# Filter Summary Report: CG,TIA,simple,Z3,Z5,ZL

## Generated by MacAnalog-Symbolix

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## Contents

1 Examined $H(z)$ for CG TIA simple Z3 Z5 ZL: $\frac{Z_3Z_5Z_Lg_m-Z_3Z_L}{Z_3Z_5g_m+2Z_3Z_Lg_m+Z_3+Z_5Z_Lg_m+Z_L}$	2
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10 INVALID-ORDER
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10.11INVALID-ORDER-11 $Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$
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$10.13 \text{INVALID-ORDER-13 } Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right) \ \dots $
$10.14 \text{INVALID-ORDER-} 14 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $
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10.18INVALID-ORDER-18 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$
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$10.21 \text{INVALID-ORDER-} 21 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)^{-1} \dots \dots$
$10.22 \text{INVALID-ORDER-} 22 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right) \ \dots $
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10.24INVALID-ORDER-24 $Z(s) = (\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_R R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1})$
10.25INVALID-ORDER-25 $Z(s) = \left( \infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1} \right)'$
$10.26 \text{INVALID-ORDER-} 26 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right) $
$10.27 \text{INVALID-ORDER-} 27 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_I R_I s + 1}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
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$10.29 \text{INVALID-ORDER-} 29 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) $
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$10.31 \text{INVALID-ORDER-31 } Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, C_L L_L s^2 + 1\right) $
$10.32 \text{INVALID-ORDER-} 32 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $
$10.33 \text{INVALID-ORDER-33 } Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + L}\right) $ $10.33 \text{INVALID-ORDER-33 } Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) $
(
10.34INVALID-ORDER-34 $Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$
$10.35 \text{INVALID-ORDER-} 35 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s}\right)  \dots $
$10.36 \text{INVALID-ORDER-} 36 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) $
$10.37 \text{INVALID-ORDER-37 } Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) \dots $
$10.38 \text{INVALID-ORDER-38 } Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s}\right)  \dots $
$10.39 \text{INVALID-ORDER-39 } Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ \dots $

10.40INVALID-ORDER-40 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$	27
10.41INVALID-ORDER-41 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	27
10.42INVALID-ORDER-42 $Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1} \right)$	27
$10.43 \text{INVALID-ORDER-43 } Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $	27
$10.44 \text{INVALID-ORDER-} 44 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \right) $	27
$10.45 \text{INVALID-ORDER-45} \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) \qquad \dots $	27
10.46INVALID-ORDER-46 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$	28
10.47INVALID-ORDER-47 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	28
10.48INVALID-ORDER-48 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	28
10.49INVALID-ORDER-49 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	28
10.50INVALID-ORDER-50 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	28
10.51INVALID-ORDER-51 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$	28
$10.52 \text{INVALID-ORDER-52 } Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) $	28
10.53INVALID-ORDER-53 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$	28
$10.54 \text{INVALID-ORDER-} 54 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L}{C_L R_L s + 1} \right) \ . \ldots $	28
$10.55 \text{INVALID-ORDER-} 55 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ R_L + \frac{1}{C_L s}\right)  \dots $	29
10.56INVALID-ORDER-56 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)$	29
10.57INVALID-ORDER-57 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	29
10.58INVALID-ORDER-58 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + \bar{L}_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)$	29
10.59INVALID-ORDER-59 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	29
10.60INVALID-ORDER-60 $Z(s) = \left( \infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$	29
10.61INVALID-ORDER-61 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	29
$10.62 \text{INVALID-ORDER-} 62 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s}\right)  \dots $	29
$10.63 \text{INVALID-ORDER-} 63 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $	29
$10.64 \text{INVALID-ORDER-} 64 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)  \dots $	30
10.65INVALID-ORDER-65 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 \overline{L}_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$	30
$10.66 \text{INVALID-ORDER-} 66 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)' $	30
10.67INVALID-ORDER-67 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	30
10.68INVALID-ORDER-68 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$	30
$10.69 \text{INVALID-ORDER-} 69 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $	30
$10.70 \text{INVALID-ORDER-70 } Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \ \dots $	30
10.71INVALID-ORDER-71 $Z(s) = \left( \infty, \infty, R_3, \infty, \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s} \right)$	30
10.72INVALID-ORDER-72 $Z(s) = \left( \infty, \infty, R_3, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1} \right)$	30
10.73INVALID-ORDER-73 $Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L + \frac{1}{C_Ls} \right)$	31
$10.74 \text{INVALID-ORDER-} 74 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s} \right) \ \dots $	31
$10.75 \text{INVALID-ORDER-} 75 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	31
$10.76 \text{INVALID-ORDER-} 76 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots $	31

$10.77 \text{INVALID-ORDER-} 77 \ Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \ \dots $	3
$10.78 \text{INVALID-ORDER-78 } Z(s) = \left( \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	3
10.79INVALID-ORDER-79 $Z(s) = \left( \infty, \infty, R_3, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1} \right)'$	3
10.80INVALID-ORDER-80 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, R_L\right)$	3
10.81INVALID-ORDER-81 $Z(s) = (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s})$	3
$10.82 \text{INVALID-ORDER-82 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	3:
10.83INVALID-ORDER-83 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$	3:
$10.84 \text{INVALID-ORDER-84 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)  \dots $	3:
$10.85 \text{INVALID-ORDER-85 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) \ \dots $	32
$10.86 \text{INVALID-ORDER-86 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right) $	32
$10.87 \text{INVALID-ORDER-87 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_L s}\right) $	32
$10.88 \text{INVALID-ORDER-88 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right) $	32
10.89INVALID-ORDER-89 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	32
$10.90 \text{INVALID-ORDER-90 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \qquad . $	32
10.91INVALID-ORDER-91 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	35
$10.92 \text{INVALID-ORDER-92 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $	3.
$10.93 \text{INVALID-ORDER-93 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $	3.
$10.94 \text{INVALID-ORDER-} 94 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $	3.
$10.95 \text{INVALID-ORDER-95 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ R_L + \frac{1}{C_L s} \right) $	3.
$10.96 \text{INVALID-ORDER-96 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ L_L s + \frac{1}{C_L s}\right)  \dots $	3.
$10.97 \text{INVALID-ORDER-97 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$	3.
$10.98 \text{INVALID-ORDER-98 } Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s+1}, L_L s + R_L + \frac{1}{C_L s}\right) $	3.
$10.99 \text{INVALID-ORDER-99 } Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s+1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	
$10.10 \text{ @NVALID-ORDER-100 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $	
10.10INVALID-ORDER-101 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s+1}\right)$	
10.102NVALID-ORDER-102 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	3
10.10 <b>B</b> NVALID-ORDER-103 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$	3
10.10 INVALID-ORDER-104 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	
$10.10 \text{Invalid-order-} 105 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $	3
10.10 <b>C</b> NVALID-ORDER-106 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	
10.10 <b>T</b> NVALID-ORDER-107 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	
$10.10 \text{\&NVALID-ORDER-108 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $	
10.10 <b>9</b> NVALID-ORDER-109 $Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$	
10.11 <b>0</b> NVALID-ORDER-110 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$	
10.11INVALID-ORDER-111 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	
10.112NVALID-ORDER-112 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$	3
10.11 <b>E</b> NVALID-ORDER-113 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$	3
10.11\(\text{INVALID-ORDER-114}\(Z(s) = \int(\infty), \infty, \int_{0.3s}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\)\\ \dots  \tau_{0.5s}   \tau_{0.5s}  \tau_{0.5s}  \tau_{0.5s}  \tau_	3

$10.11 \text{5NVALID-ORDER-115} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	35
10.116NVALID-ORDER-116 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	35
$10.11 \text{ INVALID-ORDER-} 117 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $	35
$10.11 \&NVALID-ORDER-118 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) \ \dots $	35
10.119NVALID-ORDER-119 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	35
10.120NVALID-ORDER-120 $Z(s) = \left( \infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L \right)$	36
$10.12 \text{INVALID-ORDER-} 121 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s}\right) \ \dots $	36
$10.122 \text{NVALID-ORDER-} 122 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right)  \dots $	36
10.12\( \text{INVALID-ORDER-123} \( Z(s) = \left( \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ \text{\$R_L + \frac{1}{C_L s} \right) } \] \qquad \tag{10.12\( \text{Invalence} \text{\$NVALID-ORDER-123} \) \( Z(s) = \left( \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) \qquad \tag{10.12\( \text{Invalence} \text{\$NVALID-ORDER-123} \) \( Z(s) = \left( \infty, \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) \qquad \tag{10.12\( \text{Invalence} \text{\$NVALID-ORDER-123} \) \( Z(s) = \left( \infty, \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) \qquad \tag{10.12\( \text{\$NVALID-ORDER-123} \) \( Z(s) = \left( \infty, \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) \qquad \tag{10.12\( \text{\$NVALID-ORDER-123} \)  \( Z(s) = \left( \infty, \infty, \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right)   \tag{10.12\( \text{\$NVALID-ORDER-123} \)  \( Z(s) = \left( \infty, \infty, \infty, \infty, \infty, \frac{1}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right)                                                                                                                                              \qquad    \qquad          \qqu	36
10.12 INVALID-ORDER-124 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s}\right)$	36
$10.12 \text{5NVALID-ORDER-} 125 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	36
10.126NVALID-ORDER-126 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	36
10.12 <b>T</b> NVALID-ORDER-127 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	36
10.12\( \text{NVALID-ORDER-128} \( Z(s) = \left( \infty, \infty, \frac{1}{C_3 L_5}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \].	36
$10.129 \text{NVALID-ORDER-} 129 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $	36
$10.13 \text{ @NVALID-ORDER-} 130 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L\right) \ \dots \ $	37
$10.13 \text{INVALID-ORDER-} 131 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)  \dots $	37
10.132NVALID-ORDER-132 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$	37
10.132NVALID-ORDER-133 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_{3s}}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$	37
10.13\(\text{4NVALID-ORDER-134}\(Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)  \tag{\text{.}}	37
10.13 INVALID-ORDER-135 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_{3s}}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	37
10.136NVALID-ORDER-136 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	37
10.13TNVALID-ORDER-137 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_{3s}}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	37
10.13\( \text{NVALID-ORDER-138} \( Z(s) = \int( \infty, \infty, \int_{0.3} \text{t}, \infty, \int_{0.5} \text{t} + \frac{1}{C_5 s}, \int_{0.5} \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \int_{0.5} \)                                                                                                                                                                                                                                                                                                             \qq	37
10.13 <b>9</b> NVALID-ORDER-139 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	
10.14 <b>0</b> NVALID-ORDER-140 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$	
10.14INVALID-ORDER-141 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$	38
$10.14 \text{ 2NVALID-ORDER-} 142 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L}{C_L R_L s + 1} \right) $	38
10.14\(\mathbb{B}\)\(\mathbb{NVALID-ORDER-143}\(Z(s) = \left(\infty, \infty, \frac{1}{C_5 L_5 R_5 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)\).	38
10.14 INVALID-ORDER-144 $Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ L_L s + \frac{1}{C_L s} \right)$	38
$10.145 \text{NVALID-ORDER-} 145 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)  \dots $	
$10.146 \text{NVALID-ORDER-} 146 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ L_L s + R_L + \frac{1}{C_L s} \right) $	38
$10.14 \text{INVALID-ORDER-} 147 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $ $10.14 \text{INVALID-ORDER-} 148 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $	38
$10.14 \$NVALID-ORDER-148 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	38
$10.14 \text{ 9NVALID-ORDER-} 149 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	
10.15 <b>0</b> NVALID-ORDER-150 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L\right)$	39
10.15INVALID-ORDER-151 $Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s} \right)$	
10.15 <b>2</b> NVALID-ORDER-152 $Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right)$	39
10.15 INVALID-ORDER-153 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$	39

$10.154\text{NVALID-ORDER-}154\ Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3s},\ \infty,\ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1},\ L_Ls + \frac{1}{C_Ls}\right)$
$10.15 \text{INVALID-ORDER-} 155 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $
$10.15 \text{ @NVALID-ORDER-156 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right) $
$10.15 \text{INVALID-ORDER-} 157 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $
$10.15 \&NVALID-ORDER-158 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $
$10.15 \text{ @NVALID-ORDER-159 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \ \dots $
$10.16 \text{DNVALID-ORDER-} 160 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L \right) $
$10.16 \text{INVALID-ORDER-} 161 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{1}{C_L s} \right) \ \dots $
$10.162\text{NVALID-ORDER-}162\ Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \frac{R_L}{C_L R_L s + 1}\right)\ \dots \qquad \qquad 40.162\text{NVALID-ORDER-}$
$10.16 \text{2NVALID-ORDER-} 163 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right) $
$10.16 \text{INVALID-ORDER-} 164 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s} \right) \ \dots $
$10.16 \text{INVALID-ORDER-} 165 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \qquad . $
$10.16 \text{ENVALID-ORDER-} 166 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.16 \text{INVALID-ORDER-} 167 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 L_5}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
$10.16 \text{NVALID-ORDER-} 168 \ Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $
$10.16 \text{ @NVALID-ORDER-169 } Z(s) = \left( \infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $
$10.17 \text{ONVALID-ORDER-} 170 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5, \ R_L\right)  \dots \qquad \qquad$
$10.17 \text{INVALID-ORDER-171 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5, \ \frac{1}{C_L s}\right) \ \dots $
10.172NVALID-ORDER-172 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$
10.17\$NVALID-ORDER-173 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5, \ L_L s + \frac{1}{C_L s}\right)$
10.17\(\frac{1}{4}\)NVALID-ORDER-174\(Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)\].
10.17 INVALID-ORDER-175 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$
$10.176 \text{NVALID-ORDER-} 176 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)' $
$10.17\text{INVALID-ORDER-}177\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ R_L + \frac{1}{C_Ls}\right)$
10.17\( \text{\text{8}}\) NVALID-ORDER-178 $Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s} \right)$
10.179NVALID-ORDER-179 $Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)^{-1}$
10.18 <b>0</b> NVALID-ORDER-180 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.18 \text{INVALID-ORDER-} 181 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $
$10.18 \text{ 2NVALID-ORDER-} 182 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $
10.18 INVALID-ORDER-183 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ .
10.184NVALID-ORDER-184 $Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s} \right)^{-1}$
10.18 INVALID-ORDER-185 $Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s} \right)$
$10.18 \text{ 6NVALID-ORDER-} 186 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)' $
10.18TNVALID-ORDER-187 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.18 \text{\&NVALID-ORDER-} 188 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
10.189NVALID-ORDER-189 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$

$10.19 \text{ @NVALID-ORDER-190 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s+1} \right) $
10.19INVALID-ORDER-191 $Z(s) = (\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s})$
10.19 <b>2</b> NVALID-ORDER-192 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.19 <b>BNVALID-ORDER-193</b> $Z(s) = (\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1})$
10.194NVALID-ORDER-194 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.19 INVALID-ORDER-195 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.196NVALID-ORDER-196 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$
$10.19 \text{ INVALID-ORDER-} 197 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $
10.19 & NVALID-ORDER-198 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$
10.19 <b>9</b> NVALID-ORDER-199 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.20@NVALID-ORDER-200 $Z(s) = (\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s+1})$
10.20INVALID-ORDER-201 $Z(s) = (\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s})$
10.202NVALID-ORDER-202 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.20 LNVALID-ORDER-203 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.204NVALID-ORDER-204 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.20 \text{ INVALID-ORDER-} 205 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \qquad . \tag{45}$
$10.20 \text{ (ENVALID-ORDER-206 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) $
$10.20 \text{INVALID-ORDER-} 207 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
10.20 NVALID-ORDER-208 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$
10.20 NVALID-ORDER-209 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
$10.21 \text{@NVALID-ORDER-} 210 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) $
10.21INVALID-ORDER-211 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
10.212NVALID-ORDER-212 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$
10.21 <b>E</b> NVALID-ORDER-213 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
$10.21 \text{INVALID-ORDER-} 214 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) $
$10.21 \text{ INVALID-ORDER-} 215 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \ \dots $
$10.21 \text{ (ENVALID-ORDER-216 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $
$10.21 \text{INVALID-ORDER-} 217 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right) \ . $
10.21 NVALID-ORDER-218 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
10.21 NVALID-ORDER-219 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
$10.22 \text{@NVALID-ORDER-} 220 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $
10.22INVALID-ORDER-221 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.222NVALID-ORDER-222 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
$10.22 \text{ INVALID-ORDER-} 223 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)' $
$10.224\text{NVALID-ORDER-}224 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) $
$10.22 \text{5NVALID-ORDER-} 225 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
$10.22\text{ (INVALID-ORDER-226 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1} \right) $
$10.22 \text{INVALID-ORDER-} 227 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)' \ \dots $
10.22\NVALID-ORDER-228 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$

$10.22 \text{ (NVALID-ORDER-229 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{1}{C_L s}\right) \ \dots $	47
$10.23 \text{ @NVALID-ORDER-230 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $	47
10.23INVALID-ORDER-231 $Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ R_L + \frac{1}{C_L s} \right)$	47
10.232NVALID-ORDER-232 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ L_Ls + \frac{1}{C_Ls}\right)$	48
$10.23 \text{ENVALID-ORDER-} 233 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	48
$10.234\text{NVALID-ORDER-}234\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ L_Ls + R_L + \frac{1}{C_Ls}\right).$	48
$10.235 \text{NVALID-ORDER-} 235 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L R_L s}{C_L L_R L_s s^2 + L_L s + R_L} \right)  \dots $	48
$10.236 \text{NVALID-ORDER-} 236 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)  \dots $	48
$10.23 \text{INVALID-ORDER-} 237 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $	48
10.23\( \text{NVALID-ORDER-238} \( Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L \right) \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qqqq \qqq \qqqq \qqq \qqqq \q	48
10.23 <b>9</b> NVALID-ORDER-239 $Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s} \right)$	48
$10.240 \text{NVALID-ORDER-} 240 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) $	48
$10.24 \text{INVALID-ORDER-} 241 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) $	49
$10.242\text{NVALID-ORDER-}242\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ L_Ls + \frac{1}{C_Ls}\right) \ \dots \ $	49
$10.24 \text{BNVALID-ORDER-} 243 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	49
$10.244\text{NVALID-ORDER-}244\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{C_5L_5R_5s'+L_5s+R_5}{C_5L_5s'^2+1},\ L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots$	49
10.24 INVALID-ORDER-245 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	49
$10.24 \text{ (INVALID-ORDER-246 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \qquad \dots $	49
$10.24 \text{TNVALID-ORDER-} 247 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $	49
$10.24 \$NVALID-ORDER-248 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2+1 \right)}{C_5 L_5 s^2 + C_5 R_5 s+1}, \ R_L \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	49
$10.24 \text{ @NVALID-ORDER-249 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s+1}, \ \frac{1}{C_L s} \right)  \dots $	49
$10.25 \text{ @NVALID-ORDER-} 250 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1} \right)  \dots $	50
$10.25 \text{INVALID-ORDER-} 251 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right) \ \dots $	
$10.252 \text{NVALID-ORDER-} 252 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s} \right)  \dots $	50
$10.25 \text{2NVALID-ORDER-} 253 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)^{\prime} \ \dots $	50
$10.254\text{NVALID-ORDER-}254\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ L_Ls + R_L + \frac{1}{C_Ls}\right) \ \dots $	50
$10.25 \text{INVALID-ORDER-} 255 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \ \dots $	50
$10.25 \text{ 6NVALID-ORDER-} 256 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \right) \ \dots $	50
$10.25 \text{INVALID-ORDER-} 257 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)' + \dots \right)$	50
10.25 NVALID-ORDER-258 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L\right)$	
10.25 <b>9</b> NVALID-ORDER-259 $Z(s) = \left( \infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s} \right)$	
$10.26 \text{ @NVALID-ORDER-} 260 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ \dots $	
$10.26 \text{INVALID-ORDER-} 261 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)  \dots $	51
$10.26 \text{ 2NVALID-ORDER-} 262 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \ \dots $	51
$10.26$ ENVALID-ORDER- $263$ $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) \dots \dots$	51
10.26 INVALID-ORDER-264 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	51

10.26\(\text{INVALID-ORDER-265}\(Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3.8}}, \infty, \frac{1}{C_{1.8}}\right) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
10.26 <b>6</b> NVALID-ORDER-266 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
10.26\(\text{TNVALID-ORDER-267}\(Z(s) = \sum_{\infty}(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\)\\ \tag{51}
10.26\( \text{NVALID-ORDER-268} \( Z(s) = \int(\infty), \infty, \int(R_3 + \frac{1}{C_3 s}, \infty, \int\frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \int) \\ \tag{52} \]
10.26 <b>9</b> NVALID-ORDER-269 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$
10.27 NVALID-ORDER-270 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.27INVALID-ORDER-271 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
$10.272\text{NVALID-ORDER-}272\ Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) \qquad . \qquad $
$10.27 \text{BNVALID-ORDER-} 273 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right) \ . $
$10.27 \text{ INVALID-ORDER-} 274 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s}\right) $
$10.27 \text{5NVALID-ORDER-} 275 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{\dot{R}_L}{C_L R_L s+1}\right)  .  .  .  .  .  .  .  .  .  $
10.276NVALID-ORDER-276 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s}\right)$
10.27 <b>T</b> NVALID-ORDER-277 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right)$
10.27 NVALID-ORDER-278 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.27 <b>9</b> NVALID-ORDER-279 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
10.28 INVALID-ORDER-280 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.28INVALID-ORDER-281 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$
$10.28 \text{2NVALID-ORDER-} 282 \ Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) $
10.28 INVALID-ORDER-283 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.284NVALID-ORDER-284 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
10.28 INVALID-ORDER-285 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.286NVALID-ORDER-286 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.28INVALID-ORDER-287 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.28\text{NVALID-ORDER-288 } $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.28 INVALID-ORDER-289 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
$10.29 \text{@NVALID-ORDER-} 290 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)  . $
$10.29 \text{INVALID-ORDER-} 291 \ Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \ \dots $
$10.29 \text{PNVALID-ORDER-} 292 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L\right) \ \dots $
$10.29 \text{BNVALID-ORDER-} 293 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)  \dots $
10.294NVALID-ORDER-294 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
10.29 INVALID-ORDER-295 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.296NVALID-ORDER-296 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.29 <b>T</b> NVALID-ORDER-297 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 L_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.29 NVALID-ORDER-298 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.29 <b>9</b> NVALID-ORDER-299 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.30@NVALID-ORDER-300 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_R R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$
10.30INVALID-ORDER-301 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
$10.30 \text{ 2NVALID-ORDER-302 } Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) $
10.30 RNVALID-ORDER-303 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

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10.304NVALID-ORDER-304 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
10.30 INVALID-ORDER-305 Z(s) = (\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s})
10.306NVALID-ORDER-306 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_{Ls}}\right)
10.30 TNVALID-ORDER-307 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.30\( \text{NVALID-ORDER-308} \( Z(s) = \left( \infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s} \)
10.309NVALID-ORDER-309 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.31 INVALID-ORDER-310 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.31INVALID-ORDER-311 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.312NVALID-ORDER-312 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) . . .
10.31\( \text{NVALID-ORDER-313} \( Z(s) = \left( \infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s} \right) \].
10.31\(\text{INVALID-ORDER-314}\(Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{28}}, \infty, L_5 s + R_5 + \frac{1}{C_{58}}, \frac{R_L}{C_L R_L s + 1}\)
10.31 INVALID-ORDER-315 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
10.316NVALID-ORDER-316 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, L_5 s + R_5 + \frac{1}{C_{5s}}, L_L s + \frac{1}{C_{Ls}}\right)
10.31TNVALID-ORDER-317 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.31\( \text{NVALID-ORDER-318} \( Z(s) = \left( \infty, \infty, R_3 + \frac{1}{C_{28}}, \infty, L_5 s + R_5 + \frac{1}{C_{28}}, L_L s + R_L + \frac{1}{C_{L8}} \)
10.319NVALID-ORDER-319 Z(s) = (\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L})
10.320NVALID-ORDER-320 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.32INVALID-ORDER-321 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.32 INVALID-ORDER-322 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right) \dots
10.32 INVALID-ORDER-323 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_4 s}\right)
10.324NVALID-ORDER-324 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
10.32 INVALID-ORDER-325 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_4 s}\right)
10.326NVALID-ORDER-326 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
10.32TNVALID-ORDER-327 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.32\text{NVALID-ORDER-328} Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_4 s}\right)
10.32¶NVALID-ORDER-329 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.330NVALID-ORDER-330 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.33INVALID-ORDER-331 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1} \right)
10.332NVALID-ORDER-332 Z(s) = (\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L).
10.332NVALID-ORDER-333 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_2 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_5 s}\right)
10.334NVALID-ORDER-334 Z(s) = (\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1})
10.33 INVALID-ORDER-335 Z(s) = (\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s})
10.336NVALID-ORDER-336 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_{Ls}}\right)
10.33TNVALID-ORDER-337 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.33\(\text{NVALID-ORDER-338}\(Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\)
10.339NVALID-ORDER-339 Z(s) = (\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L})
10.340 \text{NVALID-ORDER-} 340 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.34INVALID-ORDER-341 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.342NVALID-ORDER-342 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
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$10.34 \text{ \$NVALID-ORDER-343 } Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{1}{C_L s} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	60
$10.34 \text{INVALID-ORDER-344} \ Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $	60
$10.345 \text{NVALID-ORDER-} 345 \ Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right)  \dots $	60
$10.34 \text{ 6NVALID-ORDER-} 346 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right) \ \dots $	60
$10.34 \text{INVALID-ORDER-} 347 \ Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)^{\prime}  \dots $	60
$10.34 \text{\&NVALID-ORDER-348 } Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right) \qquad \dots $	60
$10.34 \text{ @NVALID-ORDER-349 } Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $	60
$10.35 \text{@NVALID-ORDER-350 } Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $	60
$10.35 \text{INVALID-ORDER-} 351 \ Z(s) = \left( \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)  \dots $	61
$10.352 \text{NVALID-ORDER-} 352 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{1}{C_L s}\right) \ \dots $	61
$10.35 \text{\&NVALID-ORDER-353} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $	61
10.354NVALID-ORDER-354 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$	61
10.35 INVALID-ORDER-355 $Z(s) = (\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s})$	61
$10.35 \text{ (ENVALID-ORDER-356 } Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_{3s}}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} \right)' \qquad \dots $	61
10.35TNVALID-ORDER-357 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$	61
10.35\( \text{NVALID-ORDER-358} \( Z(s) = \int \int \infty, \infty, \int L_3 s + \frac{1}{C_3 s}, \infty, \infty, \int R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \int \] \qquad \qqqqq \qqqqq \qqqqq \qqqqqqqqqqqqqqq	61
$10.35 \mathfrak{D} \text{NVALID-ORDER-359 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_2 s}, \ \infty, \ R_5, \ \frac{C_L L_R R_L s^2 + L_L s + R_L}{C_L L_s s^2 + 1} \right) \ldots $	61
$10.36\text{DNVALID-ORDER-360 } Z(s) = \left( \infty, \ \infty, \ L_3s + \frac{1}{C_{3s}}, \ \infty, \ R_5, \ \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1} \right)' \dots \dots$	62
10.36INVALID-ORDER-361 $Z(s) = (\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L)$	62
$10.36 \text{ 2NVALID-ORDER-} 362 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s} \right)  \dots $	62
$10.36$ NVALID-ORDER- $363$ $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$	62
10.364NVALID-ORDER-364 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_2s}, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$	62
$10.36 \text{INVALID-ORDER-} 365 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_{rs}}, \ \infty, \ \frac{1}{C_{rs}}, \ L_L s + \frac{1}{C_{rs}}\right)  \dots $	62
10.366NVALID-ORDER-366 $Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	62
$10.36\text{TNVALID-ORDER-}367 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_2s}, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)  \dots $	
$10.36 \$NVALID-ORDER-368 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_2s}, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_RL_s^2 + L_Ls + R_L}\right) \ldots \ldots$	
$10.36 \text{ (NVALID-ORDER-369 } Z(s) = \left( \infty, \ \infty, \ L_{3}s + \frac{1}{C_{2}s}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{C_{L}L_{L}R_{S} + L_{L}s + R_{L}}{C_{L}L_{1}s^{2} + 1} \right) \dots $	
$10.37 \text{@NVALID-ORDER-370 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1} \right) $	
10.37INVALID-ORDER-371 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$	63
$10.372\text{NVALID-ORDER-}372 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_{2s}}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_{Ls}}\right) \dots \dots$	
$10.37 \text{ (NVALID-ORDER-373 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right) \dots \dots$	
$10.37 \text{ INVALID-ORDER-374 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s}\right)  \dots $	
$10.37 \text{INVALID-ORDER-375 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right) \dots \dots$	
$10.37 \text{ (NVALID-ORDER-376 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	
$10.37\text{INVALID-ORDER-377 } Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	
$10.37 \$NVALID-ORDER-378 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_2s}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_RR_Ls^2 + L_Ls + R_L}\right) \qquad \dots $	
$10.37 \text{@NVALID-ORDER-379 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + L}\right) $	63
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$10.380 \text{NVALID-ORDER-} 380 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right) \ . $
10.38INVALID-ORDER-381 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$ 64
10.38 <b>P</b> NVALID-ORDER-382 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.38 INVALID-ORDER-383 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
10.384NVALID-ORDER-384 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.38 INVALID-ORDER-385 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$
10.386NVALID-ORDER-386 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.38INVALID-ORDER-387 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 64
10.38\( \text{NVALID-ORDER-388} \( Z(s) = \left( \infty, \infty, \left( L_3 s + \frac{1}{C_3 s}, \infty, \infty, \left( R_5 + \frac{1}{C_5 s}, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \] \tag{64}
10.38 <b>9</b> NVALID-ORDER-389 $Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$
$10.39 \text{ (ID-ORDER-390 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right) $
$10.39 \text{INVALID-ORDER-391 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L\right) $
10.392NVALID-ORDER-392 $Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$
10.39 NVALID-ORDER-393 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 65
10.39\(\text{AVALID-ORDER-394}\(Z(s) = \left(\infty, \infty, \lambda_{1}, \text{\$\text{\$\sigma_t}\$} \\ \text{\$\sigma_t} \\ \t
10.39 INVALID-ORDER-395 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.39 <b>6</b> NVALID-ORDER-396 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.39TNVALID-ORDER-397 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 65
$10.39 \$NVALID-ORDER-398 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right) $
10.39 <b>QNVALID-ORDER-399</b> $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 65
$10.40\text{@NVALID-ORDER-400 } Z(s) = \left( \infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1} \right) $
$10.40 \text{INVALID-ORDER-} 401 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 \overline{L_5} s^2 + 1}, \ R_L\right) $
10.40 <b>2</b> NVALID-ORDER-402 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
10.40 RNVALID-ORDER-403 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
10.404NVALID-ORDER-404 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
10.40 INVALID-ORDER-405 $Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s} \right)$
$10.40 \text{ 6} \text{NVALID-ORDER-406 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)  \dots $
$10.40\text{TNVALID-ORDER-407 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) $
$10.40 \text{\&NVALID-ORDER-408 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
10.40 NVALID-ORDER-409 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$
$10.41 \text{@NVALID-ORDER-410 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) $
10.41INVALID-ORDER-411 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$ 67
10.412NVALID-ORDER-412 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.41 <b>2</b> NVALID-ORDER-413 $Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1} \right)$ 67
10.41 INVALID-ORDER-414 $Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s} \right)$
10.41 INVALID-ORDER-415 $Z(s) = \left( \infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s} \right)$ 67
10.416NVALID-ORDER-416 $Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
$10.41\text{ INVALID-ORDER-417 } Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) $
10.41 NVALID-ORDER-418 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 67

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10.419NVALID-ORDER-419 Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.420NVALID-ORDER-420 Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
10.42INVALID-ORDER-421 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{2s}}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right).
10.42PNVALID-ORDER-422 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right) . . .
10.428NVALID-ORDER-423 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{3s}}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
10.424NVALID-ORDER-424 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
10.42 INVALID-ORDER-425 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
10.426NVALID-ORDER-426 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.42 INVALID-ORDER-427 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
10.42 \text{\&NVALID-ORDER-} 428 \ Z(s) = (\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L})
10.42 \text{ @NVALID-ORDER-} 429 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.43 \text{ @NVALID-ORDER-430 } Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) 
10.43INVALID-ORDER-431 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L\right)
10.432NVALID-ORDER-432 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{2}s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_{L}s}\right)
10.43\(\mathbb{Z}\)NVALID-ORDER-433 Z(s) = (\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1})
10.43\(\text{INVALID-ORDER-434}\(Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\)
10.43 INVALID-ORDER-435 Z(s) = (\infty, \infty, L_3s + \frac{1}{C_{3s}}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_{Ls}})
10.436NVALID-ORDER-436 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.43TNVALID-ORDER-437 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.43\(\text{NVALID-ORDER-438}\) Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.439NVALID-ORDER-439 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_r L_r s^2 + 1}\right)
10.440 \text{NVALID-ORDER-} 440 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)
10.44INVALID-ORDER-441 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L \right)
10.44BNVALID-ORDER-443 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)
10.44\(\text{INVALID-ORDER-444}\(Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\)
10.44 INVALID-ORDER-445 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
10.44TNVALID-ORDER-447 Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)
10.44&NVALID-ORDER-448 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s}\right)
10.449NVALID-ORDER-449 Z(s) = (\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{C_LL_RL_s^2+L_Ls+R_Ls}{C_LL_Ls^2+1})
10.45 INVALID-ORDER-450 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.45INVALID-ORDER-451 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, R_5, R_L + \frac{1}{C_Ls}\right) \dots
10.452NVALID-ORDER-452 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, R_5, L_L s + \frac{1}{C_{Ls}}\right) . . . . . .
10.45 INVALID-ORDER-453 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)
10.454NVALID-ORDER-454 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
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10.45 INVALID-ORDER-455 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.45 NVALID-ORDER-456 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{2}L_{3s}^{2}+1}, \infty, \frac{1}{C_{5s}}, R_{L}\right) . . . . . . .
10.45 INVALID-ORDER-457 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{1}{C_5s}\right) \dots
10.45 NVALID-ORDER-458 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right).
10.459NVALID-ORDER-459 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{2}L_{2}s^{2}+1}, \infty, \frac{1}{C_{5s}}, R_{L} + \frac{1}{C_{Ls}}\right)
10.460NVALID-ORDER-460 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.46INVALID-ORDER-461 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_2s^2+1}\right) \dots \dots
10.462NVALID-ORDER-462 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.46BNVALID-ORDER-463 Z(s) = (\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L})
10.464NVALID-ORDER-464 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_1s^2+1}\right)
10.46 INVALID-ORDER-465 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s}^2 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.466NVALID-ORDER-466 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right) \dots
10.46 TNVALID-ORDER-467 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s}^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_{Ls}}\right) . . .
10.46\( \text{NVALID-ORDER-468} \) Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_2 L_3 s^2 + 1}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1} \right)
10.469NVALID-ORDER-469 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3s}^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, R_{L} + \frac{1}{C_{Ls}}\right)
10.470NVALID-ORDER-470 Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, L_{L}s + \frac{1}{C_{L}s}\right)
10.47INVALID-ORDER-471 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, \frac{L_{Ls}}{C_{L}L_{L}s^{2}+1}\right)
10.472NVALID-ORDER-472 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.47 INVALID-ORDER-473 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3s}^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5s}+1}, \frac{L_{L}R_{Ls}}{C_{L}L_{L}R_{Ls}^{2}+L_{Ls}+R_{L}}\right)
10.474NVALID-ORDER-474 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.47 INVALID-ORDER-475 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.476NVALID-ORDER-476 Z(s) = \left( \infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, R_5 + \frac{1}{C_7 s}, R_L \right) . . . . . . . .
10.47 INVALID-ORDER-477 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) \dots
10.47\( \text{NVALID-ORDER-478} \) Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1} \right)
10.479NVALID-ORDER-479 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{2L_{2}s^{2}+1}}, \infty, R_{5} + \frac{1}{C_{5s}}, R_{L} + \frac{1}{C_{Ls}}\right)
10.480NVALID-ORDER-480 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_5 s}\right)
10.48INVALID-ORDER-481 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right) \dots \dots
10.482NVALID-ORDER-482 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_0 L_0 s^2 + 1}, \infty, R_5 + \frac{1}{C_1 s}, L_L s + R_L + \frac{1}{C_1 s}\right) \dots
10.48 INVALID-ORDER-483 Z(s) = (\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L})
10.484NVALID-ORDER-484 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
10.48 INVALID-ORDER-485 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.48 INVALID-ORDER-486 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right) \dots \dots \dots
10.48 INVALID-ORDER-487 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
10.48 NVALID-ORDER-488 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.489NVALID-ORDER-489 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
10.49@NVALID-ORDER-490 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.49INVALID-ORDER-491 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.493NVALID-ORDER-493 Z(s) = (\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L})
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10.49\(\text{INVALID-ORDER-494}\) Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
10.49 INVALID-ORDER-495 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.49 INVALID-ORDER-497 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right) \dots \dots
10.49 NVALID-ORDER-498 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)
10.499NVALID-ORDER-499 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right) . . .
10.500NVALID-ORDER-500 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)
10.50INVALID-ORDER-501 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right)
10.502NVALID-ORDER-502 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots
10.50 INVALID-ORDER-503 Z(s) = (\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L})
10.504NVALID-ORDER-504 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \frac{L_{5s}}{C_{5}L_{5}s^{2}+1}, \frac{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}{C_{L}L_{L}s^{2}+1}\right)
10.50 INVALID-ORDER-505 Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.50 INVALID-ORDER-506 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right) \dots \dots
10.50 TNVALID-ORDER-507 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) . . .
10.50\( \text{NVALID-ORDER-508} \( Z(s) = \left( \infty, \infty, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{L_5s} + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1} \right) \quad \tag{.} \tag{.}
10.509NVALID-ORDER-509 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)
10.510NVALID-ORDER-510 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right) . . . . . .
10.51INVALID-ORDER-511 Z(s) = (\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}) . . . . .
10.512NVALID-ORDER-512 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots
10.51BNVALID-ORDER-513 Z(s) = (\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L})
10.514NVALID-ORDER-514 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_1s^2+1}\right)
10.515NVALID-ORDER-515 Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.516NVALID-ORDER-516 Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{L_{5}R_{5}s}{C_{5}L_{5}R_{5}s^{2}+L_{5}s+R_{5}}, R_{L}\right) \dots
10.51 TNVALID-ORDER-517 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_1 s}\right) . . .
10.51\( \text{NVALID-ORDER-518} \( Z(s) = \left( \infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1} \)
10.519NVALID-ORDER-519 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
10.520NVALID-ORDER-520 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
10.52INVALID-ORDER-521 Z(s) = (\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{L_Ls}{C_LL_Ls^2+1})
10.522NVALID-ORDER-522 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \frac{L_{5}R_{5}s}{C_{5}L_{5}R_{5}s^{2}+L_{5}s+R_{5}}, L_{L}s + R_{L} + \frac{1}{C_{Ls}}\right)
10.52 INVALID-ORDER-523 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.52 \text{INVALID-ORDER-} 524 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.52 INVALID-ORDER-525 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.526NVALID-ORDER-526 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L\right)
10.52TNVALID-ORDER-527 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)
10.52\( \text{NVALID-ORDER-528} \( Z(s) = \left( \infty, \infty, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{R_L}{C_LR_Ls + 1} \)
10.529NVALID-ORDER-529 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)
10.53 \text{@NVALID-ORDER-530} \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s}\right)
10.53INVALID-ORDER-531 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
10.532NVALID-ORDER-532 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
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$10.53 \text{BNVALID-ORDER-533} \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \ \dots \ $
$10.53 \text{INVALID-ORDER-} 534 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $
$10.53 \text{ INVALID-ORDER-535 } Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right) \ \dots \ $
$10.53 \text{ (INVALID-ORDER-536 } Z(s) = \left( \infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L \right) $
$10.53\text{INVALID-ORDER-}537 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{1}{C_Ls}\right) \ \dots $
$10.53 \$NVALID-ORDER-538 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L}{C_LR_Ls+1}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.53 \text{ (NVALID-ORDER-539 } Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right) $
$10.54 \text{ @NVALID-ORDER-}540 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right) \ \dots $
$10.54 \text{INVALID-ORDER-} 541 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} \right)^{\prime} \qquad . $
$10.54 \text{ 2NVALID-ORDER-} 542 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + R_L + \frac{1}{C_Ls} \right) $
$10.54 \text{ INVALID-ORDER-} 543 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
$10.54 \text{ INVALID-ORDER-} 544 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1} \right) \qquad . $
$10.54 \text{ INVALID-ORDER-} 545 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)  \dots $
$10.54 \text{ 6NVALID-ORDER-} 546 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{1}{C_L s}\right) \ \dots $
$10.54\text{TNVALID-ORDER-}547\ Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ R_5,\ \frac{R_L}{C_LR_Ls + 1}\right) \ \dots \ $
10.54\( \text{RNVALID-ORDER-548} \( Z(s) = \int(\infty, \infty, \infty, \lambda_{3} + R_3 + \frac{1}{C_3 s}, \infty, \infty, \lambda_{5}, \ R_L + \frac{1}{C_L s} \infty \] \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qqqq \qqq \qqqq \qqqqq
10.54 INVALID-ORDER-549 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$
10.55 <b>0</b> NVALID-ORDER-550 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$
10.55INVALID-ORDER-551 $Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$
$10.55 \text{2NVALID-ORDER-} 552 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $
$10.55 \text{ENVALID-ORDER-} 553 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{C_L L_R R_L s^2 + L_L s + R_L}{C_L L_L R_2 s^2 + 1}\right) \qquad . \qquad $
10.55\PVALID-ORDER-554 $Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1} \right)'$
10.55 INVALID-ORDER-555 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$
10.556NVALID-ORDER-556 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
$10.55 \text{INVALID-ORDER-} 557 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) $
10.55 NVALID-ORDER-558 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.55 <b>9</b> NVALID-ORDER-559 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
$10.56 \text{ QNVALID-ORDER-} 560 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
$10.56 \text{INVALID-ORDER-} 561 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right) $
$10.562\text{NVALID-ORDER-}562 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_RL_s^2 + L_Ls + R_L}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.56$ <b>B</b> NVALID-ORDER- $563$ $Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_2s}, \infty, \frac{1}{C_5s}, \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_ts^2 + L_Ls + R_L}\right)$
$10.56 \text{ anvalide of } Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) $ $8$
10.56 INVALID-ORDER-565 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$
10.56 NVALID-ORDER-566 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$
10.56TNVALID-ORDER-567 $Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1} \right)$
10.56\( \text{NVALID-ORDER-568} \( Z(s) = \left( \infty, \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right)  \tag{8.}

10.56 <b>9</b> NVALID-ORDER-569 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
$10.570 \text{NVALID-ORDER-570 } Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $
10.57INVALID-ORDER-571 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
$10.572 \text{NVALID-ORDER-572} \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
$10.57 \text{\&NVALID-ORDER-573 } Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$
$10.57 \text{INVALID-ORDER-574} \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \ . $
10.57 INVALID-ORDER-575 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L\right)$
10.576NVALID-ORDER-576 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$
10.57 INVALID-ORDER-577 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$
10.57\( \text{NVALID-ORDER-578} \( Z(s) = \left( \infty, \infty, \infty, \left( L_3 s + R_3 + \frac{1}{C_5 s}, \infty, \infty, \infty, \left( R_5 + \frac{1}{C_5 s}, \infty,
10.57 NVALID-ORDER-579 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$
10.58 <b>0</b> NVALID-ORDER-580 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
10.58INVALID-ORDER-581 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.582NVALID-ORDER-582 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$
10.58 INVALID-ORDER-583 $Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$
$10.58 \text{INVALID-ORDER-} 584 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) $
10.58 INVALID-ORDER-585 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ R_L\right)$
10.586NVALID-ORDER-586 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$
10.58TNVALID-ORDER-587 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_LR_Ls + 1}\right)$
10.58\( \text{NVALID-ORDER-588} \( Z(s) = \left( \infty, \infty, \infty, \left( L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \left( L_5 s + \frac{1}{C_L s} \right) \] \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qqquad \qqqq \qqqqq \qqqqqq
10.58 <b>P</b> NVALID-ORDER-589 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$
$10.59 \text{@NVALID-ORDER-590 } Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 L_L s^2 + 1} \right) \qquad . \qquad $
10.59INVALID-ORDER-591 $Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.592NVALID-ORDER-592 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.59 <b>ENVALID-ORDER-593</b> $Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$
10.59\(\text{INVALID-ORDER-594}\) $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)^{\frac{1}{2}} $
10.59 INVALID-ORDER-595 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 \overline{L_5} s^2 + 1}, \ R_L\right)$
10.596NVALID-ORDER-596 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
10.59 <b>T</b> NVALID-ORDER-597 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
10.59 NVALID-ORDER-598 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 \overline{L}_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$
10.59 <b>2</b> NVALID-ORDER-599 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s}\right)$
$10.60 \text{@NVALID-ORDER-} 600 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $
10.60INVALID-ORDER-601 $Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.60 <b>2</b> NVALID-ORDER-602 $Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)$
$10.60 \text{ENVALID-ORDER-} 603 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $
$10.60 \text{INVALID-ORDER-} 604 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) $
10.60 INVALID-ORDER-605 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
10.60 INVALID-ORDER-606 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$
10.60TNVALID-ORDER-607 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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10.60\( \) NVALID-ORDER-608 Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s} \right) \dots \dots
10.609NVALID-ORDER-609 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, L_5 s + R_5 + \frac{1}{C_2 s}, L_L s + \frac{1}{C_2 s}\right) . . .
10.61@NVALID-ORDER-610 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . . . . . .
10.61INVALID-ORDER-611 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) . . . .
10.612NVALID-ORDER-612 Z(s) = (\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L})
10.618NVALID-ORDER-613 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.614NVALID-ORDER-614 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.61 INVALID-ORDER-615 Z(s) = (\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L)
10.616NVALID-ORDER-616 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_4 s}\right)
10.61TNVALID-ORDER-617 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
10.61\( \text{NVALID-ORDER-618} \( Z(s) = \left( \infty, \infty, \lambda_{.3} + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ R_L + \frac{1}{C_L s} \right) \end{array}
10.619NVALID-ORDER-619 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
10.620NVALID-ORDER-620 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.62 \text{INVALID-ORDER-621} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ L_L s + R_L + \frac{1}{C_L s}\right)
10.62 INVALID-ORDER-622 Z(s) = (\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s})
10.62\( \text{NVALID-ORDER-623} \( Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \)
10.624NVALID-ORDER-624 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
10.62 INVALID-ORDER-625 Z(s) = (\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L).
10.626NVALID-ORDER-626 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)
10.62 INVALID-ORDER-627 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_7 R_7 s + 1}\right)
10.62 \text{\&NVALID-ORDER-} 628 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right)
10.629NVALID-ORDER-629 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
10.630NVALID-ORDER-630 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.63INVALID-ORDER-631 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.632NVALID-ORDER-632 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}\right)
10.63\(\text{ENVALID-ORDER-633}\(Z(s) = \left(\infty, \infty, \lambda_{3} + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\)
10.634NVALID-ORDER-634 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
10.63 INVALID-ORDER-635 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
10.636NVALID-ORDER-636 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
10.63TNVALID-ORDER-637 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
10.63\(\text{NVALID-ORDER-638}\(Z(s) = \left(\infty, \infty, \infty, \lambda_{3} + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
10.639NVALID-ORDER-639 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ L_Ls + \frac{1}{C_Ls}\right)
10.640NVALID-ORDER-640 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)
10.64INVALID-ORDER-641 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.642\text{NVALID-ORDER-}642\ Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1},\ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
10.64 \text{BNVALID-ORDER-} 643 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L \left(C_5 L_5 s^2 + 1\right)}{C_L L_L s^2 + 1}\right)
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10.64\(\text{INVALID-ORDER-644}\(Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{R_5(C_5L_5s^2 + 1)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\)
10.64 INVALID-ORDER-645 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, R_L + \frac{1}{C_L s}\right)
10.64 ENVALID-ORDER-646 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)
10.64 INVALID-ORDER-647 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_3 s^2 + L_2 s + R_2}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)
10.64 \text{\&NVALID-ORDER-} 648 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ R_5, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.64 \text{ @NVALID-ORDER-649 } Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ R_5, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1} \right)
10.65 INVALID-ORDER-650 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, R_L\right) \dots \dots
10.65INVALID-ORDER-651 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{1}{C_{L_5} s}\right)
10.652NVALID-ORDER-652 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.65 INVALID-ORDER-653 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
10.654NVALID-ORDER-654 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_{3s} + R_3}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.65 INVALID-ORDER-655 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.65 INVALID-ORDER-656 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_2 L_3 R_{3s}^2 + L_{3s} + R_3}, \infty, \frac{1}{C_{5s}}, L_L s + R_L + \frac{1}{C_{Ls}}\right)
10.65 \text{ INVALID-ORDER-} 657 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.65\( \) NVALID-ORDER-658 Z(s) = \left( \infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.659NVALID-ORDER-659 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3} s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.660NVALID-ORDER-660 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)
10.66INVALID-ORDER-661 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
10.662NVALID-ORDER-662 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
10.662NVALID-ORDER-663 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_2 s^2 + L_2 s + R_2}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
10.664NVALID-ORDER-664 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
10.66 INVALID-ORDER-665 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.66 INVALID-ORDER-666 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.66 TNVALID-ORDER-667 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.66 NVALID-ORDER-668 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.66 \text{ @NVALID-ORDER-669 } Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1} \right)
10.67 \text{ INVALID-ORDER-} 670 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L \right) \ . \ .
10.67INVALID-ORDER-671 Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)
10.672NVALID-ORDER-672 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.678NVALID-ORDER-673 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
10.674NVALID-ORDER-674 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.67 INVALID-ORDER-675 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.676NVALID-ORDER-676 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_2 s^2 + L_2 s + R_2}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.67TNVALID-ORDER-677 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.67 \text{\&NVALID-ORDER-} 678 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.679NVALID-ORDER-679 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.68@NVALID-ORDER-680 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)
10.68INVALID-ORDER-681 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
10.682NVALID-ORDER-682 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
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10.68 INVALID-ORDER-683 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_{3s} + R_3}, \infty, L_5 s + \frac{1}{C_{5s}}, R_L + \frac{1}{C_{Ls}}\right)
10.684NVALID-ORDER-684 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.68 INVALID-ORDER-685 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . .
 10.686NVALID-ORDER-686 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.68TNVALID-ORDER-687 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.68 \text{ENVALID-ORDER-} 688 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.689NVALID-ORDER-689 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
 10.690NVALID-ORDER-690 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_2 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)
 10.69INVALID-ORDER-691 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_2 L_2 R_{2s}^2 + L_2 s + R_2}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_{Ls}}\right)
10.692NVALID-ORDER-692 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
10.69 INVALID-ORDER-693 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
10.694NVALID-ORDER-694 Z(s) = (\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s})
10.69 INVALID-ORDER-695 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_{3s} + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.69 INVALID-ORDER-696 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.69TNVALID-ORDER-697 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s}\right)
10.69 \text{\&NVALID-ORDER-} 698 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.699NVALID-ORDER-699 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.700NVALID-ORDER-700 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_2 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right).
10.70INVALID-ORDER-701 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_{Ls}}\right)
10.702NVALID-ORDER-702 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_3 s^2 + L_2 s + R_2}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_4 R_4 s + 1}\right)
10.702NVALID-ORDER-703 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_2 s^2 + L_2 s + R_2}, \infty, L_5 s + R_5 + \frac{1}{C_{5.5}}, R_L + \frac{1}{C_{4.5}}\right)
10.704NVALID-ORDER-704 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_2 s + R_2}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_5 s}\right)
10.70 INVALID-ORDER-705 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_2 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right)
10.70 INVALID-ORDER-706 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_2 s^2 + L_2 s + R_2}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.70TNVALID-ORDER-707 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.70\( \text{NVALID-ORDER-708} \) Z(s) = \left( \infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_3 s^2 + L_2 s + R_2}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + L_L s^2 + L_L} \right)
10.709NVALID-ORDER-709 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.710NVALID-ORDER-710 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_2 L_2 R_2 s^2 + L_2 s + R_2}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)
10.71INVALID-ORDER-711 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_{Ls}}\right)
10.712NVALID-ORDER-712 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
10.71ENVALID-ORDER-713 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
10.714NVALID-ORDER-714 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
10.71 INVALID-ORDER-715 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.716NVALID-ORDER-716 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
10.71 INVALID-ORDER-717 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s}\right)
10.71 \& \text{NVALID-ORDER-718} \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{C_L L_R L_s^2 + L_L s + L_L s + L_L s}{C_L L_L L_s^2 + L_L s} \right)
10.719NVALID-ORDER-719 Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
10.720NVALID-ORDER-720 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)
10.72INVALID-ORDER-721 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)
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10.72 \text{ 2NVALID-ORDER-} 722 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)
                                                                               \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ R_L + \frac{1}{C_Ls} \right)
10.72\(\text{INVALID-ORDER-724}\(Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}\), \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}\), \(L_L s + \frac{1}{C_L s} \)
10.72 INVALID-ORDER-725 Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.726NVALID-ORDER-726 Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)
                                                                               \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \right.
                                                                               \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}\right)
                                                                                \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)^{-1} \right)
10.730NVALID-ORDER-730 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
                                                                                                                                                  \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{1}{C_Ls}
                                                                                \left(\infty, \, \infty, \, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \, \infty, \right)
10.73INVALID-ORDER-731 Z(s) =
                                                                                                                                                   \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}
                                                                                \left( \infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \right)
10.732NVALID-ORDER-732 Z(s) =
                                                                                \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L + \frac{1}{C_Ls} \right)
10.73 NVALID-ORDER-733 Z(s) = 1
                                                                                \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
10.734NVALID-ORDER-734 Z(s) =
10.73 INVALID-ORDER-735 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right)
10.73 6NVALID-ORDER-736 Z(s) =
                                                                                \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
 10.73 NVALID-ORDER-737 Z(s) =
                                                                                \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \right)
                                                                               \stackrel{\longleftarrow}{(}\infty, \infty, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \frac{R_5(C_5L_5s^2 + 1)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}
10.740NVALID-ORDER-740 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{1}{C_1s}\right)
10.74INVALID-ORDER-741 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)
10.742NVALID-ORDER-742 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_2 s^2 + 1}, \infty, R_5, R_L + \frac{1}{C_L s}\right)
10.748NVALID-ORDER-743 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_2 s^2 + 1}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)
10.74\(\text{INVALID-ORDER-744}\) Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.74 INVALID-ORDER-745 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)
10.746NVALID-ORDER-746 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                        \frac{L_3s+R_3}{2+1}, \infty, R_5, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}
10.74\(\text{NVALID-ORDER-748}\) Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{R_L (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.749NVALID-ORDER-749 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, R_L\right)
10.750NVALID-ORDER-750 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
10.75INVALID-ORDER-751 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.752NVALID-ORDER-752 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
10.75\( \text{INVALID-ORDER-753} \( Z(s) = \left( \infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \right) \)
10.754NVALID-ORDER-754 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
10.75 INVALID-ORDER-755 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                               \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L} \right)
10.75 INVALID-ORDER-757 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
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10.75\( \text{NVALID-ORDER-758} \( Z(s) = \left( \infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \)
                                                                           \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L\right)
                                                                          \left(\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_{Ls}}\right)
                                                                          (\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1})
10.762NVALID-ORDER-762 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_{LS}}\right)
                                                                          \left(\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
10.76 INVALID-ORDER-765 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.76 INVALID-ORDER-766 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                             \left( \infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) 
10.768NVALID-ORDER-768 Z(s) = 
10.769NVALID-ORDER-769 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right) \dots
10.770NVALID-ORDER-770 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_{L_5} s}\right)
10.77INVALID-ORDER-771 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.772NVALID-ORDER-772 Z(s) = (\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls})
10.77BNVALID-ORDER-773 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.774NVALID-ORDER-774 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.77\finvalid NVALID-ORDER-775 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
10.776NVALID-ORDER-776 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                          \left(\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                                            \left(\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.779NVALID-ORDER-779 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)
10.78 INVALID-ORDER-780 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
10.78INVALID-ORDER-781 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.782NVALID-ORDER-782 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_{55}}, R_L + \frac{1}{C_{L5}}\right)
10.78\textbf{ENVALID-ORDER-783} Z(s) = (\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_2 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s})
10.784NVALID-ORDER-784 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.78 INVALID-ORDER-785 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.78 INVALID-ORDER-786 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
                                                                                                                  \frac{L_{3}s+R_{3}}{+1}, \infty, L_{5}s+\frac{1}{C_{5}s}, \frac{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}{C_{r}L_{r}s^{2}+1}
                                                                            (\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1})
                                                                          \left(\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)
10.790NVALID-ORDER-790 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_{Ls}}\right)
10.79INVALID-ORDER-791 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
10.792NVALID-ORDER-792 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
10.79ENVALID-ORDER-793 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_Ls}\right)
10.794NVALID-ORDER-794 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.79 INVALID-ORDER-795 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.796NVALID-ORDER-796 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
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10.79TNVALID-ORDER-797 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                                       (\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1})
10.799NVALID-ORDER-799 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)
                                                                     \left(\infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, L_5s+R_5+\frac{1}{C_5s}, \frac{1}{C_Ls}\right)
10.800NVALID-ORDER-800 Z(s) =
10.80INVALID-ORDER-801 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)
10.80 \text{ 2NVALID-ORDER-802 } Z(s) = \left(\infty, \ \infty, \ \tfrac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_3 s^2 + 1}, \ \infty, \ L_5 s + R_5 + \tfrac{1}{C_5 s}, \ R_L + \tfrac{1}{C_L s} \right)
                                                                                      \frac{C_3L_3R_3s^2+L_3s+R_3}{C_2L_2s^2+1}, \infty, L_5s+R_5+\frac{1}{C_5s}, L_Ls+\frac{1}{C_Ls}
10.80BNVALID-ORDER-803 Z(s) =
                                                                      (\infty, \infty,
10.804NVALID-ORDER-804 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
10.80 INVALID-ORDER-805 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.80 6NVALID-ORDER-806 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
                                                                                                     \frac{s^2 + L_3 s + R_3}{3s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}
10.80TNVALID-ORDER-807 Z(s) =
                                                                                      \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, L_5s+R_5+\frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}
                                                                       \infty, \infty,
10.80 INVALID-ORDER-809 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)
10.810NVALID-ORDER-810 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{1}{C_Ls}\right)
10.81INVALID-ORDER-811 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{R_L}{C_LR_Ls + 1}\right)
                                                                                     \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ R_L + \frac{1}{C_Ls}
10.812NVALID-ORDER-812 Z(s) = (\infty, \infty,
10.81 INVALID-ORDER-813 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s} \right)
10.814NVALID-ORDER-814 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
10.81 INVALID-ORDER-815 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
10.81 \text{ INVALID-ORDER-816 } Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.81 INVALID-ORDER-817 Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                                      \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right) \right)
                                                                                                                                                                       R_L(C_LL_Ls^2+1)
10.81\( \) NVALID-ORDER-818 Z(s) = (
                                                                                                                                \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L
10.819NVALID-ORDER-819 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_3 s^2 + L_3 s}, \infty, \right)
                                                                                                                                \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}
                                                                                     \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty,
10.82 NVALID-ORDER-820 Z(s) = (\infty, \infty, \infty)
                                                                                                                      , \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}
10.82INVALID-ORDER-821 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 c^2 + L_3 s}\right)
10.822NVALID-ORDER-822 Z(s) = (\infty, \infty,
10.82\( \text{SNVALID-ORDER-823} \( Z(s) = \int \infty, \infty, \)
10.824NVALID-ORDER-824 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_1 L_3 c^2 + 1}\right)
10.82 INVALID-ORDER-825 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_2 s^2 + 1}\right)
                                                                                                                                                                  L_{Ls} + R_{L} + \frac{1}{C_{Ls}}
10.826NVALID-ORDER-826 Z(s) =
10.82TNVALID-ORDER-827 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \right)
                                                                                                                                                                      R_L\left(C_LL_Ls^2+1\right)
                                                                       (\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}
10.828NVALID-ORDER-828 Z(s) =
                                                                                                                                 \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1},
                                                                                      \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty,
10.82 NVALID-ORDER-829 Z(s) =
                                                                       \infty, \infty,
                                                                                                                                 \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},
                                                                       \infty, \infty, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_1r_2r_3r_3}
                                                                                                                                                                 \frac{1}{C_L s}
10.83 ONVALID-ORDER-830 Z(s) =
                                                                                                                                    R_5(C_5L_5s^2+1)
                                                                                                                                 \frac{\frac{R_{L}}{C_{5}L_{5}s^{2}+C_{5}R_{5}s+1},\ \frac{R_{L}}{C_{L}R_{L}s+1}
                                                                       \infty, \, \infty, \, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \, \infty,
10.83INVALID-ORDER-831 Z(s) =
                                                                                                                                    R_5(C_5L_5s^2+1)
                                                                       \infty, \infty, \frac{C_3L_3R_3s^2+1}{C_3r}
                                                                                                                       , \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, R_L + \frac{1}{C_Ls}
10.832NVALID-ORDER-832 Z(s) =
10.83 \text{ ENVALID-ORDER-833 } Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s} \right)
                                                                                                                                    R_5(C_5L_5s^2+1)
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10.08 EVALID CORDINATE 
$$Z_{ij} = \left( \sum_{k \in K_{ij}} \sum_{i \in K_{ij}$$

$10.86 \text{ INVALID-ORDER-865 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} \right) \ \dots $
$10.86 \text{ 6NVALID-ORDER-866 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3 \left( C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $
$10.86 \text{ INVALID-ORDER-} 867 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1} \right)' \dots \dots$
10.86\NVALID-ORDER-868 $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$
10.86 NVALID-ORDER-869 $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$
$10.87 \text{@NVALID-ORDER-870 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1} \right) \ \dots $
10.87INVALID-ORDER-871 $Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
$10.87 2 \text{NVALID-ORDER-} 872 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) \ \dots $
$10.87 \text{\&NVALID-ORDER-873 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) $
$10.87 \text{ INVALID-ORDER-874 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) $
$10.87 \text{ INVALID-ORDER-875 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $
$10.87 \text{ (INVALID-ORDER-876 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)  \dots $
$10.87\text{INVALID-ORDER-877 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right) $
10.87\( \text{NVALID-ORDER-878} \) $Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left( C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L \right) $
$10.87 \text{ @NVALID-ORDER-879 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s+\frac{1}{C_5s}, \ \frac{1}{C_Ls}\right) $
$10.88 \text{@NVALID-ORDER-}880 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)  \dots $
$10.88INVALID-ORDER-881 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s+\frac{1}{C_5s}, \ R_L+\frac{1}{C_Ls}\right) \ \dots $
$10.882 \text{NVALID-ORDER-} 882 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s+\frac{1}{C_5s}, \ L_Ls+\frac{1}{C_Ls}\right) $
$10.88 \text{ENVALID-ORDER-} 883 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} \right)^{-1} \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.884\text{NVALID-ORDER-}884\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s+\frac{1}{C_5s},\ L_Ls+R_L+\frac{1}{C_Ls}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.88 \text{INVALID-ORDER-885} \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.88 \text{ INVALID-ORDER-886 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1} \right) \ \dots $
$10.88\text{INVALID-ORDER-}887\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)\ \dots \qquad $
10.88\( \text{NVALID-ORDER-888} \( Z(s) = \left( \infty, \infty, \frac{R_3 \left( C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L \right) \qquad \qqqq \qqqq \qqqqq \qqqq \qqqqq \qqqqqq
$10.88 \text{ @NVALID-ORDER-889 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{1}{C_Ls}\right) \ . $
$10.89 \text{@NVALID-ORDER-890 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L}{C_LR_Ls+1} \right) $
$10.89 \text{INVALID-ORDER-891 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right) $
$10.892\text{NVALID-ORDER-892} \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + \frac{1}{C_Ls}\right) \ \dots $
$10.89 \text{\&NVALID-ORDER-893 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} \right) $
$10.894\text{NVALID-ORDER-894} \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + R_L + \frac{1}{C_Ls} \right) $
$10.89 \text{ INVALID-ORDER-895 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)  \dots $

$10.92 \text{INVALID-ORDER-} 927 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1} \right) \ \dots $	121
$10.92\$NVALID-ORDER-928\ Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ R_L\right)$	121
10.929NVALID-ORDER-929 $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{1}{C_Ls}\right)$	121
$10.93 \text{@NVALID-ORDER-930 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L}{C_LR_Ls+1} \right)  \dots $	121
$10.93 \text{INVALID-ORDER-931 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L + \frac{1}{C_Ls} \right) \ \dots $	121
$10.932 \text{NVALID-ORDER-} 932 \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls} \right) \ \dots $	
$10.93 \text{ INVALID-ORDER-933 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} \right)^{\prime} \ \dots \ $	121
$10.93 \text{4NVALID-ORDER-934} \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + R_L + \frac{1}{C_Ls} \right) \ \dots \ $	
$10.93 \text{INVALID-ORDER-935} \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	121
$10.93 \text{ (INVALID-ORDER-936 } Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	122
$10.93\text{TNVALID-ORDER-937} \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1} \right)' \dots \dots$	122

11 PolynomialError

1 Examined 
$$H(z)$$
 for CG TIA simple Z3 Z5 ZL: 
$$\frac{Z_3Z_5Z_Lg_m-Z_3Z_L}{Z_3Z_5g_m+2Z_3Z_Lg_m+Z_3+Z_5Z_Lg_m+Z_L}$$

$$H(z) = \frac{Z_3 Z_5 Z_L g_m - Z_3 Z_L}{Z_3 Z_5 g_m + 2 Z_3 Z_L g_m + Z_3 + Z_5 Z_L g_m + Z_L}$$

- 2 HP
- 3 BP

**3.1** BP-1 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{s \left( L_L R_3 R_5 g_m - L_L R_3 \right)}{R_3 R_5 g_m + R_3 + s^2 \left( C_L L_L R_3 R_5 g_m + C_L L_L R_3 \right) + s \left( 2 L_L R_3 g_m + L_L R_5 g_m + L_L \right)}$$

$$Q \colon \frac{C_L R_3 R_5 g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_3 \sqrt{\frac{1}{C_L L_L}}}{2R_3 g_m + R_5 g_m + 1}$$
 wo:  $\sqrt{\frac{1}{C_L L_L}}$  bandwidth:  $\frac{\sqrt{\frac{1}{C_L L_L}} (2R_3 g_m + R_5 g_m + 1)}{C_L R_3 R_5 g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_3 \sqrt{\frac{1}{C_L L_L}}}$  K-LP: 0 K-HP: 0 K-BP:  $\frac{R_3 R_5 g_m - R_3}{2R_3 g_m + R_5 g_m + 1}$  Qz: None Wz: None

3.2 BP-2 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{s\left(L_{L}R_{3}R_{5}R_{L}g_{m} - L_{L}R_{3}R_{L}\right)}{R_{3}R_{5}R_{L}g_{m} + R_{3}R_{L} + s^{2}\left(C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{L}L_{L}R_{3}R_{L}\right) + s\left(L_{L}R_{3}R_{5}g_{m} + 2L_{L}R_{3}R_{L}g_{m} + L_{L}R_{3} + L_{L}R_{5}R_{L}g_{m} + L_{L}R_{L}\right)}$$

## Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_L R_3 R_5 R_L g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_3 R_L \sqrt{\frac{1}{C_L L_L}}}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_L L_L}} (R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L)}{C_L R_3 R_5 R_L g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_3 R_L \sqrt{\frac{1}{C_L L_L}}} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_L} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

**3.3** BP-3 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{s \left( L_L R_5 g_m - L_L \right)}{2 L_L g_m s + R_5 g_m + s^2 \left( C_3 L_L R_5 g_m + C_3 L_L + C_L L_L R_5 g_m + C_L L_L \right) + 1}$$

$$Q: \frac{C_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}} + C_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}} + C_{L}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}} + C_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}{2g_{m}}$$

$$wo: \sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}$$

$$bandwidth: \frac{2g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}{C_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}} + C_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}} + C_{L}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}} + C_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}$$

K-LP: 0  
K-HP: 0  
K-BP: 
$$\frac{R_5g_m-1}{2g_m}$$
  
Qz: None  
Wz: None

**3.4** BP-4 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{s \left( L_L R_5 R_L g_m - L_L R_L \right)}{R_5 R_L g_m + R_L + s^2 \left( C_3 L_L R_5 R_L g_m + C_3 L_L R_L + C_L L_L R_5 R_L g_m + C_L L_L R_L \right) + s \left( L_L R_5 g_m + 2 L_L R_L g_m + L_L \right)}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}\\ \text{wo:} \ \sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{bandwidth:} \ \frac{(R_{5}g_{m}+2R_{L}g_{m}+1)\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}{C_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_{5}R_{L}g_{m}-R_{L}}{R_{5}g_{m}+2R_{L}g_{m}+1}}\\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

**3.5** BP-5 
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{s \left( L_L R_3 R_5 g_m - L_L R_3 \right)}{R_3 R_5 g_m + R_3 + s^2 \left( C_3 L_L R_3 R_5 g_m + C_3 L_L R_3 + C_L L_L R_3 R_5 g_m + C_L L_L R_3 \right) + s \left( 2 L_L R_3 g_m + L_L R_5 g_m + L_L \right)}$$

## Parameters:

$$\begin{array}{c} \text{Q:} \ \frac{C_{3}R_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{+}+C_{L}L_{L}}}+C_{3}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{wo:} \ \sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{bandwidth:} \ \frac{(2R_{3}g_{m}+R_{5}g_{m}+1)\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}{C_{3}R_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{3}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}\sqrt{\frac{1}{C_{3}L_{L$$

**3.6** BP-6 
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{s\left(L_{L}R_{3}R_{5}R_{L}g_{m} - L_{L}R_{3}R_{L}\right)}{R_{3}R_{5}R_{L}g_{m} + R_{3}R_{L} + s^{2}\left(C_{3}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{3}L_{L}R_{3}R_{L} + C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{L}L_{L}R_{3}R_{L}\right) + s\left(L_{L}R_{3}R_{5}g_{m} + 2L_{L}R_{3}R_{L}g_{m} + L_{L}R_{3} + L_{L}R_{5}R_{L}g_{m} + L_{L}R_{L}\right)}$$

$$\begin{array}{c} \text{Q:} \frac{C_{3}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{3}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{wo:} \sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{wo:} \sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{bandwidth:} \frac{(R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}{C_{3}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{3}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+$$

**3.7** BP-7 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, R_{5}, R_{L}\right)$$

$$H(s) = \frac{s \left( L_3 R_5 R_L g_m - L_3 R_L \right)}{R_5 R_L g_m + R_L + s^2 \left( C_3 L_3 R_5 R_L g_m + C_3 L_3 R_L \right) + s \left( L_3 R_5 g_m + 2 L_3 R_L g_m + L_3 \right)}$$

$$Q \colon \frac{C_3 R_5 R_L g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_L \sqrt{\frac{1}{C_3 L_3}}}{R_5 g_m + 2 R_L g_m + 1}$$
 wo: 
$$\sqrt{\frac{1}{C_3 L_3}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_3 L_3}} (R_5 g_m + 2 R_L g_m + 1)}{C_3 R_5 R_L g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_L \sqrt{\frac{1}{C_3 L_3}}}$$
 K-LP: 0 K-HP: 0 K-BP: 
$$\frac{R_5 R_L g_m - R_L}{R_5 g_m + 2 R_L g_m + 1}$$
 Qz: None Wz: None

**3.8** BP-8 
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{s \left( L_3 R_5 g_m - L_3 \right)}{2 L_3 g_m s + R_5 g_m + s^2 \left( C_3 L_3 R_5 g_m + C_3 L_3 + C_L L_3 R_5 g_m + C_L L_3 \right) + 1}$$

### Parameters:

$$\begin{array}{c} \text{Q:} \ \frac{C_3R_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{2g_m} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3+C_LL_3}} \\ \text{bandwidth:} \ \frac{2g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{C_3R_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}}+C_L\sqrt{\frac{1}{C_3L_3+C_LL_3}} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_5g_m-1}{2g_m} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

**3.9** BP-9 
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{s \left( L_{3}R_{5}R_{L}g_{m} - L_{3}R_{L} \right)}{R_{5}R_{L}g_{m} + R_{L} + s^{2} \left( C_{3}L_{3}R_{5}R_{L}g_{m} + C_{3}L_{3}R_{L} + C_{L}L_{3}R_{5}R_{L}g_{m} + C_{L}L_{3}R_{L} \right) + s \left( L_{3}R_{5}g_{m} + 2L_{3}R_{L}g_{m} + L_{3} \right)}{R_{5}R_{L}g_{m} + R_{L} + s^{2} \left( C_{3}L_{3}R_{5}R_{L}g_{m} + C_{3}L_{3}R_{L} + C_{L}L_{3}R_{5}R_{L}g_{m} + C_{L}L_{3}R_{L} \right) + s \left( L_{3}R_{5}g_{m} + 2L_{3}R_{L}g_{m} + L_{3} \right)}$$

**3.10** BP-10 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{s\left(L_{3}L_{L}R_{5}g_{m} - L_{3}L_{L}\right)}{2L_{3}L_{L}g_{m}s + L_{3}R_{5}g_{m} + L_{3} + L_{L}R_{5}g_{m} + L_{L} + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m} + C_{3}L_{3}L_{L} + C_{L}L_{3}L_{L}R_{5}g_{m} + C_{L}L_{3}L_{L}\right)}$$

$$\begin{array}{c} \text{Q:} & \frac{C_3R_5g_m\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + C_3\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_LL_3L_L}} + C_LR_5g_m\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + C_L\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L}} + C_L\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L}} \\ \text{wo:} & \sqrt{\frac{L_3+L_L}{C_3L_3L_L}} \\ \text{bandwidth:} & \frac{2g_m\sqrt{\frac{L_3+L_L}{C_3L_3L_L}}}{C_3R_5g_m\sqrt{\frac{L_3}{C_3L_3L_L} + C_LL_3L_L} + \frac{L_L}{C_3L_3L_L} + C_3\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + C_LR_5g_m\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + C_LL_3L_L} + C_L\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}$$

# **3.11** BP-11 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

$$H(s) = \frac{s\left(L_{3}L_{L}R_{5}R_{L}g_{m} - L_{3}L_{L}R_{L}\right)}{L_{3}R_{5}R_{L}g_{m} + L_{3}R_{L} + L_{L}R_{5}R_{L}g_{m} + L_{L}R_{L} + s^{2}\left(C_{3}L_{3}L_{L}R_{5}R_{L}g_{m} + C_{3}L_{3}L_{L}R_{5}R_{L}g_{m} + C_{L}L_{3}L_{L}R_{L}\right) + s\left(L_{3}L_{L}R_{5}g_{m} + 2L_{3}L_{L}R_{L}g_{m} + L_{3}L_{L}\right)}$$

#### Parameters:

$$Q: \frac{C_3R_5R_Lg_m\sqrt{\frac{L_3}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + \frac{L_L}{C_3L_3L_L} + C_3R_L\sqrt{\frac{L_3}{C_3L_3L_L + C_LL_3L_L}} + C_LR_5R_Lg_m\sqrt{\frac{L_3}{C_3L_3L_L + C_LL_3L_L} + C_3L_3L_L + C_3L_$$

# **3.12** BP-12 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, R_L\right)$

$$H(s) = \frac{s \left( L_3 R_3 R_5 R_L g_m - L_3 R_3 R_L \right)}{R_3 R_5 R_L g_m + R_3 R_L + s^2 \left( C_3 L_3 R_3 R_5 R_L g_m + C_3 L_3 R_3 R_L \right) + s \left( L_3 R_3 R_5 g_m + 2 L_3 R_3 R_L g_m + L_3 R_3 + L_3 R_5 R_L g_m + L_3 R_L \right)}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_3R_3R_5R_Lg_m\sqrt{\frac{1}{C_3L_3}}+C_3R_3R_L\sqrt{\frac{1}{C_3L_3}}}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_3L_3}}(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}{C_3R_3R_5R_Lg_m\sqrt{\frac{1}{C_3L_3}}+C_3R_3R_L\sqrt{\frac{1}{C_3L_3}}} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_5R_Lg_m-R_3R_L}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

**3.13** BP-13 
$$Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{s \left(L_{3} R_{3} R_{5} g_{m} - L_{3} R_{3}\right)}{R_{3} R_{5} g_{m} + R_{3} + s^{2} \left(C_{3} L_{3} R_{3} R_{5} g_{m} + C_{L} L_{3} R_{3} R_{5} g_{m} + C_{L} L_{3} R_{3}\right) + s \left(2 L_{3} R_{3} g_{m} + L_{3} R_{5} g_{m} + L_{3}\right)}$$

$$\begin{array}{c} \text{Q:} & \frac{C_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_3R_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3R_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{2R_3g_m+R_5g_m+1} \\ \text{wo:} & \sqrt{\frac{1}{C_3L_3+C_LL_3}} \\ & \frac{(2R_3g_m+R_5g_m+1)\sqrt{\frac{1}{C_3L_3}+C_LL_3}}{C_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_3R_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3R_5g_m\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1} \\ \text{Qz:} & \text{None} \\ \\ \text{Wz:} & \text{None} \end{array}$$

# **3.14** BP-14 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{s\left(L_{3}R_{3}R_{5}R_{L}g_{m} - L_{3}R_{3}R_{L}\right)}{R_{3}R_{5}R_{L}g_{m} + R_{3}R_{L} + s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m} + C_{3}L_{3}R_{3}R_{L} + C_{L}L_{3}R_{3}R_{5}R_{L}g_{m} + C_{L}L_{3}R_{3}R_{L}\right) + s\left(L_{3}R_{3}R_{5}g_{m} + 2L_{3}R_{3}R_{L}g_{m} + L_{3}R_{3} + L_{3}R_{5}R_{L}g_{m} + L_{3}R_{L}\right)}$$

#### Parameters:

$$\begin{array}{c} \text{Q:} & \frac{C_{3}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{3}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}\\ \text{wo:} & \sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}\\ \text{bandwidth:} & \frac{(R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}}{C_{3}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{3}R_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C_{L}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}+C_{L}L_{3}}}+C$$

**3.15** BP-15 
$$Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{s\left(L_{3}L_{L}R_{3}R_{5}g_{m} - L_{3}L_{L}R_{3}\right)}{L_{3}R_{3}R_{5}g_{m} + L_{3}R_{3} + L_{L}R_{3}R_{5}g_{m} + L_{L}R_{3} + s^{2}\left(C_{3}L_{3}L_{L}R_{3}R_{5}g_{m} + C_{3}L_{3}L_{L}R_{3} + C_{L}L_{3}L_{L}R_{3}\right) + s\left(2L_{3}L_{L}R_{3}g_{m} + L_{3}L_{L}R_{5}g_{m} + L_{3}L_{L}\right)}$$

$$\begin{array}{c} Q: \frac{C_{3}R_{3}R_{5}g_{m}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{3}R_{3}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}R_{5}g_{m}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}C_{3}L_{L}+C_{L}L_{3}L_{L}} \\ wo: \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} \\ wo: \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} \\ & \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}R_{5}g_{m}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}C_{L}+C_{L}L_{3}L_{L}} \\ & \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}R_{5}g_{m}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}C_{L}+C_{L}L_{3}L_{L}} \\ & \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}R_{5}g_{m}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}C_{L}+C_{L}L_{3}L_{L}} \\ & \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}C_{L}+C_{L}L_{3}L_{L}} + C_{L}R_{3}C_{L}+C_{L}L_{3}L_{L}} \\ & \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}C_{L}+C_{L}L_{2}L_{L}} \\ & \sqrt{\frac{L_{3}+L_$$

**3.16** BP-16 
$$Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{s\left(L_{3}L_{L}R_{3}R_{5}R_{L}g_{m} - L_{3}L_{L}R_{3}R_{L}\right)}{L_{3}R_{3}R_{5}R_{L}g_{m} + L_{2}R_{3}R_{5}R_{L}g_{m} + L_{L}R_{3}R_{L} + s^{2}\left(C_{3}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{3}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{L}L_{3}L_{L}R_{3}R_{5}g_{m} + 2L_{3}L_{L}R_{3}R_{L}g_{m} + L_{3}L_{L}R_{3} + L_{3}L_{L}R_{3}R_{L}g_{m} + L_{3}L_{L}R_{3}R_{L}$$

$$Q \colon \frac{C_3 R_3 R_5 R_L g_m \sqrt{\frac{L_3}{C_3 L_3 L_L} + \frac{L_L}{C_3 L_$$

## 4 LP

## 5 BS

**5.1** BS-1 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^2 \left( C_L L_L R_3 R_5 g_m - C_L L_L R_3 \right)}{2R_3 g_m + R_5 g_m + s^2 \left( 2C_L L_L R_3 g_m + C_L L_L R_5 g_m + C_L L_L \right) + s \left( C_L R_3 R_5 g_m + C_L R_3 \right) + 1}$$

## Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{2L_LR_3g_m\sqrt{\frac{1}{C_LL_L}} + L_LR_5g_m\sqrt{\frac{1}{C_LL_L}} + L_L\sqrt{\frac{1}{C_LL_L}}}{R_3R_5g_m + R_3} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_LL_L}}(R_3R_5g_m + R_3)}{2L_LR_3g_m\sqrt{\frac{1}{C_LL_L}} + L_LR_5g_m\sqrt{\frac{1}{C_LL_L}} + L_L\sqrt{\frac{1}{C_LL_L}}} \\ \text{K-LP:} \ \frac{R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + 1} \\ \text{K-HP:} \ \frac{R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + 1} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{array}$$

**5.2 BS-2** 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L + s^2 \left(C_L L_L R_3 R_5 R_L g_m - C_L L_L R_3 R_L\right)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^2 \left(C_L L_L R_3 R_5 g_m + 2 C_L L_L R_3 R_L g_m + C_L L_L R_3 + C_L L_L R_5 R_L g_m + C_L L_L R_1\right) + s \left(C_L R_3 R_5 R_L g_m + C_L R_3 R_L\right)}$$

$$\begin{aligned} & \text{Q:} \ \frac{L_L R_3 R_5 g_m \sqrt{\frac{1}{C_L L_L}} + 2L_L R_3 R_L g_m \sqrt{\frac{1}{C_L L_L}} + L_L R_3 \sqrt{\frac{1}{C_L L_L}} + L_L R_5 R_L g_m \sqrt{\frac{1}{C_L L_L}} + L_L R_L \sqrt{\frac{1}{C_L L_L}} \\ & \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \end{aligned} \\ & \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_L L_L}} (R_3 R_5 R_L g_m + R_3 R_L)}{L_L R_3 R_5 g_m \sqrt{\frac{1}{C_L L_L}} + 2L_L R_3 R_L g_m \sqrt{\frac{1}{C_L L_L}} + L_L R_3 \sqrt{\frac{1}{C_L L_L}} + L_L R_5 R_L g_m \sqrt{\frac{1}{C_L L_L}} + L_L R_L \sqrt{\frac{1}{C_L L_L}} \\ & \text{K-LP:} \ \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}} \\ & \text{K-HP:} \ \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}} \\ & \text{K-BP:} \ 0 \end{aligned}$$

Qz: None Wz: 
$$\sqrt{\frac{1}{C_L L_L}}$$

**5.3** BS-3 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_3 R_L \right)}{R_5 g_m + 2 R_L g_m + s^2 \left( C_3 L_3 R_5 g_m + 2 C_3 L_3 R_L g_m + C_3 L_3 \right) + s \left( C_3 R_5 R_L g_m + C_3 R_L \right) + 1}$$

$$Q \colon \frac{L_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{3}}} + 2L_{3}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}}} + L_{3}\sqrt{\frac{1}{C_{3}L_{3}}}}{R_{5}R_{L}g_{m} + R_{L}}$$
 wo: 
$$\sqrt{\frac{1}{C_{3}L_{3}}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_{3}L_{3}}}(R_{5}R_{L}g_{m} + R_{L})}{L_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{3}L_{3}}} + 2L_{3}R_{L}g_{m}\sqrt{\frac{1}{C_{3}L_{3}}} + L_{3}\sqrt{\frac{1}{C_{3}L_{3}}}}$$
 K-LP: 
$$\frac{R_{5}R_{L}g_{m} - R_{L}}{R_{5}g_{m} + 2R_{L}g_{m} + 1}$$
 K-HP: 
$$\frac{R_{5}R_{L}g_{m} - R_{L}}{R_{5}g_{m} + 2R_{L}g_{m} + 1}$$
 K-BP: 0 Qz: None Wz: 
$$\sqrt{\frac{1}{C_{3}L_{3}}}$$

**5.4** BS-4 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3R_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^2\left(C_3L_3R_3R_5g_m + 2C_3L_3R_3R_Lg_m + C_3L_3R_3 + C_3L_3R_5R_Lg_m + C_3L_3R_L\right) + s\left(C_3R_3R_5R_Lg_m + C_3R_3R_L\right)}$$

### Parameters:

$$\begin{array}{c} \text{Q:} \ \frac{L_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3}} + 2L_3R_3R_Lg_m\sqrt{\frac{1}{C_3L_3}} + L_3R_3\sqrt{\frac{1}{C_3L_3}} + L_3R_5R_Lg_m\sqrt{\frac{1}{C_3L_3}} + L_3R_L\sqrt{\frac{1}{C_3L_3}} }{R_3R_5R_Lg_m + R_3R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_3L_3}}(R_3R_5R_Lg_m + R_3R_L)}{L_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3}} + 2L_3R_3R_Lg_m\sqrt{\frac{1}{C_3L_3}} + L_3R_3\sqrt{\frac{1}{C_3L_3}} + L_3R_5R_Lg_m\sqrt{\frac{1}{C_3L_3}} + L_3R_5R_Lg_m\sqrt{\frac$$

## 6 GE

**6.1** GE-1 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^2 \left( C_L L_L R_3 R_5 g_m - C_L L_L R_3 \right) + s \left( C_L R_3 R_5 R_L g_m - C_L R_3 R_L \right)}{2 R_3 g_m + R_5 g_m + s^2 \left( 2 C_L L_L R_3 g_m + C_L L_L R_5 g_m + C_L L_L \right) + s \left( C_L R_3 R_5 g_m + 2 C_L R_3 R_L g_m + C_L R_3 + C_L R_5 R_L g_m + C_L R_L \right) + 1}$$

$$\begin{aligned} &\text{Q: } \frac{2L_L R_3 g_m \sqrt{\frac{1}{C_L L_L}} + L_L R_5 g_m \sqrt{\frac{1}{C_L L_L}} + L_L \sqrt{\frac{1}{C_L L_L}}}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_L L_L}} \\ &\text{bandwidth: } \frac{\sqrt{\frac{1}{C_L L_L}} (R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L)}{2L_L R_3 g_m \sqrt{\frac{1}{C_L L_L}} + L_L R_5 g_m \sqrt{\frac{1}{C_L L_L}} + L_L \sqrt{\frac{1}{C_L L_L}}} \\ &\text{K-LP: } \frac{R_3 R_5 g_m - R_3}{2R_3 g_m + R_5 g_m + 1} \\ &\text{K-HP: } \frac{R_3 R_5 g_m - R_3}{2R_3 g_m + R_5 g_m + 1} \end{aligned}$$

K-BP: 
$$\frac{R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}}{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L}}$$
Qz: 
$$\frac{L_{L}\sqrt{\frac{1}{C_{L}L_{L}}}}{R_{L}}$$
Wz: 
$$\sqrt{\frac{1}{C_{L}L_{L}}}$$

**6.2** GE-2 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L + s^2 \left(C_L L_L R_3 R_5 R_L g_m - C_L L_L R_3 R_L\right) + s \left(L_L R_3 R_5 g_m - L_L R_3\right)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^2 \left(C_L L_L R_3 R_5 g_m + 2 C_L L_L R_3 R_L g_m + C_L L_L R_3 + C_L L_L R_3 R_L g_m + C_L L_L R_3 R_L g_m + L_L R_5 g_m + R_L R_$$

$$Q \colon \frac{C_L R_3 R_5 g_m \sqrt{\frac{1}{C_L L_L}} + 2 C_L R_3 R_L g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_3 \sqrt{\frac{1}{C_L L_L}} + C_L R_5 R_L g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_L \sqrt{\frac{1}{C_L L_L}}}{2 R_3 g_m + R_5 g_m + 1}$$

$$\text{wo: } \sqrt{\frac{1}{C_L L_L}}$$

$$\text{bandwidth: } \frac{\sqrt{\frac{1}{C_L L_L}} (2 R_3 g_m + R_5 g_m + 1)}{C_L R_3 R_5 g_m \sqrt{\frac{1}{C_L L_L}} + 2 C_L R_3 R_L g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_3 \sqrt{\frac{1}{C_L L_L}} + C_L R_5 R_L g_m \sqrt{\frac{1}{C_L L_L}} + C_L R_L \sqrt{\frac{1}{C_L L_L}}}$$

$$\text{K-LP: } \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}}$$

$$\text{K-HP: } \frac{R_3 R_5 g_m - R_3 R_L}{R_3 R_5 g_m - 2 R_3 R_L g_m - R_3 R_L}}$$

$$\text{K-BP: } \frac{R_3 R_5 g_m - R_3}{2 R_3 g_m + R_5 g_m + 1}}$$

$$\text{Qz: } C_L R_L \sqrt{\frac{1}{C_L L_L}}}$$

$$\text{Wz: } \sqrt{\frac{1}{C_L L_L}}$$

## **6.3** GE-3 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{C_5 L_5 R_3 R_L g_m s^2 - C_5 R_3 R_L s + R_3 R_L g_m}{R_3 g_m + R_L g_m + s^2 \left( C_5 L_5 R_3 g_m + C_5 L_5 R_L g_m \right) + s \left( 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_L \right)}$$

## Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_L g_m \sqrt{\frac{1}{C_5 L_5}}}{2 R_3 R_L g_m + R_3 + R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5 L_5}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5 L_5}} (2 R_3 R_L g_m + R_3 + R_L)}{L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_L g_m \sqrt{\frac{1}{C_5 L_5}}} \\ & \text{K-LP:} \ \frac{R_3 R_L}{R_3 + R_L} \\ & \text{K-HP:} \ \frac{R_3 R_L}{R_3 + R_L} \\ & \text{K-BP:} \ -\frac{R_3 R_L}{2 R_3 R_L g_m + R_3 + R_L} \\ & \text{Qz:} \ -L_5 g_m \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

**6.4 GE-4** 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{-C_5L_5R_3R_Ls^2 + L_5R_3R_Lg_ms - R_3R_L}{2R_3R_Lg_m + R_3 + R_L + s^2\left(2C_5L_5R_3R_Lg_m + C_5L_5R_3 + C_5L_5R_L\right) + s\left(L_5R_3g_m + L_5R_Lg_m\right)}$$

$$\begin{aligned} & \text{Q:} \ \frac{2C_5R_3R_Lg_m\sqrt{\frac{1}{C_5L_5}} + C_5R_3\sqrt{\frac{1}{C_5L_5}} + C_5R_L\sqrt{\frac{1}{C_5L_5}}}{R_3g_m + R_Lg_m} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5L_5}}(R_3g_m + R_Lg_m)}{2C_5R_3R_Lg_m\sqrt{\frac{1}{C_5L_5}} + C_5R_3\sqrt{\frac{1}{C_5L_5}} + C_5R_L\sqrt{\frac{1}{C_5L_5}}} \\ & \text{K-LP:} \ -\frac{R_3R_L}{2R_3R_Lg_m + R_3 + R_L}}{R_3R_L} \\ & \text{K-HP:} \ -\frac{R_3R_L}{2R_3R_Lg_m + R_3 + R_L} \end{aligned}$$

K-BP: 
$$\frac{R_3 R_L}{R_3 + R_L}$$
Qz:  $-\frac{C_5 \sqrt{\frac{1}{C_5 L_5}}}{g_m}$ 
Wz:  $\sqrt{\frac{1}{C_5 L_5}}$ 

**6.5** GE-5 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{C_5 L_5 R_3 R_L g_m s^2 + R_3 R_L g_m + s \left(C_5 R_3 R_5 R_L g_m - C_5 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_5 L_5 R_3 g_m + C_5 L_5 R_L g_m\right) + s \left(C_5 R_3 R_5 g_m + 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_5 R_L g_m + C_5 R_L\right)}$$

### Parameters:

$$\begin{aligned} & \text{Q: } \frac{L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_L g_m \sqrt{\frac{1}{C_5 L_5}}}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ & \text{wo: } \sqrt{\frac{1}{C_5 L_5}} \\ & \text{bandwidth: } \frac{\sqrt{\frac{1}{C_5 L_5}} (R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L)}{L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_L g_m \sqrt{\frac{1}{C_5 L_5}}} \\ & \text{K-LP: } \frac{R_3 R_L}{R_3 + R_L} \\ & \text{K-HP: } \frac{R_3 R_L}{R_3 + R_L} \\ & \text{K-BP: } \frac{R_3 R_5 g_m + 2 R_3 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ & \text{Qz: } \frac{L_5 g_m \sqrt{\frac{1}{C_5 L_5}}}{R_5 g_m - 1} \\ & \text{Wz: } \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

**6.6** GE-6 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$$

$$H(s) = \frac{-C_5L_5R_3R_5R_Ls^2 - R_3R_5R_L + s\left(L_5R_3R_5R_Lg_m - L_5R_3R_L\right)}{2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^2\left(2C_5L_5R_3R_5R_Lg_m + C_5L_5R_3R_5 + C_5L_5R_3R_L\right) + s\left(L_5R_3R_5g_m + 2L_5R_3R_Lg_m + L_5R_3 + L_5R_5R_Lg_m + L_5R_L\right)}$$

### Parameters:

$$Q \colon \frac{2C_{5}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + C_{5}R_{3}R_{5}\sqrt{\frac{1}{C_{5}L_{5}}} + C_{5}R_{5}R_{L}\sqrt{\frac{1}{C_{5}L_{5}}}}{R_{3}R_{5}g_{m} + 2R_{3}R_{L}g_{m} + R_{3} + R_{5}R_{L}g_{m} + R_{L}}$$

$$\text{wo: } \sqrt{\frac{1}{C_{5}L_{5}}}$$

$$\text{bandwidth: } \frac{\sqrt{\frac{1}{C_{5}L_{5}}}(R_{3}R_{5}g_{m} + 2R_{3}R_{L}g_{m} + R_{3} + R_{5}R_{L}g_{m} + R_{L})}{2C_{5}R_{3}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + C_{5}R_{3}R_{5}\sqrt{\frac{1}{C_{5}L_{5}}} + C_{5}R_{5}R_{L}\sqrt{\frac{1}{C_{5}L_{5}}}}$$

$$\text{K-LP: } -\frac{R_{3}R_{L}}{2R_{3}R_{L}g_{m} + R_{3} + R_{L}}}{R_{3}R_{5}g_{m} + 2R_{3}R_{L}g_{m} - R_{3}R_{L}}}$$

$$\text{K-HP: } -\frac{R_{3}R_{L}}{2R_{3}R_{5}g_{m} + 2R_{3}R_{L}g_{m} - R_{3}R_{L}}}$$

$$\text{K-BP: } \frac{R_{3}R_{5}g_{m} + 2R_{3}R_{L}g_{m} - R_{3}R_{L}}{R_{3}R_{5}g_{m} + 2R_{3}R_{L}g_{m} + R_{3} + R_{5}R_{L}g_{m} + R_{L}}}$$

$$\text{Qz: } -\frac{C_{5}R_{5}\sqrt{\frac{1}{C_{5}L_{5}}}}{R_{5}g_{m} - 1}}$$

$$\text{Wz: } \sqrt{\frac{1}{C_{5}L_{5}}}$$

**6.7** GE-7 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{L_5 R_3 R_L g_m s + R_3 R_5 R_L g_m - R_3 R_L + s^2 \left(C_5 L_5 R_3 R_5 R_L g_m - C_5 L_5 R_3 R_L\right)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^2 \left(C_5 L_5 R_3 R_5 g_m + 2 C_5 L_5 R_3 R_L g_m + C_5 L_5 R_3 + C_5 L_5 R_5 R_L g_m + C_5 L_5 R_L\right) + s \left(L_5 R_3 g_m + L_5 R_L g_m\right)}$$

$$\begin{aligned} \text{Q:} & \frac{C_5 R_3 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + 2 C_5 R_3 R_L g_m \sqrt{\frac{1}{C_5 L_5}} + C_5 R_3 \sqrt{\frac{1}{C_5 L_5}} + C_5 R_5 R_L g_m \sqrt{\frac{1}{C_5 L_5}} + C_5 R_L \sqrt{\frac{1}{C_5 L_5}}}{R_3 g_m + R_L g_m} \\ & \text{wo:} & \sqrt{\frac{1}{C_5 L_5}} \\ & \text{bandwidth:} & \frac{\sqrt{\frac{1}{C_5 L_5}} (R_3 g_m + R_L g_m)}{C_5 R_3 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + 2 C_5 R_3 R_L g_m \sqrt{\frac{1}{C_5 L_5}} + C_5 R_3 \sqrt{\frac{1}{C_5 L_5}} + C_5 R_5 R_L g_m \sqrt{\frac{1}{C_5 L_5}} + C_5 R_1 \sqrt{\frac{1}{C_5 L_5}}} \\ & \text{K-LP:} & \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}}{R_3 R_5 g_m + 2 R_3 R_L g_m - R_3 R_L} \\ & \text{K-HP:} & \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}} \end{aligned}$$

K-BP: 
$$\frac{R_3 R_L}{R_3 + R_L}$$
Qz:  $\frac{C_5 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} - C_5 \sqrt{\frac{1}{C_5 L_5}}}{g_m}$ 
Wz:  $\sqrt{\frac{1}{C_5 L_5}}$ 

**6.8** GE-8 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, R_L\right)$$

$$H(s) = \frac{-C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^2\left(C_5L_5R_3R_5R_Lg_m - C_5L_5R_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^2\left(C_5L_5R_3R_5g_m + 2C_5L_5R_3R_Lg_m + C_5L_5R_3 + C_5L_5R_5R_Lg_m + C_5L_5R_L\right) + s\left(2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L\right)}$$

#### Parameters:

$$Q \colon \frac{L_{5}R_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + 2L_{5}R_{3}R_{L}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + L_{5}R_{3}\sqrt{\frac{1}{C_{5}L_{5}}} + L_{5}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + L_{5}R_{L}\sqrt{\frac{1}{C_{5}L_{5}}}}{2R_{3}R_{5}R_{L}g_{m} + R_{3}R_{5} + R_{5}R_{L}}$$

$$\text{wo: } \sqrt{\frac{1}{C_{5}L_{5}}}$$

$$\text{bandwidth: } \frac{\sqrt{\frac{1}{C_{5}L_{5}}}(2R_{3}R_{5}R_{L}g_{m} + R_{3}R_{5} + R_{5}R_{L})}{L_{5}R_{3}R_{5}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + 2L_{5}R_{3}R_{L}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + L_{5}R_{3}\sqrt{\frac{1}{C_{5}L_{5}}} + L_{5}R_{5}R_{L}g_{m}\sqrt{\frac{1}{C_{5}L_{5}}} + L_{5}R_{5}R_{L}g_{m} + R_{5}R_{L}g_{m} + R_{5}R_{L}g_{m}} + R_{5}R_{L}g_{m} + R_{5}R_{L}g_{m}$$

**6.9** GE-9 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_3 R_L \right) + s \left( C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L \right)}{R_5 g_m + 2 R_L g_m + s^2 \left( C_3 L_3 R_5 g_m + 2 C_3 L_3 R_L g_m + C_3 L_3 \right) + s \left( C_3 R_3 R_5 g_m + 2 C_3 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m + C_3$$

### Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{L_3R_5g_m\sqrt{\frac{1}{C_3L_3}} + 2L_3R_Lg_m\sqrt{\frac{1}{C_3L_3}} + L_3\sqrt{\frac{1}{C_3L_3}}}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_3L_3}}(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)}{L_3R_5g_m\sqrt{\frac{1}{C_3L_3}} + 2L_3R_Lg_m\sqrt{\frac{1}{C_3L_3}} + L_3\sqrt{\frac{1}{C_3L_3}}} \\ & \text{K-LP:} \ \frac{R_5R_Lg_m - R_L}{R_5g_m + 2R_Lg_m + 1} \\ & \text{K-HP:} \ \frac{R_5R_Lg_m - R_L}{R_5g_m + 2R_Lg_m + 1} \\ & \text{K-BP:} \ \frac{R_3R_5g_m + 2R_Lg_m - R_3R_L}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ & \text{Qz:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_3} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_3L_3}} \end{aligned}$$

**6.10** GE-10 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3R_3R_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^2\left(C_3L_3R_3R_5g_m + 2C_3L_3R_3R_Lg_m + C_3L_3R_3 + C_3L_3R_5R_Lg_m + C_3L_3R_L\right) + s\left(L_3R_5g_m + 2L_3R_Lg_m + L_3R_L\right)}$$

$$Q \colon \frac{C_3 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + 2 C_3 R_3 R_L g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_3 \sqrt{\frac{1}{C_3 L_3}} + C_3 R_5 R_L g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_L \sqrt{\frac{1}{C_3 L_3}} }{R_5 g_m + 2 R_L g_m + 1}$$
 wo: 
$$\sqrt{\frac{1}{C_3 L_3}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_3 L_3}} (R_5 g_m + 2 R_L g_m + 1)}{C_3 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + 2 C_3 R_3 R_L g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_3 \sqrt{\frac{1}{C_3 L_3}} + C_3 R_5 R_L g_m \sqrt{\frac{1$$

K-BP: 
$$\frac{R_5 R_L g_m - R_L}{R_5 g_m + 2 R_L} g_m + 1$$
  
Qz:  $C_3 R_3 \sqrt{\frac{1}{C_3 L_3}}$   
Wz:  $\sqrt{\frac{1}{C_3 L_3}}$ 

### 7 AP

### 8 INVALID-NUMER

8.1 INVALID-NUMER-1  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5 R_3 s + R_3 g_m}{C_5 C_L R_3 s^2 + g_m + s \left(2 C_5 R_3 g_m + C_5 + C_L R_3 g_m\right)}$$

### Parameters:

Q: 
$$\frac{C_5C_LR_3\sqrt{\frac{g_m}{C_5C_LR_3}}}{2C_5R_3g_m+C_5+C_LR_3g_m}$$
 wo: 
$$\sqrt{\frac{g_m}{C_5C_LR_3}}$$
 bandwidth: 
$$\frac{2C_5R_3g_m+C_5+C_LR_3g_m}{C_5C_LR_3}$$
 K-LP:  $R_3$  K-HP: 0 K-BP: 
$$-\frac{C_5R_3}{2C_5R_3g_m+C_5+C_LR_3g_m}$$
 Qz: None Wz: None

8.2 INVALID-NUMER-2  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_5 R_3 R_L s + R_3 R_L g_m}{C_5 C_L R_3 R_L s^2 + R_3 g_m + R_L g_m + s \left(2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_L + C_L R_3 R_L g_m\right)}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_5C_LR_3R_L\sqrt{\frac{g_m}{C_5C_LR_L}} + \frac{g_m}{C_5C_LR_3}}{2C_5R_3R_Lg_m + C_5R_3 + C_5R_L + C_LR_3R_Lg_m} \\ \text{wo:} \ \sqrt{\frac{R_3g_m + R_Lg_m}{C_5C_LR_3R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_3g_m + R_Lg_m}{C_5C_LR_3R_L}}(2C_5R_3R_Lg_m + C_5R_3 + C_5R_L + C_LR_3R_Lg_m)}{C_5C_LR_3R_L\sqrt{\frac{g_m}{C_5C_LR_3}} + \frac{g_m}{C_5C_LR_3}} \\ \text{K-LP:} \ \frac{R_3R_L}{R_3 + R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_3R_L}{2C_5R_3R_Lg_m + C_5R_3 + C_5R_L + C_LR_3R_Lg_m}} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

8.3 INVALID-NUMER-3  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5R_3R_5s + R_3R_5g_m - R_3}{C_5C_LR_3R_5s^2 + 2R_3g_m + R_5g_m + s\left(2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + C_LR_3\right) + 1}$$

$$\begin{aligned} &\text{Q: } \frac{C_5C_LR_3R_5\sqrt{\frac{2g_m}{C_5C_LR_5} + \frac{g_m}{C_5C_LR_3} + \frac{1}{C_5C_LR_3R_5}}}{2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + C_LR_3} \\ &\text{wo: } \sqrt{\frac{2R_3g_m + R_5g_m + 1}{C_5C_LR_3R_5}} \\ &\text{bandwidth: } \frac{\sqrt{\frac{2R_3g_m + R_5g_m + 1}{C_5C_LR_3R_5}}}{C_5C_LR_3R_5} (2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + C_LR_3)}{C_5C_LR_3R_5\sqrt{\frac{2g_m}{C_5C_LR_5} + \frac{g_m}{C_5C_LR_3} + \frac{1}{C_5C_LR_3R_5}}} \end{aligned}$$

```
K-LP: \frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1}
K-HP: 0
K-BP: -\frac{C_5R_3R_5}{2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}
Qz: None
Wz: None
```

# 8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{-C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L}{C_5C_LR_3R_5R_Ls^2 + R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s\left(2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L\right)}$$

#### Parameters:

```
\begin{aligned} &\text{Q:} \ \frac{C_5C_LR_3R_5R_L\sqrt{\frac{g_m}{C_5C_LR_L}} + \frac{2g_m}{C_5C_LR_5} + \frac{1}{C_5C_LR_5R_L} + \frac{g_m}{C_5C_LR_3} + \frac{1}{C_5C_LR_3R_5}}{2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L} \\ &\text{wo:} \ \sqrt{\frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_5C_LR_3R_5R_L}}} \\ &\text{bandwidth:} \ \frac{\sqrt{\frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_5C_LR_3R_5R_L}} (2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L)}{C_5C_LR_3R_5R_L}} \\ &\text{bandwidth:} \ \frac{\sqrt{\frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_5C_LR_3R_5R_L}} (2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L)}{C_5C_LR_3R_5R_L}} \\ &\text{K-LP:} \ \frac{R_3R_5R_Lg_m - R_3R_L}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}} \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ -\frac{C_5R_3R_5R_L}{2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L}}{C_5C_LR_3R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L}} \\ &\text{Qz:} \ \text{None} \end{aligned}
```

### 8.5 INVALID-NUMER-5 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 g_m + s \left(C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^2 \left(C_5 C_L R_3 R_5 g_m + C_5 C_L R_3\right) + s \left(2 C_5 R_3 g_m + C_5 R_5 g_m + C_5 + C_L R_3 g_m\right)}$$

#### Parameters:

Q: 
$$\frac{C_5C_LR_3R_5g_m\sqrt{\frac{g_m}{C_5C_LR_3R_5g_m+C_5C_LR_3}}+C_5C_LR_3\sqrt{\frac{g_m}{C_5C_LR_3R_5g_m+C_5C_LR_3}}}{2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m}$$
 wo: 
$$\sqrt{\frac{g_m}{C_5C_LR_3R_5g_m+C_5C_LR_3}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{g_m}{C_5C_LR_3R_5g_m+C_5C_LR_3}}(2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m)}{C_5C_LR_3R_5g_m\sqrt{\frac{g_m}{C_5C_LR_3R_5g_m+C_5C_LR_3}}}+C_5C_LR_3\sqrt{\frac{g_m}{C_5C_LR_3R_5g_m+C_5C_LR_3}}$$
 K-LP:  $R_3$  K-HP: 0 K-BP: 
$$\frac{C_5R_3R_5g_m-C_5R_3}{2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m}$$
 Qz: None Wz: None

# 8.6 INVALID-NUMER-6 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L g_m + s \left(C_5 R_3 R_5 R_L g_m - C_5 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_5 C_L R_3 R_5 R_L g_m + C_5 C_L R_3 R_L\right) + s \left(C_5 R_3 R_5 g_m + 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_5 R_L g_m + C_5 R_L + C_L R_3 R_L g_m\right)}$$

$$Q: \frac{C_5C_LR_3R_5R_Lg_m\sqrt{\frac{R_3g_m}{C_5C_LR_3R_5R_Lg_m} + C_5C_LR_3R_L} + C_5C_LR_3R_L\sqrt{\frac{R_3g_m}{C_5c_LR_3R_5R_Lg_m} + C_5C_LR_3R_L} + C_5C_LR_3R_Lg_m + C_5C_LR_3R_Lg_m + C_5C_LR_3R_Lg_m + C_5C_LR_3R_SR_Lg_m + C_5C_LR_3R_Lg_m + C_5C_LR_3R_Lg_m$$

8.7 INVALID-NUMER-7 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m + s \left( C_L R_5 R_L g_m - C_L R_L \right) - 1}{2 g_m + s^2 \left( C_3 C_L R_5 R_L g_m + C_3 C_L R_L \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + 2 C_L R_L g_m + C_L \right)}$$

### Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{\sqrt{2}C_{3}C_{L}R_{5}R_{L}g_{m}\sqrt{\frac{g_{m}}{C_{3}C_{L}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{L}}} + \sqrt{2}C_{3}C_{L}R_{L}\sqrt{\frac{g_{m}}{C_{3}C_{L}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{L}}} } \\ & \text{wo:} \ \sqrt{2}\sqrt{\frac{g_{m}}{C_{3}C_{L}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{L}}} \\ & \text{bandwidth:} \ \frac{\sqrt{2}\sqrt{\frac{g_{m}}{C_{3}C_{L}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{L}}} (C_{3}R_{5}g_{m}+C_{3}+C_{L}R_{5}g_{m}+2C_{L}R_{L}g_{m}+C_{L}}) }{\sqrt{2}C_{3}C_{L}R_{5}R_{L}g_{m}\sqrt{\frac{g_{m}}{C_{3}C_{L}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{L}}} + \sqrt{2}C_{3}C_{L}R_{L}\sqrt{\frac{g_{m}}{C_{3}C_{L}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{L}}}} \\ & \text{K-LP:} \ \frac{R_{5}g_{m}-1}{2g_{m}} \\ & \text{K-HP:} \ 0 \\ & \text{K-BP:} \ \frac{C_{L}R_{5}R_{L}g_{m}-C_{L}R_{L}}{C_{3}R_{5}g_{m}+C_{3}+C_{L}R_{5}g_{m}+2C_{L}R_{L}g_{m}+C_{L}}} \\ & \text{Qz:} \ \text{None} \end{aligned}$$

## 8.8 INVALID-NUMER-8 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$

# $H(s) = \frac{-C_5 R_L s + R_L g_m}{C_3 C_5 R_L s^2 + g_m + s \left( C_3 R_L g_m + 2 C_5 R_L g_m + C_5 \right)}$

### Parameters:

Wz: None

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_L}}}{C_3R_Lg_m+2C_5R_Lg_m+C_5} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_3C_5R_L}} \\ \text{bandwidth:} \ \frac{C_3R_Lg_m+2C_5R_Lg_m+C_5}{C_3C_5R_L} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_L}{C_3R_Lg_m+2C_5R_Lg_m+C_5} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

# 8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{-C_5 R_L s + R_L g_m}{g_m + s^2 \left( C_3 C_5 R_L + C_5 C_L R_L \right) + s \left( C_3 R_L g_m + 2 C_5 R_L g_m + C_5 + C_L R_L g_m \right)}$$

$$\begin{aligned} & \text{Q:} \ \frac{C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_L+C_5C_LR_L}} + C_5C_LR_L\sqrt{\frac{g_m}{C_3C_5R_L+C_5C_LR_L}}}{C_3R_Lg_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m} \\ & \text{wo:} \ \sqrt{\frac{g_m}{C_3C_5R_L + C_5C_LR_L}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_3C_5R_L + C_5C_LR_L}} (C_3R_Lg_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m)}{C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_L + C_5C_LR_L}} + C_5C_LR_L\sqrt{\frac{g_m}{C_3C_5R_L + C_5C_LR_L}}} \\ & \text{K-LP:} \ R_L \\ & \text{K-HP:} \ 0 \\ & \text{K-BP:} \ -\frac{C_5R_L}{C_3R_Lg_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m}} \\ & \text{Qz:} \ \text{None} \end{aligned}$$

### 8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{-C_5R_5R_Ls + R_5R_Lg_m - R_L}{C_3C_5R_5R_Ls^2 + R_5g_m + 2R_Lg_m + s\left(C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5\right) + 1}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_5R_L\sqrt{\frac{g_m}{C_3C_5R_L}} + \frac{2g_m}{C_3C_5R_5} + \frac{1}{C_3C_5R_5R_L}}{C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5} \\ \text{wo:} \ \sqrt{\frac{R_5g_m + 2R_Lg_m + 1}{C_3C_5R_5R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_5g_m + 2R_Lg_m + 1}{C_3C_5R_5R_L}}(C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5)}{C_3C_5R_5R_L} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_5g_m + 2R_Lg_m + 1}{C_3C_5R_5R_L}}(C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5)}{C_3C_5R_5R_L} \\ \text{K-LP:} \ \frac{R_5R_Lg_m - R_L}{R_5g_m + 2R_Lg_m + 1} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_5R_L}{C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

# **8.11** INVALID-NUMER-11 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_{Ls}}\right)$

$$H(s) = \frac{-C_5R_5s + R_5g_m - 1}{2g_m + s^2\left(C_3C_5R_5 + C_5C_LR_5\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_L\right)}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_3C_5R_5\sqrt{\frac{g_m}{C_3C_5R_5+C_5C_LR_5}} + \sqrt{2}C_5C_LR_5\sqrt{\frac{g_m}{C_3C_5R_5+C_5C_LR_5}}}{C_3R_5g_m+C_3+2C_5R_5g_m+C_LR_5g_m+C_L} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_m}{C_3C_5R_5+C_5C_LR_5}} \\ \text{bandwidth:} \ \frac{\sqrt{2}\sqrt{\frac{g_m}{C_3C_5R_5+C_5C_LR_5}} (C_3R_5g_m+C_3+2C_5R_5g_m+C_LR_5g_m+C_L)}}{\sqrt{2}C_3C_5R_5\sqrt{\frac{g_m}{C_3C_5R_5+C_5C_LR_5}} + \sqrt{2}C_5C_LR_5\sqrt{\frac{g_m}{C_3C_5R_5+C_5C_LR_5}}} \\ \text{K-LP:} \ \frac{R_5g_m-1}{2g_m} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_5}{C_3R_5g_m+C_3+2C_5R_5g_m+C_LR_5g_m+C_L}} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

## **8.12** INVALID-NUMER-12 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

#### Parameters:

Wz: None

$$H(s) = \frac{-C_5R_5R_Ls + R_5R_Lg_m - R_L}{R_5g_m + 2R_Lg_m + s^2\left(C_3C_5R_5R_L + C_5C_LR_5R_L\right) + s\left(C_3R_5R_Lg_m + C_3R_5 + C_LR_5R_Lg_m + C_5R_5R_Lg_m + C$$

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### 8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L g_m + s \left( C_5 R_5 R_L g_m - C_5 R_L \right)}{g_m + s^2 \left( C_3 C_5 R_5 R_L g_m + C_3 C_5 R_L \right) + s \left( C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 \right)}$$

#### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_5R_Lg_m\sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L}}}{C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L}} (C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5)}{C_3C_5R_5R_Lg_m\sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L}}} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_5R_5R_Lg_m-C_5R_L}{C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5}} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

# 8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_{L}g_{m} + s\left(C_{5}R_{5}R_{L}g_{m} - C_{5}R_{L}\right)}{g_{m} + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m} + C_{3}C_{5}R_{L} + C_{5}C_{L}R_{5}R_{L}g_{m} + C_{5}C_{L}R_{L}\right) + s\left(C_{3}R_{L}g_{m} + C_{5}R_{5}g_{m} + 2C_{5}R_{L}g_{m} + C_{5} + C_{L}R_{L}g_{m}\right)}$$

#### Parameters:

```
\frac{C_{3}C_{5}R_{5}R_{L}g_{m}\sqrt{\frac{g_{m}}{C_{3}C_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}R_{L}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{L}}}+C_{3}C_{5}R_{L}\sqrt{\frac{g_{m}}{C_{3}C_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5}C_{L}R_{5}R_{L}g_{m}+C_{5
 Wo: \sqrt{\frac{g_m}{C_3C_5R_5R_Lg_m+C_3C_5R_L+C_5C_LR_5R_Lg_m+C_5C_LR_L}}
K-LP: R_L
  K-HP: 0
K-BP: \frac{C_5R_5R_Lg_m - C_5R_L}{C_3R_Lg_m + C_5R_5g_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m} Qz: None
  Wz: None
```

# 8.15 INVALID-NUMER-15 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

```
H(s) = \frac{R_3 R_5 g_m - R_3 + s \left( C_L R_3 R_5 R_L g_m - C_L R_3 R_L \right)}{2 R_3 g_m + R_5 g_m + s^2 \left( C_3 C_L R_3 R_5 R_L g_m + C_3 C_L R_3 R_L \right) + s \left( C_3 R_3 R_5 g_m + C_3 R_3 + C_L R_3 R_5 g_m + 2 C_L R_3 R_L g_m + C_L R_3 + C_L R_5 R_L g_m + C_L R_L \right) + 1}
Parameters:
              Q: \underbrace{\frac{C_3C_LR_3R_5R_Lg_m\sqrt{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \frac{R_5g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \frac{1}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3R_3R_5g_m+C_3R_3+C_LR_3R_5g_m+C_2C_LR_3R_Lg_m+C_LR_3+C_LR_3R_Lg_m+C_LR_3} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \frac{R_5g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}}_{C_3R_3R_5g_m+C_3R_3+C_LR_3R_5g_m+C_2C_LR_3R_Lg_m+C_LR_3} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \frac{R_5g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}}_{C_3R_3R_5g_m+C_3R_3+C_LR_3R_2} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}}_{C_3R_3R_5g_m+C_3R_3+C_LR_3R_5g_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \underbrace{\frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}}_{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L}
            \sqrt{\frac{2R_3g_m + R_5g_m + 1}{C_3C_LR_3R_5}} (C_3R_3R_5g_m + C_3R_3 + C_LR_3R_5g_m + 2C_LR_3R_Lg_m + C_LR_3 + C_LR_5R_Lg_m + C_LR_L})  bandwidth:  \frac{\sqrt{\frac{2R_3g_m + R_5g_m + 1}{C_3C_LR_3R_5R_Lg_m + C_3C_LR_3R_L}} (C_3R_3R_5g_m + C_3R_3R_5g_m + 2C_LR_3R_Lg_m + C_LR_3 + C_LR_5R_Lg_m + C_LR_L)}{C_3C_LR_3R_5R_Lg_m + C_3C_LR_3R_L} + \frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m + C_3C_LR_3R_L} + \frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m + C_3C_LR_3R_L} + \frac{2R_3g_m}{C_3C_LR_3R_5R_Lg_m + C_3C_LR_3R_L} + \frac{R_5g_m}{C_3C_LR_3R_5R_Lg_m + C_3C_LR_3R_L} + \frac{R_5g_m}{C_3C_LR_3R_5
            K-LP: \frac{R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + 1}
K-HP: 0
              \text{K-BP:} \frac{1}{C_{3}R_{3}R_{5}g_{m}\sqrt{\frac{2R_{3}g_{m}}{C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}}} + \frac{R_{5}g_{m}}{C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}}} + C_{3}R_{3}\sqrt{\frac{2R_{3}g_{m}}{C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}}} + C_{2}R_{3}\sqrt{\frac{2R_{3}g_{m}}{C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L}} + C_{2}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}R_{3}R_{L} + C_{2}R_{3}R_{2}R_{L} + C_{2}R_{3}R_{2}R_{L} + C_{2}R_{3}R_{2}R_{L} + C_{2}R_{3}R_{2}R_{L} + C_{2}R_{3}R_{L} + C_{2}R_{2}R_{2}R_{L} +
                 Qz: None
              Wz: None
```

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### 8.16 INVALID-NUMER-16 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{-C_5 R_3 R_L s + R_3 R_L g_m}{C_3 C_5 R_3 R_L s^2 + R_3 g_m + R_L g_m + s \left( C_3 R_3 R_L g_m + 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_L \right)}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_3R_L\sqrt{\frac{g_m}{C_3C_5R_L}} + \frac{g_m}{C_3C_5R_3}}{C_3R_3R_Lg_m + 2C_5R_3R_Lg_m + C_5R_3 + C_5R_L} \\ \text{wo:} \ \sqrt{\frac{R_3g_m + R_Lg_m}{C_3C_5R_3R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_3g_m + R_Lg_m}{C_3C_5R_3R_L}}(C_3R_3R_Lg_m + 2C_5R_3R_Lg_m + C_5R_3 + C_5R_L)}{C_3C_5R_3R_L\sqrt{\frac{g_m}{C_3C_5R_L}} + \frac{g_m}{C_3C_5R_3}} \\ \text{K-LP:} \ \frac{R_3R_L}{R_3 + R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_3R_L}{C_3R_3R_Lg_m + 2C_5R_3R_Lg_m + C_5R_3 + C_5R_L}} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

# 8.17 INVALID-NUMER-17 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5R_3s + R_3g_m}{g_m + s^2\left(C_3C_5R_3 + C_5C_LR_3\right) + s\left(C_3R_3g_m + 2C_5R_3g_m + C_5 + C_LR_3g_m\right)}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3+C_5C_LR_3}} + C_5C_LR_3\sqrt{\frac{g_m}{C_3C_5R_3+C_5C_LR_3}}}{C_3R_3g_m+2C_5R_3g_m+C_5+C_LR_3g_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_3C_5R_3+C_5C_LR_3}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_3C_5R_3+C_5C_LR_3}} (C_3R_3g_m+2C_5R_3g_m+C_5+C_LR_3g_m)}{C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3+C_5C_LR_3}} + C_5C_LR_3\sqrt{\frac{g_m}{C_3C_5R_3+C_5C_LR_3}}} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_3}{C_3R_3g_m+2C_5R_3g_m+C_5+C_LR_3g_m} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

# 8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{-C_5 R_3 R_L s + R_3 R_L g_m}{R_3 g_m + R_L g_m + s^2 \left( C_3 C_5 R_3 R_L + C_5 C_L R_3 R_L \right) + s \left( C_3 R_3 R_L g_m + 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_L + C_L R_3 R_L g_m \right)}$$

#### Parameters:

Wz: None

$$Q: \frac{C_3C_5R_3R_L\sqrt{\frac{R_39m}{C_3C_5R_3R_L} + \frac{C_5C_LR_3R_L}{C_3C_5R_3R_L + C_5C_LR_3R_L} + C_5C_LR_3R_L\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR_3R_L}}}{C_3R_3R_Lg_m + C_5R_3R_Lg_m + C_5R_3R_Lg_m} + \frac{R_L9m}{C_3C_5R_3R_L + C_5C_LR_3R_L} \\ wo: \sqrt{\frac{R_3g_m + R_Lg_m}{C_3C_5R_3R_L + C_5C_LR_3R_L}} \\ bandwidth: \frac{\sqrt{\frac{R_3g_m + R_Lg_m}{C_3C_5R_3R_L + C_5C_LR_3R_L}}}{\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR_3R_L}} + C_3C_LR_3R_Lg_m + C_5R_3C_LR_3R_L}} \\ k-LP: \frac{R_19m}{R_3+R_L} \\ k-HP: 0 \\ \frac{C_5R_3R_L\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR_3R_L}} + C_5C_LR_3R_L\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR_3R_L}} + C_5C_LR_3R_Lg_m}}{C_3R_3R_Lg_m\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR_3R_L}} + C_5C_LR_3R_Lg_m}} \\ k-RP: -\frac{C_5R_3R_L\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR_3R_L}} + C_5R_3R_Lg_m\sqrt{\frac{R_39m}{C_3C_5R_3R_L + C_5C_LR$$

**8.19** INVALID-NUMER-19 
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$H(s) = \frac{-C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L}{C_3C_5R_3R_5R_Ls^2 + R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s\left(C_3R_3R_5R_Lg_m + C_3R_3R_L + 2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L\right)}$$

### Parameters:

```
\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_3R_5R_L\sqrt{\frac{g_m}{C_3C_5R_L}} + \frac{2g_m}{C_3C_5R_5} + \frac{1}{C_3C_5R_5R_L} + \frac{g_m}{C_3C_5R_3} + \frac{1}{C_3C_5R_3} + \frac{1}{C_3C_5R_3R_5}}{C_3R_3R_5R_Lg_m + C_3R_3R_L + 2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L}} \\ \text{wo:} \ \sqrt{\frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_3C_5R_3R_5R_L}}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_3C_5R_3R_5R_L}} (C_3R_3R_5R_Lg_m + C_3R_3R_L + 2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L)}{C_3C_5R_3R_5R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_3C_5R_3R_5R_L}} (C_3R_3R_5R_Lg_m + C_3R_3R_L + 2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L)}{C_3C_5R_3R_5R_L}} \\ \text{K-LP:} \ \frac{R_3R_5g_m - R_3R_L}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_3R_5R_L}{C_3R_3R_5R_Lg_m + C_3R_3R_L + 2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L}}{C_3R_3R_5R_Lg_m + C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L}} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}
```

### 8.20 INVALID-NUMER-20 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5R_3R_5s + R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + s^2\left(C_3C_5R_3R_5 + C_5C_LR_3R_5\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + C_LR_3\right) + 1}$$

#### Parameters:

```
 Q : \frac{C_3C_5R_3R_5\sqrt{\frac{2R_3g_m}{c_3R_5+c_5c_LR_3R_5} + \frac{R_5g_m}{c_3c_5R_3R_5+c_5c_LR_3R_5} + C_5C_LR_3R_5\sqrt{\frac{2R_3g_m}{c_3c_5R_3R_5+c_5c_LR_3R_5} + \frac{R_5g_m}{c_3c_5R_3R_5+c_5c_LR_3R_5} + \frac{R_5g_m}{c_3c_5R_3R_5+c
```

8.21 INVALID-NUMER-21  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^2\left(C_3C_5R_3R_5R_L + C_5C_LR_3R_5R_L\right) + s\left(C_3R_3R_5R_Lg_m + C_3R_3R_L + 2C_5R_3R_5R_Lg_m + C_5R_3R_5 + C_5R_5R_L + C_LR_3R_5R_Lg_m + C_LR_3R_L\right)}$$

### Parameters:

Wz: None

Wz: None

```
 Q: \frac{R_3R_5g_m}{C_3C_5R_3R_5R_L\sqrt{C_3C_5R_3R_5R_L} + C_3C_5R_3R_5R_L + C_3C_5R_3R_
```

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### **8.22** INVALID-NUMER-22 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_3 R_L g_m + s \left(C_5 R_3 R_5 R_L g_m - C_5 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_3 C_5 R_3 R_5 R_L g_m + C_3 C_5 R_3 R_L\right) + s \left(C_3 R_3 R_L g_m + C_5 R_3 R_5 g_m + 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_5 R_L g_m + C_5 R_L\right)}$$

#### Parameters:

 $Q: \frac{C_3C_5R_3R_5R_Lg_m\sqrt{C_3C_5R_3R_5R_Lg_m+C_3C_5R_3R_L} + C_3C_5R_3R_Lg_m+C_3C_5R_3R_L}{C_3R_3R_Lg_m+C_3C_5R_3R_Lg_m+C_3C_5R_3R_L} + C_3C_5R_3R_Lg_m+C_3C_5R_3R_L} \\ wo: \sqrt{\frac{R_3g_m+R_Lg_m}{C_3C_5R_3R_5R_Lg_m+C_3C_5R_3R_L}}} \\ bandwidth: \frac{\sqrt{\frac{R_3g_m+R_Lg_m}{C_3C_5R_3R_5R_Lg_m+C_3C_5R_3R_L}}}{C_3C_5R_3R_5R_Lg_m+C_3C_5R_3R_L} + C_3C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_Lg_m+C_5R_3R_L$ 

## **8.23** INVALID-NUMER-23 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3g_m + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3 + C_5C_LR_3R_5g_m + C_5C_LR_3\right) + s\left(C_3R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5 + C_LR_3g_m\right)}$$

### Parameters:

 $Q: \frac{C_3C_5R_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+C_5C_LR_3}} + C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_5C_LR_3}} + C_5C_LR_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+C_5C_LR_3}} + C_5C_LR_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_5C_LR_3}} + C_5C_LR_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_5C_LR_3}} + C_5C_LR_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_$ 

# 8.24 INVALID-NUMER-24 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L g_m + s \left(C_5 R_3 R_5 R_L g_m - C_5 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_3 C_5 R_3 R_5 R_L g_m + C_3 C_5 R_3 R_L + C_5 C_L R_3 R_5 R_L g_m + C_5 C_L R_3 R_L\right) + s \left(C_3 R_3 R_L g_m + C_5 R_2 R_L g_m + C_5 R_2 R_L g_m + C_5 R_2 R_L g_m + C_5 R_$$

### Parameters:

Wz: None

 $\begin{array}{c} \text{Q:} \frac{R_3g_m}{C_3C_5R_3R_5R_Lg_m} \sqrt{\frac{R_3g_m}{C_3C_5R_3R_5R_Lg_m} + C_5C_LR_3R_5R_Lg_m} + C_3C_5R_3R_5R_Lg_m + C_5C_LR_3R_5R_Lg_m + C_5C_LR_3R_5R_$ 

### **8.25** INVALID-NUMER-25 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_5g_m + s\left(C_3R_3R_5g_m - C_3R_3\right) - 1}{2g_m + s^2\left(C_3C_LR_3R_5g_m + C_3C_LR_3\right) + s\left(2C_3R_3g_m + C_3R_5g_m + C_3 + C_LR_5g_m + C_L\right)}$$

#### Parameters:

# 8.26 INVALID-NUMER-26 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_5 R_L g_m - R_L + s \left( C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L \right)}{R_5 g_m + 2 R_L g_m + s^2 \left( C_3 C_L R_3 R_5 R_L g_m + C_3 C_L R_3 R_L \right) + s \left( C_3 R_3 R_5 g_m + 2 C_3 R_3 R_L g_m + C_3 R_3 + C_3 R_5 R_L g_m + C_3 R_L + C_L R_5 R_L g_m + C_L R_L \right) + 1}$$

### Parameters:

$$\begin{array}{c} \text{Q:} \frac{C_3C_LR_3R_5R_Lg_m\sqrt{\frac{R_5g_m}{C_2C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \frac{2R_Lg_m}{C_3C_LR_3R_5R_Lg_m+C_3C_LR_3R_L} + \frac{2R_Lg_m}{C_3C_LR_3R_5R_Lg_m+C_3$$

### 9 INVALID-WZ

**9.1** INVALID-WZ-1 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_{5s}}, R_L + \frac{1}{C_{Ls}}\right)$$

$$H(s) = \frac{-C_5C_LR_3R_Ls^2 + R_3g_m + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^2\left(2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_5C_LR_L\right) + s\left(2C_5R_3g_m + C_5 + C_LR_3g_m + C_LR_Lg_m\right)}$$

$$\begin{array}{c} \text{Q:} & \frac{2C_5C_LR_3R_Lg_m\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_1}} + C_5C_LR_3\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_1}} + C_5C_LR_L\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_1}} + C_5C_LR_L\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_1}} \\ \text{wo:} & \sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_3}} \\ \text{bandwidth:} & \frac{\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_3} + C_5C_LR_1}} {2C_5C_LR_3R_Lg_m+C_5C_LR_3C_LR_1} + C_5C_LR_3\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_3}} + C_5C_LR_1\sqrt{\frac{g_m}{2C_5C_LR_3R_Lg_m+C_5C_LR_3}} + C_5C$$

### **9.2** INVALID-WZ-2 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5C_LR_3R_5R_Ls^2 + R_3R_5g_m - R_3 + s\left(-C_5R_3R_5 + C_LR_3R_5R_Lg_m - C_LR_3R_L\right)}{2R_3g_m + R_5g_m + s^2\left(2C_5C_LR_3R_5R_Lg_m + C_5C_LR_3R_5 + C_5C_LR_5R_L\right) + s\left(2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + 2C_LR_3R_Lg_m + C_LR_3 + C_LR_5R_Lg_m + C_LR_L\right) + 1}$$

### Parameters:

 $Q: \frac{2C_5C_LR_3R_5R_Lg_m\sqrt{\frac{2R_5g_m}{2C_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5} + 2c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5}{2C_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5} + C_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c_5C_LR_3R_5R_Lg_m+c$ 

### **9.3** INVALID-WZ-3 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3g_m + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LR_3R_L\right) + s\left(C_5R_3R_5g_m - C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^2\left(C_5C_LR_3R_5g_m + C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_5C_LR_3 + C_5C_LR_4\right) + s\left(2C_5R_3g_m + C_5R_5g_m + C_5 + C_LR_3g_m + C_LR_Lg_m\right)}$$

#### Parameters:

 $Q: \frac{g_m}{C_5C_LR_3R_5g_m\sqrt{\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_5g_m+2C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3R_Lg_m+\overline{C_5C_LR_3$ 

# **9.4** INVALID-WZ-4 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_5g_m + s^2\left(C_3C_LR_3R_5R_Lg_m - C_3C_LR_3R_L\right) + s\left(C_3R_3R_5g_m - C_3R_3 + C_LR_5R_Lg_m - C_LR_L\right) - 1}{2g_m + s^2\left(C_3C_LR_3R_5g_m + 2C_3C_LR_3R_Lg_m + C_3C_LR_3 + C_3C_LR_5R_Lg_m + C_3C_LR_L\right) + s\left(2C_3R_3g_m + C_3R_5g_m + C_3R_5$$

#### Parameters:

Wz:  $\sqrt{\frac{g_m}{C_5C_LR_5R_Lg_m-C_5C_LR_L}}$ 

 $Q: \frac{\sqrt{2C_3C_LR_3R_5g_m}\sqrt{\frac{g_m}{C_3C_LR_3R_5g_m}+2C_3C_LR_3R_Lg_m}+\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt{2C_3C_LR_3R_Lg_m}+2\sqrt$ 

Wz:  $\sqrt{\frac{1}{C_3C_LR_3R_L}}$ 

**9.5** INVALID-WZ-5 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{-C_3C_5R_3R_Ls^2 + R_Lg_m + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{g_m + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5R_L\right) + s\left(C_3R_3g_m + C_3R_Lg_m + 2C_5R_Lg_m + C_5\right)}$$

#### Parameters:

$$Q: \frac{2C_3C_5R_3R_Lg_m\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_3}} + C_3C_5R_3\sqrt{\frac{g_m}{2C_3G_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_3}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_3C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_3C_5R_3R_Lg_m+C_5C_5R_L}} + C_3C_5R_L\sqrt{\frac{g_m}{2C_$$

### **9.6** INVALID-WZ-6 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{-C_3C_5R_3R_5R_Ls^2 + R_5R_Lg_m - R_L + s\left(C_3R_3R_5R_Lg_m - C_3R_3R_L - C_5R_5R_L\right)}{R_5g_m + 2R_Lg_m + s^2\left(2C_3C_5R_3R_5R_Lg_m + C_3C_5R_3R_5 + C_3C_5R_5R_L\right) + s\left(C_3R_3R_5g_m + 2C_3R_3R_Lg_m + C_3R_3 + C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5\right) + 1}$$

### Parameters:

$$\begin{array}{c} \text{Q:} & \frac{R_5 g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 L_g m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m} + \frac{2 R_L g_m}{2 C_3 C_5 R_3 R_5 R_L g_m}$$

# **9.7** INVALID-WZ-7 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L g_m + s^2 \left( C_3 C_5 R_3 R_5 R_L g_m - C_3 C_5 R_3 R_L \right) + s \left( C_3 R_3 R_L g_m + C_5 R_5 R_L g_m - C_5 R_L \right)}{g_m + s^2 \left( C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 R_L g_m + C_3 C_5 R_3 + C_3 C_5 R_5 R_L g_m + C_3 C_5 R_L \right) + s \left( C_3 R_3 g_m + C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 R_5 R_L g_m + C_5$$

#### Parameters:

Qz: None Wz:  $\sqrt{\frac{-R_5 g_m + 1}{C_3 C_5 R_3 R_5}}$ 

```
 Q: \frac{\frac{g_m}{C_3C_5R_3R_5g_m + 2C_3C_5R_3R_5g_m + 2C_3C_5R_3R_1g_m + C_3C_5R_3R_1g_m + C_3C_5R_1g_m + C_3C_5R_1g_m + C_3C_5R_1g_m + C_3C
```

### 10 INVALID-ORDER

Wz:  $\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m-C_3C_5R_3}}$ 

10.1 INVALID-ORDER-1  $Z(s) = (\infty, \infty, R_3, \infty, R_5, R_L)$ 

$$H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}$$

10.2 INVALID-ORDER-2  $Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_3 R_5 g_m - R_3}{2R_3 g_m + R_5 g_m + s \left(C_L R_3 R_5 g_m + C_L R_3\right) + 1}$$

10.3 INVALID-ORDER-3  $Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s \left( C_L R_3 R_5 R_L g_m + C_L R_3 R_L \right)}$$

10.4 INVALID-ORDER-4  $Z(s) = \left(\infty, \infty, R_3, \infty, R_5, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s \left( C_L R_3 R_5 R_L g_m - C_L R_3 R_L \right)}{2 R_3 g_m + R_5 g_m + s \left( C_L R_3 R_5 g_m + 2 C_L R_3 R_L g_m + C_L R_3 + C_L R_5 R_L g_m + C_L R_L \right) + 1}$$

10.5 INVALID-ORDER-5  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, R_L\right)$ 

$$H(s) = \frac{-C_5 R_3 R_L s + R_3 R_L g_m}{R_3 g_m + R_L g_m + s \left(2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_L\right)}$$

10.6 INVALID-ORDER-6  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_LR_3s^3 - C_5R_3s + C_LL_LR_3g_ms^2 + R_3g_m}{g_m + s^3\left(2C_5C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_5C_LR_3 + C_LL_Lg_m\right) + s\left(2C_5R_3g_m + C_5 + C_LR_3g_m\right)}$$

10.7 INVALID-ORDER-7  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5L_LR_3s^2 + L_LR_3g_ms}{C_5C_LL_LR_3s^3 + R_3g_m + s^2\left(2C_5L_LR_3g_m + C_5L_L + C_LL_LR_3g_m\right) + s\left(C_5R_3 + L_Lg_m\right)}$$

10.8 INVALID-ORDER-8  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_LR_3s^3 + R_3g_m + s^2\left(-C_5C_LR_3R_L + C_LL_LR_3g_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^3\left(2C_5C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_5C_LR_4 + C_LL_Lg_m\right) + s\left(2C_5R_3g_m + C_5 + C_LR_3g_m + C_5C_LR_4\right)}$$

10.9 INVALID-ORDER-9  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_5L_LR_3R_Ls^2 + L_LR_3R_Lg_ms}{C_5C_LL_LR_3R_Ls^3 + R_3R_Lg_m + s^2\left(2C_5L_LR_3R_Lg_m + C_5L_LR_3 + C_5L_LR_L + C_LL_LR_3R_Lg_m\right) + s\left(C_5R_3R_L + L_LR_3g_m + L_LR_Lg_m\right)}$$

10.10 INVALID-ORDER-10  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5C_LL_R_3R_Ls^3 + R_3R_Lg_m + s^2\left(-C_5L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(-C_5R_3R_L + L_LR_3g_m\right)}{R_3g_m + R_Lg_m + s^3\left(2C_5C_LL_R_3R_Lg_m + C_5C_LL_R_3 + C_5C_LL_R\right) + s^2\left(2C_5L_LR_3g_m + C_5L_L + C_LL_R_3g_m + C_LL_R_Lg_m\right) + s\left(2C_5R_3R_Lg_m + C_5R_3 + C_5R_L + L_Lg_m\right)}$$

10.12 INVALID-ORDER-12  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$ 

$$H(s) = \frac{-C_5 R_3 R_5 R_L s + R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s \left(2 C_5 R_3 R_5 R_L g_m + C_5 R_3 R_5 + C_5 R_5 R_L\right)}$$

**10.13** INVALID-ORDER-13  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_LR_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_LL_LR_3R_5g_m - C_LL_LR_3\right)}{2R_3g_m + R_5g_m + s^3\left(2C_5C_LL_LR_3R_5g_m + C_5C_LL_LR_5\right) + s^2\left(C_5C_LR_3R_5 + 2C_LL_LR_3g_m + C_LL_LR_5g_m + C_LL_L\right) + s\left(2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + C_LR_3\right) + 1}$$

**10.14** INVALID-ORDER-14  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5L_LR_3R_5s^2 + s\left(L_LR_3R_5g_m - L_LR_3\right)}{C_5C_LL_LR_3R_5s^3 + R_3R_5g_m + R_3 + s^2\left(2C_5L_LR_3R_5g_m + C_5L_LR_5 + C_LL_LR_3R_5g_m + C_LL_LR_3\right) + s\left(C_5R_3R_5 + 2L_LR_3g_m + L_LR_5g_m + L_LR_$$

**10.15** INVALID-ORDER-15  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_R_3R_5s^3 + R_3R_5g_m - R_3 + s^2\left(-C_5C_LR_3R_5R_L + C_LL_R_3R_5g_m - C_LL_R_3\right) + s\left(-C_5R_3R_5 + C_LR_3R_5R_Lg_m - C_LR_3R_L\right)}{2R_3g_m + R_5g_m + s^3\left(2C_5C_LL_R_3R_5g_m + C_5C_LL_R_5\right) + s^2\left(2C_5C_LR_3R_5R_Lg_m + C_5C_LR_3R_5 + C_LL_R_3g_m + C_LL_LR_3g_m + C_LL_L\right) + s\left(2C_5R_3R_5g_m + C_5R_5R_Lg_m + C_LR_3R_Lg_m + C_LR_3R_$$

**10.16** INVALID-ORDER-16  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_5L_LR_3R_5R_Ls^2 + s\left(L_LR_3R_5R_Lg_m - L_LR_3R_L\right)}{C_5C_LL_LR_3R_5R_Ls^3 + R_3R_5R_Lg_m + R_3R_L + s^2\left(2C_5L_LR_3R_5R_Lg_m + C_5L_LR_3R_5 + C_5L_LR_3R_5R_Lg_m + C_LL_LR_3R_5R_L + L_LR_3R_5g_m + 2L_LR_3R_Lg_m + L_LR_3 + L_LR_5R_Lg_m + L_LR_L\right)}$$

10.17 INVALID-ORDER-17  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5C_LL_R_3R_5R_Lg_m - R_3R_L + s^2\left(-C_5L_LR_3R_5R_Lg_m - C_LL_LR_3R_5R_Lg_m - C_LL_LR_3R_5R_L + L_LR_3R_5g_m - L_LR_3\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(2C_5C_LL_R_3R_5R_Lg_m + C_5C_LL_R_3R_5 + C_5C_LL_R_3R_5g_m + C_5L_LR_3R_5g_m + C_5L_LR_3g_m +$$

10.18 INVALID-ORDER-18  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_5C_LL_LR_3R_5R_Ls^3 - C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^2\left(C_LL_LR_3R_5R_Lg_m - C_LL_LR_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(2C_5C_LL_LR_3R_5R_Lg_m + C_5C_LL_LR_3R_5R_L\right) + s^2\left(C_5C_LR_3R_5R_L + C_LL_RR_3R_5R_Lg_m + C_LL_LR_3R_5R_Lg_m + C_LL_LR_3R_5R_Lg_m$$

**10.19** INVALID-ORDER-19  $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$ 

$$H(s) = \frac{R_3 R_L g_m + s \left( C_5 R_3 R_5 R_L g_m - C_5 R_3 R_L \right)}{R_3 g_m + R_L g_m + s \left( C_5 R_3 R_5 g_m + 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_5 R_L g_m + C_5 R_L \right)}$$

**10.20** INVALID-ORDER-20 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_L L_L R_3 g_m s^2 + R_3 g_m + s^3 \left(C_5 C_L L_L R_3 R_5 g_m - C_5 C_L L_L R_3\right) + s \left(C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^3 \left(2 C_5 C_L L_L R_3 g_m + C_5 C_L L_L R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_5 C_L R_3 R_5 g_m + C_5 C_L R_3 + C_L L_L g_m\right) + s \left(2 C_5 R_3 g_m + C_5 R_5 g_m + C_5 + C_L R_3 g_m\right)}$$

10.21 INVALID-ORDER-21 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 g_m s + s^2 \left( C_5 L_L R_3 R_5 g_m - C_5 L_L R_3 \right)}{R_3 g_m + s^3 \left( C_5 C_L L_L R_3 R_5 g_m + C_5 C_L L_L R_3 \right) + s^2 \left( 2 C_5 L_L R_3 g_m + C_5 L_L R_5 g_m + C_5 L_L + C_L L_L R_3 g_m \right) + s \left( C_5 R_3 R_5 g_m + C_5 R_3 + L_L g_m \right)}$$

10.22 INVALID-ORDER-22 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 g_m + s^3 \left(C_5 C_L L_L R_3 R_5 g_m - C_5 C_L L_L R_3\right) + s^2 \left(C_5 C_L R_3 R_5 R_L g_m - C_5 C_L R_3 R_L + C_L L_L R_3 g_m\right) + s \left(C_5 R_3 R_5 g_m - C_5 R_3 + C_L R_3 R_L g_m\right)}{g_m + s^3 \left(2 C_5 C_L L_L R_3 g_m + C_5 C_L L_L\right) + s^2 \left(C_5 C_L R_3 R_5 g_m + 2 C_5 C_L R_3 R_L g_m + C_5 C_L R_3 + C_5 C_L R_5 R_L g_m + C_5 C_L R_4 + C_L L_L g_m\right) + s \left(2 C_5 R_3 g_m + C_5 R_5 g_m + C_5 + C_L R_3 g_m + C_5 R_4 g_m\right)}$$

10.23 INVALID-ORDER-23 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s + s^2 \left( C_5 L_L R_3 R_5 R_L g_m - C_5 L_L R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_5 C_L L_L R_3 R_5 R_L g_m + C_5 C_L L_L R_3 R_L \right) + s^2 \left( C_5 L_L R_3 R_5 g_m + 2 C_5 L_L R_3 R_L g_m + C_5 L_L R_3 + C_5 L_L R_5 R_L g_m + C_5 L_L R_3 R_L g_m \right) + s \left( C_5 R_3 R_5 R_L g_m + C_5 R_3 R_L + L_L R_3 g_m + L_L R_L g_m \right)}$$

10.24 INVALID-ORDER-24 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_S^2 + 1}\right)$$

$$H(s) = \frac{R_3 R_L g_m + s^3 \left(C_5 C_L L_L R_3 R_5 R_L g_m - C_5 C_L L_L R_3 R_L g_m - C_5 L_L R_3 R_L g_m - C_5 L_L R_3 R_L g_m - C_5 R_3 R_L + L_L R_3 g_m \right)}{R_3 g_m + R_L g_m + s^3 \left(C_5 C_L L_L R_3 R_5 g_m + 2 C_5 C_L L_L R_3 + C_5 C_L L_L R_3 + C_5 C_L L_L R_3 + C_5 C_L L_L R_3 R_L g_m + C_5 C_L L_L R_3 g_m + C_5 R_3 R_L g_m + C_5 R_L g_m + C_5 R_L g_m + C_5 R_L g_m + C_5 R_L g_m +$$

10.25 INVALID-ORDER-25 
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_L L_L R_3 R_L g_m + s^3 \left(C_5 C_L L_L R_3 R_5 R_L g_m - C_5 C_L L_L R_3 R_L g_m - C_5 R_3 R_L \right)}{R_3 g_m + R_L g_m + s^3 \left(C_5 C_L L_L R_3 R_5 g_m + 2 C_5 C_L L_L R_3 R_L g_m + C_5 C_L R_3 R_L g_m + C_5$$

10.26 INVALID-ORDER-26  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5 L_5 R_3 g_m s^2 - C_5 R_3 s + R_3 g_m}{C_5 C_L L_5 R_3 g_m s^3 + g_m + s^2 \left(C_5 C_L R_3 + C_5 L_5 g_m\right) + s \left(2 C_5 R_3 g_m + C_5 + C_L R_3 g_m\right)}$$

10.27 INVALID-ORDER-27  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5 L_5 R_3 R_L g_m s^2 - C_5 R_3 R_L s + R_3 R_L g_m}{C_5 C_L L_5 R_3 R_L g_m s^3 + R_3 g_m + R_L g_m + s^2 \left( C_5 C_L R_3 R_L + C_5 L_5 R_3 g_m + C_5 L_5 R_L g_m \right) + s \left( 2 C_5 R_3 R_L g_m + C_5 R_3 + C_5 R_L + C_L R_3 R_L g_m \right)}$$

**10.28** INVALID-ORDER-28 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5C_LL_5R_3R_Lg_ms^3 + R_3g_m + s^2\left(-C_5C_LR_3R_L + C_5L_5R_3g_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^3\left(C_5C_LL_5R_3g_m + C_5C_LL_5R_Lg_m\right) + s^2\left(2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_$$

**10.29** INVALID-ORDER-29 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 - C_5C_LL_LR_3s^3 - C_5R_3s + R_3g_m + s^2\left(C_5L_5R_3g_m + C_LL_LR_3g_m\right)}{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_5R_3g_m + 2C_5C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_5C_LR_3 + C_5L_5g_m + C_LL_Lg_m\right) + s\left(2C_5R_3g_m + C_5C_LR_3g_m\right)}$$

10.30 INVALID-ORDER-30 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_5L_5L_LR_3g_ms^3 - C_5L_LR_3s^2 + L_LR_3g_ms}{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_LR_3 + C_5L_5L_Lg_m\right) + s^2\left(C_5L_5R_3g_m + 2C_5L_LR_3g_m + C_5L_L + C_LL_LR_3g_m\right) + s\left(C_5R_3 + L_Lg_m\right)}$$

10.31 INVALID-ORDER-31 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_5R_3R_Lg_m - C_5C_LL_LR_3\right) + s^2\left(-C_5C_LR_3R_L + C_5L_5R_3g_m + C_LL_LR_3g_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_5R_3g_m + C_5C_LL_5R_2g_m + C_5C_LL_L\right) + s^2\left(2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_5C_LR_4 + C_5L_5g_m + C_LL_Lg_m\right) + s\left(2C_5R_3g_m + C_5C_LL_3R_3g_m + C_5C_LR_3g_m + C_5C_LR$$

10.32 INVALID-ORDER-32 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_5 L_L R_3 R_L g_m s^3 - C_5 L_L R_3 R_L g_m s^3 - C_5 L_L R_3 R_L g_m s}{C_5 C_L L_L R_3 R_L g_m s^4 + R_3 R_L g_m + s^3 \left(C_5 C_L L_L R_3 R_L + C_5 L_5 L_L R_3 g_m + C_5 L_L R_1 g_m\right) + s^2 \left(C_5 L_5 R_3 R_L g_m + 2 C_5 L_L R_3 R_L g_m + C_5 L_L R_3 R_L g_m\right) + s \left(C_5 R_3 R_L + L_L R_3 g_m + L_L R_L g_m\right)}$$

10.33 INVALID-ORDER-33 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(-C_5C_LL_LR_3R_L + C_5L_5L_LR_3g_m\right) + s^2\left(C_5L_5R_3R_Lg_m - C_5L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(-C_5R_3R_L + L_LR_3g_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_5C_LL_5L_LR_3g_m + C_5C_LL_LR_3R_Lg_m + S^2\left(C_5L_5R_3R_Lg_m + C_5L_LR_3g_m + C_5L_LR_3g$$

10.34 INVALID-ORDER-34 
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_ms^4 - C_5C_LL_LR_3R_Ls^3 - C_5R_3R_Ls + R_3R_Lg_m + s^2\left(C_5L_5R_3R_Lg_m + C_LL_LR_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_5C_LL_5L_LR_3g_m + C_5C_LL_LR_3R_Lg_m + S_5C_LL_LR_3 + C_5C_LL_LR_3 + C_5C_LL_LR$$

**10.35** INVALID-ORDER-35  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5L_5R_3s^2 + L_5R_3g_ms - R_3}{C_5C_LL_5R_3s^3 + 2R_3g_m + s^2\left(2C_5L_5R_3g_m + C_5L_5 + C_LL_5R_3g_m\right) + s\left(C_LR_3 + L_5g_m\right) + 1}$$

**10.36** INVALID-ORDER-36  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_5L_5R_3R_Ls^2 + L_5R_3R_Lg_ms - R_3R_L}{C_5C_LL_5R_3R_Ls^3 + 2R_3R_Lg_m + R_3 + R_L + s^2\left(2C_5L_5R_3R_Lg_m + C_5L_5R_3 + C_5L_5R_3 + C_5L_5R_3R_Lg_m\right) + s\left(C_LR_3R_L + L_5R_3g_m + L_5R_Lg_m\right)}$$

10.37 INVALID-ORDER-37 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_5R_3R_Ls^3 - R_3 + s^2\left(-C_5L_5R_3 + C_LL_5R_3R_Lg_m\right) + s\left(-C_LR_3R_L + L_5R_3g_m\right)}{2R_3g_m + s^3\left(2C_5C_LL_5R_3R_Lg_m + C_5C_LL_5R_3 + C_5C_LL_5R_L\right) + s^2\left(2C_5L_5R_3g_m + C_5L_5R_3g_m + C_LL_5R_3g_m\right) + s\left(2C_LR_3R_Lg_m + C_LR_3 + C_LR_4 + L_5g_m\right) + 1}$$

**10.38** INVALID-ORDER-38 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_5L_LR_3s^4 + C_LL_5L_LR_3g_ms^3 + L_5R_3g_ms - R_3 + s^2\left(-C_5L_5R_3 - C_LL_LR_3\right)}{2R_3g_m + s^4\left(2C_5C_LL_5L_LR_3g_m + C_5C_LL_5L_L\right) + s^3\left(C_5C_LL_5R_3 + C_LL_5L_Lg_m\right) + s^2\left(2C_5L_5R_3g_m + C_5L_5 + C_LL_5R_3g_m + 2C_LL_LR_3g_m + C_LL_L\right) + s\left(C_LR_3 + L_5g_m\right) + 1}$$

10.39 INVALID-ORDER-39  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5L_5L_LR_3s^3 + L_5L_LR_3g_ms^2 - L_LR_3s}{C_5C_LL_5L_LR_3s^4 + R_3 + s^3\left(2C_5L_5L_LR_3g_m + C_5L_5L_L + C_LL_5L_LR_3g_m\right) + s^2\left(C_5L_5R_3 + C_LL_LR_3 + L_5L_Lg_m\right) + s\left(L_5R_3g_m + 2L_LR_3g_m + L_L\right)}$$

**10.40** INVALID-ORDER-40  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_5L_LR_3s^4 - R_3 + s^3\left(-C_5C_LL_5R_3R_L + C_LL_5L_LR_3g_m\right) + s^2\left(-C_5L_5R_3 + C_LL_5R_3R_Lg_m - C_LL_LR_3\right) + s\left(-C_LR_3R_L + L_5R_3g_m\right)}{2R_3g_m + s^4\left(2C_5C_LL_5L_LR_3g_m + C_5C_LL_5R_3R_Lg_m + C_5C_LL_5R_3 + C_5C_LL_5R_3 + C_5C_LL_5R_3 + C_5C_LL_5R_3g_m + C_5L_5R_3g_m + C_5L_5R_3g_m + C_5C_LL_5R_3g_m + C_5C_LL_5R_3R_Lg_m + C_5C_LL_5R_3g_m + C_$$

10.41 INVALID-ORDER-41  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_5L_5L_LR_3R_Ls^3 + L_5L_LR_3R_Lg_ms^2 - L_LR_3R_Ls}{C_5C_LL_5L_LR_3R_Ls^4 + R_3R_L + s^3\left(2C_5L_5L_LR_3R_Lg_m + C_5L_5L_LR_3 + C_5L_5L_LR_3 + C_5L_5L_LR_3R_Lg_m\right) + s^2\left(C_5L_5R_3R_L + C_LL_LR_3R_L + L_5L_LR_3g_m + L_5L_LR_3g_m\right) + s\left(L_5R_3R_Lg_m + 2L_LR_3R_Lg_m + L_LR_3 + L_LR_L\right)}$$

10.42 INVALID-ORDER-42  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5C_LL_5L_LR_3R_Ls^4 - R_3R_L + s^3\left(-C_5L_5L_LR_3 + C_LL_5L_LR_3R_Lg_m\right) + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_L + L_5L_LR_3g_m\right) + s\left(L_5R_3R_Lg_m - L_LR_3\right)}{2R_3R_Lg_m + R_3 + R_L + s^4\left(2C_5C_LL_5L_LR_3R_Lg_m + C_5C_LL_5L_LR_3 + C_5C_LL_5L_LR_3g_m + C_5L_5L_LR_3g_m + C_5L_5L_LR_3g_m + C_5L_5L_LR_3g_m + C_5L_5L_RR_3g_m + C_5L_5L_RR_3g_m + C_5L_5L_RR_3g_m + C_5L_5R_3R_Lg_m + C_5R_3R_Lg_m +$$

10.43 INVALID-ORDER-43  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_5C_LL_5L_LR_3R_Lg_ms^3 + L_5R_3R_Lg_ms - R_3R_L + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_L\right)}{2R_3R_Lg_m + R_3 + R_L + s^4\left(2C_5C_LL_5L_LR_3R_Lg_m + C_5C_LL_5L_LR_3 + C_5C_LL_5L_1R_3 +$$

**10.44** INVALID-ORDER-44  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5 L_5 R_3 g_m s^2 + R_3 g_m + s \left(C_5 R_3 R_5 g_m - C_5 R_3\right)}{C_5 C_L L_5 R_3 g_m s^3 + g_m + s^2 \left(C_5 C_L R_3 R_5 g_m + C_5 C_L R_3 + C_5 L_5 g_m\right) + s \left(2 C_5 R_3 g_m + C_5 R_5 g_m + C_5 + C_L R_3 g_m\right)}$$

**10.45** INVALID-ORDER-45  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5L_5R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_5R_3R_5R_Lg_m - C_5R_3R_L\right)}{C_5C_LL_5R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_5C_LR_3R_5R_Lg_m + C_5L_5R_3g_m + C_5L_5R_Lg_m\right) + s\left(C_5R_3R_5g_m + 2C_5R_3R_Lg_m + C_5R_3 + C_5R_5R_Lg_m + C_5R_L + C_LR_3R_Lg_m\right)}$$

**10.46** INVALID-ORDER-46  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5R_3R_Lg_ms^3 + R_3g_m + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LR_3R_L + C_5L_5R_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^3\left(C_5C_LL_5R_3g_m + C_5C_LL_5R_Lg_m\right) + s^2\left(C_5C_LR_3R_5g_m + 2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_5C_LR_3 + C_5C_LR_4 + C_5L_5g_m\right) + s\left(2C_5R_3g_m + C_5R_5g_m + C_5R_5g_m + C_5R_3g_m + C_5R_3g_m\right)}$$

10.47 INVALID-ORDER-47  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_LR_3R_5g_m - C_5C_LL_LR_3\right) + s^2\left(C_5L_5R_3g_m + C_LL_LR_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_5R_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_5C_LR_3R_5g_m + C_5C_LR_3 + C_5L_Lg_m\right) + s\left(2C_5R_3g_m + C_5R_5g_m + C_5R_5g_m + C_5R_5g_m\right)}$$

10.48 INVALID-ORDER-48  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

10.49 INVALID-ORDER-49  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_5R_3R_Lg_m + C_5C_LL_LR_3R_5g_m - C_5C_LL_LR_3\right) + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LR_3R_L + C_5L_5R_3g_m + C_LL_LR_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3 + C_LR_3R_Lg_m\right)}{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_5R_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LR_3R_5g_m + C_5C_LR_$$

10.50 INVALID-ORDER-50  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_5L_5L_LR_3R_Lg_ms^3 + L_LR_3R_Lg_ms + s^2\left(C_5L_LR_3R_5R_Lg_m - C_5L_LR_3R_L\right)}{C_5C_LL_5L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_5C_LL_LR_3R_5R_Lg_m + C_5L_LR_3R_Lg_m + C_5L_LR_3R_Lg$$

10.51 INVALID-ORDER-51  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_s^2 + 1}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_m + s^3\left(C_5C_LL_LR_3R_Lg_m + s^3\left(C_5C_LL_LR_3R_Lg_m + C_5L_LR_3R_Lg_m + C_5L_LR_3R_Lg_m$$

10.52 INVALID-ORDER-52  $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_m s^4 + R_3R_Lg_m + s^3\left(C_5C_LL_LR_3R_Lg_m - C_5C_LL_LR_3R_Lg_m + C_LL_LR_3R_Lg_m + s^2\left(C_5L_5R_3R_Lg_m + C_LL_LR_3R_Lg_m + s^2\left(C_5L_5R_3R_Lg_m + C_LL_LR_3R_Lg_m + s^2\left(C_5L_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m$$

**10.53** INVALID-ORDER-53  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5L_5R_3R_5s^2 - R_3R_5 + s\left(L_5R_3R_5g_m - L_5R_3\right)}{C_5C_LL_5R_3R_5s^3 + 2R_3R_5g_m + R_5 + s^2\left(2C_5L_5R_3R_5g_m + C_5L_5R_5 + C_LL_5R_3R_5g_m + C_LL_5R_3\right) + s\left(C_LR_3R_5 + 2L_5R_3g_m + L_5R_5g_m + L_5\right)}$$

10.54 INVALID-ORDER-54  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_5L_5R_3R_5R_Ls^2 - R_3R_5R_L + s\left(L_5R_3R_5R_Lg_m - L_5R_3R_L\right)}{C_5C_LL_5R_3R_5R_Ls^3 + 2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^2\left(2C_5L_5R_3R_5R_Lg_m + C_5L_5R_3R_5 + C_5L_5R_3R_5R_Lg_m + C_LL_5R_3R_L\right) + s\left(C_LR_3R_5R_L + L_5R_3R_5g_m + 2L_5R_3R_Lg_m + L_5R_3 + L_5R_5R_Lg_m + L_5R_L\right)}$$

10.55 INVALID-ORDER-55  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_5R_3R_5R_Ls^3 - R_3R_5 + s^2\left(-C_5L_5R_3R_5 + C_LL_5R_3R_5R_Lg_m - C_LL_5R_3R_5\right) + s\left(-C_LR_3R_5R_L + L_5R_3R_5g_m - L_5R_3\right)}{2R_3R_5g_m + R_5 + s^3\left(2C_5C_LL_5R_3R_5R_Lg_m + C_5C_LL_5R_3R_5 + C_5C_LL_5R_3R_5g_m + C_5L_5R_3R_5g_m + C_5L_5R_3g_m + C_5L_5R_3g$$

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10.56 INVALID-ORDER-56 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5L_LR_3R_5s^4 - R_3R_5 + s^3\left(C_LL_5L_LR_3R_5g_m - C_LL_5L_LR_3\right) + s^2\left(-C_5L_5R_3R_5 - C_LL_LR_3R_5\right) + s\left(L_5R_3R_5g_m - L_5R_3\right)}{2R_3R_5g_m + R_5 + s^4\left(2C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3\right) + s^3\left(C_5C_LL_5L_LR_3g_m + C_LL_5L_LR_3g_m + C_LL_5L_L\right) + s^2\left(2C_5L_5R_3R_5g_m + C_5L_5R_3R_5g_m + C_5R_5R_5g_m + C_5R_5R_5g
10.57 INVALID-ORDER-57 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                       H(s) = \frac{-C_5L_5L_LR_3R_5s^3 - L_LR_3R_5s + s^2\left(L_5L_LR_3R_5g_m - L_5L_LR_3\right)}{C_5C_LL_5L_LR_3R_5s^4 + R_3R_5 + s^3\left(2C_5L_5L_LR_3R_5g_m + C_5L_5L_LR_3 + C_LL_5L_LR_3\right) + s^2\left(C_5L_5R_3R_5 + C_LL_LR_3R_5 + C_LL_LR
10.58 INVALID-ORDER-58 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5L_R_3R_5s^4 - R_3R_5 + s^3\left(-C_5C_LL_5R_3R_5R_L + C_LL_5L_LR_3R_5g_m - C_LL_5L_LR_3\right) + s^2\left(-C_5L_5R_3R_5 + C_LL_5R_3R_5R_Lg_m - C_LL_5R_3R_5 - C_LL_5R_3R_5 + s^2\left(-C_5L_5R_3R_5 + C_LL_5R_3R_5 - C_LL_5R_5R_5 -
10.59 INVALID-ORDER-59 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{-C_5L_5L_LR_3R_5R_Ls^3 - L_LR_3R_5R_Ls + s^2\left(L_5L_LR_3R_5R_Lg_m - L_5L_LR_3R_L\right)}{C_5C_LL_5L_LR_3R_5R_Ls^4 + R_3R_5R_Ls^4 + R_3R_
10.60 INVALID-ORDER-60 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_1 L_1 s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -C_5C_LL_5L_LR_3R_5R_Ls^4-R_3R_5R_L+s^3\left(-C_5L_5L_LR_3R_5+C_LL_5L_LR_3R_5R_Lg_m-C_LL_5L_LR_3R_L\right)+s^2\left(-C_5L_5R_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LL_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_L-C_LR_3R_5R_1-C_LR_3R_5R_1-C_LR_3R_5R_1-C_LR_3R_5R_1-C_LR_3R_5R_1-C_LR_3R_5R_1-C_LR_3R_5R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_LR_3R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_1-C_1R_
H(s) = \frac{-C_5C_LL_5L_LR_3R_5R_Ls - R_3R_5R_Ls - R_3R_5R
10.61 INVALID-ORDER-61 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \frac{-C_5C_LL_5L_LR_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - C_LL_5L_LR_3R_5R_Ls^4 - C_LL_5L_LR
10.62 INVALID-ORDER-62 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                      H(s) = \frac{L_5 R_3 g_m s + R_3 R_5 g_m - R_3 + s^2 \left(C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(C_5 C_L L_5 R_3 R_5 g_m + C_5 C_L L_5 R_3\right) + s^2 \left(2 C_5 L_5 R_3 g_m + C_5 L_5 R_5 g_m + C_5 L_5 + C_L L_5 R_3 g_m\right) + s \left(C_L R_3 R_5 g_m + C_L R_3 + L_5 g_m\right) + 1}
10.63 INVALID-ORDER-63 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                 H(s) = \frac{L_5 R_3 R_L g_m s + R_3 R_5 R_L g_m - R_3 R_L + s^2 \left(C_5 L_5 R_3 R_5 R_L g_m - C_5 L_5 R_3 R_L \right)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^3 \left(C_5 C_L L_5 R_3 R_5 R_L g_m + C_5 L_5 R_3 R_L g_m + 2 C_5 L_5 R_3 R_L g_m + C_5 L_5 R_3 R_L
10.64 INVALID-ORDER-64 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{R_3R_5g_m - R_3 + s^3\left(C_5C_LL_5R_3R_5R_Lg_m - C_5C_LL_5R_3R_Lg_m - C_5L_5R_3R_Lg_m - C_5L_5R_3R_Lg_m + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3R_Lg_m + s^2\left(C_5L_5R_3R_Lg_m - C_LR_3R_Lg_m + s^2\left(C_5L_5R_3R_Lg_m - C_LR_3R_Lg_m + c_LR_3R_Lg_m +$ 

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10.65 INVALID-ORDER-65 Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_L L_5 L_L R_3 g_m s^3 + L_5 R_3 g_m s + R_3 R_5 g_m - R_3 + s^4 \left(C_5 C_L L_5 L_L R_3 R_5 g_m - C_5 L_5 L_L R_3\right) + s^2 \left(C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3 + C_L L_L R_3 R_5 g_m - C_L L_L R_3\right)}{2 R_3 g_m + R_5 g_m + s^4 \left(2 C_5 C_L L_5 L_L R_5 g_m + C_5 C_L L_5 L_L\right) + s^3 \left(C_5 C_L L_5 R_3 R_5 g_m + C_5 L_L L_2 R_3 g_m + C_5 L_5 R_3 g_m + C_5 L_4 L_2 R_3 g_m + C_5 L_5 R_3
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**10.66** INVALID-ORDER-66 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.67 INVALID-ORDER-67  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_5C_LL_5L_LR_3R_5g_m - C_5C_LL_5L_LR_3\right) + s^3\left(C_5C_LL_5R_3R_Lg_m - C_5C_LL_5R_3R_Lg_m - C_5L_LE_Ra_3g_m\right) + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3R_5g_m - C_5L_5R_3R_Lg_m + C_LL_LR_3R_5g_m - C_LL_LR_3g_m\right) + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3R_5g_m - C_5L_5R_3R_Lg_m + C_LL_LR_3g_m\right) + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3R_Lg_m + C_5L_LR_3g_m\right) + s^2\left(C_5L_5R_3R_5g_m + C_5L_LR_3g_m\right) + s^2\left(C_5L_5R_3g_m + C_5L_5R_3g_m\right) + s^2\left(C_5L_5R_3g_m\right) + s^2\left(C_5L_5R_3g_m\right) + s^2\left(C_$ 

**10.68** INVALID-ORDER-68  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

 $L_5L_LR_3R_Lg_ms^2 + s^3\left(C_5L_5L_LR_3R_5R_Lg_m - C_5L_5L_LR_3R_L\right) + s\left(L_LR_3R_5R_Lg_m - L_LR_3R_L\right)$  $H(s) = \frac{L_5L_LR_3R_Lg_ms^2 + s^3\left(C_5L_5L_LR_3R_5R_Lg_m - C_5L_5L_LR_3R_L\right) + s\left(L_LR_3R_5R_Lg_m - L_LR_3R_L\right)}{R_3R_5R_Lg_m + R_3R_L + s^4\left(C_5C_LL_5L_LR_3R_5R_Lg_m + C_5C_LL_5L_LR_3R_Lg_m + C_5L_5L_LR_3R_Lg_m + C_5$ 

10.69 INVALID-ORDER-69  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $R_{3}R_{5}R_{L}g_{m} - R_{3}R_{L} + s^{4}\left(C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}\right) + s^{3}\left(C_{5}L_{5}L_{L}R_{3}R_{5}g_{m} - C_{5}L_{5}L_{L}R_{3} + C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}g_{m} - C_{5}L_{5}L_{L}R_{3} + C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{5}R_{5}R_{L}g_{m} - C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{5}R_{5}R_{L}g_{m} - C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{5}R_{5}R_{L}g_{m} - C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{5}R_{5}R_{L}g_{m} - C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{5}R_{5}R_{L}g_{m$  $\frac{R_3R_5g_m + R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^4\left(C_5C_LL_5L_LR_3R_5g_m + 2C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3 + C_5C_LL_5L_RR_3 + C_5C_LL_5L_RR_$ 

10.70 INVALID-ORDER-70  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

 $C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}s^{3} + L_{5}R_{3}R_{L}g_{m}s + R_{3}R_{5}R_{L}g_{m} - R_{3}R_{L} + s^{4}\left(C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m} - C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m} - C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{3}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m} - C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{3}R_{L}g_{m} - C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{L}g_{m} - C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{L}g_{m} - C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}R_{L}g_$  $\frac{C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}s^{3}+L_{5}R_{3}R_{L}g_{m}s+R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{4}\left(C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}\right)+s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m}+R_{5}R_{L}g_{m}+R_{5}R_{L}g_{m}+R_{5}R_{L}g_{m}+R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{$ 

10.71 INVALID-ORDER-71  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{-C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^3\left(C_5C_LL_5R_3R_5g_m + C_5C_LL_5R_3\right) + s^2\left(C_5C_LR_3R_5 + 2C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5\right) + s\left(2C_5R_3R_5g_m + C_5R_5 + C_LR_3R_5g_m + C_LR_3\right) + 1}$ 

10.72 INVALID-ORDER-72  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$ 

 $\frac{-C_{5}R_{3}R_{5}R_{L}s+R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}L_{5}R_{3}R_{L}\right)}{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{5}L_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}R_{L}+C_{5}L_{5}R_{3}R_{5}g_{m}+2C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{3}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{3}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g$ 

10.73 INVALID-ORDER-73  $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$ 

 $R_{3}R_{5}g_{m}-R_{3}+s^{3}\left(C_{5}C_{L}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}C_{L}L_{5}R_{3}R_{5}R_{L}+C_{5}L_{5}R_{3}R_{5}g_{m}-C_{5}L_{5}R_{3}\right)+s\left(-C_{5}R_{3}R_{5}+C_{L}R_{3}R_{5}R_{L}g_{m}-C_{L}R_{3}R_{L}\right)\\ -2R_{3}g_{m}+R_{5}g_{m}+s^{3}\left(C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+2C_{5}C_{L}L_{5}R_{3}+C_{5}C_{L}L_{5}R_{3}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{5}g_{m}+C_{5}C_{$ 

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10.74 INVALID-ORDER-74 Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)
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 $H(s) = \frac{-C_5C_LL_LR_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^4\left(C_5C_LL_5L_LR_3R_5g_m - C_5L_LL_RR_3R_5g_m - C_5L_5R_3 + C_LL_LR_3R_5g_m - C_5L_LL_RR_3\right) + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3R_5g_m - C_5L_5R_3 + C_LL_LR_3R_5g_m - C_5L_LL_RR_3\right)}{2R_3g_m + R_5g_m + s^4\left(2C_5C_LL_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m + C_5C_LL_5R_3R_5g_m + C_5C_LL_LR_3g_m + C_5L_LR_3g_m + C_5L_LR_3g_m$ 

10.75 INVALID-ORDER-75 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{-C_5L_LR_3R_5s^2 + s^3\left(C_5L_5L_LR_3R_5g_m - C_5L_LR_3\right) + s\left(L_LR_3R_5g_m - L_LR_3\right)}{R_3R_5g_m + R_3 + s^4\left(C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3\right) + s^3\left(C_5C_LL_LR_3R_5 + 2C_5L_LR_3g_m + C_5L_LR_3g_m + C_5L_LR_3g_m$ 

10.76 INVALID-ORDER-76 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3 R_5 g_m - R_3 + s^4 \left(C_5 C_L L_5 L_L R_3 R_5 g_m - C_5 C_L L_5 R_3 R_5 R_L g_m - C_5 C_L L_5 R_3 R_5 - C_5 C_L L_5 R_3 R_5 R_L - C_5 C_L L_5 R_3 R_5 R_L + C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_5 R_5 R_L - C_5 C_L L_5 R_3 R_5 R_L + C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_5 R_L g_m - C$ 

10.77 INVALID-ORDER-77 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{-C_5L_LR_3R_5R_Ls^2 + s^3\left(C_5L_5L_LR_3R_5R_Lg_m - C_5L_5L_LR_3R_5R_Lg_m - C_5L_5L_LR_3R_5R_Lg_m - L_LR_3R_L\right)}{R_3R_5R_Lg_m + R_3R_L + s^4\left(C_5C_LL_5L_LR_3R_5R_Lg_m + C_5L_5L_LR_3R_5R_Lg_m + C_5L_5L_RR_3R_5R_Lg_m + C_5L_5L_RR_3R_5R_Lg$ 

10.78 INVALID-ORDER-78 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L + s^4 \left(C_5 C_L L_5 L_L R_3 R_5 R_L g_m - C_5 C_L L_5 L_L R_3 R_5 R_L + C_5 L_5 L_L R_3 R_5 g_m - C_5 L_5 L_L R_3 R_5 g_m - C_5 L_5 L_L R_3 R_5 g_m - C_5 L_5 L_L R_3 R_5 g_m + C_5 L_5 L_L R_3 R_5 R_L g_m + C_5 L_5 L_L R_5 R_L g_m + C_5 L_L R_5 R_L g_m + C_5$ 

10.79 INVALID-ORDER-79 
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

 $H(s) = \frac{-C_5C_LL_R3R_5R_Ls^3 - C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^4\left(C_5C_LL_5L_R3R_5R_Lg_m - C_5C_LL_5L_R3R_5R_Lg_m - C_5C_LL_5L_R3R_5R_Lg_m - C_5C_LL_5L_R3R_5R_Lg_m - C_5C_LL_5L_R3R_5R_Lg_m + C_5C_LL_5R_3R_5R_Lg_m + C_5C_LL_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m + C_5C_LL_5R_5R_Lg_m + C_5C_LL_5R_5R_5R_Lg_m +$ 

10.80 INVALID-ORDER-80  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, R_L\right)$ 

$$H(s) = \frac{R_5 R_L g_m - R_L}{R_5 g_m + 2 R_L g_m + s \left( C_3 R_5 R_L g_m + C_3 R_L \right) + 1}$$

10.81 INVALID-ORDER-81  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m - 1}{2g_m + s \left(C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L\right)}$$

10.82 INVALID-ORDER-82  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_5 R_L g_m - R_L}{R_5 g_m + 2 R_L g_m + s \left( C_3 R_5 R_L g_m + C_3 R_L + C_L R_5 R_L g_m + C_L R_L \right) + 1}$$

10.83 INVALID-ORDER-83 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m + s^2 \left( C_L L_L R_5 g_m - C_L L_L \right) - 1}{2 C_L L_L g_m s^2 + 2 g_m + s^3 \left( C_3 C_L L_L R_5 g_m + C_3 C_L L_L \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L \right)}$$

10.84 INVALID-ORDER-84 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m + s^2 \left( C_L L_L R_5 g_m - C_L L_L \right) + s \left( C_L R_5 R_L g_m - C_L R_L \right) - 1}{2 g_m + s^3 \left( C_3 C_L L_L R_5 g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_5 R_L g_m + C_3 C_L R_L + 2 C_L L_L g_m \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + 2 C_L R_L g_m + C_L R_L g_m \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L R_L g_m + C_L R_L g_m \right)}$$

10.85 INVALID-ORDER-85 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_{5}R_{L}g_{m} - R_{L} + s^{2}\left(C_{L}L_{L}R_{5}R_{L}g_{m} - C_{L}L_{L}R_{L}\right) + s\left(L_{L}R_{5}g_{m} - L_{L}\right)}{R_{5}g_{m} + 2R_{L}g_{m} + s^{3}\left(C_{3}C_{L}L_{L}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{L}\right) + s^{2}\left(C_{3}L_{L}R_{5}g_{m} + C_{3}L_{L} + C_{L}L_{L}R_{5}g_{m} + 2C_{L}L_{L}R_{L}g_{m} + C_{L}L_{L}\right) + s\left(C_{3}R_{5}R_{L}g_{m} + C_{3}R_{L} + 2L_{L}g_{m}\right) + 1}$$

**10.86** INVALID-ORDER-86 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_{5}R_{L}g_{m} - R_{L} + s^{2}\left(C_{L}L_{L}R_{5}R_{L}g_{m} - C_{L}L_{L}R_{L}\right)}{R_{5}g_{m} + 2R_{L}g_{m} + s^{3}\left(C_{3}C_{L}L_{L}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{L}\right) + s^{2}\left(C_{L}L_{L}R_{5}g_{m} + 2C_{L}L_{L}R_{L}g_{m} + C_{L}L_{L}\right) + s\left(C_{3}R_{5}R_{L}g_{m} + C_{3}R_{L} + C_{L}R_{5}R_{L}g_{m} + C_{L}R_{L}\right) + 1}$$

10.87 INVALID-ORDER-87  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5 s + g_m}{s^2 (C_3 C_5 + C_5 C_L) + s (C_3 g_m + 2C_5 g_m + C_L g_m)}$$

10.88 INVALID-ORDER-88  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LR_Ls^2 + g_m + s\left(-C_5 + C_LR_Lg_m\right)}{C_3C_5C_LR_Ls^3 + s^2\left(C_3C_5 + C_3C_LR_Lg_m + 2C_5C_LR_Lg_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

**10.89** INVALID-ORDER-89  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_Ls^3 - C_5s + C_LL_Lg_ms^2 + g_m}{C_3C_5C_LL_Ls^4 + s^3\left(C_3C_LL_Lg_m + 2C_5C_LL_Lg_m\right) + s^2\left(C_3C_5 + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

10.90 INVALID-ORDER-90  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5 L_L s^2 + L_L g_m s}{C_5 s + g_m + s^3 \left( C_3 C_5 L_L + C_5 C_L L_L \right) + s^2 \left( C_3 L_L g_m + 2 C_5 L_L g_m + C_L L_L g_m \right)}$$

10.91 INVALID-ORDER-91  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LL_Ls^3 + g_m + s^2\left(-C_5C_LR_L + C_LL_Lg_m\right) + s\left(-C_5 + C_LR_Lg_m\right)}{C_3C_5C_LL_Ls^4 + s^3\left(C_3C_5C_LR_L + C_3C_LL_Lg_m + 2C_5C_LL_Lg_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + 2C_5C_LR_Lg_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

10.92 INVALID-ORDER-92  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_5 L_L R_L s^2 + L_L R_L g_m s}{R_L g_m + s^3 \left(C_3 C_5 L_L R_L + C_5 C_L L_L R_L\right) + s^2 \left(C_3 L_L R_L g_m + 2 C_5 L_L R_L g_m + C_5 L_L + C_L L_L R_L g_m\right) + s \left(C_5 R_L + L_L g_m\right)}$$

10.93 INVALID-ORDER-93 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{-C_5C_LL_LR_Ls^3 + R_Lg_m + s^2\left(-C_5L_L + C_LL_LR_Lg_m\right) + s\left(-C_5R_L + L_Lg_m\right)}{C_3C_5C_LL_LR_Ls^4 + g_m + s^3\left(C_3C_5L_L + C_3C_LL_LR_Lg_m + 2C_5C_LL_LR_Lg_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_L + C_3L_Lg_m + 2C_5L_Lg_m + C_LL_Lg_m\right) + s\left(C_3R_Lg_m + 2C_5R_Lg_m + C_5C_LL_LR_Lg_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_L + C_3L_Lg_m + C_5C_LL_Lg_m\right) + s\left(C_3R_Lg_m + C_5C_LL_Lg_m\right) +$$

10.94 INVALID-ORDER-94 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{-C_5C_LL_LR_Ls^3 - C_5R_Ls + C_LL_LR_Lg_ms^2 + R_Lg_m}{C_3C_5C_LL_LR_Ls^4 + g_m + s^3\left(C_3C_LL_LR_Lg_m + 2C_5C_LL_LR_Lg_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_L + C_5C_LR_L + C_LL_Lg_m\right) + s\left(C_3R_Lg_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m\right)}$$

10.95 INVALID-ORDER-95 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_{3}s}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, R_{L} + \frac{1}{C_{L}s}\right)$$

$$H(s) = \frac{-C_5C_LR_5R_Ls^2 + R_5g_m + s\left(-C_5R_5 + C_LR_5R_Lg_m - C_LR_L\right) - 1}{C_3C_5C_LR_5R_Ls^3 + 2g_m + s^2\left(C_3C_5R_5 + C_3C_LR_5R_Lg_m + C_3C_LR_L + 2C_5C_LR_5R_Lg_m + C_5C_LR_5\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + 2C_LR_Lg_m + C_LR_5g_m + C_LR_5g_m$$

**10.96** INVALID-ORDER-96 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_LR_5s^3 - C_5R_5s + R_5g_m + s^2\left(C_LL_LR_5g_m - C_LL_L\right) - 1}{C_3C_5C_LL_LR_5s^4 + 2g_m + s^3\left(C_3C_LL_LR_5g_m + C_3C_LL_LR_5g_m\right) + s^2\left(C_3C_5R_5 + C_5C_LR_5 + 2C_LL_Lg_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s^2\left(C_3C_5R_5 + C_5C_LR_5 + 2C_LL_Lg_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s^2\left(C_3C_5R_5 + C_5C_LR_5 + 2C_LR_5g_m\right) + s^2\left(C_3R_5g_m + C_3R_5g_m + C_3R_5g_m\right) + s^2\left(C_3R_5g_m + C_3R_5g_m\right) + s^2\left(C_3R_5g_m\right) + s^2\left(C_$$

10.97 INVALID-ORDER-97 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{-C_5L_LR_5s^2 + s\left(L_LR_5g_m - L_L\right)}{R_5g_m + s^3\left(C_3C_5L_LR_5 + C_5C_LL_LR_5\right) + s^2\left(C_3L_LR_5g_m + C_3L_L + 2C_5L_LR_5g_m + C_LL_LR_5g_m + C_LL_L\right) + s\left(C_5R_5 + 2L_Lg_m\right) + 1}$$

10.98 INVALID-ORDER-98 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_R_5s^3 + R_5g_m + s^2\left(-C_5C_LR_5R_L + C_LL_LR_5g_m - C_LL_L\right) + s\left(-C_5R_5 + C_LR_5R_Lg_m - C_LR_L\right) - 1}{C_3C_5C_LL_LR_5s^4 + 2g_m + s^3\left(C_3C_5C_LR_5R_L + C_3C_LL_R_5g_m + C_3C_LL_LR_5g_m\right) + s^2\left(C_3C_5R_5 + C_3C_LR_5R_Lg_m + C_3C_LR_L + 2C_5C_LR_5R_Lg_m + C_3C_LR_L + 2C_5C_LR_5R_Lg_m + C_3C_LR_5R_Lg_m + C_3C_LR_L + 2C_5C_LR_5R_Lg_m + C_3C_LR_L + 2C_5C_LR_5R_L + 2C_5C_LR_5R_L + 2C_5C_LR_5R_Lg_m + C_3C_LR_L + 2C_5C_LR_5R_L +$$

**10.99** INVALID-ORDER-99  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_5L_LR_5R_Ls^2 + s\left(L_LR_5R_Lg_m - L_LR_L\right)}{R_5R_Lg_m + R_L + s^3\left(C_3C_5L_LR_5R_L + C_5C_LL_LR_5R_L\right) + s^2\left(C_3L_LR_5R_Lg_m + C_3L_LR_L + 2C_5L_LR_5R_Lg_m + C_5L_LR_5 + C_LL_LR_5R_Lg_m + C_LL_LR_L\right) + s\left(C_5R_5R_L + L_LR_5g_m + 2L_LR_Lg_m + L_L\right)}$$

10.100 INVALID-ORDER-100 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{-C_5C_LL_R_5R_Ls^3 + R_5R_Lg_m - R_L + s^2\left(-C_5L_LR_5 + C_LL_R_5R_Lg_m - C_LL_LR_L\right) + s\left(-C_5R_5R_L + L_LR_5g_m - L_L\right)}{C_3C_5C_LL_R_5R_Ls^4 + R_5g_m + 2R_Lg_m + s^3\left(C_3C_5L_LR_5 + C_3C_LL_R_5R_Lg_m + C_5C_LL_R_5\right) + s^2\left(C_3C_5R_5R_L + C_3L_LR_5g_m + C_3L_LR_5g_m + C_LL_R_5g_m +$$

10.101 INVALID-ORDER-101 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{-C_5C_LL_R_5R_Ls^3 - C_5R_5R_Ls + R_5R_Lg_m - R_L + s^2\left(C_LL_R_5R_Lg_m - C_LL_LR_L\right)}{C_3C_5C_LL_R_5R_Ls^4 + R_5g_m + 2R_Lg_m + s^3\left(C_3C_LL_R_5R_Lg_m + C_3C_LL_R_L + 2C_5C_LL_R_5R_Lg_m + C_5C_LL_R_5\right) + s^2\left(C_3C_5R_5R_L + C_5C_LR_5R_L + C_5C_LR_5R_L + C_5C_LR_5R_Lg_m + C_5C_LL_R_5\right) + s^2\left(C_3C_5R_5R_L + C_5C_LR_5R_Lg_m + C_5C_LR_5\right) + s^2\left(C_3C_5R_5R_L + C_5C_LR_5\right) + s^2\left(C_5C_5R_5R_L + C_5C_LR_5\right) + s^2\left(C_5C_5R_5R_5\right) + s^2\left(C_5C_5R_5R_$$

**10.102** INVALID-ORDER-102 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s \left( C_5 R_5 g_m - C_5 \right)}{s^2 \left( C_3 C_5 R_5 g_m + C_3 C_5 + C_5 C_L R_5 g_m + C_5 C_L \right) + s \left( C_3 g_m + 2 C_5 g_m + C_L g_m \right)}$$

**10.103** INVALID-ORDER-103 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^2 \left( C_5 C_L R_5 R_L g_m - C_5 C_L R_L \right) + s \left( C_5 R_5 g_m - C_5 + C_L R_L g_m \right)}{s^3 \left( C_3 C_5 C_L R_5 R_L g_m + C_3 C_5 C_L R_L \right) + s^2 \left( C_3 C_5 R_5 g_m + C_3 C_5 + C_3 C_L R_L g_m + C_5 C_L R_5 g_m + 2 C_5 C_L R_L g_m + C_5 C_L \right) + s \left( C_3 g_m + 2 C_5 g_m + C_L g_m \right)}$$

**10.104** INVALID-ORDER-104 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_L L_L g_m s^2 + g_m + s^3 \left( C_5 C_L L_L R_5 g_m - C_5 C_L L_L \right) + s \left( C_5 R_5 g_m - C_5 \right)}{s^4 \left( C_3 C_5 C_L L_L R_5 g_m + C_3 C_5 C_L L_L \right) + s^3 \left( C_3 C_L L_L g_m + 2 C_5 C_L L_L g_m \right) + s^2 \left( C_3 C_5 R_5 g_m + C_3 C_5 + C_5 C_L R_5 g_m + C_5 C_L \right) + s \left( C_3 g_m + 2 C_5 g_m + C_L g_m \right)}$$

**10.105** INVALID-ORDER-105 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_{L}g_{m}s + s^{2}\left(C_{5}L_{L}R_{5}g_{m} - C_{5}L_{L}\right)}{g_{m} + s^{3}\left(C_{3}C_{5}L_{L}R_{5}g_{m} + C_{3}C_{5}L_{L} + C_{5}C_{L}L_{L}R_{5}g_{m} + C_{5}C_{L}L_{L}\right) + s^{2}\left(C_{3}L_{L}g_{m} + 2C_{5}L_{L}g_{m} + C_{L}L_{L}g_{m}\right) + s\left(C_{5}R_{5}g_{m} + C_{5}C_{L}L_{L}R_{5}g_{m} + C_{5}C_{L}L_{L}\right) + s^{2}\left(C_{3}L_{L}g_{m} + 2C_{5}L_{L}g_{m} + C_{L}L_{L}g_{m}\right) + s\left(C_{5}R_{5}g_{m} + C_{5}C_{L}L_{L}R_{5}g_{m} + C_{5}C_{L}L_{L}R_{5}g_{m}\right) + s\left(C_{5}R_{5}g_{m} + C_{$$

**10.106** INVALID-ORDER-106 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^3 \left( C_5 C_L L_L R_5 g_m - C_5 C_L L_L \right) + s^2 \left( C_5 C_L R_5 R_L g_m - C_5 C_L R_L + C_L L_L g_m \right) + s \left( C_5 R_5 g_m - C_5 + C_L R_L g_m \right)}{s^4 \left( C_3 C_5 C_L L_L R_5 g_m + C_3 C_5 C_L L_L \right) + s^3 \left( C_3 C_5 C_L R_5 R_L g_m + C_3 C_5 C_L R_L + C_3 C_L L_L g_m \right) + s^2 \left( C_3 C_5 R_5 g_m + C_3 C_5 + C_3 C_L R_L g_m + C_5 C_L R_L g_m \right)}$$

10.107 INVALID-ORDER-107 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L g_m s + s^2 \left( C_5 L_L R_5 R_L g_m - C_5 L_L R_L \right)}{R_L g_m + s^3 \left( C_3 C_5 L_L R_5 R_L g_m + C_3 C_5 L_L R_L + C_5 C_L L_L R_5 R_L g_m + C_5 C_L L_L R_L \right) + s^2 \left( C_3 L_L R_L g_m + C_5 L_L R_5 g_m + 2 C_5 L_L R_L g_m + C_5 L_L + C_L L_L R_L g_m \right) + s \left( C_5 R_5 R_L g_m + C_5 R_L + L_L g_m \right)}$$

10.108 INVALID-ORDER-108 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_L g_m + s^3 \left( C_5 C_L L_L R_5 R_L g_m - C_5 C_L L_L R_L \right) + s^2 \left( C_5 L_L R_5 g_m - C_5 L_L + C_L L_L R_L g_m \right) + s \left( C_5 R_5 R_L g_m - C_5 R_L + L_L g_m \right)}{g_m + s^4 \left( C_3 C_5 C_L L_L R_5 g_m + C_3 C_5 L_L L_R L_2 g_m + C_5 C_L L_L R_L g_m + C_5 C_L R_L g$$

10.109 INVALID-ORDER-109 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_L L_L R_L g_m s^2 + R_L g_m + s^3 \left( C_5 C_L L_L R_5 R_L g_m - C_5 C_L L_L R_L \right) + s \left( C_5 R_5 R_L g_m - C_5 R_L \right)}{g_m + s^4 \left( C_3 C_5 C_L L_L R_5 g_m + C_3 C_5 C_L L_L R_L \right) + s^3 \left( C_3 C_L L_L R_L g_m + C_5 C_L L_L R_L g_m + C_5 C_L L_L \right) + s^2 \left( C_3 C_5 R_5 R_L g_m + C_5 C_L R_L + C_L L_L g_m \right) + s \left( C_3 R_L g_m + C_5 R_L g$$

10.110 INVALID-ORDER-110  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$ 

$$H(s) = \frac{C_5 L_5 R_L g_m s^2 - C_5 R_L s + R_L g_m}{C_3 C_5 L_5 R_L g_m s^3 + g_m + s^2 \left( C_3 C_5 R_L + C_5 L_5 g_m \right) + s \left( C_3 R_L g_m + 2 C_5 R_L g_m + C_5 \right)}$$

**10.111** INVALID-ORDER-111  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5 L_5 g_m s^2 - C_5 s + g_m}{s^3 \left( C_3 C_5 L_5 g_m + C_5 C_L L_5 g_m \right) + s^2 \left( C_3 C_5 + C_5 C_L \right) + s \left( C_3 g_m + 2 C_5 g_m + C_L g_m \right)}$$

10.112 INVALID-ORDER-112  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5 L_5 R_L g_m s^2 - C_5 R_L s + R_L g_m}{g_m + s^3 \left( C_3 C_5 L_5 R_L g_m + C_5 C_L L_5 R_L g_m \right) + s^2 \left( C_3 C_5 R_L + C_5 C_L R_L + C_5 L_5 g_m \right) + s \left( C_3 R_L g_m + 2 C_5 R_L g_m + C_5 + C_L R_L g_m \right)}$$

**10.113** INVALID-ORDER-113  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5R_Lg_ms^3 + g_m + s^2\left(-C_5C_LR_L + C_5L_5g_m\right) + s\left(-C_5 + C_LR_Lg_m\right)}{C_3C_5C_LL_5R_Lg_ms^4 + s^3\left(C_3C_5C_LR_L + C_3C_5L_5g_m + C_5C_LL_5g_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + 2C_5C_LR_Lg_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

**10.114** INVALID-ORDER-114  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_Lg_ms^4 - C_5C_LL_Ls^3 - C_5s + g_m + s^2\left(C_5L_5g_m + C_LL_Lg_m\right)}{C_3C_5C_LL_5L_Lg_ms^5 + C_3C_5C_LL_Ls^4 + s^3\left(C_3C_5L_5g_m + C_3C_LL_Lg_m + C_5C_LL_5g_m + 2C_5C_LL_Lg_m\right) + s^2\left(C_3C_5 + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

**10.115** INVALID-ORDER-115  $Z(s) = \left(\infty, \infty, \frac{1}{C_{3}s}, \infty, L_{5}s + \frac{1}{C_{5}s}, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right)$ 

$$H(s) = \frac{C_5 L_5 L_L g_m s^3 - C_5 L_L s^2 + L_L g_m s}{C_5 s + g_m + s^4 \left( C_3 C_5 L_5 L_L g_m + C_5 C_L L_5 L_L g_m \right) + s^3 \left( C_3 C_5 L_L + C_5 C_L L_L \right) + s^2 \left( C_3 L_L g_m + C_5 L_5 g_m + 2 C_5 L_L g_m + C_L L_L g_m \right)}$$

**10.116** INVALID-ORDER-116  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_5R_Lg_m - C_5C_LL_L\right) + s^2\left(-C_5C_LR_L + C_5L_5g_m + C_LL_Lg_m\right) + s\left(-C_5 + C_LR_Lg_m\right)}{C_3C_5C_LL_5L_Lg_ms^5 + s^4\left(C_3C_5C_LL_5R_Lg_m + C_3C_5C_LL_L\right) + s^3\left(C_3C_5C_LR_L + C_3C_5L_Lg_m + C_5C_LL_5g_m + 2C_5C_LL_Lg_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + 2C_5C_LR_Lg_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

10.117 INVALID-ORDER-117  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_5L_5L_LR_Lg_ms^3 - C_5L_LR_Ls^2 + L_LR_Lg_ms}{R_Lg_m + s^4\left(C_3C_5L_5L_LR_Lg_m + C_5C_LL_5L_LR_Lg_m\right) + s^3\left(C_3C_5L_LR_L + C_5C_LL_LR_L + C_5L_5L_Lg_m\right) + s^2\left(C_3L_LR_Lg_m + C_5L_5R_Lg_m + C_5L_LR_Lg_m + C_5L_LR_Lg_m\right) + s^2\left(C_3C_5L_LR_Lg_m + C_5L_LR_Lg_m\right) + s^2\left(C_3C_$$

**10.118** INVALID-ORDER-118  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_Lg_ms^4 + R_Lg_m + s^3\left(-C_5C_LL_LR_L + C_5L_5L_Lg_m\right) + s^2\left(C_5L_5R_Lg_m - C_5L_L + C_LL_LR_Lg_m\right) + s\left(-C_5R_L + L_Lg_m\right)}{C_3C_5C_LL_5L_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_L + C_3C_5L_Lg_m + C_5C_LL_LR_Lg_m + C_3C_5L_LR_Lg_m + C_5C_LL_LR_Lg_m + C_5C_LL_L$$

10.119 INVALID-ORDER-119  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_Lg_ms^4 - C_5C_LL_LR_Ls^3 - C_5R_Ls + R_Lg_m + s^2\left(C_5L_5R_Lg_m + C_LL_LR_Lg_m\right)}{C_3C_5C_LL_5L_LR_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_L + C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_5R_Lg_m + C_3C_LL_LR_Lg_m + C_5C_LL_LR_Lg_m + C_5C_LR_Lg_m + C_5C_L$$

10.120 INVALID-ORDER-120 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{-C_5L_5R_Ls^2 + L_5R_Lg_ms - R_L}{C_3C_5L_5R_Ls^3 + 2R_Lg_m + s^2\left(C_3L_5R_Lg_m + 2C_5L_5R_Lg_m + C_5L_5\right) + s\left(C_3R_L + L_5g_m\right) + 1}$$

**10.121** INVALID-ORDER-121 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5L_5s^2 + L_5g_ms - 1}{2g_m + s^3\left(C_3C_5L_5 + C_5C_LL_5\right) + s^2\left(C_3L_5g_m + 2C_5L_5g_m + C_LL_5g_m\right) + s\left(C_3 + C_L\right)}$$

10.122 INVALID-ORDER-122 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{-C_5L_5R_Ls^2 + L_5R_Lg_ms - R_L}{2R_Lg_m + s^3\left(C_3C_5L_5R_L + C_5C_LL_5R_L\right) + s^2\left(C_3L_5R_Lg_m + 2C_5L_5R_Lg_m + C_5L_5 + C_LL_5R_Lg_m\right) + s\left(C_3R_L + C_LR_L + L_5g_m\right) + 1}$$

**10.123** INVALID-ORDER-123 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_5R_Ls^3 + s^2\left(-C_5L_5 + C_LL_5R_Lg_m\right) + s\left(-C_LR_L + L_5g_m\right) - 1}{C_3C_5C_LL_5R_Ls^4 + 2g_m + s^3\left(C_3C_5L_5 + C_3C_LL_5R_Lg_m + 2C_5C_LL_5R_Lg_m + C_5C_LL_5\right) + s^2\left(C_3C_LR_L + C_3L_5g_m + 2C_5L_5g_m + C_LL_5g_m\right) + s\left(C_3 + 2C_LR_Lg_m + C_L\right)}$$

**10.124** INVALID-ORDER-124 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_5L_Ls^4 + C_LL_5L_Lg_ms^3 + L_5g_ms + s^2\left(-C_5L_5 - C_LL_L\right) - 1}{C_3C_5C_LL_5L_Ls^5 + 2g_m + s^4\left(C_3C_LL_5L_Lg_m + 2C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_5 + C_3C_LL_L + C_5C_LL_5\right) + s^2\left(C_3L_5g_m + 2C_5L_5g_m + C_LL_5g_m\right) + s\left(C_3 + C_L\right)}$$

10.125 INVALID-ORDER-125  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5L_5L_Ls^3 + L_5L_Lg_ms^2 - L_Ls}{s^4\left(C_3C_5L_5L_L + C_5C_LL_5L_L\right) + s^3\left(C_3L_5L_Lg_m + 2C_5L_5L_Lg_m + C_LL_5L_Lg_m\right) + s^2\left(C_3L_L + C_5L_5 + C_LL_L\right) + s\left(L_5g_m + 2L_Lg_m\right) + 1}$$

**10.126** INVALID-ORDER-126 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_5L_Ls^4 + s^3\left(-C_5C_LL_5R_L + C_LL_5L_Lg_m\right) + s^2\left(-C_5L_5 + C_LL_5R_Lg_m - C_LL_L\right) + s\left(-C_LR_L + L_5g_m\right) - 1}{C_3C_5C_LL_5L_Ls^5 + 2g_m + s^4\left(C_3C_5C_LL_5R_Lg_m + 2C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_5 + C_3C_LL_5R_Lg_m + C_3C_LL_5\right) + s^2\left(C_3C_LR_L + C_3L_5g_m + 2C_5L_5g_m + 2C_LL_5g_m\right) + s\left(C_3 + 2C_LR_Lg_m + C_LL_5\right)}$$

10.127 INVALID-ORDER-127  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_5L_5L_LR_Ls^3 + L_5L_LR_Lg_ms^2 - L_LR_Ls}{R_L + s^4\left(C_3C_5L_5L_LR_L + C_5C_LL_5L_LR_L\right) + s^3\left(C_3L_5L_LR_Lg_m + 2C_5L_5L_LR_Lg_m + C_5L_5L_LR_Lg_m\right) + s^2\left(C_3L_LR_L + C_5L_5R_L + C_LL_LR_L + L_5L_Lg_m\right) + s\left(L_5R_Lg_m + 2L_LR_Lg_m + L_LR_Lg_m + L_LR_Lg_m\right) + s\left(L_5R_Lg_m + 2L_LR_Lg_m + L_LR_Lg_m\right) + s\left(L_5R_Lg_m + 2L_LR_Lg_m + L_LR_Lg_m\right) + s\left(L_5R_Lg_m + L_LR_Lg_m + L_LR_Lg_m\right) + s\left(L_5R_Lg_m + L_LR_Lg_m\right) + s\left(L_5R_Lg_m\right) + s\left(L_5R_Lg_m$$

10.128 INVALID-ORDER-128  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_5C_LL_5L_LR_Ls^4 - R_L + s^3\left(-C_5L_5L_L + C_LL_5L_LR_Lg_m\right) + s^2\left(-C_5L_5R_L - C_LL_LR_L + L_5L_Lg_m\right) + s\left(L_5R_Lg_m - L_L\right)}{C_3C_5C_LL_5L_LR_Ls^5 + 2R_Lg_m + s^4\left(C_3C_5L_5L_LR_Lg_m + 2C_5C_LL_5L_LR_Lg_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_5L_LR_L + C_3C_LL_LR_L + C_3L_5L_Lg_m + 2C_5L_5L_Lg_m + C_4L_5L_Lg_m\right) + s^2\left(C_3L_5R_Lg_m + C_5L_5L_LR_Lg_m + C_5L_5$$

10.129 INVALID-ORDER-129 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{-C_5C_LL_5L_LR_Ls^4 + C_LL_5L_LR_Lg_ms^3 + L_5R_Lg_ms - R_L + s^2\left(-C_5L_5R_L - C_LL_LR_L\right)}{C_3C_5C_LL_5L_LR_Ls^5 + 2R_Lg_m + s^4\left(C_3C_LL_5L_LR_Lg_m + 2C_5C_LL_5L_LR_Lg_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_5R_L + C_5C_LL_5R_L + C_5C_LL_5R_Lg_m + 2C_5L_5R_Lg_m + 2C_5L_5R_Lg_m$$

**10.130** INVALID-ORDER-130  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$ 

$$H(s) = \frac{C_5 L_5 R_L g_m s^2 + R_L g_m + s \left(C_5 R_5 R_L g_m - C_5 R_L\right)}{C_3 C_5 L_5 R_L g_m s^3 + g_m + s^2 \left(C_3 C_5 R_5 R_L g_m + C_3 C_5 R_L + C_5 L_5 g_m\right) + s \left(C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5\right)}$$

10.131 INVALID-ORDER-131  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5 L_5 g_m s^2 + g_m + s \left(C_5 R_5 g_m - C_5\right)}{s^3 \left(C_3 C_5 L_5 g_m + C_5 C_L L_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_3 C_5 + C_5 C_L R_5 g_m + C_5 C_L\right) + s \left(C_3 g_m + 2 C_5 g_m + C_L g_m\right)}$$

**10.132** INVALID-ORDER-132  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5 L_5 R_L g_m s^2 + R_L g_m + s \left(C_5 R_5 R_L g_m - C_5 R_L\right)}{g_m + s^3 \left(C_3 C_5 L_5 R_L g_m + C_5 C_L L_5 R_L g_m\right) + s^2 \left(C_3 C_5 R_5 R_L g_m + C_3 C_5 R_L + C_5 C_L R_5 R_L g_m + C_5 C_L R_L + C_5 L_5 g_m\right) + s \left(C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 R_L g_m\right)}$$

**10.133** INVALID-ORDER-133  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5R_Lg_ms^3 + g_m + s^2\left(C_5C_LR_5R_Lg_m - C_5C_LR_L + C_5L_5g_m\right) + s\left(C_5R_5g_m - C_5 + C_LR_Lg_m\right)}{C_3C_5C_LL_5R_Lg_ms^4 + s^3\left(C_3C_5C_LR_5R_Lg_m + C_3C_5L_Lg_m + C_5C_LL_5g_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5L_Rg_m + C_5C_LR_5g_m + C_5C_LR_$$

**10.134** INVALID-ORDER-134  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_LR_5g_m - C_5C_LL_L\right) + s^2\left(C_5L_5g_m + C_LL_Lg_m\right) + s\left(C_5R_5g_m - C_5\right)}{C_3C_5C_LL_5L_Lg_ms^5 + s^4\left(C_3C_5C_LL_LR_5g_m + C_3C_5C_LL_L\right) + s^3\left(C_3C_5L_Lg_m + C_5C_LL_5g_m + 2C_5C_LL_2g_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5 + C_5C_LR_5g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

10.135 INVALID-ORDER-135  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_5L_5L_Lg_ms^3 + L_Lg_ms + s^2\left(C_5L_LR_5g_m - C_5L_L\right)}{g_m + s^4\left(C_3C_5L_Lg_m + C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_LR_5g_m + C_3C_LL_LR_5g_m + C_5C_LL_L\right) + s^2\left(C_3L_Lg_m + C_5L_5g_m + C_5L_Lg_m\right) + s\left(C_5R_5g_m + C_5C_LL_LR_5g_m + C_5C_LL_L\right) + s^2\left(C_3L_Lg_m + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_5R_5g_m + C_5C_LL_LR_5g_m + C_5C_LL_L\right) + s^2\left(C_3L_Lg_m + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_5R_5g_m + C_5C_LL_LR_5g_m + C_5C_LL_L\right) + s^2\left(C_3L_Lg_m + C_5C_LL_Lg_m\right) + s^2\left(C_5R_5g_m + C_5C_LL_L\right) + s^2\left(C_5R_5g_m + C_5C_LL\right) + s^2\left(C_5R_5g_m + C_5C_LL\right)$$

10.136 INVALID-ORDER-136  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_Lg_ms^4 + g_m + s^3\left(C_5C_LL_5R_Lg_m + C_5C_LL_LR_5g_m - C_5C_LL_L\right) + s^2\left(C_5C_LR_5R_Lg_m - C_5C_LR_L + C_5L_5g_m + C_LL_Lg_m\right) + s\left(C_5R_5g_m - C_5 + C_LR_Lg_m\right)}{C_3C_5C_LL_5L_2g_ms^5 + s^4\left(C_3C_5C_LL_5R_Lg_m + C_3C_5C_LL_LR_5g_m + C_3C_5C_LR_L + C_3C_5L_5g_m + C_3C_LL_Lg_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5C_LL_Rg_m + C_5C_LR_5g_m + C_5C_LR$$

10.137 INVALID-ORDER-137  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_5 L_L R_L g_m s^3 + L_L R_L g_m s + s^2 \left(C_5 L_L R_5 R_L g_m - C_5 L_L R_L \right)}{R_L g_m + s^4 \left(C_3 C_5 L_L R_L g_m + C_5 C_L L_L R_L g_m \right) + s^3 \left(C_3 C_5 L_L R_5 R_L g_m + C_5 C_L L_L R_5 R_L g_m + C_5 L_L R_L g_m \right) + s^2 \left(C_3 L_L R_L g_m + C_5 L_L R_L g_m \right) + s \left(C_5 R_5 R_L g_m + C_5 R_L R_L g_m \right) + s \left(C_5 R_5 R_L g_m + C_5 R_L R$$

10.138 INVALID-ORDER-138  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_Lg_ms^4 + R_Lg_m + s^3\left(C_5C_LL_LR_5R_Lg_m - C_5C_LL_LR_L + C_5L_5L_Lg_m\right) + s^2\left(C_5L_5R_Lg_m + C_5L_LR_5g_m - C_5L_L + C_LL_LR_Lg_m\right) + s\left(C_5R_5R_Lg_m - C_5R_L + L_Lg_m\right)}{C_3C_5C_LL_5L_LR_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_5R_Lg_m + C_3C_5L_LR_Lg_m + C_5C_LL_LR_5g_m + C_3C_5L_LR_5g_m + C_5C_LL_LR_5g_m + C_5C_LLR_5g_m + C_5C_LL_LR_5g_m + C_5C_LLR_5g_m + C_5C_LLR$$

10.139 INVALID-ORDER-139  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_5C_LL_5L_LR_Lg_ms^4 + R_Lg_m + s^3\left(C_5C_LL_LR_5R_Lg_m - C_5C_LL_LR_L\right) + s^2\left(C_5L_5R_Lg_m + C_LL_LR_Lg_m\right) + s\left(C_5R_5R_Lg_m - C_5R_L\right)}{C_3C_5C_LL_5L_LR_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_5R_Lg_m + C_3C_LL_LR_Lg_m\right) + s^3\left(C_3C_5L_LR_Lg_m + C_5C_LL_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m$$

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H(s) = \frac{-C_5L_5R_5R_Ls^2 - R_5R_L + s\left(L_5R_5R_Lg_m - L_5R_L\right)}{C_3C_5L_5R_5R_Ls^3 + 2R_5R_Lg_m + R_5 + s^2\left(C_3L_5R_5R_Lg_m + C_3L_5R_L + 2C_5L_5R_5R_Lg_m + C_5L_5R_5\right) + s\left(C_3R_5R_L + L_5R_5g_m + 2L_5R_Lg_m + L_5\right)}
10.141 INVALID-ORDER-141 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                     H(s) = \frac{-C_5L_5R_5s^2 - R_5 + s\left(L_5R_5g_m - L_5\right)}{2R_5q_m + s^3\left(C_3C_5L_5R_5 + C_5C_LL_5R_5\right) + s^2\left(C_3L_5R_5q_m + C_3L_5 + 2C_5L_5R_5q_m + C_LL_5R_5q_m + C_LL_5\right) + s\left(C_3R_5 + C_LR_5 + 2L_5q_m\right)}
10.142 INVALID-ORDER-142 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                           H(s) = \frac{-C_5L_5R_5R_Ls^2 - R_5R_L + s\left(L_5R_5R_Lg_m - L_5R_L\right)}{2R_5R_Lg_m + R_5 + s^3\left(C_3C_5L_5R_5R_L + C_5C_LL_5R_5R_L\right) + s^2\left(C_3L_5R_5R_Lg_m + C_3L_5R_L + 2C_5L_5R_5R_Lg_m + C_5L_5R_5R_Lg_m + C_LL_5R_L\right) + s\left(C_3R_5R_L + C_LR_5R_L + L_5R_5g_m + 2L_5R_Lg_m + L_5\right)}
10.143 INVALID-ORDER-143 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5R_5R_Ls^3 - R_5 + s^2\left(-C_5L_5R_5R_Lg_m - C_LL_5R_L\right) + s\left(-C_LR_5R_L + L_5R_5g_m - L_5\right)}{C_3C_5C_LL_5R_5R_Ls^4 + 2R_5g_m + s^3\left(C_3C_5L_5R_5 + C_3C_LL_5R_5R_Lg_m + C_5C_LL_5R_5\right) + s^2\left(C_3C_LL_5R_5R_L + C_3L_5R_5g_m + C_LL_5R_5g_m + C_LL_5g_m + C_LL_5g
10.144 INVALID-ORDER-144 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5L_LR_5s^4 - R_5 + s^3\left(C_LL_5L_LR_5g_m - C_LL_5L_L\right) + s^2\left(-C_5L_5R_5 - C_LL_LR_5\right) + s\left(L_5R_5g_m - L_5\right)}{C_3C_5C_LL_5L_LR_5s^5 + 2R_5g_m + s^4\left(C_3C_LL_5L_LR_5g_m + C_3C_LL_5L_LR_5g_m\right) + s^3\left(C_3C_5L_5R_5 + C_3C_LL_5L_LR_5 + C_5C_LL_5R_5 + C_3C_LL_5R_5 + C_3C_LL_5R
10.145 INVALID-ORDER-145 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                     H(s) = \frac{-C_5L_5L_LR_5s^3 - L_LR_5s + s^2\left(L_5L_LR_5g_m - L_5L_L\right)}{R_5 + s^4\left(C_3C_5L_5L_LR_5 + C_5C_LL_5L_LR_5\right) + s^3\left(C_3L_5L_LR_5g_m + C_3L_5L_LR_5g_m + C_LL_5L_LR_5g_m + C_LL_5L_L\right) + s^2\left(C_3L_LR_5 + C_5L_5R_5 + C_LL_LR_5 + 2L_5L_Lg_m\right) + s\left(L_5R_5g_m + L_5 + 2L_LR_5g_m\right)}
10.146 INVALID-ORDER-146 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5L_LR_5s^4 - R_5 + s^3\left(-C_5C_LL_5R_5R_L + C_LL_5L_LR_5g_m - C_LL_5L_L\right) + s^2\left(-C_5L_5R_5 + C_LL_5R_5R_Lg_m - C_LL_5R_L - C_LL_LR_5\right) + s\left(-C_LR_5R_L + C_LL_5R_5R_L 
10.147 INVALID-ORDER-147 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{-C_5L_5L_LR_5R_Ls + s^2\left(L_5L_LR_5R_Lg_m - L_5L_LR_L\right)}{R_5R_L + s^4\left(C_3C_5L_5L_LR_5R_L + C_5C_LL_5L_LR_5R_Lg_m + C_3L_5L_LR_5R_Lg_m + C_5L_5L_LR_5R_Lg_m + C_5L_5L_Rg_m + C_5L_5L_Rg_m
10.148 INVALID-ORDER-148 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -C_5C_LL_5L_LR_5R_Ls^4 - R_5R_L + s^3\left(-C_5L_5L_LR_5 + C_LL_5L_LR_5R_Lg_m - C_LL_5L_LR_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_LR_5R_L + L_5R_LR_5R_L + L_5R_LR_5R_LR_5R_L + L_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R
H(s) = \frac{-C_5C_LL_5L_LR_5R_Ls^4 - R_5R_L + s^3\left(-C_5L_5L_LR_5 + C_LL_5L_LR_5R_Lg_m - C_LL_5L_LR_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_LR_5R_L + L_5R_Lg_m - C_LL_5L_LR_5R_Lg_m - C_LL_5L_LR_5R_Lg_m + C_5C_LL_5L_Rg_m 
10.149 INVALID-ORDER-149 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C_5C_LL_5L_LR_5R_Ls^4 - R_5R_L + s^3\left(C_LL_5L_LR_5R_Lg_m - C_LL_5L_LR_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_LR_5R_L\right) + s\left(L_5R_5R_Lg_m - C_LL_5L_LR_5\right) + s^2\left(-C_5L_5R_5R_L - C_LL_LR_5R_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_5R_LR_5R_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_5R_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_5R_5R_L\right) + s^2\left(-C_5L_5R_5R_L - C_LL_5R_5R_L\right) + s^2\left(-C_5L_5R_5R_L\right) + s^2\left(-C
                                           \frac{C_5C_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_5D_LL_
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10.140 INVALID-ORDER-140  $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, \frac{L_{5}R_{5}s}{C_{5}L_{5}R_{5}s^{2} + L_{5}s + R_{5}}, R_{L}\right)$ 

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10.152 INVALID-ORDER-152 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                      H(s) = \frac{L_5 R_L g_m s + R_5 R_L g_m - R_L + s^2 \left(C_5 L_5 R_5 R_L g_m - C_5 L_5 R_L\right)}{R_5 g_m + 2 R_L g_m + s^3 \left(C_3 C_5 L_5 R_5 R_L g_m + C_3 C_5 L_5 R_L + C_5 C_L L_5 R_L g_m + C_5 C_L L_5 R_L\right) + s^2 \left(C_3 L_5 R_L g_m + C_5 L_5 R_L g_m + 
 10.153 INVALID-ORDER-153 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
 H(s) = \frac{R_5g_m + s^3\left(C_5C_LL_5R_5R_Lg_m - C_5C_LL_5R_L\right) + s^2\left(C_5L_5R_5g_m - C_5L_5 + C_LL_5R_Lg_m\right) + s\left(C_LR_5R_Lg_m - C_LR_L + L_5g_m\right) - 1}{2g_m + s^4\left(C_3C_5C_LL_5R_5g_m + C_3C_5C_LL_5R_Lg_m + C_5C_LL_5R_5g_m + C_5C_L
 10.154 INVALID-ORDER-154 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
 H(s) = \frac{C_L L_5 L_L g_m s^3 + L_5 g_m s + R_5 g_m + s^4 \left(C_5 C_L L_5 L_L R_5 g_m - C_5 L_L R_5 g_m - C_5 L_L L_L R
10.155 INVALID-ORDER-155 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                H(s) = \frac{L_5L_Lg_ms^2 + s^3\left(C_5L_5L_LR_5g_m - C_5L_5L_L\right) + s\left(L_LR_5g_m - L_L\right)}{R_5g_m + s^4\left(C_3C_5L_5L_LR_5g_m + C_3C_5L_5L_L + C_5C_LL_5L_LR_5g_m + C_5C_LL_5L_L\right) + s^3\left(C_3L_5L_Lg_m + 2C_5L_5L_Lg_m + C_LL_5L_Lg_m\right) + s^2\left(C_3L_LR_5g_m + C_3L_L + C_5L_5R_5g_m + C_5L_5 + C_LL_LR_5g_m + C_LL_L\right) + s\left(L_5g_m + 2L_Lg_m\right) + 1}
10.156 INVALID-ORDER-156 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
 H(s) = \frac{R_5 g_m + s^4 \left(C_5 C_L L_5 L_L R_5 g_m - C_5 C_L L_5 L_L\right) + s^3 \left(C_5 C_L L_5 R_L g_m - C_5 C_L L_5 R_L g_m - C_5 L_5 + C_L L_5 R_L g_m + C_L L_L R_5 g_m - C_L L_L\right) + s \left(C_5 C_L L_5 R_L g_m + C_2 C_L L_5 R_L g_m + C_3 C_5 C_L L_5 R_L g_m + C_5 C_L L_5 R_L g
 10.157 INVALID-ORDER-157 Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
 H(s) = \frac{L_5 L_L R_L g_m s^2 + s^3 \left(C_5 L_5 L_L R_5 R_L g_m - C_5 L_5 L_L R_L\right) + s \left(L_L R_5 R_L g_m - L_L R_L\right)}{R_5 R_L g_m + R_L + s^4 \left(C_3 C_5 L_5 L_L R_5 R_L g_m + C_3 C_5 L_5 L_L R_5 R_L g_m + C_5 L_5 L_L R_5 R_L g_m + C_5 L_5 L_L R_5 R_L g_m + C_5 L_5 L_L R_5 g_m + 2 C_5 L_5 L_L R_5 g_m + 2 C_5 L_5 L_L R_5 g_m + C_5 
 10.158 INVALID-ORDER-158 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R_5R_Lg_m - R_L + s^4\left(C_5C_LL_5L_LR_5R_Lg_m - C_5C_LL_5L_LR_L\right) + s^3\left(C_5L_5L_LR_5g_m - C_5L_5L_L + C_LL_5L_LR_Lg_m\right) + s^2\left(C_5L_5R_5R_Lg_m - C_5L_5L_LR_Lg_m\right) + s^2\left(C_5L_5R_Lg_m - C_5L_5L_LR_Lg_m\right) + s^2\left(C_5L_5R_5R_Lg_m - C_5L_5L_LR_Lg_m\right) + s^2\left(C_5L_5R_Lg_m - C_5L_5L_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_5R_Lg_m\right) + s^2\left(C_5L_5R_5R_Lg_m\right) + s^2\left(C_5L_5R_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right) + s^2\left(C_5L_5R_Lg_m\right)
 H(s) = \frac{K_5 K_L g_m - K_L + s^* \left( C_5 C_L L_5 L_L K_5 g_m - C_5 C_L L_5 L_L K_1 g_m - C_5 L_L K_1 g_m - C_5 L_L K_1 g_m - C_5 L_L K_1 g_m + s^* \left( C_5 C_L L_5 L_L K_1 g_m + S^* \left( C_5 C_L L_5 L_L K_1 g_m + S^* \left( C_5 C_L L_5 L_L K_1 g_m + S^* \left( C_5 C_L L_5 L_L K_1 g_m + C_
 10.159 INVALID-ORDER-159 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C_{L}L_{5}L_{L}R_{L}g_{m}s^{3} + L_{5}R_{L}g_{m}s + R_{5}R_{L}g_{m} - R_{L} + s^{4}\left(C_{5}C_{L}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}L_{L}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{5}R_{L}g_{m} - C_{5}R_{L}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{L}R_{L}\right) + s^{2}\left(C_{5}R_{L}R_{L}\right) + s^{2}\left(C_{5}R
                                                       \frac{1}{R_5 g_m + 2 R_L g_m + s^5 \left( C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 L_L L_L R_L g_m + C_5 C_L L_5 L_L R_5 g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 L_L L_L R_5 R_L g_m + C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5 R_L g_m + C_5 C_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66
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 $H(s) = \frac{L_5 R_L g_m s + R_5 R_L g_m - R_L + s^2 \left(C_5 L_5 R_5 R_L g_m - C_5 L_5 R_L\right)}{R_5 g_m + 2 R_L g_m + s^3 \left(C_3 C_5 L_5 R_5 R_L g_m + C_3 C_5 L_5 R_L\right) + s^2 \left(C_3 L_5 R_L g_m + C_5 L_5 R_5 g_m + 2 C_5 L_5 R_L g_m + C_5 L_5\right) + s \left(C_3 R_5 R_L g_m + C_3 R_L + L_5 g_m\right) + 1}$ 

 $H(s) = \frac{L_5 g_m s + R_5 g_m + s^2 \left(C_5 L_5 R_5 g_m - C_5 L_5\right) - 1}{2 g_m + s^3 \left(C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + C_5 C_L L_5 R_5 g_m + C_5 C_L L_5\right) + s^2 \left(C_3 L_5 g_m + 2 C_5 L_5 g_m + C_L L_5 g_m\right) + s \left(C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L\right)}$ 

10.150 INVALID-ORDER-150  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)$ 

10.151 INVALID-ORDER-151  $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$ 

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10.160 INVALID-ORDER-160 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
                                                                                                                                                                                                                                                          H(s) = \frac{-C_5R_5R_Ls + R_5R_Lg_m - R_L + s^2\left(C_5L_5R_5R_Lg_m - C_5L_5R_L\right)}{R_5g_m + 2R_Lg_m + s^3\left(C_3C_5L_5R_5R_Lg_m + C_3C_5L_5R_L\right) + s^2\left(C_3C_5R_5R_L + C_5L_5R_5g_m + 2C_5L_5R_Lg_m + C_5L_5\right) + s\left(C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5\right) + 1}
10.161 INVALID-ORDER-161 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                         H(s) = \frac{-C_5R_5s + R_5g_m + s^2\left(C_5L_5R_5g_m - C_5L_5\right) - 1}{2g_m + s^3\left(C_3C_5L_5R_5g_m + C_3C_5L_5 + C_5C_LL_5R_5g_m + C_5C_LL_5\right) + s^2\left(C_3C_5R_5 + C_5C_LR_5 + 2C_5L_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m\right) + s\left(C_3R_5g_m + C_3R_5g_m + C_3R_5g_m + C_2R_5g_m\right) + s\left(C_3R_5g_m + C_3R_5g_m + C_3R_5g_m + C_3R_5g_m\right) + s\left(C_3R_5g_m + C_3R_5g_m + C_3R_5g_m\right
10.162 INVALID-ORDER-162 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                           H(s) = \frac{-C_5R_5R_Ls + R_5R_Lg_m - R_L + s^2\left(C_5L_5R_5R_Lg_m - C_5L_5R_L\right)}{R_5g_m + 2R_Lg_m + s^3\left(C_3C_5L_5R_5R_Lg_m + C_3C_5L_5R_L + C_5C_LL_5R_5R_Lg_m + C_5C_LL_5R_L\right) + s^2\left(C_3C_5R_5R_L + C_5C_LR_5R_L + C_5C
10.163 INVALID-ORDER-163 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                              \frac{R_{5}g_{m}+s^{3}\left(C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}-C_{5}C_{L}L_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}R_{5}R_{L}+C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}\right)+s\left(-C_{5}R_{5}+C_{L}R_{5}R_{L}g_{m}-C_{L}R_{L}\right)-1}{2g_{m}+s^{4}\left(C_{3}C_{5}C_{L}L_{5}R_{5}g_{m}+C_{3}C_{5}L_{L}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}\right)+s^{2}\left(C_{3}C_{5}R_{5}+C_{2}L_{5}R_{L}g_{m}+C_{3}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R
10.164 INVALID-ORDER-164 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_LR_5s^3 - C_5R_5s + R_5g_m + s^4\left(C_5C_LL_5L_LR_5g_m - C_5L_LL_RS_5g_m - C_5L_LL_R
10.165 INVALID-ORDER-165 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                      H(s) = \frac{-C_5L_LR_5s^2 + s^3\left(C_5L_5L_LR_5g_m - C_5L_5L_L\right) + s\left(L_LR_5g_m - L_L\right)}{R_5g_m + s^4\left(C_3C_5L_5L_LR_5g_m + C_3C_5L_5L_LR_5g_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_LR_5 + C_5C_LL_LR_5 + 2C_5L_5L_Lg_m\right) + s^2\left(C_3L_LR_5g_m + C_5L_5 + 2C_5L_LR_5g_m + C_5L_5 + 2C_5L_5L_LR_5g_m + C_5L_5 + 2C_5L_5L_R + 2C_5L_5
10.166 INVALID-ORDER-166 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{R_5g_m + s^4\left(C_5C_LL_5L_LR_5g_m - C_5C_LL_5L_L\right) + s^3\left(C_5C_LL_5R_5R_Lg_m - C_5C_LL_5R_L - C_5C_LL_2R_5\right) + s^2\left(-C_5C_LR_5R_L + C_5L_5R_5g_m - C_5L_5 + C_LL_5R_5g_m - C_5L_5R_5R_L + C_5C_LL_5R_5R_L + C_5C_LL_5R_L +
10.167 INVALID-ORDER-167 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -C_5L_LR_5R_Ls^2 + s^3\left(C_5L_5L_LR_5R_Lg_m - C_5L_5L_LR_L\right) + s\left(L_LR_5R_Lg_m - L_LR_L\right)
                                              -C_{5}L_{L}R_{5}R_{L}s^{2} + s^{3}\left(C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{L}\right) + s\left(L_{L}R_{5}R_{L}g_{m} - L_{L}R_{L}\right) \\ -C_{5}L_{L}R_{5}R_{L}s^{2} + s^{3}\left(C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{L}\right) + s\left(L_{L}R_{5}R_{L}g_{m} - L_{L}R_{L}\right) \\ -C_{5}L_{L}R_{5}R_{L}s^{2} + s^{3}\left(C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{L}\right) + s\left(L_{L}R_{5}R_{L}g_{m} - L_{L}R_{L}\right) \\ -C_{5}L_{L}R_{5}R_{L}g_{m} + C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{L}\right) + s\left(L_{L}R_{5}R_{L}g_{m} - L_{L}R_{L}\right) \\ -C_{5}L_{L}R_{5}R_{L}g_{m} + C_{5}L_{L}R_{5}R_{L}g_{m} + C_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{5}R_{L}g_{m} + C_{5}L_{L}R_{5}R_{L}g_{m} + C
10.168 INVALID-ORDER-168 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
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 $R_5R_Lg_m - R_L + s^4\left(C_5C_LL_5L_LR_5R_Lg_m - C_5C_LL_5L_LR_L\right) + s^3\left(-C_5C_LL_LR_5R_L + C_5L_5L_LR_5g_m - C_5L_5L_L\right) - s^4\left(-C_5C_LL_5L_LR_5R_L + C_5L_5L_LR_5g_m - C_5L_5L_L\right) + s^4\left(-C_5C_LL_5L_RR_5R_L + C_5L_5L_LR_5g_m - C_5L_5L_L\right) + s^4\left(-C_5C_LL_5L_RR_5R_L + C_5L_5L_RR_5g_m - C_5L_5L_L\right) + s^4\left(-C_5C_LL_5L_RR_5R_L + C_5L_5L_RR_5g_m - C_5L_5L_L\right) + s^4\left(-C_5C_LL_5L_RR_5R_L + C_5L_5L_RR_5g_m - C_5L_5L_5L_RR_5g_m - C_5L_5L_RR_5g_m - C_5L_5L_RR_5g_m$ 

10.169 INVALID-ORDER-169 
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{-C_5C_LL_RS_RLs^3 - C_5R_5R_Ls + R_5R_Lg_m - R_L + s^4\left(C_5C_LL_5L_LR_5R_Lg_m - C_5C_LL_5L_LR_L\right) + s^2\left(C_5C_LL_5L_LR_5R_Lg_m + S^5\left(C_3C_5C_LL_5L_LR_5R_Lg_m + C_5C_LL_5L_LR_5g_m + C_5C_LL_5L_Rg_m + C_5C_LL_$ 

**10.170** INVALID-ORDER-170  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, R_L\right)$ 

$$H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s \left( C_3 R_3 R_5 R_L g_m + C_3 R_3 R_L \right)}$$

**10.171** INVALID-ORDER-171  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_3 R_5 g_m - R_3}{2R_3 g_m + R_5 g_m + s \left(C_3 R_3 R_5 g_m + C_3 R_3 + C_L R_3 R_5 g_m + C_L R_3\right) + 1}$$

10.172 INVALID-ORDER-172  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_3 R_5 R_L g_m - R_3 R_L}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s \left( C_3 R_3 R_5 R_L g_m + C_3 R_3 R_L + C_L R_3 R_5 R_L g_m + C_L R_3 R_L \right)}$$

**10.173** INVALID-ORDER-173  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_{3}R_{5}g_{m} - R_{3} + s^{2}\left(C_{L}L_{L}R_{3}R_{5}g_{m} - C_{L}L_{L}R_{3}\right)}{2R_{3}g_{m} + R_{5}g_{m} + s^{3}\left(C_{3}C_{L}L_{L}R_{3}R_{5}g_{m} + C_{3}C_{L}L_{L}R_{3}\right) + s^{2}\left(2C_{L}L_{L}R_{3}g_{m} + C_{L}L_{L}R_{5}g_{m} + C_{L}L_{L}\right) + s\left(C_{3}R_{3}R_{5}g_{m} + C_{3}R_{3} + C_{L}R_{3}R_{5}g_{m} + C_{L}R_{3}\right) + 1}$$

**10.174** INVALID-ORDER-174  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_3R_5g_m - R_3 + s^2\left(C_LL_LR_3R_5g_m - C_LL_LR_3\right) + s\left(C_LR_3R_5R_Lg_m - C_LR_3R_L\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_LL_LR_3R_5g_m + C_3C_LL_LR_3\right) + s^2\left(C_3C_LR_3R_5R_Lg_m + C_LL_LR_3g_m + C_LL_LR_5g_m + C_LL_L\right) + s\left(C_3R_3R_5g_m + C_3R_3R_5g_m + C_LR_3R_5g_m +$$

10.175 INVALID-ORDER-175  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$R_{3}R_{5}R_{L}g_{m} - R_{3}R_{L} + s^{2}\left(C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{L}L_{L}R_{3}R_{L}\right) + s\left(L_{L}R_{3}R_{5}g_{m} - L_{L}R_{3}\right)$$

$$H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^2\left(C_LL_R_3R_5R_Lg_m - C_LL_R_3R_L\right) + s\left(L_LR_3R_5g_m - L_LR_3\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(C_3C_LL_R_3R_5R_Lg_m + C_3L_LR_3R_5g_m + C_LL_LR_3R_Lg_m + C_LLR_3R_Lg_m + C_LL_LR_3R_Lg_m + C_LL_LR_3R_Lg$$

10.176 INVALID-ORDER-176  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^2\left(C_LL_LR_3R_5R_Lg_m - C_LL_LR_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(C_3C_LL_LR_3R_5R_Lg_m + C_3C_LL_LR_3R_L\right) + s^2\left(C_LL_LR_3R_5g_m + 2C_LL_LR_3R_Lg_m + C_LL_LR_3 + C_LL_$$

10.177 INVALID-ORDER-177  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LR_3R_Ls^2 + R_3g_m + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{C_3C_5C_LR_3R_Ls^3 + g_m + s^2\left(C_3C_5R_3 + C_3C_LR_3R_Lg_m + 2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C$$

**10.178** INVALID-ORDER-178  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{-C_5C_LL_LR_3s^3 - C_5R_3s + C_LL_LR_3g_ms^2 + R_3g_m}{C_3C_5C_LL_LR_3s^4 + g_m + s^3\left(C_3C_LL_LR_3g_m + 2C_5C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5C_LR_3 + C_LL_Lg_m\right) + s\left(C_3R_3g_m + 2C_5R_3g_m + C_5 + C_LR_3g_m\right)}$ 10.179 INVALID-ORDER-179  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{-C_5L_LR_3s^2 + L_LR_3g_ms}{R_3g_m + s^3\left(C_3C_5L_LR_3 + C_5C_LL_LR_3\right) + s^2\left(C_3L_LR_3g_m + 2C_5L_LR_3g_m + C_5L_L + C_LL_LR_3g_m\right) + s\left(C_5R_3 + L_Lg_m\right)}$ 10.180 INVALID-ORDER-180  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{-C_5C_LL_R3s^3 + R_3g_m + s^2\left(-C_5C_LR_3R_L + C_LL_R3g_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{C_3C_5C_LL_LR_3s^4 + g_m + s^3\left(C_3C_5C_LR_3R_L + C_3C_LL_R3g_m + 2C_5C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_3C_LR_3R_Lg_m + 2C_5C_LR_3R_Lg_m + C_5C_LR_3 + C_5$ 10.181 INVALID-ORDER-181  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{-C_5L_LR_3R_Ls^2 + L_LR_3R_Lg_ms}{R_3R_Lg_m + s^3\left(C_3C_5L_LR_3R_L + C_5C_LL_LR_3R_L\right) + s^2\left(C_3L_LR_3R_Lg_m + 2C_5L_LR_3R_Lg_m + C_5L_LR_3 + C_5L_LR_4 + C_LL_LR_3R_Lg_m\right) + s\left(C_5R_3R_L + L_LR_3g_m + L_LR_Lg_m\right)}$ 10.182 INVALID-ORDER-182  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_4 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{-C_5C_LL_R_3R_Ls^3 + R_3R_Lg_m + s^2\left(-C_5L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(-C_5R_3R_L + L_LR_3g_m\right)}{C_3C_5C_LL_LR_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(C_3C_5L_LR_3 + C_3C_LL_LR_3R_Lg_m + C_5C_LL_LR_3 + C_5C_LLR_3 + C_5C_LLR_3$ 10.183 INVALID-ORDER-183  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{-C_5C_LL_R_3R_Ls^3 - C_5R_3R_Ls + C_LL_LR_3R_Lg_ms^2 + R_3R_Lg_m}{C_3C_5C_LL_LR_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(C_3C_LL_R_3R_Lg_m + 2C_5C_LL_RR_3R_Lg_m + C_5C_LL_RR_3 + C_5C_LR_3 +$ 

**10.184** INVALID-ORDER-184  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_5C_LR_3R_5R_Ls^2 + R_3R_5g_m - R_3 + s\left(-C_5R_3R_5 + C_LR_3R_5R_Lg_m - C_LR_3R_L\right)}{C_3C_5C_LR_3R_5R_Ls^3 + 2R_3g_m + R_5g_m + s^2\left(C_3C_5R_3R_5 + C_3C_LR_3R_5R_Lg_m + C_5C_LR_3R_5 + C_5C$$

**10.185** INVALID-ORDER-185 
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_LR_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_LL_LR_3R_5g_m - C_LL_LR_3\right)}{C_3C_5C_LL_LR_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(C_3C_LL_LR_3R_5g_m + C_3C_LL_LR_3 + 2C_5C_LL_LR_3R_5g_m + C_5C_LL_LR_3\right) + s^2\left(C_3C_5R_3R_5 + C_5C_LL_RR_3R_5g_m + C_LL_L\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_5R_3R_5g_m + C_5R_3R_5g_m + C_LR_3\right) + 1}$$

**10.186** INVALID-ORDER-186 
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{-C_5L_LR_3R_5s^2 + s\left(L_LR_3R_5g_m - L_LR_3\right)}{R_3R_5g_m + R_3 + s^3\left(C_3C_5L_LR_3R_5 + C_5C_LL_LR_3R_5\right) + s^2\left(C_3L_LR_3R_5g_m + C_3L_LR_3 + 2C_5L_LR_3R_5g_m + C_5L_LR_3R_5g_m + C_LL_LR_3\right) + s\left(C_5R_3R_5 + 2L_LR_3g_m + L_LR_5g_m + L$$

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10.187 INVALID-ORDER-187 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_R 3R_5 s^3 + R_3R_5 g_m - R_3 + s^2 \left(-C_5C_LR_3R_5 R_L + C_LL_LR_3R_5 g_m - C_LL_LR_3\right) + s \left(-C_5R_3R_5 + C_LR_3R_5 R_L g_m - C_LR_3R_L R_3 R_2 r_L + C_LL_R R_3 R_5 r_L + C_LR_3 R_5 r_L + 
10.188 INVALID-ORDER-188 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{-C_5L_LR_3R_5R_Ls^2 + s\left(L_LR_3R_5R_Lg_m - L_LR_3R_L\right)}{R_3R_5R_Lg_m + R_3R_L + s^3\left(C_3C_5L_LR_3R_5R_L + C_5C_LL_LR_3R_5R_L\right) + s^2\left(C_3L_LR_3R_5R_Lg_m + C_3L_LR_3R_5R_Lg_m + C_5L_LR_3R_5R_Lg_m + C_5L_LR_3R_
10.189 INVALID-ORDER-189 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H(s) = \frac{-C_5C_LL_R_3R_5R_Ls^3 + R_3R_5R_Lg_m - R_3R_L + s^2\left(-C_5L_LR_3R_5 + C_LL_LR_3R_5R_Lg_m - C_LL_LR_3R_L\right) + s\left(-C_5C_LL_R_3R_5R_Ls^4 + R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_4 + s^3\left(C_3C_5L_LR_3R_5 + C_3C_LL_R_3R_5 + C_3C_LL_R_
10.190 INVALID-ORDER-190 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_5C_LL_LR_3R_5R_Ls^3 - C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^2\left(C_LL_LR_3R_5R_Lg_m - C_LL_LR_3R_L\right)
H(s) = \frac{-C_5C_LL_LR_3R_5R_Ls^4 - C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^4(C_LL_LR_3R_5R_Lg_m - C_LL_LR_3R_L)}{C_3C_5C_LL_LR_3R_5R_Ls^4 + R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3(C_3C_LL_LR_3R_5R_Lg_m + C_5C_LL_LR_3R_5 + C_5C_LL_RR_3R_5 + C_5C_LL_
10.191 INVALID-ORDER-191 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                         H(s) = \frac{R_3 g_m + s^2 \left( C_5 C_L R_3 R_5 R_L g_m - C_5 C_L R_3 R_L \right) + s \left( C_5 R_3 R_5 g_m - C_5 R_3 + C_L R_3 R_L g_m \right)}{g_m + s^3 \left( C_3 C_5 C_L R_3 R_5 R_L g_m + C_3 C_5 C_L R_3 R_5 g_m + C_5 C_L R_3 R_L g_m + C
10.192 INVALID-ORDER-192 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                  H(s) = \frac{C_L L_L R_3 g_m s^2 + R_3 g_m + s^3 \left(C_5 C_L L_L R_3 R_5 g_m - C_5 C_L L_L R_3\right) + s \left(C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^4 \left(C_3 C_5 C_L L_L R_3 R_5 g_m + C_3 C_5 C_L L_L R_3\right) + s^3 \left(C_3 C_L L_L R_3 g_m + C_5 C_L L_L R_3 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L R_3 + C_L L_L g_m\right) + s \left(C_3 R_3 g_m + 2 C_5 R_3 g_m + C_5 R_3 g_m + C_5 R_3 g_m\right)}
10.193 INVALID-ORDER-193 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                         H(s) = \frac{L_L R_3 g_m s + s^2 \left(C_5 L_L R_3 R_5 g_m - C_5 L_L R_3\right)}{R_3 g_m + s^3 \left(C_3 C_5 L_L R_3 R_5 g_m + C_3 C_5 L_L R_3 + C_5 C_L L_L R_3 R_5 g_m + C_5 C_L L_L R_3\right) + s^2 \left(C_3 L_L R_3 g_m + 2 C_5 L_L R_3 g_m + C_5 L_L R_5 g_m + C_5 L_L R_3 g_m\right) + s \left(C_5 R_3 R_5 g_m + C_5 R_3 + L_L g_m\right)}
10.194 INVALID-ORDER-194 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{R_3g_m + s^3\left(C_5C_LL_R R_3R_5g_m - C_5C_LL_R R_3\right) + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LR_3R_L + C_LL_RR_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^4\left(C_3C_5C_LL_R R_3F_5g_m + C_3C_5C_LL_RR_3F_5g_m + C_3C_5C_LL_RR_3F_5g_m + C_3C_5C_LL_RR_3F_5g_m + C_3C_5C_LL_RR_3F_5g_m + C_3C_5C_LR_3R_5g_m + C_3C_
10.195 INVALID-ORDER-195 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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 $H(s) = \frac{L_L R_3 R_L g_m s + s^2 \left( C_5 L_L R_3 R_5 R_L g_m - C_5 L_L R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_3 C_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L R_3 R_L + C_5 C_L L_L R_3 R_5 R_L g_m + C_5 L_L R_3 R_L g_m + C_5 L_L R_3$ 

10.196 INVALID-ORDER-196  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$  $R_{3}R_{L}g_{m} + s^{3}\left(C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{5}L_{L}R_{3}R_{5}g_{m} - C_{5}L_{L}R_{3} + C_{L}L_{L}R_{3}R_{L}g_{m}\right) + s\left(C_{5}R_{3}R_{5}R_{L}g_{m}\right) + s\left(C_{5}R_{5}R_{L}g_{m}\right) + s\left(C_{5}R_{5}R_{L}g_{m}\right)$  $H(s) = \frac{R_3R_Lg_m + s^3\left(C_5C_LL_R_3R_5R_Lg_m - C_5C_LL_R_3R_Lg_m + s^2\left(C_5L_LR_3R_5g_m - C_5L_LR_3 + C_LL_R_3R_Lg_m\right) + s\left(C_5R_3R_5R_Lg_m - C_5C_LL_R_3R_Lg_m + s^2\left(C_5C_LL_R_3R_Lg_m + C_5C_LL_R_3R_Lg_m + C_5C_LL_R_3R_Lg$ 10.197 INVALID-ORDER-197  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $C_{L}L_{L}R_{3}R_{L}g_{m}s^{2} + R_{3}R_{L}g_{m} + s^{3}\left(C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{L}\right) + s\left(C_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}R_{3}R_{L}\right)$  $H(s) = \frac{C_L L_L R_3 R_L g_m + s^3 \left(C_5 C_L L_L R_3 R_5 R_L g_m - C_5 C_L L_L R_3 R_L \right) + s \left(C_5 R_3 R_5 R_L g_m - C_5 R_3 R_L \right)}{R_3 g_m + R_L g_m + s^4 \left(C_3 C_5 C_L L_L R_3 R_5 R_L g_m + C_5 C_L L_L R_3 R_5 R_L g_m + C_5 C_L L_L R_3 R_5 R_L g_m + C_5 C_L R_5 R_5 R_L g_m + C_5 C_$ 10.198 INVALID-ORDER-198  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$  $H(s) = \frac{C_5L_5R_3R_Lg_ms^2 - C_5R_3R_Ls + R_3R_Lg_m}{C_3C_5L_5R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_3C_5R_3R_L + C_5L_5R_3g_m + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m + 2C_5R_3R_Lg_m + C_5R_3 + C_5R_L\right)}$ **10.199** INVALID-ORDER-199  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$  $H(s) = \frac{C_5 L_5 R_3 g_m s^2 - C_5 R_3 s + R_3 g_m}{g_m + s^3 \left( C_3 C_5 L_5 R_3 g_m + C_5 C_L L_5 R_3 g_m \right) + s^2 \left( C_3 C_5 R_3 + C_5 C_L R_3 + C_5 L_5 g_m \right) + s \left( C_3 R_3 g_m + 2 C_5 R_3 g_m + C_5 + C_L R_3 g_m \right)}$ **10.200** INVALID-ORDER-200  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{C_5L_5R_3R_Lg_ms^2 - C_5R_3R_Ls + R_3R_Lg_m}{R_3g_m + R_Lg_m + s^3\left(C_3C_5L_5R_3R_Lg_m + C_5C_LL_5R_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_L + C_5C_LR_3R_L + C_5L_5R_3g_m + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C_5R_3R_Lg_m + C_5R_3R_Lg_m + C_5R_3R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C_5$ 10.201 INVALID-ORDER-201  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{C_5C_LL_5R_3R_Lg_ms^3 + R_3g_m + s^2\left(-C_5C_LR_3R_L + C_5L_5R_3g_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{C_3C_5C_LL_5R_3R_Lg_ms^4 + g_m + s^3\left(C_3C_5C_LR_3R_L + C_5C_LL_5R_3g_m + C_5C_LL_5R_2g_m\right) + s^2\left(C_3C_5R_3 + C_3C_LR_3R_Lg_m + C_5C_LR_3R_Lg_m + C_5C_L$ 10.202 INVALID-ORDER-202  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 - C_5C_LL_LR_3s^3 - C_5R_3s + R_3g_m + s^2\left(C_5L_5R_3g_m + C_LL_LR_3g_m\right)}{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_3 + C_5C_LL_5L_g_m\right) + s^3\left(C_3C_5L_5R_3g_m + C_5C_LL_5R_3g_m + C_5C_LL_LR_3g_m + C_5C_LLR_3g_m + C_5C_LL_LR_3g_m + C_5C_L$ 10.203 INVALID-ORDER-203  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{C_5L_5L_LR_3g_ms^3 - C_5L_LR_3s^2 + L_LR_3g_ms}{R_3g_m + s^4\left(C_3C_5L_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m\right) + s^3\left(C_3C_5L_LR_3 + C_5C_LL_LR_3 + C_5L_5L_Lg_m\right) + s^2\left(C_3L_LR_3g_m + C_5L_5R_3g_m + C_5L_LR_3g_m + C_5L_LR_3g_m\right) + s\left(C_5R_3 + L_Lg_m\right)}$ 

 $H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_5R_3R_Lg_m - C_5C_LL_LR_3\right) + s^2\left(-C_5C_LR_3R_L + C_5L_5R_3g_m + C_LL_LR_3g_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_5R_3R_Lg_m + C_3C_LL_5R_3g_m + C_5C_LL_5R_3g_m + C_5C_LL_5R_3g_m$ 

10.204 INVALID-ORDER-204  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

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10.205 INVALID-ORDER-205 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{C_5L_5L_LR_3R_Lg_ms^3 - C_5L_LR_3R_Lg_ms}{R_3R_Lg_m + s^4\left(C_3C_5L_5L_LR_3R_Lg_m + C_5C_LL_5L_LR_3R_Lg_m\right) + s^3\left(C_3C_5L_LR_3R_L + C_5C_LL_LR_3R_L + C_5L_LR_3R_Lg_m\right) + s^2\left(C_3L_LR_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_LR_3R_Lg_m + C_5L_LR_3R_Lg_m\right) + s^2\left(C_3L_LR_3R_Lg_m + C_5L_LR_3R_Lg_m + C_5L_LR_3R_Lg_m\right) + s^2\left(C_3L_LR_3R_Lg_m\right) + s^2\left(C_3L_LR_3R_Lg_m\right
10.206 INVALID-ORDER-206 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}s^{4}+R_{3}R_{L}g_{m}+s^{3}\left(-C_{5}C_{L}L_{L}R_{3}R_{L}+C_{5}L_{5}L_{L}R_{3}g_{m}\right)+s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m}-C_{5}L_{L}R_{3}+C_{L}L_{L}R_{3}R_{L}g_{m}\right)
H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_m + s^3\left(-C_5C_LL_LR_3R_Lg_m + s^3\left(-C_5C_LL_LR_3R_Lg_m + s^3\left(-C_5C_LL_LR_3R_Lg_m + c^3C_5L_LR_3g_m + c^3C_5L_LR_3R_Lg_m + c^3C_5L_LR_3R_Lg_m + s^3\left(-C_5C_LL_LR_3R_Lg_m + s^3c_LL_LR_3R_Lg_m + s^3c_LL_LR_3R_Lg
10.207 INVALID-ORDER-207 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}s^{4}-C_{5}C_{L}L_{L}R_{3}R_{L}s^{3}-C_{5}R_{3}R_{L}s+R_{3}R_{L}g_{m}+s^{2}\left(C_{5}L_{5}R_{3}R_{L}g_{m}+C_{L}L_{L}R_{3}R_{L}g_{m}\right)
H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_ms^4 - C_5C_LL_LR_3R_Ls^3 - C_5R_3R_Ls + R_3R_Lg_m + s^2\left(C_5L_5R_3R_Lg_m + C_LL_LR_3R_Lg_m\right)}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + R_3g_m + R_Lg_m + s^4\left(C_3C_5C_LL_LR_3R_L + C_5C_LL_LR_3R_Lg_m\right) + s^3\left(C_3C_5L_5R_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LLR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LLR_3R_Lg_m + C_5C_LLR_3R_Lg_
10.208 INVALID-ORDER-208 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)
                                                                                                                                                                                                                                                       H(s) = \frac{-C_5L_5R_3R_Ls^2 + L_5R_3R_Lg_ms - R_3R_L}{C_3C_5L_5R_3R_Ls^3 + 2R_3R_Lg_m + R_3 + R_L + s^2\left(C_3L_5R_3R_Lg_m + 2C_5L_5R_3R_Lg_m + C_5L_5R_3 + C_5L_5R_L\right) + s\left(C_3R_3R_L + L_5R_3g_m + L_5R_Lg_m\right)}
10.209 INVALID-ORDER-209 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                    H(s) = \frac{-C_5L_5R_3s^2 + L_5R_3g_ms - R_3}{2R_3q_m + s^3\left(C_3C_5L_5R_3 + C_5C_LL_5R_3\right) + s^2\left(C_3L_5R_3q_m + 2C_5L_5R_3q_m + C_5L_5 + C_LL_5R_3q_m\right) + s\left(C_3R_3 + C_LR_3 + L_5q_m\right) + 1}
10.210 INVALID-ORDER-210 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                          H(s) = \frac{-C_5L_5R_3R_Ls^2 + L_5R_3R_Lg_ms - R_3R_L}{2R_3R_Lg_m + R_3 + R_L + s^3\left(C_3C_5L_5R_3R_L + C_5C_LL_5R_3R_L\right) + s^2\left(C_3L_5R_3R_Lg_m + 2C_5L_5R_3R_Lg_m + C_5L_5R_3 + C_5L_5R_3R_Lg_m\right) + s\left(C_3R_3R_L + C_LR_3R_L + L_5R_3g_m + L_5R_Lg_m\right)}
10.211 INVALID-ORDER-211 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_{Ls}}\right)
H(s) = \frac{-C_5C_LL_5R_3R_Ls^3 - R_3 + s^2\left(-C_5L_5R_3R_Lg_m\right) + s\left(-C_LR_3R_L + L_5R_3g_m\right)}{C_3C_5C_LL_5R_3R_Ls^4 + 2R_3g_m + s^3\left(C_3C_5L_5R_3 + C_3C_LL_5R_3R_Lg_m + C_5C_LL_5R_3 + C_
10.212 INVALID-ORDER-212 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5L_LR_3s^4 + C_LL_5L_LR_3g_ms^3 + L_5R_3g_ms - R_3 + s^2\left(-C_5L_5R_3 - C_LL_LR_3\right)}{C_3C_5C_LL_5L_LR_3s^5 + 2R_3g_m + s^4\left(C_3C_LL_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_5R_3 + C_LL_5L_Lg_m\right) + s^2\left(C_3L_5R_3g_m + C_5L_5R_3g_m + C_
10.213 INVALID-ORDER-213 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
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 $H(s) = \frac{-C_5L_5L_LR_3s^3 + L_5L_LR_3g_ms^2 - L_LR_3s}{R_3 + s^4\left(C_3C_5L_5L_LR_3 + C_5C_LL_5L_LR_3\right) + s^3\left(C_3L_5L_LR_3g_m + 2C_5L_5L_LR_3g_m + C_5L_5L_L + C_LL_5L_LR_3g_m\right) + s^2\left(C_3L_LR_3 + C_5L_5R_3 + C_LL_LR_3 + L_5L_Lg_m\right) + s\left(L_5R_3g_m + 2L_LR_3g_m + L_L\right)}$ 

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10.214 INVALID-ORDER-214 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_5L_LR_3s^4 - R_3 + s^3\left(-C_5C_LL_5R_3R_L + C_LL_5L_LR_3g_m\right) + s^2\left(-C_5L_5R_3 + C_LL_5R_3R_Lg_m - C_LL_LR_3\right) + s\left(-C_LR_3R_L + L_5R_3R_Lg_m - C_LL_LR_3\right) + s\left(-C_LR_3R_L + L_5R_3R_Lg_m + C_3C_LL_5R_3R_Lg_m + C_3C_LL_5R
10.215 INVALID-ORDER-215 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{-C_5L_5L_LR_3R_Ls^3 + L_5L_LR_3R_Lg_ms^2 - L_LR_3R_Ls}{R_3R_L + s^4\left(C_3C_5L_5L_LR_3R_L + C_5C_LL_5L_LR_3R_L\right) + s^3\left(C_3L_5L_LR_3R_Lg_m + 2C_5L_5L_LR_3R_Lg_m + C_5L_5L_LR_3R_Lg_m\right) + s^2\left(C_3L_LR_3R_L + C_5L_5R_3R_L + C_5L_5R_3R_Lg_m\right) + s^2\left(C_3L_LR_3R_L + C_5L_5R_3R_L + C_5L_5
10.216 INVALID-ORDER-216 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -C_5C_LL_5L_LR_3R_Ls^4 - R_3R_L + s^3\left(-C_5L_5L_LR_3 + C_LL_5L_LR_3R_Lg_m\right) + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_L + s^2(-C_5L_5R_3R_L - C_LL_LR_3R_L + s^2(-C_5L_5R_1 - c_1R_1R_1 + s^2(-C_5L_5R_1R_1 + s^2(-C_5L_5R_1R_1 + c_1R_1R_1 + s^2(-C_5L_5R_1R_1 + c_1R_1R_1 + s^2(-C_5L_5R_1R_1 + c_1R_1R_1 + s^2(-C_5L_5R_1R_1 + c_1R_1R_1 + c_1R_1R_1 + s^2(-C_5L_5R_1R_1 + c_1R_1R_1 + c_1R_
H(s) = \frac{-C_5C_LL_5L_LR_3R_Ls^4 - R_3R_L + s^3\left(-C_5L_5L_LR_3 + C_LL_5L_LR_3R_Lg_m\right) + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_L + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_Lg_m\right) + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_L + s^2\left(-C_5L_5L_LR_3R_Lg_m\right) + s^2\left(-C_5L_5L_LR_
10.217 INVALID-ORDER-217 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_5C_LL_5L_LR_3R_Ls^4 + C_LL_5L_LR_3R_Lg_ms^3 + L_5R_3R_Lg_ms - R_3R_L + s^2\left(-C_5L_5R_3R_L - C_LL_LR_3R_L\right)
H(s) = \frac{-C_5C_LL_5L_LR_3R_Ls^5 + C_LL_5L_LR_3R_Lg_ms^5 + L_5R_3R_Lg_ms^5 + L_5R_3
10.218 INVALID-ORDER-218 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                          H(s) = \frac{C_5L_5R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_5R_3R_5R_Lg_m - C_5R_3R_L\right)}{C_3C_5L_5R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_3C_5R_3R_5R_Lg_m + C_3C_5R_3R_L + C_5L_5R_3g_m + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C_5R_3R_5g_m + 2C_5R_3R_Lg_m + C_5R_3R_Lg_m + C_5R_3R_Lg_m\right)}
10.219 INVALID-ORDER-219 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                             H(s) = \frac{C_5L_5R_3g_ms^2 + R_3g_m + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^3\left(C_3C_5L_5R_3g_m + C_5C_LL_5R_3g_m\right) + s^2\left(C_3C_5R_3R_5g_m + C_5C_LR_3R_5g_m + C_5C_LR_3 + C_5L_5g_m\right) + s\left(C_3R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5 + C_LR_3g_m\right)}
10.220 INVALID-ORDER-220 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_5L_5R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_5R_3R_5R_Lg_m - C_5R_3R_L\right)}{R_3g_m + R_Lg_m + s^3\left(C_3C_5L_5R_3R_Lg_m + C_5C_LL_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_5C_LR_3R_Lg_m + C_5C_LR_3R_L + C_5C_LR_3R_Lg_m + C_5C_LR_3R_Lg_m + C_5R_3R_Lg_m + C_5R_Lg_m + C_5R_Lg_m + C_5R_Lg_m + C_5R_Lg_m + C_5R_Lg_m + C_5R_Lg_m + C_5R
10.221 INVALID-ORDER-221 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
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$$H(s) = \frac{C_5C_LL_5R_3R_Lg_ms^3 + R_3g_m + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LR_3R_L + C_5L_5R_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3 + C_LR_3R_Lg_m\right)}{C_3C_5C_LL_5R_3R_Lg_ms^4 + g_m + s^3\left(C_3C_5C_LR_3R_5R_Lg_m + C_3C_5L_Ls_Rg_m + C_5C_LL_5R_3g_m + C_5C_LL_5R_3g_m + C_5C_LL_5R_3g_m + C_5C_LR_3R_Lg_m + C_5$$

10.222 INVALID-ORDER-222 
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_LR_3R_5g_m - C_5C_LL_LR_3\right) + s^2\left(C_5L_5R_3g_m + C_LL_LR_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{C_3C_5C_LL_5L_Rg_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_3F_{5g_m} + C_3C_5L_LR_3F_{5g_m} + C_5C_LL_Rg_{5g_m} + C_5C_LRg_{5g_m} + C_5C_LRg_{5g$$

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10.223 INVALID-ORDER-223 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_5L_5L_LR_3g_ms^3 + L_LR_3g_ms + s^2\left(C_5L_LR_3R_5g_m - C_5L_LR_3\right)}{R_3g_m + s^4\left(C_3C_5L_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m + C_5C_LL_LR_3F_5g_m + C_5C_LL_LR_3F_5g_m + C_5C_LL_LR_3F_5g_m + C_5L_LR_3g_m + C
10.224 INVALID-ORDER-224 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H(s) = \frac{C_5C_LL_5L_LR_3g_ms^4 + R_3g_m + s^3\left(C_5C_LL_5R_3R_Lg_m + C_5C_LL_LR_3R_5g_m - C_5C_LL_LR_3\right) + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LL_LR_3\right) + s^2\left(C_5C_LR_3R_5R_Lg_m - C_5C_LL_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_5R_3g_m + C_3C_5C_LL_LR_3g_m + C_3C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR
10.225 INVALID-ORDER-225 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C_5L_5L_LR_3R_Lg_ms^3 + L_LR_3R_Lg_ms + s^2(C_5L_LR_3R_5R_Lg_m - C_5L_LR_3R_L)
H(s) = \frac{C_5L_5L_LR_3R_Lg_ms + s^2\left(C_5L_LR_3R_Lg_ms + s^2\left(C_5L_LR_3R_5R_Lg_m - C_5L_LR_3R_L\right)\right.}{R_3R_Lg_m + s^4\left(C_3C_5L_5L_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_RR_3R_Lg_m + C_5C_LL_RR_3R_
10.226 INVALID-ORDER-226 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C_5C_LL_5L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_5C_LL_LR_3R_5R_Lg_m - C_5C_LL_LR_3R_Lg_m\right)
H(s) = \frac{C_5C_LL_5L_LR_3R_Lg_ms^5 + R_3R_Lg_m + s^3\left(C_5C_LL_LR_3R_5R_Lg_m - C_5C_LL_LR_3R_5R_Lg_m - C_5C_LL_LR_3R_Lg_m + s^3\left(C_3C_5L_LR_3R_Lg_m + S^3\left(C_3C_5L_LR_3R_Lg_m + S^3\left(C_3C_5L_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LLR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m 
10.227 INVALID-ORDER-227 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C_5C_LL_5L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3(C_5C_LL_LR_3R_5R_Lg_m - C_5C_LL_LR_3R_L)
                                        \frac{C_5 C_L L_5 L_L R_3 R_L g_m s + r_{13} r_L g_m s + r_{13} r_L g_m + s + (C_5 C_L L_L R_3 R_5 r_L g_m + c_5 C_L L_5 L_L R_3 r_L g_m + s + (C_5 C_L L_L R_3 R_5 r_L g_m + c_5 C_L L_5 R_3 R_L g_m + C_5 C_L L_5 R_3 R_L g_m + C_5 C_L L_5 R_3 R_L g_m + C_5 C_L L_4 R_3 R_5 g_m + C_5 C_L L_5 R_3 R_L g_m + C_5 C_L L_5 R_5 R_L g_m + C_
10.228 INVALID-ORDER-228 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)
                                                                                    H(s) = \frac{-C_5L_5R_3R_5R_Ls^2 - R_3R_5R_Ls + s\left(L_5R_3R_5R_Lg_m - L_5R_3R_L\right)}{C_3C_5L_5R_3R_5R_Ls^3 + 2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^2\left(C_3L_5R_3R_5R_Lg_m + C_3L_5R_3R_5R_Lg_m + C_5L_5R_3R_5R_Lg_m + C_5L_5R_3R_5R_L\right) + s\left(C_3R_3R_5R_L + L_5R_3R_5g_m + 2L_5R_3R_Lg_m + L_5R_3 + L_5R_5R_Lg_m + L_5R_3R_L\right)}
10.229 INVALID-ORDER-229 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)
                                                                                                                                    H(s) = \frac{-C_5L_5R_3R_5s^2 - R_3R_5 + s\left(L_5R_3R_5g_m - L_5R_3\right)}{2R_3R_5g_m + R_5 + s^3\left(C_3C_5L_5R_3R_5 + C_5C_LL_5R_3R_5\right) + s^2\left(C_3L_5R_3R_5g_m + C_3L_5R_3 + 2C_5L_5R_3R_5g_m + C_5L_5R_3R_5g_m + C_LL_5R_3\right) + s\left(C_3R_3R_5 + C_LR_3R_5 + 2L_5R_3g_m + L_5R_5g_m + L_5R_5g_m + C_5L_5R_3R_5g_m + C_5L_5R_5g_m + C_5
10.230 INVALID-ORDER-230 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{-C_5L_5R_3R_5R_Ls^2 - R_3R_5R_Ls^2 - R_3R_5R_Lg_m - L_5R_3R_L)}{2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^3\left(C_3C_5L_5R_3R_5R_L + C_5C_LL_5R_3R_5R_Lg_m + C_3L_5R_3R_5R_Lg_m + C_5L_5R_3R_5R_Lg_m + C_5L_5R_5R_5R_Lg_m + C_5L_5R_5R_5R_Lg_m
10.231 INVALID-ORDER-231 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{-C_5C_LL_5R_3R_5R_Ls^3 - R_3R_5 + s^2\left(-C_5L_5R_3R_5R_Lg_m - C_LL_5R_3R_5\right) + s\left(-C_LR_3R_5R_L + L_5R_3R_5g_m - L_5R_3R_5R_Lg_m - C_LL_5R_3R_5R_Lg_m - C_LL_5R_3R_5R_L$ 

 $-C_5C_LL_5R_3R_5R_Ls^3 - R_3R_5 + s^2\left(-C_5L_5R_3R_5 + C_LL_5R_3R_5R_Lg_m - C_LL_5R_3R_L\right) + s\left(-C_LR_3R_5R_L + L_5R_3R_5g_m - L_5R_3R_5R_L\right) + s\left(-C_LR_3R_5R_L + L_5R_3R_5R_L\right) + s\left(-C_LR_3R_5R_L + L_5R_3R_5R_L\right) + s\left(-C_LR_3R_5R_L + L_5R_3R_5R_L\right) + s\left(-C_LR_3R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_5R_L\right) + s\left(-C_LR_3R_5R_L\right) + s\left(-C_L$ 

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10.232 INVALID-ORDER-232 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + \frac{1}{C_{Ls}}\right)
H(s) = \frac{-C_5C_LL_5L_LR_3R_5s^4 - R_3R_5 + s^3\left(C_LL_5L_LR_3R_5g_m - C_LL_5L_LR_3\right) + s^2\left(-C_5L_5R_3R_5 - C_LL_LR_3R_5\right) + s\left(L_5R_3R_5g_m - L_5L_2R_3R_5g_m - C_LL_5L_LR_3R_5g_m - C_LL_5L_LR_3R_5g_m + C_5L_5L_LR_3R_5g_m + C_5L_5L_LR_3R_5
10.233 INVALID-ORDER-233 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_5L_5L_LR_3R_5s^3 - L_LR_3R_5s + s^2\left(L_5L_LR_3R_5g_m - L_5L_LR_3\right)}{R_3R_5 + s^4\left(C_3C_5L_5L_LR_3R_5 + C_5C_LL_5L_LR_3R_5\right) + s^3\left(C_3L_5L_LR_3R_5g_m + C_3L_5L_LR_3 + 2C_5L_5L_LR_3R_5g_m + C_5L_5L_LR_3R_5g_m + C_5L_5L_LR_3R_5 + C_5L_5R_3R_5 + C_5L_5R_5R_5 + C_5L
10.234 INVALID-ORDER-234 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H(s) = \frac{C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}s^{5} + 2R_{3}R_{5}g_{m} + R_{5} + s^{4}\left(C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m} + C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}g_{m} + C_{5}C_{L}L_{5}R_{3}R_{5}g_{m} + C_{5}C_{L}L_{5}R_{5}g_{m} + C_{5
10.235 INVALID-ORDER-235 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -C_5L_5L_LR_3R_5R_Ls^3 - L_LR_3R_5R_Ls + s^2(L_5L_LR_3R_5R_Lg_m - L_5L_LR_3R_L)
H(s) = \frac{-C_5 L_5 L_L R_3 R_5 R_L s^3 - L_L R_3 R_5 R_L s^3 - L_L R_3 R_5 R_L s + s^2 \left(L_5 L_L R_3 R_5 R_L g_m - L_5 L_L R_3 R_5 L\right)}{R_3 R_5 R_L + s^4 \left(C_3 C_5 L_5 L_L R_3 R_5 R_L + c_5 L_5 L_L R_3 R_5 R_L g_m + C_5 L_5 L_L R_3 R_5 R_L + c_5 L_5 L
10.236 INVALID-ORDER-236 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2R_2s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -C_5C_LL_5L_LR_3R_5R_5
H(s) = \frac{ - \frac{C_{3}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}s^{5} + 2R_{3}R_{5}R_{L}g_{m} + R_{3}R_{5} + R_{5}R_{L} + s^{4}\left(C_{3}C_{5}L_{5}L_{L}R_{3}R_{5} + C_{3}C_{L}L_{5}L_{L}R_{3}R_{5} + C_{5}C_{L}L_{5}L_{L}R_{3}R_{5} + C_{5}C_{L}L_{5}L_{L}R_{3}R_{5} + C_{5}C_{L}L_{5}L_{L}R_{3}R_{5} + C_{5}C_{L}L_{5}L_{L}R_{3}R_{5} + C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L} + C_{3}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L} + C_{3}C_{L}L_{5}L_{L}R_
10.237 INVALID-ORDER-237 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -C_5C_LL_5L_LR_3R_5R_Ls^4 - R_3R_5R_L + s
H(s) = \frac{-C_5C_LL_5L_LR_3R_5R_Ls^5 + 2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^4(C_3C_LL_5L_LR_3R_5R_Lg_m + C_3C_LL_5L_LR_3R_5R_Lg_m + C_5C_LL_5L_LR_3R_5R_Lg_m + C_5C_LL_5L_Rg_m 
10.238 INVALID-ORDER-238 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)
                                      H(s) = \frac{L_5 R_3 R_L g_m s + R_3 R_5 R_L g_m - R_3 R_L + s^2 \left(C_5 L_5 R_3 R_5 R_L g_m - C_5 L_5 R_3 R_L\right)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^3 \left(C_3 C_5 L_5 R_3 R_5 R_L g_m + C_5 L_5 R_3 R_L g_m + C_5 L_5 R_L 
10.239 INVALID-ORDER-239 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)
                                                                                                  H(s) = \frac{L_5 R_3 g_m s + R_3 R_5 g_m - R_3 + s^2 \left(C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(C_3 C_5 L_5 R_3 R_5 g_m + C_3 C_5 L_5 R_3 + C_5 C_L L_5 R_3 R_5 g_m + C_5 C_L L_5 R_3\right) + s^2 \left(C_3 L_5 R_3 g_m + C_5 L_5 R_3 g_
10.240 INVALID-ORDER-240 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_5 R_3 R_L g_m s + R_3 R_5 R_L g_m - R_3 R_L + s^2 \left(C_5 L_5 R_3 R_5 R_L g_m - C_5 L_5 R_3 R_L\right)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^3 \left(C_3 C_5 L_5 R_3 R_5 R_L g_m + C_5 C_L L_5 R_3 R_5 R_L g_m + C_5 C_L L_5 R_3 R_L g_m + C_5 L_
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R_{3}R_{5}g_{m} - R_{3} + s^{3}\left(C_{5}C_{L}L_{5}R_{3}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{3}R_{L}\right) + s^{2}\left(C_{5}L_{5}R_{3}R_{5}g_{m} - C_{5}L_{5}R_{3} + C_{L}L_{5}R_{3}R_{L}g_{m}\right) + s\left(C_{L}R_{3}R_{L}g_{m}\right) + s\left(C_{L}R_{3
H(s) = \frac{R_3R_5g_m - R_3 + s^{\circ}\left(C_5C_LL_5R_3R_5R_Lg_m - C_5C_LL_5R_3R_5L_g_m - C_5L_5R_3R_5g_m - C_5L_5R_3R_5g_m - C_5L_5R_3R_5g_m - C_5L_5R_3R_5g_m + S_5C_LL_5R_3R_5g_m - C_5L_5R_3R_5g_m + S_5C_LL_5R_3R_5g_m + S_5C_LL_5R_5g_m + S_5C_LL_5R
10.242 INVALID-ORDER-242 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.243 INVALID-ORDER-243 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
L_5L_LR_3g_ms^2 + s^3(C_5L_5L_LR_3R_5g_m - C_5L_5L_LR_3) + s(L_LR_3R_5g_m - L_LR_3)
10.244 INVALID-ORDER-244 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R_3R_5g_m - R_3 + s^4(C_5C_LL_5L_LR_3R_5g_m - C_5C_LL_5L_LR_3) + s^4(C_5C_LL_5L_LR_3)
H(s) = \frac{R_3 R_5 g_m + R_5 f_m + s^5 \left(C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 L_L L_5 L_L R_3 \right) + s^4 \left(C_3 C_5 C_L L_5 L_L R_3 R_5 R_L + C_3 C_L L_5 L_L R_3 g_m + C_5 
10.245 INVALID-ORDER-245 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L_5L_LR_3R_Lg_ms^2 + s^3\left(C_5L_5L_LR_3R_5R_Lg_m - C_5L_5L_LR_3R_L\right) + s\left(L_LR_3R_5R_Lg_m - C_5L_5L_LR_3R_L\right)
H(s) = \frac{L_5 L_L \iota_3 \iota_5 L_L g_m s + s + s + (C_5 L_5 L_L R_3 R_5 R_L g_m + C_5 L_5 L_L R_3 R_L g_m 
10.246 INVALID-ORDER-246 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{R_3R_5R_Lg_m - R_3R_5R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^5\left(C_3C_5C_LL_5L_LR_3R_5R_Lg_m + C_3C_5L_LL_RR_3R_5g_m + C_3C_5L_LL_RR_3R_5g_m + C_3C_5L_LL_RR_3R_Lg_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_RR_3R_5g_m + C_5C_LL_5L_RR_5g_m + C_5C_
10.247 INVALID-ORDER-247 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                       \frac{C_L L_3 L_L R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^5 \left(C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L L_L R_3 R_L g_m + C_5 C_L L_5 L_L R_3 R_L g_
10.248 INVALID-ORDER-248 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
                                         \frac{-C_{5}R_{3}R_{5}R_{L}s+R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{2}\left(C_{5}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}L_{5}R_{3}R_{L}\right)}{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{4}+s^{3}\left(C_{3}C_{5}L_{5}R_{3}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+2C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}+
10.249 INVALID-ORDER-249 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
                                                 H(s) = \frac{-C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + C_5C_LL_5R_3R_5g_m + C_5C_LL_5R_3\right) + s^2\left(C_3C_5R_3R_5 + C_5C_LR_3R_5 + C_5C
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10.241 INVALID-ORDER-241  $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$ 

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10.250 INVALID-ORDER-250 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{-C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^2\left(C_5L_5R_3R_5R_Lg_m - C_5L_5R_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(C_3C_5L_5R_3R_5R_Lg_m + C_5C_LL_5R_3R_L\right) + s^2\left(C_3C_5R_3R_5R_L + C_5C_LR_3R_5R_L + C_5C_LR_3R_5R
10.251 INVALID-ORDER-251 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R_3R_5g_m - R_3 + s^3\left(C_5C_LL_5R_3R_5R_Lg_m - C_5C_LL_5R_3R_L\right) + s^2\left(-C_5C_LR_3R_5R_L + C_5L_5R_3R_5g_m - C_5R_3R_5R_L\right) + s^2\left(-C_5C_LR_3R_5R_L + C_5L_5R_3R_5g_m - C_5R_3R_5R_L\right) + s^2\left(-C_5C_LR_3R_5R_L\right) + s^2\left(-C_5C_LR
                                            \frac{R_3R_5g_m - R_3 + s^* \left(C_5C_LL_5R_3R_5R_Lg_m - C_5C_LL_5R_3R_L\right) + s^* \left(-C_5C_LR_3R_5R_L + C_5L_5R_3R_5g_m - C_5R_LR_3R_5g_m - C_5R_
10.252 INVALID-ORDER-252 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   H(s) = \frac{-C_5C_LL_LR_3R_5s^\circ - C_5R_3R_5s + R_3R_5g_m - R_3 + s^*(C_5C_LL_5L_LR_3R_5g_m - C_5C_LL_5L_LR_3) + s^*(C_5L_LL_5L_LR_3R_5g_m - C_5C_LL_5L_LR_3) + s^*(C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_RR_3R_5g_m + C_5C_LL_5L_RR_3R_5g_m + C_5C_LL_5L_RR_3R_5g_m + C_5C_LL_5L_RR_3R_5g_m + C_5C_LL_5L_RR_3R_5g_m + C_5C_LL_5R_3R_5g_m + C_5C_LL_5
10.253 INVALID-ORDER-253 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                              \frac{-C_5L_LR_3R_5s^2 + s^3\left(C_5L_5L_LR_3R_5g_m - C_5L_5L_LR_3\right) + s\left(L_LR_3R_5g_m - L_LR_3\right)}{R_3R_5g_m + R_3 + s^4\left(C_3C_5L_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3R_5g_m + C_5C_LL_5L_LR_3\right) + s^3\left(C_3C_5L_LR_3R_5 + C_5C_LL_LR_3R_5 + C_5C_LLR_3R_5 + C_5C_LL_LR_3R_5 + C_5C
10.254 INVALID-ORDER-254 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
10.255 INVALID-ORDER-255 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                            -C_{5}L_{L}R_{3}R_{5}R_{L}s^{2} + s^{3}\left(C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{5}L_{5}L_{L}R_{3}R_{L}g_{m} + C_{5}L_{L}R_{3}R_{L}g_{m} + C_{5}L_{
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$$10.256 \quad \text{INVALID-ORDER-256} \ Z(s) = \left( \infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left( C_5 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L + C_5 L_L R_5 R$$

$$H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^5 \left(C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L L_R R_3 R_5 R_L + C_3 C_5 L_L L_R R_3 R_5 g_m + C_3 C_5 L_L L_R R_3 R_5 g_m + C_5 C_L L_5 L_L R_5 g_m + C_5 C_L L_5 L_L R_5 g_m + C_5 C_L L_5 L_L R_5$$

10.257 INVALID-ORDER-257 
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^5 \left(C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 R_L + C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_5 C_L L_5 L_L R_3 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_5$$

**10.258** INVALID-ORDER-258 
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ R_L\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s \left( C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L \right)}{R_5 g_m + 2 R_L g_m + s \left( C_3 R_3 R_5 g_m + 2 C_3 R_3 R_L g_m + C_3 R_3 + C_3 R_5 R_L g_m + C_3 R_L \right) + 1}$$

10.259 INVALID-ORDER-259 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_3 C_L L_L R_3 R_5 g_m - C_3 C_L L_L R_3\right) + s^2 \left(C_L L_L R_5 g_m - C_L L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2 g_m + s^3 \left(2 C_3 C_L L_L R_3 g_m + C_3 C_L L_L R_5 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L L_L g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L\right)}$$

10.260 INVALID-ORDER-260 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{s^2 \left( C_3 L_L R_3 R_5 g_m - C_3 L_L R_3 \right) + s \left( L_L R_5 g_m - L_L \right)}{R_5 g_m + s^3 \left( C_3 C_L L_L R_3 R_5 g_m + C_3 C_L L_L R_3 \right) + s^2 \left( 2 C_3 L_L R_3 g_m + C_3 L_L R_5 g_m + C_3 L_L + C_L L_L R_5 g_m + C_L L_L \right) + s \left( C_3 R_3 R_5 g_m + C_3 R_3 + 2 L_L g_m \right) + 1}$$

**10.261** INVALID-ORDER-261 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m + s^3 \left( C_3 C_L L_L R_3 R_5 g_m - C_3 C_L L_L R_3 \right) + s^2 \left( C_3 C_L R_3 R_5 R_L g_m - C_3 C_L R_3 R_L + C_L L_L R_5 g_m - C_L L_L \right) + s \left( C_3 R_3 R_5 g_m - C_3 R_3 + C_L R_5 R_L g_m - C_L R_L \right) - 1}{2 g_m + s^3 \left( 2 C_3 C_L L_L R_3 g_m + C_3 C_L L_L R_5 g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_3 R_5 g_m + 2 C_3 C_L R_3 R_L g_m + C_3 C_L R_3 + C_3 C_L R_3 R_L g_m + C_3 C_L R_L + 2 C_L L_L g_m \right) + s \left( 2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 R$$

10.262 INVALID-ORDER-262 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{s^2 \left( C_3 L_L R_3 R_5 R_L g_m - C_3 L_L R_3 R_L \right) + s \left( L_L R_5 R_L g_m - L_L R_L \right)}{R_5 R_L g_m + R_L + s^3 \left( C_3 C_L L_L R_3 R_5 R_L g_m + C_3 C_L L_L R_3 R_L \right) + s^2 \left( C_3 L_L R_3 R_5 g_m + 2 C_3 L_L R_3 R_L g_m + C_3 L_L R_3 + C_3 L_L R_5 R_L g_m + C_4 L_L R_L \right) + s \left( C_3 R_3 R_5 R_L g_m + C_3 R_3 R_L + L_L R_5 g_m + 2 L_L R_L g_m + L_L \right)}$$

10.263 INVALID-ORDER-263 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s^3 \left( C_3 C_L L_L R_3 R_5 R_L g_m - C_3 C_L L_L R_3 R_L \right) + s^2 \left( C_3 L_L R_3 R_5 g_m - C_3 L_L R_3 + C_L L_L R_5 R_L g_m - C_L L_L R_L \right) + s \left( C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L + L_L R_5 g_m - L_L \right)}{R_5 g_m + 2 R_L g_m + s^3 \left( C_3 C_L L_L R_3 R_5 g_m + 2 C_3 C_L L_L R_3 R_L g_m + C_3 C_L L_L R_3 + C_3 C_L L_L R_3 R_L g_m + C_3 C_L L_L R_2 R_L g_m + C_3 C_L L_L R_3 R_L g_m + C_3 C_L L_L R_2 R_L g_m + C_3 C_L R_2 R_L g_m + C_3 C_L$$

10.264 INVALID-ORDER-264 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s^3 \left( C_3 C_L L_L R_3 R_5 R_L g_m - C_3 C_L L_L R_3 R_L \right) + s^2 \left( C_L L_L R_5 R_L g_m - C_L L_L R_L \right) + s \left( C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L \right)}{R_5 g_m + 2 R_L g_m + s^3 \left( C_3 C_L L_L R_3 R_L g_m + C_3 C_L R_3 R_L g_m +$$

**10.265** INVALID-ORDER-265  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_3C_5R_3s^2 + g_m + s\left(C_3R_3g_m - C_5\right)}{C_3C_5C_LR_3s^3 + s^2\left(2C_3C_5R_3g_m + C_3C_5 + C_3C_LR_3g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

**10.266** INVALID-ORDER-266  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_3C_5R_3R_Ls^2 + R_Lg_m + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{C_3C_5C_LR_3R_Ls^3 + g_m + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5R_L + C_3C_LR_3R_Lg_m + C_5C_LR_L\right) + s\left(C_3R_3g_m + C_3R_Lg_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m\right)}$$

**10.267** INVALID-ORDER-267 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_3C_5C_LR_3R_Ls^3 + g_m + s^2\left(-C_3C_5R_3 + C_3C_LR_3R_Lg_m - C_5C_LR_L\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right)}{s^3\left(2C_3C_5C_LR_3R_Lg_m + C_3C_5C_LR_3 + C_3C_5C_LR_L\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5 + C_3C_LR_3g_m + C_3C_LR_Lg_m + 2C_5C_LR_Lg_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

**10.268** INVALID-ORDER-268  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_3C_5C_LL_LR_3s^4 + g_m + s^3\left(C_3C_LL_LR_3g_m - C_5C_LL_L\right) + s^2\left(-C_3C_5R_3 + C_LL_Lg_m\right) + s\left(C_3R_3g_m - C_5\right)}{s^4\left(2C_3C_5C_LL_LR_3g_m + C_3C_5C_LL_L\right) + s^3\left(C_3C_5C_LR_3 + C_3C_LL_Lg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5 + C_3C_LR_3g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$$

10.269 INVALID-ORDER-269  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_3C_5L_LR_3s^3 + L_Lg_ms + s^2\left(C_3L_LR_3g_m - C_5L_L\right)}{C_3C_5C_LL_LR_3s^4 + g_m + s^3\left(2C_3C_5L_LR_3g_m + C_3C_LL_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_3L_Lg_m + 2C_5L_Lg_m + C_LL_Lg_m\right) + s\left(C_3R_3g_m + C_5\right)}$$

10.270 INVALID-ORDER-270  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_3C_5C_LL_LR_3s^4 + g_m + s^3\left(-C_3C_5C_LR_3R_L + C_3C_LL_LR_3g_m - C_5C_LL_L\right) + s^2\left(-C_3C_5R_3 + C_3C_LR_3R_Lg_m - C_5C_LR_L + C_LL_Lg_m\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right)}{s^4\left(2C_3C_5C_LL_LR_3g_m + C_3C_5C_LL_L\right) + s^3\left(2C_3C_5C_LR_3R_Lg_m + C_3C_5C_LR_3 + C_3C_LL_Lg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right) + s\left(C_3R_3g_m + C_3C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right) + s\left(C_3R_3g_m + C_3C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s\left(C_3R_3g_m + C_3C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s\left(C_3R_3g_m + C_3C_5C_LR_Lg_m\right) + s\left(C_3R_3g_m + C_3C_LR_Lg_m\right) + s\left(C_3R_3g_m + C_3C_LR$$

10.271 INVALID-ORDER-271  $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{-C_3C_5L_LR_3R_Ls^3 + L_LR_Lg_ms + s^2\left(C_3L_LR_3R_Lg_m - C_5L_LR_L\right)}{C_3C_5C_LL_LR_3R_Ls^4 + R_Lg_m + s^3\left(2C_3C_5L_LR_3R_Lg_m + C_3C_5L_LR_3 + C_3C_5L_LR_3R_Lg_m + C_5C_LL_LR_L\right) + s^2\left(C_3C_5R_3R_L + C_3L_LR_3g_m + C_5L_LR_Lg_m + C$$

10.272 INVALID-ORDER-272  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{1}s}, \infty, \frac{1}{C_{1}s}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{-C_3C_5C_LL_R_3R_Ls^4 + R_Lg_m + s^3\left(-C_3C_5L_LR_3 + C_3C_LL_RR_3R_Lg_m - C_5C_LL_RR_L\right) + s^2\left(-C_3C_5R_3R_L + C_3L_LR_3g_m - C_5L_L + C_LL_RLg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L + L_Lg_m\right)}{g_m + s^4\left(2C_3C_5C_LL_RR_3R_Lg_m + C_3C_5L_LR_3g_m + C_3C_5L_LR_3g_m + C_3C_5L_LR_2g_m + C_5C_LL_LR_2g_m + C_5C_LL_LR_2g_m + C_5C_LL_Rg_m + C_5C_LL_Rg$$

10.273 INVALID-ORDER-273  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

10.274 INVALID-ORDER-274  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_3C_5R_3R_5s^2 + R_5g_m + s\left(C_3R_3R_5g_m - C_3R_3 - C_5R_5\right) - 1}{C_3C_5C_LR_3R_5s^3 + 2g_m + s^2\left(2C_3C_5R_3R_5g_m + C_3C_5R_5 + C_3C_LR_3R_5g_m + C_3C_LR_3 + C_5C_LR_5\right) + s\left(2C_3R_3g_m + C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m +$$

10.275 INVALID-ORDER-275  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{-C_3C_5R_3R_5R_Ls^2 + R_5R_Lg_m - R_L + s\left(C_3R_3R_5R_Lg_m - C_3R_3R_L - C_5R_5R_L\right)}{C_3C_5C_LR_3R_5R_Ls^3 + R_5g_m + 2R_Lg_m + s^2\left(2C_3C_5R_3R_5R_Lg_m + C_3C_5R_3R_5 + C_3C_5R_5R_5 + C_3C$$

10.276 INVALID-ORDER-276  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{-C_3C_5C_LR_3R_5R_Ls^3 + R_5g_m + s^2\left(-C_3C_5R_3R_5 + C_3C_LR_3R_5R_Lg_m - C_3C_LR_3R_L - C_5C_LR_5R_L\right) + s\left(C_3R_3R_5g_m - C_3R_3 - C_5R_5 + C_LR_5R_Lg_m - C_LR_L\right) - 1}{2g_m + s^3\left(2C_3C_5C_LR_3R_5R_Lg_m + C_3C_5C_LR_3R_5 + C_3C_5C_LR_3R_5g_m + C_3C_5R_3R_5g_m + C_3C_5R_3R_5g_m + C_3C_LR_3R_Lg_m + C_3C$$

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10.277 INVALID-ORDER-277 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_R_3R_5s^4 + R_5g_m + s^3\left(C_3C_LL_R_3R_5g_m - C_3C_LL_R_3 - C_5C_LL_LR_5\right) + s^2\left(-C_3C_5R_3R_5 + C_LL_LR_5g_m - C_LL_L\right) + s\left(C_3R_3R_5g_m - C_3R_3 - C_5R_5\right) - 1}{2g_m + s^4\left(2C_3C_5C_LL_R_3R_5g_m + C_3C_5C_LL_R_5\right) + s^3\left(C_3C_5C_LR_3R_5 + 2C_3C_LL_R_3g_m + C_3C_LL_R_5g_m\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LL_R_5\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_LL_R_5g_m\right) + s^2\left(2C_
10.278 INVALID-ORDER-278 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_LR_3R_5s^3 + s^2\left(C_3L_LR_3R_5g_m - C_3L_LR_3 - C_5L_LR_5\right) + s\left(L_LR_5g_m - L_L\right)}{C_3C_5C_LL_LR_3R_5s^4 + R_5g_m + s^3\left(2C_3C_5L_LR_3R_5g_m + C_3C_LL_LR_3 + C_5C_LL_LR_5\right) + s^2\left(C_3C_5R_3R_5 + 2C_3L_LR_3g_m + C_3L_LR_5g_m + C_4L_LR_5g_m + C_4L_L\right) + s\left(C_3R_3R_5g_m + C_3R_3R_5g_m + C_3R_4R_5g_m + C_4R_5g_m + C_4R_5g_m
10.279 INVALID-ORDER-279 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_R_3R_5s^4 + R_5g_m + s^3\left(-C_3C_5C_LR_3R_5R_L + C_3C_LL_R_3R_5g_m - C_3C_LL_R_3 + s^2\left(-C_3C_5R_3R_5 + C_3C_LR_3R_5R_Lg_m - C_3C_LR_3R_L - C_5C_LR_5R_L + C_LL_R_5g_m\right)}{2g_m + s^4\left(2C_3C_5C_LL_R_3R_5g_m + C_3C_5C_LL_R_5\right) + s^3\left(2C_3C_5C_LR_3R_5R_Lg_m + C_3C_5C_LR_3R_5 + C_3C_LL_R_3g_m + C_3C_LL_R_5g_m\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_5C_LR_3R_5g_m + C_3C_LL_R_3g_m + C_3C_LL_R_3g_m + C_3C_LL_R_5g_m\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_5C_LR_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LL_R_3g_m\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_5C_LR_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LR_3R_5g_m\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_L
10.280 INVALID-ORDER-280 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{-C_3C_5L_LR_3R_5R_Ls^3 + s^2\left(C_3L_LR_3R_5R_Lg_m - C_3L_LR_3R_L - C_5L_LR_5R_L\right) + s\left(L_LR_5R_Lg_m - L_LR_L\right)}{C_3C_5C_LL_LR_3R_5R_Ls^4 + R_5R_Lg_m + R_L + s^3\left(2C_3C_5L_LR_3R_5R_Lg_m + C_3C_LL_R_3R_5R_Lg_m + C_3C_LL_R_3R_L + C_5C_LL_R_3R_L\right) + s^2\left(C_3C_5R_3R_5R_L + C_3L_LR_3R_5R_Lg_m + C_3
10.281 INVALID-ORDER-281 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}s^{4}+R_{5}R_{L}g_{m}-R_{L}+s^{3}\left(-C_{3}C_{5}L_{L}R_{3}R_{5}+C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{5}R_{L}+C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{5}R_{L}+C_{5}C_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{5}C_{L}R_{5}R_{L}\right)+s^{
H(s) = \frac{- \cup_3 \cup_5 \cup_L L_L R_3 R_5 R_L S^- + R_5 R_L g_m - R_L + S^- (- \cup_3 \cup_5 L_L L_R 3 R_5 R_L g_m - C_3 \cup_L L_L R_3 R_5 R_L g_m + C_3 \cup_L L_L R_3 R_L g_m + C_3 \cup_L R_3 
10.282 INVALID-ORDER-282 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}s^{4}+R_{5}R_{L}g_{m}-R_{L}+s^{3}\left(C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{3}R_{L}-C_{5}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{L}L_{L}R_{5}R_{L}\right)+s^{2}\left(-C
                                                      -C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}s^{s} + R_{5}R_{L}g_{m} - R_{L} + s^{*}\left(C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{L}L_{L}R_{3}R_{L} - C_{5}C_{L}L_{L}R_{5}R_{L}\right) + s^{*}\left(-R_{5}g_{m} + 2R_{L}g_{m} + s^{4}\left(2C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{5}R_{L}g
10.283 INVALID-ORDER-283 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                      H(s) = \frac{g_m + s^2 \left( C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 \right) + s \left( C_3 R_3 g_m + C_5 R_5 g_m - C_5 \right)}{s^3 \left( C_3 C_5 C_L R_3 R_5 g_m + C_3 C_5 C_L R_3 \right) + s^2 \left( 2 C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + C_3 C_L R_3 g_m + C_5 C_L R_5 g_m + C_5 C_L \right) + s \left( C_3 g_m + 2 C_5 g_m + C_L g_m \right)}
10.284 INVALID-ORDER-284 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                                       H(s) = \frac{R_L g_m + s^2 \left( C_3 C_5 R_3 R_5 R_L g_m - C_3 C_5 R_3 R_L \right) + s \left( C_3 R_3 R_L g_m + C_5 R_5 R_L g_m - C_5 R_L \right)}{g_m + s^3 \left( C_3 C_5 C_L R_3 R_5 R_L g_m + C_3 C_5 C_L R_3 R_L \right) + s^2 \left( C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 R_L g_m + C_3 C_5 R_3 + C_3 C_5 R_3 R_L g_m + C_5 C_L R_3 R_L g_m + C
10.285 INVALID-ORDER-285 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{g_m + s^3 \left( C_3 C_5 C_L R_3 R_5 R_L g_m - C_3 C_5 C_L R_3 R_L \right) + s^2 \left( C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_3 C_L R_3 R_L g_m + C_5 C_L R_5 R_L g_m - C_5 C_L R_L \right) + s \left( C_3 R_3 g_m + C_5 R_5 g_m - C_5 + C_L R_L g_m \right)}{s^3 \left( C_3 C_5 C_L R_3 R_5 g_m + 2 C_3 C_5 C_L R_3 R_L g_m + C_3 C_5 C_L R_3 + C_3 C_5 C_L R_3 R_L g_m + C_5 C_L R_5 R_L g_m$ 

**10.286** INVALID-ORDER-286  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{g_m + s^4 \left( C_3 C_5 C_L L_L R_3 R_5 g_m - C_3 C_5 C_L L_L R_3 \right) + s^3 \left( C_3 C_L L_L R_3 g_m + C_5 C_L L_L R_5 g_m - C_5 C_L L_L \right) + s^2 \left( C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_L L_L g_m \right) + s \left( C_3 R_3 g_m + C_5 R_5 g_m - C_5 \right)}{s^4 \left( 2 C_3 C_5 C_L L_L R_5 g_m + C_5 C_L R_5 g$ 

10.287 INVALID-ORDER-287  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L_L g_m s + s^3 \left(C_3 C_5 L_L R_3 R_5 g_m - C_3 C_5 L_L R_3\right) + s^2 \left(C_3 L_L R_3 g_m + C_5 L_L R_5 g_m - C_5 L_L\right)}{g_m + s^4 \left(C_3 C_5 C_L L_L R_3 R_5 g_m + C_3 C_5 L_L R_3 g_m + C_5 C_L L_L R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_3 C_5 R_3 + C_3 L_L g_m + C_L L_L g_m\right) + s \left(C_3 R_3 g_m + C_5 R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L L_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_3 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_5 R_5 g_m + C_5 C_L\right) + s^2 \left(C_3 C_5 R_5 R_5 g_m + C_5 C_L\right) + s^2 \left(C_5 R_5 R_5 g_m + C_5 R_5$ 

10.288 INVALID-ORDER-288  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{g_m + s^4 \left( C_3 C_5 C_L L_L R_3 R_5 g_m - C_3 C_5 C_L L_L R_3 \right) + s^3 \left( C_3 C_5 C_L R_3 R_5 R_L g_m - C_3 C_5 C_L R_3 R_L + C_3 C_L L_L R_3 g_m + C_5 C_L L_L R_5 g_m - C_3 C_5 R_3 + C_3 C_L R_3 R_L g_m + C_5 C_L R_5 R_L g_m - C_5 C_L R_L + C_L L_L g_m \right) + s \left( C_3 C_5 C_L R_3 R_5 g_m + C_3 C_5 C_L L_L R_3 g_m + C_3 C_5 C_L L_L R_5 g_m + C_3 C_5 C_L R_3 R_L g_m + C_3 C_L R_L g_m + C_$ 

10.289 INVALID-ORDER-289  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{L_L R_L g_m s + s^3 \left(C_3 C_5 L_L R_3 R_5 R_L g_m - C_3 C_5 L_L R_3 R_L \right) + s^2 \left(C_3 L_L R_3 R_L g_m + C_5 L_L R_5 R_L g_m - C_5 L_L R_L \right)}{R_L g_m + s^4 \left(C_3 C_5 C_L L_L R_3 R_5 R_L g_m + C_3 C_5 L_L R_3 R_5 g_m + 2 C_3 C_5 L_L R_3 R_5 g_m + 2 C_3 C_5 L_L R_3 R_L g_m + C_3 C_5 L_L R_3 R_L g_m + C_5 C_L L_L R_5 R_L g_m + C_5 C_L R_5 R_L g_m + C_$ 

10.290 INVALID-ORDER-290  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{R_L g_m + s^4 \left( C_3 C_5 C_L L_L R_3 R_5 g_m - C_3 C_5 L_L R_3 R_5 g_m - C_3 C_5 L_L R_3 R_L g_m + C_5 C_L L_L R_5 R_L g_m - C_5 C_L L_L R_5 R_L g_m - C_3 C_5 R_3 R_5 R_L g_m - C_3 C_5 R_3 R_5 R_L g_m - C_3 C_5 R_3 R_L + C_3 L_L R_5 R_L g_m + C_5 C_L L_L R_3 R_5 g_m + C_5 C_L L_L R_5 R_L g_m$ 

10.291 INVALID-ORDER-291  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L g_m + s^4 \left( C_3 C_5 C_L L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_L g_m + C_5 C_L L_L R_5 R_L g_m - C_5 C_L R_5 R_L g_m - C_$ 

10.292 INVALID-ORDER-292  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$ 

 $H(s) = \frac{C_3C_5L_5R_3R_Lg_ms^3 + R_Lg_m + s^2\left(-C_3C_5R_3R_L + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{g_m + s^3\left(C_3C_5L_5R_3g_m + C_3C_5L_5R_Lg_m\right) + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5R_L + C_5L_5g_m\right) + s\left(C_3R_3g_m + C_3R_Lg_m + 2C_5R_Lg_m + C_5\right)}$ 

10.293 INVALID-ORDER-293  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5L_5R_3g_ms^3 + g_m + s^2\left(-C_3C_5R_3 + C_5L_5g_m\right) + s\left(C_3R_3g_m - C_5\right)}{C_3C_5C_LL_5R_3g_ms^4 + s^3\left(C_3C_5C_LR_3 + C_3C_5L_5g_m + C_5C_LL_5g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5 + C_3C_LR_3g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$ 

10.294 INVALID-ORDER-294  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_3C_5L_5R_3R_Lg_ms^3 + R_Lg_m + s^2\left(-C_3C_5R_3R_L + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{C_3C_5C_LL_5R_3R_Lg_ms^4 + g_m + s^3\left(C_3C_5C_LR_3R_L + C_3C_5L_5R_3g_m + C_3C_5L_5R_Lg_m\right) + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5R_L + C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_3R_Lg_m + C_3C_5R_Lg_m + C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_3R_Lg_m + C_3C_5R_Lg_m + C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_3R_Lg_m + C_3C_5R_Lg_m + C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_3R_Lg_m + C_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C$ 

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10.295 INVALID-ORDER-295 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
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$$H(s) = \frac{C_3C_5C_LL_5R_3R_Lg_ms^4 + g_m + s^3\left(-C_3C_5C_LR_3R_L + C_3C_5L_5R_3g_m + C_5C_LL_5R_Lg_m\right) + s^2\left(-C_3C_5R_3 + C_3C_LR_3R_Lg_m - C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right)}{s^4\left(C_3C_5C_LL_5R_3g_m + C_3C_5C_LL_5R_Lg_m\right) + s^3\left(2C_3C_5C_LR_3R_Lg_m + C_3C_5C_LR_3 + C_3C_5C_LR_3 + C_3C_5C_LR_3g_m + C_5C_LL_5g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5C_LR_3g_m + C_3C_5C_LR_3g_m + C_5C_LR_3g_m + C_5C_LR_3g_$$

10.296 INVALID-ORDER-296 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(-C_3C_5C_LL_LR_3 + C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_5R_3g_m + C_3C_LL_LR_3g_m - C_5C_LL_L\right) + s^2\left(-C_3C_5R_3 + C_5L_5g_m + C_LL_Lg_m\right) + s\left(C_3R_3g_m - C_5\right)}{C_3C_5C_LL_5L_2g_ms^5 + s^4\left(C_3C_5C_LL_5R_3g_m + 2C_3C_5C_LL_L\right) + s^3\left(C_3C_5C_LR_3 + C_3C_5L_Lg_m + C_5C_LL_2g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5L_2g_m + C_3C_5C_LL_2g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5C_LL_2g_m\right) + s^2\left(2C_5C_5C_LL_2g_m$$

10.297 INVALID-ORDER-297 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_3C_5L_LR_3g_ms^4 + L_Lg_ms + s^3\left(-C_3C_5L_LR_3 + C_5L_5L_Lg_m\right) + s^2\left(C_3L_LR_3g_m - C_5L_L\right)}{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_3 + C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_LR_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_3R_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_3R_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_3R_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_3R_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_3R_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m + C_5L_Lg_m\right) + s\left(C_3R_3g_m + C_5C_LL_L\right) + s^2\left(C_3C_5R_3 + C_5L_Lg_m\right) + s^2\left($$

10.298 INVALID-ORDER-298 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_5R_3R_Lg_m - C_3C_5C_LL_LR_3 + C_5C_LL_5L_g_m\right) + s^3\left(-C_3C_5C_LR_3R_L + C_3C_5L_5R_3g_m + C_3C_LL_LR_3g_m + C_5C_LL_5R_Lg_m - C_5C_LL_L\right) + s^2\left(-C_3C_5R_3 + C_3C_LR_3R_Lg_m - C_5C_LR_L + C_5L_5g_m + C_4C_LR_3g_m + C_5C_LL_5R_Lg_m\right) + s^3\left(-C_3C_5C_LR_3R_L + C_3C_5C_LR_3R_L + C_3C_5C_LR_3R_L + C_3C_5C_LR_3R_L + C_3C_5C_LR_3R_L + C_3C_5C_LR_3R_Lg_m + C_5C_LL_5R_2g_m + C_5C_LL_5R_3g_m + C_5C_LL_5g_m + C_5C_LL_5R_3g_m + C_5C_LL_5R_3g_m$$

10.299 INVALID-ORDER-299 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_3C_5L_LR_3R_Lg_ms^4 + L_LR_Lg_ms + s^3\left(-C_3C_5L_LR_3R_L + C_5L_5L_LR_Lg_m\right) + s^2\left(C_3L_LR_3R_Lg_m - C_5L_LR_L\right)}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(C_3C_5L_LR_3R_L + C_3C_5L_LR_3g_m + C_5C_LL_LR_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m + C_5C_LL_LR_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m + C_5C_LL_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_m\right) + s^2\left(C_3C_5L_LR_3R_Lg_$$

10.300 INVALID-ORDER-300 
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(-C_3C_5C_LL_LR_3R_L + C_3C_5L_LR_3g_m + C_5C_LL_5L_LR_2g_m\right) + s^3\left(C_3C_5L_5R_3R_Lg_m - C_3C_5L_LR_3 + C_3C_LL_LR_3R_Lg_m - C_5C_LL_LR_L + C_5L_5L_Lg_m\right) + s^2\left(-C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LL_LR_3R_Lg_m + C_3C_5L_LR_3g_m + C_3C_5L_LR$$

10.301 INVALID-ORDER-301 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(-C_3C_5C_LL_LR_3R_L + C_5C_LL_5L_LR_2g_m\right) + s^3\left(C_3C_5L_5R_3R_Lg_m + C_3C_LL_LR_3R_Lg_m - C_5C_LL_LR_3\right) + s^2\left(C_3C_5C_LL_5L_LR_3g_m + C_3C_5C_LL_LR_3g_m + C_3C_5C_LL_Rg_m\right) + s^3\left(C_3C_5C_LL_5L_LR_3g_m + C_3C_5C_LL_LR_3g_m + C_3C_5C_LL_LR_3g_m$$

10.302 INVALID-ORDER-302 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{-C_3C_5L_5R_3R_Ls^3 - R_L + s^2\left(C_3L_5R_3R_Lg_m - C_5L_5R_L\right) + s\left(-C_3R_3R_L + L_5R_Lg_m\right)}{2R_Lg_m + s^3\left(2C_3C_5L_5R_3R_Lg_m + C_3C_5L_5R_3 + C_3C_5L_5R_L\right) + s^2\left(C_3L_5R_3g_m + C_3L_5R_Lg_m + 2C_5L_5R_Lg_m + C_5L_5\right) + s\left(2C_3R_3R_Lg_m + C_3R_3 + C_3R_L + L_5g_m\right) + 1}$$

10.303 INVALID-ORDER-303 
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_3C_5L_5R_3s^3 + s^2\left(C_3L_5R_3g_m - C_5L_5\right) + s\left(-C_3R_3 + L_5g_m\right) - 1}{C_3C_5C_LL_5R_3s^4 + 2g_m + s^3\left(2C_3C_5L_5R_3g_m + C_3C_LL_5R_3g_m + C_5C_LL_5\right) + s^2\left(C_3C_LR_3 + C_3L_5g_m + C_LL_5g_m\right) + s\left(2C_3R_3g_m + C_3 + C_LL_5g_m$$

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10.304 INVALID-ORDER-304 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{-C_3C_5L_5R_3R_Ls^3 - R_L + s^2\left(C_3L_5R_3R_Lg_m - C_5L_5R_L\right) + s\left(-C_3R_3R_L + L_5R_Lg_m\right)}{C_3C_5C_LL_5R_3R_Ls^4 + 2R_Lg_m + s^3\left(2C_3C_5L_5R_3R_Lg_m + C_3C_5L_5R_3 + C_3C_5L_5R_Lg_m + C_5C_LL_5R_L\right) + s^2\left(C_3C_LR_3R_L + C_3L_5R_3g_m + C_5L_5R_Lg_m + C_5L_5R_Lg_m + C_5L_5R_Lg_m + C_5L_5R_Lg_m + C_5L_5R_Lg_m + C_5R_Lg_m\right) + s\left(2C_3R_3R_Lg_m + C_3R_3R_Lg_m + C_3R_3R
10.305 INVALID-ORDER-305 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{L_{5s}}{C_5L_{5s}^2+1}, R_L + \frac{1}{C_{Ls}}\right)
H(s) = \frac{-C_3C_5C_LL_5R_3R_Ls^4 + s^3\left(-C_3C_5L_5R_3 + C_3C_LL_5R_3R_Lg_m - C_5C_LL_5R_L\right) + s^2\left(-C_3C_LR_3R_L + C_3L_5R_3g_m - C_5L_5 + C_LL_5R_Lg_m\right) + s\left(-C_3R_3 - C_LR_L + L_5g_m\right) - 1}{2g_m + s^4\left(2C_3C_5C_LL_5R_3R_Lg_m + C_3C_5C_LL_5R_3 + C_3C_5C_LL_5R_3g_m + C_3C_5C_LL_5R
10.306 INVALID-ORDER-306 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_5L_LR_3s^5 + s^4\left(C_3C_LL_5L_LR_3g_m - C_5C_LL_5L_L\right) + s^3\left(-C_3C_5L_5R_3 - C_3C_LL_LR_3 + C_LL_5L_Lg_m\right) + s^2\left(C_3L_5R_3g_m - C_5L_5 - C_LL_L\right) + s\left(-C_3R_3 + L_5g_m\right) - 1}{2g_m + s^5\left(2C_3C_5C_LL_5L_LR_3g_m + C_3C_5C_LL_5L_L\right) + s^4\left(C_3C_5C_LL_5R_3 + C_3C_LL_5L_Lg_m\right) + s^3\left(2C_3C_5L_5R_3g_m + C_3C_LL_5R_3g_m + C_3C_LL_5R_3g
10.307 INVALID-ORDER-307 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_5L_LR_3s^4 - L_Ls + s^3\left(C_3L_5L_LR_3g_m - C_5L_5L_L\right) + s^2\left(-C_3L_LR_3 + L_5L_Lg_m\right)}{C_3C_5C_LL_5L_LR_3s^5 + s^4\left(2C_3C_5L_5L_LR_3g_m + C_3C_5L_5L_LR_3g_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_5L_LR_3 + C_3L_LR_3 + C_5L_5L_Lg_m\right) + s^2\left(C_3L_5R_3g_m + C_3L_LR_3g_m + C_3L_LR
10.308 INVALID-ORDER-308 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_5L_LR_3s^5 + s^4\left(-C_3C_5C_LL_5R_3R_L + C_3C_LL_5L_LR_3g_m - C_5C_LL_5L_L\right) + s^3\left(-C_3C_5L_5R_3 + C_3C_LL_5R_3R_Lg_m - C_3C_LL_LR_3 - C_5C_LL_5R_L + C_LL_5L_Lg_m\right) + s^2\left(-C_3C_LR_3R_L + C_3C_LL_5R_3R_Lg_m - C_3C_LL_5R_2g_m - C_3C_LL_5R_3R_Lg_m - C_3C_LL_5R_2g_m - C_3C_LL_5R_
10.309 INVALID-ORDER-309 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -C_3C_5L_5L_LR_3R_Ls^4 - L_LR_Ls + s^3\left(C_3L_5L_LR_3R_Lg_m - C_5L_5L_LR_L\right) + s^2\left(-C_3L_LR_3R_L + L_5L_LR_Lg_m\right)
H(s) = \frac{-C_3C_5L_5L_LR_3R_Ls - L_LR_Ls + s \cdot (C_3L_5L_LR_3R_Lg_m - C_5L_5L_LR_L) + s \cdot (-C_3L_LR_3R_Lg_m - C_5L_5L_LR_L) + s \cdot (-C_3L_LR_3R_Lg_m - C_5L_5L_LR_Lg_m)}{C_3C_5C_LL_5L_LR_3R_Ls - L_LR_3R_Ls - L_LR_3R_Lg_m + C_3C_5L_5L_Rg_m + C_3C_5L_5L_Rg_m + C_5C_5L_LR_Lg_m + C_5C_5L
10.310 INVALID-ORDER-310 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                              \frac{-C_3C_5C_LL_5L_RR_3R_Ls^5 - R_L + s^4\left(-C_3C_5L_5L_LR_3R_Lg_m - C_5C_LL_5L_LR_3\right) + s^3\left(-C_3C_5L_5R_3R_L - C_3C_LL_RR_3R_L + C_3L_5L_RR_3g_m + c_3C_5L_5L_RR_3R_Lg_m - C_5C_LL_5L_RR_3R_Lg_m + c_3C_5L_5L_RR_3R_Lg_m + c_3C_5L_5L_RR_3R_Lg_m + c_3C_5L_5L_LR_3g_m + c_3C_5L_5L_RR_3g_m + c_3C_5L_5L_RR_3g_
10.311 INVALID-ORDER-311 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H(s) = \frac{C_3C_5C_LL_5L_LR_3R_Lg_m + C_3C_5L_5L_LR_3R_Lg_m + C_3C_5L_5L_LR_3R_Lg_m + C_3C_5L_5L_LR_3R_Lg_m + C_3C_5L_5L_LR_3g_m + C_3C_5L_5L_RR_3g_m + C_3C_5L_5R_3g_m + C_3C_5L_5L_RR_3g_m + C_3C_5L
10.312 INVALID-ORDER-312 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                         H(s) = \frac{C_3C_5L_5R_3R_Lg_ms^3 + R_Lg_m + s^2\left(C_3C_5R_3R_5R_Lg_m - C_3C_5R_3R_L + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C_5R_5R_Lg_m - C_5R_L\right)}{g_m + s^3\left(C_3C_5L_5R_3g_m + C_3C_5L_5R_Lg_m\right) + s^2\left(C_3C_5R_3R_5g_m + 2C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_Lg_m + C_5R_5g_m + 2C_5R_Lg_m + C_5R_5g_m +
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**10.313** INVALID-ORDER-313  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5L_5R_3g_ms^3 + g_m + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_5L_5g_m\right) + s\left(C_3R_3g_m + C_5R_5g_m - C_5\right)}{C_3C_5C_LL_5R_3g_ms^4 + s^3\left(C_3C_5C_LR_3R_5g_m + C_3C_5L_Lg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5R_5g_m + C_3C_5 + C_3C_LR_3g_m + C_5C_LR_5g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$ 

10.314 INVALID-ORDER-314  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_3C_5L_5R_3R_Lg_ms^3 + R_Lg_m + s^2\left(C_3C_5R_3R_5R_Lg_m - C_3C_5R_3R_L + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C_5R_5R_Lg_m - C_5R_L\right)}{C_3C_5C_LL_5R_3R_Lg_ms^4 + g_m + s^3\left(C_3C_5C_LR_3R_5R_Lg_m + C_3C_5L_5R_3g_m + C_3C_5L_5R_Lg_m\right) + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_5C_LR_5R_Lg_m + C_5C_LR_5R_Lg_m\right) + s^2\left(C_3C_5R_3R_5R_Lg_m + C_3C_5R_3R_Lg_m + C_3C$ 

10.315 INVALID-ORDER-315  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_5R_3R_Lg_ms^4 + g_m + s^3\left(C_3C_5C_LR_3R_5R_Lg_m - C_3C_5C_LR_3R_Lg_m + C_5C_LL_5R_Lg_m\right) + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_3C_LR_3R_Lg_m + C_5C_LR_5R_Lg_m - C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_3g_m + C_5R_5g_m - C_5C_LR_3R_Lg_m + C_5C_LR_5R_Lg_m + C_5C_LR_5g_m + C_5C_LR_5R_Lg_m + C_5C_LR_5R_$ 

**10.316** INVALID-ORDER-316  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_3R_5g_m - C_3C_5C_LL_LR_3 + C_5C_LL_Lg_m\right) + s^3\left(C_3C_5L_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_LR_3g_m + C_5C_LL_Lg_m\right) + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_5L_5g_m + C_4L_Lg_m\right) + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_5L_Lg_m\right) + s^2\left(C_3C_5R_3R_5g_m + C_3C_5L_Lg_m\right) + s^2\left(C_3C_5R_3g_m + C_3C_5R_5g_m + C_3C_5L_Lg_m\right) + s^2\left(C_3C_5R_3g_m + C_3C_5R_5g_m + C_3C_5R_5g_m\right) + s^2\left(C_3C_5R_3g_m + C_3C_5R_5g_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5R_5g_m\right) + s^2\left(C_3C_5R_5g_m\right) + s^2\left(C_3C_5R_5g_m\right) + s^2\left(C_$ 

10.317 INVALID-ORDER-317  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5L_LR_3g_ms^4 + L_Lg_ms + s^3\left(C_3C_5L_LR_3R_5g_m - C_3C_5L_LR_3 + C_5L_Lg_m\right) + s^2\left(C_3L_LR_3g_m + C_5L_LR_5g_m - C_5L_L\right)}{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_LR_3F_{5g_m} + C_3C_5L_LR_3 + C_5C_LL_LR_3g_m + C_5C_LL$ 

10.318 INVALID-ORDER-318  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_5L_LR_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_5R_3R_Lg_m + C_3C_5C_LL_LR_3R_5g_m - C_3C_5C_LL_LR_3 + C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5C_LR_3R_Lg_m - C_3C_5C_LR_3R_L + C_3C_5L_LR_3g_m + C_3C_LL_LR_3g_m + C_5C_LL_LR_5g_m - C_5C_LL_L\right) + s^2\left(C_3C_5C_LL_5L_2g_ms^5 + s^4\left(C_3C_5C_LL_5R_3g_m + C_3C_5C_LL_5R_2g_m + C_3C_5C_LL_LR_3g_m + C_3C_5C_LLR_3g_m + C_3C_5C_LL_LR_3g_m + C_3C_5C_LLR_3g_m + C_3C_5C_LL$ 

10.319 INVALID-ORDER-319  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $s) = \frac{C_3C_5L_5L_LR_3R_Lg_ms^4 + L_LR_Lg_ms + s^3\left(C_3C_5L_LR_3R_5R_Lg_m - C_3C_5L_LR_3R_Lg_m + s^4\left(C_3C_5L_LR_3R_5R_Lg_m + C_3C_5L_LR_3R_Lg_m + s^4\left(C_3C_5L_LR_3R_5R_Lg_m + C_3C_5L_LR_3R_Lg_m + s^4\left(C_3C_5L_LR_3R_Lg_m + s^4c_3C_5L_LR_3R_Lg_m + s^4c_3C_5L_L$ 

10.320 INVALID-ORDER-320  $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(C_3C_5C_LL_LR_3R_5R_Lg_m - C_3C_5C_LL_LR_3R_L + C_3C_5L_LR_3g_m + C_5C_LL_5L_LR_2g_m\right) + s^3\left(C_3C_5L_5R_3R_Lg_m + C_3C_5L_LR_3R_5g_m - C_3C_5L_LR_3 + C_3C_LL_RR_3R_Lg_m\right) + s^4\left(C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LL_L$ 

10.321 INVALID-ORDER-321  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_5L_RR_3R_Lg_ms^5 + R_Lg_m + s^4\left(C_3C_5C_LL_LR_3R_5R_Lg_m - C_3C_5C_LL_LR_3R_L + C_5C_LL_5L_LR_2g_m\right) + s^3\left(C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LLR_3R_Lg_m + C_3C_5C_LL_LR_3R_Lg_m + C_3C_5C_LL_LR_3R_Lg_m$ 

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\frac{-C_3C_5L_5R_3R_5s^3-R_5+s^2\left(C_3L_5R_3R_5g_m-C_3L_5R_3-C_5L_5R_5\right)+s\left(-C_3R_3R_5+L_5R_5g_m-L_5\right)}{C_3C_5C_LL_5R_3R_5s^4+2R_5g_m+s^3\left(2C_3C_5L_5R_3R_5g_m+C_3C_5L_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C_LL_5R_3+C_5C
10.324 INVALID-ORDER-324 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -C_3C_5L_5R_3R_5R_Ls^3 - R_5R_L + s^2\left(C_3L_5R_3R_5R_Lg_m - C_3L_5R_3R_L - C_5L_5R_5R_L\right) + s\left(-C_3R_3R_5R_L + L_5R_5R_Lg_m - L_5R_Lg_m - L_5R_Lg_m\right) + s\left(-C_3R_3R_5R_L + L_5R_5R_Lg_m - L_5R_Lg_m\right) + s\left(-C_3R_3R_5R_Lg_m - L_5R_Lg_m\right) + s\left(-C_3R_3R_5R_Lg_m\right) + s\left(-C_3R
H(s) = \frac{-C_3C_5L_5R_3R_5R_Ls^3 - R_5R_L + s^2\left(C_3L_5R_3R_5R_Lg_m - C_3L_5R_3R_L - C_5L_5R_5R_L\right) + s\left(-C_3R_3R_5R_L + L_5R_5R_Lg_m - L_5R_Lg_m - L_5R_Lg_m - L_5R_Lg_m - L_5R_Lg_m - L_5R_Lg_m - L_5R_Lg_m + R_5 + s^3\left(2C_3C_5L_5R_3R_5R_Lg_m + C_3C_5L_5R_3R_5R_Lg_m + C_3C_5L_5R_3R_5R_Lg_m + C_3L_5R_3R_5R_Lg_m + C_3L_5R_5R_Lg_m + C_3L_5R_3R_5R_Lg_m + C_3L_5R_5R_2g_m + C_3L_5R_3R_5R_Lg
10.325 INVALID-ORDER-325 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
                                                10.326 INVALID-ORDER-326 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_{Ls}}\right)
H(s) = \frac{-C_3C_5C_LL_5L_LR_3R_5s^5 - R_5 + s^4\left(C_3C_LL_5L_LR_3R_5g_m - C_3C_LL_5L_LR_3 - C_5C_LL_5L_LR_3\right) + s^3\left(-C_3C_5L_5R_3R_5 - C_3C_LL_LR_3R_5 + C_LL_5L_LR_5g_m - C_LL_5L_L\right)}{2R_5g_m + s^5\left(2C_3C_5C_LL_5L_LR_3R_5g_m + C_3C_5L_LL_5L_LR_5g_m + C_3C_LL_5L_LR_5g_m + C_3C_LL_5L_RR_5g_m + C_3C_LL_5
10.327 INVALID-ORDER-327 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -C_{3}C_{5}L_{5}L_{L}R_{3}R_{5}s^{4}-L_{L}R_{5}s+s^{3}\left(C_{3}L_{5}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{3}-C_{5}L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}-C_{5}L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}-C_{5}L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}-C_{5}L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}-C_{5}L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}-C_{5}L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{3}R_{5}+L_{5}L_{L}R_{5}g_{m}-L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}+L_{5}L_{L}R_{5}\right)+s^{2}\left(-C_{3}L_{L}R_{5}
H(s) = \frac{-C_3C_5L_LR_3R_5s^* - L_LR_5s + s^* \left( C_3L_5L_LR_3R_5g_m - C_3L_5L_LR_3 - C_5L_5L_LR_5 \right) + s^* \left( -C_3L_LR_3R_5g_m - L_5L_LR_5g_m - L_5L_LR_5 \right) + s^* \left( -C_3L_LR_3R_5g_m - L_5L_LR_5g_m - 
10.328 INVALID-ORDER-328 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H(s) = \frac{-C_3C_5C_LL_5L_LR_3R_5s^3 - R_5 + s^4\left(-C_3C_5C_LL_5R_3R_5R_L + C_3C_LL_5L_LR_3R_5g_m - C_3C_LL_5L_LR_3 - C_5C_LL_5L_LR_5\right) + s^3\left(-C_3C_5L_5R_3R_5R_L + C_3C_5C_LL_5L_LR_3g_m + S^3\left(2C_3C_5C_LL_5L_LR_3g_m + C_3C_5C_LL_5L_LR_3g_m + C_3C
10.329 INVALID-ORDER-329 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -C_3C_5L_5L_LR_3R_5R_Ls^4 - L_LR_5R_Ls +
H(s) = \frac{C_3C_5L_5L_1R_3R_5R_Ls^5 + R_5R_L + s^4\left(2C_3C_5L_5L_1R_3R_5R_Lg_m + C_3C_5L_5L_1R_3R_5R_Lg_m + C_3C_5L_5L_1R_3R_5R_Lg
10.330 INVALID-ORDER-330 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -C_3C_5C_LL_5L_LR_3R_5R_Ls^5 - R_5R_L + s^4(-C_3C_5L_5L_LR_3R_5 + C_3C_LL_5L_L
H(s) = \frac{1}{2R_5R_Lg_m + R_5 + s^5\left(2C_3C_5C_LL_5L_LR_3R_5R_Lg_m + C_3C_5L_LL_5L_LR_3R_5g_m + C_3C_5L_LL_5L_LR_3R_5g_m + C_3C_LL_5L_LR_3R_5g_m + C_3C_LL_5L_RR_3R_5g_m + C_3
10.331 INVALID-ORDER-331 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                \frac{2R_5R_Lg_m + R_5 + s^5 \left(2C_3C_5C_LL_5L_LR_3R_5R_Lg_m + C_3C_5C_LL_5L_LR_3R_5 + C_3C_5C_LL_5L_LR_3R_5R_L + C_3C_LL_5L_LR_3R_5g_m + 2C_3C_LL_5L_LR_3R_Lg_m + C_3C_LL_5L_LR_3R_Lg_m + C_3C_LL_5L_Rg_m + C_3C_LL_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              85
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 $H(s) = \frac{-C_3C_5L_5R_3R_5R_Ls^3 - R_5R_L + s^2\left(C_3L_5R_3R_5R_Lg_m - C_3L_5R_3R_L - C_5L_5R_5R_L\right) + s\left(-C_3R_3R_5R_L + L_5R_5R_Lg_m - L_5R_L\right)}{2R_5R_Lg_m + R_5 + s^3\left(2C_3C_5L_5R_3R_5R_Lg_m + C_3C_5L_5R_3R_5 + C_3C_5L_5R_3R_5g_m + 2C_3L_5R_3R_5g_m + 2C_3L_5R_3R_Lg_m + C_3L_5R_3R_Lg_m + C_3L_5R_Lg_m + C_3L_5R_L$ 

10.322 INVALID-ORDER-322  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$ 

10.323 INVALID-ORDER-323  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_1 s}\right)$ 

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10.332 INVALID-ORDER-332 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)
 H(s) = \frac{R_5 R_L g_m - R_L + s^3 \left(C_3 C_5 L_5 R_3 R_5 R_L g_m - C_3 C_5 L_5 R_3 R_L g_m + C_5 L_5 R_3 R_L g_m + C_5 L_5 R_5 R_L g_m - C_3 R_3 R_L + L_5 R_L g_m \right)}{R_5 g_m + 2 R_L g_m + s^3 \left(C_3 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_5 R_3 R_L g_m + C_3 C_5 L_5 R_L g_m + C_5 L_5 R_L g
 10.333 INVALID-ORDER-333 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)
 H(s) = \frac{R_5g_m + s^3\left(C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_3\right) + s^2\left(C_3L_5R_3g_m + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_3R_3R_5g_m - C_3R_3 + L_5g_m\right) - 1}{2g_m + s^4\left(C_3C_5C_LL_5R_3g_m + C_3C_5L_5R_3g_m + C_3C_5L_5
 10.334 INVALID-ORDER-334 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R_5R_Lg_m - R_L + s^3\left(C_3C_5L_5R_3R_5R_Lg_m - C_3C_5L_5R_3R_L\right) + s^2\left(C_3L_5R_3R_Lg_m + C_5L_5R_5R_Lg_m - C_5L_5R_L\right) + s\left(C_3R_3R_Lg_m - C_5L_5R_Lg_m - C_5L_5R_L\right) + s\left(C_3R_3R_Lg_m - C_5L_5R_Lg_m - C_5L_5R_L\right) + s\left(C_3R_3R_Lg_m - C_5L_5R_Lg_m - C_5L_5R_Lg_m - C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_Lg_m\right) + s\left(C_3R_2R_Lg_m - C_5R_Lg_m\right) + s\left(C_3R_2R_Lg_m\right) + s\left(C_3R_2R_Lg_m\right) + s\left(C_3R_2R_Lg_m\right) + s\left(C_3R_2R_Lg_m\right) + s\left(C_3R_2R_Lg_m\right) + s\left(C_3R_2R_Lg_m\right) + s\left(C_3R_2R_Lg_
                                                     \frac{R_{5}R_{L}g_{m}-R_{L}+s^{3}\left(C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}-C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}-C_{5}L_{5}R_{5}R_{L}g_{m}-C_{5}L_{5}R_{5}R_{L}g_{m}-C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C_{5}L_{5}R_{5}R_{L}g_{m}+C
10.335 INVALID-ORDER-335 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
                                                     \frac{R_5g_m + s^4 \left(C_3C_5C_LL_5R_3R_5R_Lg_m - C_3C_5C_LL_5R_3R_Lg_m - C_3C_5L_Lt_5R_3R_Lg_m - C_3C_5L_Lt_5R_3R_Lg_m - C_3C_LL_5R_3R_Lg_m - C_3C_LL_5R_Lg_m - C_3C_LL_
 10.336 INVALID-ORDER-336 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
 H(s) = \frac{R_5g_m + s^5 \left(C_3C_5C_LL_5L_LR_3R_5g_m - C_3C_5C_LL_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m - C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_5g_m - C_3C_5R_5g_m - C_3C_5L_5R_5g_m - C_3C_5R_5g_m - C
 10.337 INVALID-ORDER-337 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             s^{4}\left(C_{3}C_{5}L_{5}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{5}L_{L}R_{3}\right)+s^{3}\left(C_{3}L_{5}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}\right)+s^{2}\left(C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_{L}R_{5}g_{m}+C_{5}L_{5}L_
                                                       \frac{s \left( C_3 C_5 L_5 L_L R_3 R_5 g_m + C_3 C_5 L_5 L_L R_3 g_m + C
 10.338 INVALID-ORDER-338 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
 H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_5L_LR_3g_m - C_3C_5C_LL_5L_LR_3\right) + s^4 \left( C_3C_5C_LL_5R_3R_5R_Lg_m - C_3C_5C_LL_5R_3R_L+ C_3C_LL_5L_LR_3g_m + C_5C_LL_5L_LR_3g_m - C_5C_LL_5L_L\right) + s^3 \left( C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_5R_5g_m - C_3C_5L_5R_5g_m - C_3C
 10.339 INVALID-ORDER-339 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s^4 (C_3 C_5 L_5 L_L R_3 R_5 R_5)
 H(s) = \frac{1}{R_5 R_L g_m + R_L + s^5 \left( C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L L_L R_3 R_L g_m + C_3 C_5 L_5 L_L R_3 R_L g_m + C_5 C_L L_5 L_L R
 10.340 INVALID-ORDER-340 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
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 $R_5R_Lg_m - R_L + s^5 (C_3C_5C_LL_5L_LR_3R_5R_Lg$  $\frac{1}{R_5 g_m + 2 R_L g_m + s^5 \left( C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_5 C_L L_5 L_L R_3 R_$ 

 $H(s) = \frac{R_5 R_L g_m - R_L + s^5 \left(C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 g_m - C_3 C_5 L_5 L_L R_3 + C_3 C_L L_5 L_L R_3 R_L g_m - C_3 C_5 L_5 L_L R_3 R_5 g_m - C_3 C_5 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_5 C$ 

10.341 INVALID-ORDER-341  $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

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10.342 INVALID-ORDER-342 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
 H(s) = \frac{R_5 R_L g_m - R_L + s^3 \left(C_3 C_5 L_5 R_3 R_5 R_L g_m - C_3 C_5 L_5 R_3 R_L \right) + s^2 \left(-C_3 C_5 R_3 R_5 R_L + C_5 L_5 R_5 R_L g_m - C_5 L_5 R_L\right) + s \left(C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L - C_5 R_5 R_L\right)}{R_5 g_m + 2 R_L g_m + s^3 \left(C_3 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_5 R_3 R_L g_m + C_3 C_5 L_5 R_L g_m + 
 10.343 INVALID-ORDER-343 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
 H(s) = \frac{R_5g_m + s^3\left(C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_3\right) + s^2\left(-C_3C_5R_3R_5 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_3R_3R_5g_m - C_3R_3 - C_5R_5\right) - 1}{2g_m + s^4\left(C_3C_5C_LL_5R_3R_5g_m + C_3C_5L_5R_3g_m + C_3C_
 10.344 INVALID-ORDER-344 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R_{5}R_{L}g_{m}-R_{L}+s^{3}\left(C_{3}C_{5}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}L_{5}R_{3}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{5}L_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}-C
 H(s) = \frac{R_5 R_L g_m - R_L + s^3 \left(C_3 C_5 L_5 R_3 R_5 R_L g_m - C_3 C_5 L_5 R_3 R_L \right) + s^2 \left(-C_3 C_5 R_3 R_5 R_L + C_5 L_5 R_5 R_L g_m - C_5 R_5 R_L g_m - C_5 R_5 R_L g_m + C_5 C_4 L_5 R_3 R_5 R_L + C_5 C_4 L_5 R_3 R_5 R_L \right) + s^2 \left(-C_3 C_5 R_3 R_5 R_L + C_5 C_4 L_5 R_5 R_L + C_5
10.345 INVALID-ORDER-345 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                                          \frac{R_{5}g_{m}+s^{4}\left(C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{5}R_{3}R_{L}\right)+s^{3}\left(-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{3}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}-C_{5}C_{L}L_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{5}R_{3}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}-C_{5}C_{L}L_{5}R_{L}\right)+s^{2}\left(-C_{3}C_{5}R_{3}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{3}C_{5}L_{5}R_{5}R_{L}+C_{5}C_{L}L_{5}R_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_{L}+C_{5}C_{L}L_{5}R_
10.346 INVALID-ORDER-346 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
 H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_5L_LR_3R_5g_m - C_3C_5C_LL_5L_LR_3 \right) + s^4 \left( -C_3C_5C_LL_5L_LR_3g_m - C_5C_LL_5L_L \right) + s^3 \left( C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_3 + C_3C_LL_LR_3g_m + C_3C_5C_LL_LR_3g_m + C_3C_5C_L
 10.347 INVALID-ORDER-347 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 s^{4} \left(C_{3} C_{5} L_{5} L_{L} R_{3} R_{5} g_{m}-C_{3} C_{5} L_{L} R_{3}\right)+s^{3} \left(-C_{3} C_{5} L_{L} R_{3} R_{5}+C_{5} L_{5} L_{L} R_{5} g_{m}-C_{5} L_{5} L_{L}\right)+s^{2} \left(C_{3} L_{L} R_{5} R_{5}
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 $\frac{s^4 \left(C_3 C_5 L_5 L_L R_3 R_5 g_m - C_3 C_5 L_L R_3 R_5 g_m - C_3 C_5 L_L R_3 R_5 + C_5 L_L R_5 g_m - C_5 L_5 L_L R_5 g_m + C_5 C_5 L_5 L_5 L_L R_5 g_m + C_5 C_5 L_5 L_L R_5 g_m + C_5 C_5 L_5 L_L R_5 g_m + C_5 C_5 L_5 L_L R_5 g_m + C_5 C_$ 

10.348 INVALID-ORDER-348  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_5L_LR_3R_5g_m - C_3C_5C_LL_5R_3R_5R_Lg_m - C_3C_5C_LL_5R_3R_5R_Lg_m - C_3C_5C_LL_5R_3R_5 - C_5C_LL_5R_3R_5 - C_5C_LL_5R_3R_5 - C_5C_LL_5R_3R_5 - C_5C_LL_5R_3R_5 - C_5C_LL_5R_3R_5g_m - C_5C_LL_5R_3R_5g_m - C_5C_LL_5R_3R_5g_m + C_3C_5C_LL_5R_3R_5g_m + C_3C_5C_LL_5R_5g_m + C_3C_5$ 

10.349 INVALID-ORDER-349  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $\frac{s}{R_{5}R_{L}g_{m}+R_{L}+s^{5}\left(C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}L_{R}R_{3}R_{L}\right)+s^{4}\left(C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+$ 

10.350 INVALID-ORDER-350  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $R_5R_Lg_m - R_L + s^5\left(C_3C_5C_LL_5L_LR_3R_5R_Lg_m - C_3C_5C_LL_5L_LR_3R_L\right) + s^4\left(-\frac{1}{2}C_5C_LL_5L_LR_3R_L\right) + s^4\left(-\frac{1}{2}C_5C_LL_$  $H(s) = \frac{1}{R_5 g_m + 2 R_L g_m + s^5 \left( C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5$  10.351 INVALID-ORDER-351  $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $R_{5}$ 

 $H(s) = \frac{1}{R_5 g_m + 2 R_L g_m + s^5 \left( C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5 R_L g_m + C$ 

**10.352** INVALID-ORDER-352  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^2 \left( C_3 L_3 R_5 g_m - C_3 L_3 \right) - 1}{2 C_3 L_3 g_m s^2 + 2 g_m + s^3 \left( C_3 C_L L_3 R_5 g_m + C_3 C_L L_3 \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L \right)}$$

**10.353** INVALID-ORDER-353  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_{5}R_{L}g_{m} - R_{L} + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m} - C_{3}L_{3}R_{L}\right)}{R_{5}g_{m} + 2R_{L}g_{m} + s^{3}\left(C_{3}C_{L}L_{3}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{3}R_{L}\right) + s^{2}\left(C_{3}L_{3}R_{5}g_{m} + 2C_{3}L_{3}R_{L}g_{m} + C_{3}L_{3}\right) + s\left(C_{3}R_{5}R_{L}g_{m} + C_{3}R_{L} + C_{L}R_{5}R_{L}g_{m} + C_{L}R_{L}\right) + 1}$$

**10.354** INVALID-ORDER-354  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^3 \left( C_3 C_L L_3 R_5 R_L g_m - C_3 C_L L_3 R_L \right) + s^2 \left( C_3 L_3 R_5 g_m - C_3 L_3 \right) + s \left( C_L R_5 R_L g_m - C_L R_L \right) - 1}{2 g_m + s^3 \left( C_3 C_L L_3 R_5 g_m + 2 C_3 C_L L_3 R_L g_m + C_3 C_L L_3 \right) + s^2 \left( C_3 C_L R_5 R_L g_m + C_3 C_L R_L + 2 C_3 L_3 g_m \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + 2 C_L R_L g_m + C_L R_L \right)}$$

**10.355** INVALID-ORDER-355  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m - C_3 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 g_m - C_3 L_3 + C_L L_L R_5 g_m - C_L L_L \right) - 1}{2 C_3 C_L L_3 L_L g_m s^4 + 2 g_m + s^3 \left( C_3 C_L L_3 R_5 g_m + C_3 C_L L_3 + C_3 C_L L_L R_5 g_m + C_3 C_L L_L \right) + s^2 \left( 2 C_3 L_3 g_m + 2 C_L L_L g_m \right) + s \left( C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L L_L \right)}$$

10.356 INVALID-ORDER-356  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{s^3 \left( C_3 L_3 L_L R_5 g_m - C_3 L_3 L_L \right) + s \left( L_L R_5 g_m - L_L \right)}{2 C_3 L_3 L_L g_m s^3 + 2 L_L g_m s + R_5 g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m + C_3 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 g_m + C_3 L_3 + C_3 L_L R_5 g_m + C_3 L_L + C_L L_L R_5 g_m + C_L L_L \right) + 1}$$

10.357 INVALID-ORDER-357  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m - C_3 C_L L_3 L_L \right) + s^3 \left( C_3 C_L L_3 R_5 R_L g_m - C_3 C_L L_3 R_L \right) + s^2 \left( C_3 L_3 R_5 g_m - C_3 L_3 + C_L L_L R_5 g_m - C_L L_L \right) + s \left( C_L R_5 R_L g_m - C_L R_L \right) - 1}{2 C_3 C_L L_3 L_L g_m s^4 + 2 g_m + s^3 \left( C_3 C_L L_3 R_5 g_m + 2 C_3 C_L L_3 R_L g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_5 R_L g_m - C_3 L_L L_L R_5 g_m - C_L L_L \right) + s \left( C_3 R_5 g_m + 2 C_L L_L g_m \right) + s \left( C_3 R_5 g_m + C_3 C_L L_2 R_5 g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_5 R_L g_m - C_L L_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L g_m - C_L R_L \right) + s \left( C_4 R_5 R_L g_m - C_L R_L g_m - C_L R_L g_m - C_L R_L g_m \right) + s \left( C_4 R_5 R_L g_m - C_L R_L g_m - C_L R_L g_m - C_L R_L g_m \right) + s \left( C_4 R_5 R_L g_m - C_L R_L g_m \right) + s \left( C_4 R_5 R_L g_m - C_L R$$

10.358 INVALID-ORDER-358  $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{s^3 \left( C_3 L_3 L_L R_5 R_L g_m - C_3 L_3 L_L R_L \right) + s \left( L_L R_5 R_L g_m - L_L R_L \right)}{R_5 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m + C_3 C_L L_3 L_L R_L \right) + s^3 \left( C_3 L_3 L_L R_5 g_m + 2 C_3 L_3 L_L R_L g_m + C_3 L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m + C_3 L_2 R_5 R_L g_m + C_3 L_L R_5 R_L g_m + C_4 L$$

10.359 INVALID-ORDER-359  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m - C_3 C_L L_3 L_L R_L \right) + s^3 \left( C_3 L_3 L_L R_5 g_m - C_3 L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_3 R_L + C_L L_L R_5 R_L g_m - C_L L_L R_L \right) + s \left( L_L R_5 g_m - L_L \right)}{R_5 g_m + 2 R_L g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m + 2 C_3 L_L L_L R_5 R_L g_m + C_3 L_L L_L R_5 g_m + 2 C_3 L_3 L_L R_5 g_m + 2 C_3 L_3 L_L R_5 g_m + C_3 L_L$$

10.360 INVALID-ORDER-360  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m - C_3 C_L L_3 L_L R_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_3 R_L + C_L L_L R_5 R_L g_m - C_L L_L R_L \right)}{R_5 g_m + 2 R_L g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m + 2 C_3 C_L L_3 L_L R_5 g_m + C_3 C_L L_3 R_L + C_3 C_L L_L R_5 R_L g_m + C_3 C_L L_L R_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m + C_3 L_L L_R R_5 g_m + 2 C_3 L_3 R_L g_m + C_3 L_L R_L g_m + C_4 L_L R_5 g_m$ **10.361** INVALID-ORDER-361  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$  $H(s) = \frac{-C_3C_5L_3R_Ls^3 + C_3L_3R_Lg_ms^2 - C_5R_Ls + R_Lg_m}{q_m + s^3\left(2C_3C_5L_3R_Lq_m + C_3C_5L_3\right) + s^2\left(C_3C_5R_L + C_3L_3q_m\right) + s\left(C_3R_Lq_m + 2C_5R_Lq_m + C_5\right)}$ **10.362** INVALID-ORDER-362  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$  $H(s) = \frac{-C_3C_5L_3s^3 + C_3L_3g_ms^2 - C_5s + g_m}{C_3C_5C_LL_3s^4 + s^3\left(2C_3C_5L_3g_m + C_3C_LL_3g_m\right) + s^2\left(C_3C_5 + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$ **10.363** INVALID-ORDER-363  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{-C_3C_5L_3R_Ls^3 + C_3L_3R_Lg_ms^2 - C_5R_Ls + R_Lg_m}{C_3C_5C_LL_3R_Ls^4 + g_m + s^3\left(2C_3C_5L_3R_Lg_m + C_3C_5L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_3C_5R_L + C_3L_3g_m + C_5C_LR_L\right) + s\left(C_3R_Lg_m + 2C_5R_Lg_m + C_5 + C_LR_Lg_m\right)}$ **10.364** INVALID-ORDER-364  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{-C_3C_5C_LL_3R_Ls^4 + g_m + s^3\left(-C_3C_5L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_3L_3g_m - C_5C_LR_L\right) + s\left(-C_5 + C_LR_Lg_m\right)}{s^4\left(2C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_3\right) + s^3\left(C_3C_5C_LR_L + 2C_3C_5L_3g_m + C_3C_LL_3g_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + 2C_5C_LR_Lg_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$ **10.365** INVALID-ORDER-365  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{-C_3C_5C_LL_3L_Ls^5 + C_3C_LL_3L_Lg_ms^4 - C_5s + g_m + s^3\left(-C_3C_5L_3 - C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_LL_Lg_m\right)}{2C_3C_5C_LL_3L_Lg_ms^5 + s^4\left(C_3C_5C_LL_3 + C_3C_5C_LL_L\right) + s^3\left(2C_3C_5L_3g_m + C_3C_LL_3g_m + C_3C_LL_Lg_m\right) + s^2\left(C_3C_5 + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}$ **10.366** INVALID-ORDER-366  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{-C_3C_5L_3L_Ls^4 + C_3L_3L_Lg_ms^3 - C_5L_Ls^2 + L_Lg_ms}{C_3C_5C_LL_3L_Ls^5 + C_5s + g_m + s^4\left(2C_3C_5L_3L_Lg_m + C_3C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3 + C_3C_5L_L + C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_Lg_m + 2C_5L_Lg_m + C_LL_Lg_m\right)}$ 10.367 INVALID-ORDER-367  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{-C_3C_5C_LL_3L_Ls^5 + g_m + s^4\left(-C_3C_5C_LL_3R_L + C_3C_LL_3L_Lg_m\right) + s^3\left(-C_3C_5L_3 + C_3C_LL_3R_Lg_m - C_5C_LL_L\right) + s^2\left(C_3L_3g_m - C_5C_LR_L + C_LL_Lg_m\right) + s\left(-C_5 + C_LR_Lg_m\right)}{2C_3C_5C_LL_3L_Lg_ms^5 + s^4\left(2C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_3 + C_3C_5C_LL_1\right) + s^3\left(C_3C_5C_LL_3g_m + C_3C_LL_2g_m + C_5C_LL_Lg_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_5C_LL_3R_Lg_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m\right) + s^2\left(C_5C_LL_3R_Lg_m\right) + s^2\left(C_5C_LL_3R_Lg_m\right) + s^2\left(C_5C_LL_3R_Lg_m\right) + s^2\left($ 10.368 INVALID-ORDER-368  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{-C_3C_5L_3L_LR_Ls^4 + C_3L_3L_LR_Lg_ms^3 - C_5L_LR_Ls^2 + L_LR_Lg_ms}{C_3C_5C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(2C_3C_5L_3L_LR_Lg_m + C_3C_5L_3L_LR_Lg_m\right) + s^3\left(C_3C_5L_3R_L + C_3C_5L_LR_L + C_3L_3L_Lg_m + C_5C_LL_LR_L\right) + s^2\left(C_3L_3R_Lg_m + C_3L_LR_Lg_m + C_5L_LR_Lg_m\right) + s\left(C_5R_L + L_Lg_m\right) + s\left(C_5R_L + L_L$ 10.369 INVALID-ORDER-369  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$  $-C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}s^{5}+R_{L}g_{m}+s^{4}\left(-C_{3}C_{5}L_{3}L_{L}+C_{3}C_{L}L_{3}L_{L}R_{L}g_{m}\right)+s^{3}\left(-C_{3}C_{5}L_{3}R_{L}+C_{3}L_{3}L_{L}g_{m}-C_{5}C_{L}L_{L}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{L}g_{m}-C_{5}L_{L}+C_{L}L_{L}R_{L}g_{m}\right)+s\left(-C_{5}R_{L}+L_{L}g_{m}\right)\\ g_{m}+s^{5}\left(2C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}g_{m}+C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}+C_{3}C_{L}L_{L}R_{L}g_{m}+C_{3}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}\right)+s^{2}\left(C_{3}C_{5}R_{L}+C_{3}L_{2}g_{m}+C_{3}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}\right)+s^{2}\left(C_{3}C_{5}R_{L}+C_{3}L_{2}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}\right)+s^{2}\left(C_{3}C_{5}R_{L}+C_{3}L_{2}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}\right)+s^{2}\left(C_{3}C_{5}R_{L}+C_{3}L_{2}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}\right)+s^{2}\left(C_{3}C_{5}R_{L}+C_{3}L_{2}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{L}R_{L}g_{m}+C_{5}C$ 

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H(s) = \frac{-C_3C_5C_LL_3L_LR_Ls^5 + C_3C_LL_3L_LR_Lg_ms^4 - C_5R_Ls + R_Lg_m + s^3\left(-C_3C_5L_3R_L - C_5C_LL_LR_L\right) + s^2\left(C_3L_3R_Lg_m + C_LL_LR_Lg_m\right)}{g_m + s^5\left(2C_3C_5C_LL_3L_Lg_m + C_3C_5C_LL_3L_L\right) + s^4\left(C_3C_5C_LL_3R_L + C_3C_5C_LL_3R_Lg_m + C_3C_5L_3R_Lg_m + C_3C_5L_3R_Lg_m + C_3C_5L_LR_Lg_m + C_3C_5L_LR_Lg_m + C_3C_5L_LR_Lg_m + C_3C_5C_LL_Rg_m + C_3C_5C_LL_Rg_
10.371 INVALID-ORDER-371 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)
                                                                                                                                                                                                                                                  H(s) = \frac{-C_3C_5L_3R_5R_Ls^3 - C_5R_5R_Ls + R_5R_Lg_m - R_L + s^2\left(C_3L_3R_5R_Lg_m - C_3L_3R_L\right)}{R_5g_m + 2R_Lg_m + s^3\left(2C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5\right) + s^2\left(C_3C_5R_5R_L + C_3L_3R_5g_m + 2C_3L_3R_Lg_m + C_3L_3\right) + s\left(C_3R_5R_Lg_m + C_3R_L + 2C_5R_5R_Lg_m + C_5R_5\right) + 1}
10.372 INVALID-ORDER-372 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                         H(s) = \frac{-C_3C_5L_3R_5s^3 - C_5R_5s + R_5g_m + s^2\left(C_3L_3R_5g_m - C_3L_3\right) - 1}{C_3C_5C_LL_3R_5s^4 + 2g_m + s^3\left(2C_3C_5L_3R_5g_m + C_3C_LL_3R_5g_m + C_3C_LL_3\right) + s^2\left(C_3C_5R_5 + 2C_3L_3g_m + C_5C_LR_5\right) + s\left(C_3R_5g_m + C_3 + 2C_5R_5g_m + C_LR_5g_m + C_LR_5g_m + C_LR_5g_m\right)}
10.373 INVALID-ORDER-373 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{-C_3C_5L_3R_5R_Ls^3 - C_5R_5R_Ls + R_5R_Lg_m - R_L + s^2\left(C_3L_3R_5R_Lg_m - C_3L_3R_L\right)}{C_3C_5C_LL_3R_5R_Ls^4 + R_5g_m + 2R_Lg_m + s^3\left(2C_3C_5L_3R_5R_Lg_m + C_3C_LL_3R_5R_Lg_m + C_3C_LL_3R_L\right) + s^2\left(C_3C_5R_5R_L + C_3L_3R_5g_m + 2C_3L_3R_Lg_m + C_3R_L + s^2C_LR_5R_L\right) + s\left(C_3R_5R_Lg_m + C_3R_L + s^2C_LR_5R_Lg_m + C_3R_L\right) + s\left(C_3R_5R_Lg_m + C_3R_L + s^2C_LR_5R_Lg_m + C_3R_L\right) + s\left(C_3R_5R_Lg_m + C_3R_L + s^2C_LR_5R_Lg_m + C_3R_L\right) + s\left(C_3R_5R_Lg_m + C_3R_L\right) + s\left(C_3R_Lg_m + C_3R_L\right) + s\left(C_3R_Lg_m + C_3R_Lg_m + C_3
10.374 INVALID-ORDER-374 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_3R_5R_Ls^4 + R_5g_m + s^3\left(-C_3C_5L_3R_5 + C_3C_LL_3R_5R_Lg_m - C_3L_L3R_L\right) + s^2\left(C_3L_3R_5g_m - C_3L_3 - C_5C_LR_5R_L\right) + s\left(-C_5R_5 + C_LR_5R_Lg_m - C_LR_L\right) - 1}{2g_m + s^4\left(2C_3C_5C_LL_3R_5R_Lg_m + C_3C_5L_3R_5g_m + C_3C_LL_3R_5g_m + C_3C_LR_5g_m + C
10.375 INVALID-ORDER-375 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
                                             -C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5}-C_{5}R_{5}s+R_{5}g_{m}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}-C_{3}C_{L}L_{3}L_{L}\right)+s^{3}\left(-C_{3}C_{5}L_{3}R_{5}-C_{5}C_{L}L_{L}R_{5}\right)+s^{2}\left(C_{3}L_{3}R_{5}g_{m}-C_{3}L_{3}+C_{L}L_{L}R_{5}g_{m}-C_{L}L_{L}\right)-1\\ -2C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}g_{m}+s^{4}\left(C_{3}C_{5}L_{L}R_{5}+2C_{3}C_{L}L_{L}R_{5}+2C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{L}R
10.376 INVALID-ORDER-376 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_LR_5s^4 - C_5L_LR_5s^2 + s^3\left(C_3L_3L_LR_5g_m - C_3L_3L_L\right) + s\left(L_LR_5g_m - L_L\right)}{C_3C_5C_LL_3L_LR_5s^5 + R_5g_m + s^4\left(2C_3C_5L_3L_LR_5g_m + C_3C_LL_3L_L\right) + s^3\left(C_3C_5L_3L_LR_5 + 2C_3L_3L_LR_5g_m + C_5L_LR_5\right) + s^2\left(C_3L_3R_5g_m + C_3L_LR_5g_m + C_3L_LR_5g_m + C_4L_LR_5g_m + C_4L_L\right) + s\left(C_5R_5 + 2L_Lg_m\right) + s\left
10.377 INVALID-ORDER-377 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                             -C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + R_{5}g_{m} + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{5}R_{L} + C_{3}C_{L}L_{3}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{3}R_{5} + C_{3}C_{L}L_{3}R_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}R_{5} + C_{3}C_{L}L_{3}R_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}R_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}R_{5}g_{m} + C_{3}C_{L
10.378 INVALID-ORDER-378 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -C_3C_5L_3L_LR_5R_Ls^4 - C_5L_LR_5R_Ls^2 + s^3\left(C_3L_3L_LR_5R_Lg_m - C_3L_3L_LR_L\right) + s\left(L_LR_5R_Lg_m - L_LR_L\right)
H(s) = \frac{C_3C_5C_LL_3L_LR_5R_Ls^5 + R_5R_Lg_m + C_3C_5L_3L_LR_5R_Lg_m + C_3C
10.379 INVALID-ORDER-379 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_R R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                              -C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}s^{5} + R_{5}R_{L}g_{m} - R_{L} + s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{5} + C_{3}C_{L}L_{3}L_{L}R_{5} + C_{3}C_{L}L_{3}L_{L}R_{5}\right) + s^{3}\left(-C_{3}C_{5}L_{3}R_{L}R_{5} + C_{3}L_{L}R_{5}R_{L} + C_{3
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10.370 INVALID-ORDER-370  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

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10.380 INVALID-ORDER-380 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       H(s) = \frac{-C_3C_5C_LL_3L_LR_5R_Ls^5 - C_5R_5R_Ls + R_5R_Lg_m - R_L + s^4\left(C_3C_LL_3L_LR_5R_Lg_m - C_3C_LL_3L_LR_L\right) + s^3\left(-C_3C_2L_3L_LR_5R_Lg_m + C_3C_5C_LL_3L_Rs_Rg_m + C
10.381 INVALID-ORDER-381 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                                                                                                      H(s) = \frac{C_3L_3R_Lg_ms^2 + R_Lg_m + s^3\left(C_3C_5L_3R_5R_Lg_m - C_3C_5L_3R_L\right) + s\left(C_5R_5R_Lg_m - C_5R_L\right)}{g_m + s^3\left(C_3C_5L_3R_5g_m + 2C_3C_5L_3R_Lg_m + C_3C_5L_3\right) + s^2\left(C_3C_5R_5R_Lg_m + C_3C_5R_L + C_3L_3g_m\right) + s\left(C_3R_Lg_m + C_5R_5g_m + 2C_5R_Lg_m + C_5\right)}
10.382 INVALID-ORDER-382 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                     H(s) = \frac{C_3L_3g_ms^2 + g_m + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_3\right) + s\left(C_5R_5g_m - C_5\right)}{s^4\left(C_3C_5C_LL_3R_5g_m + C_3C_5L_L\right) + s^3\left(2C_3C_5L_3g_m + C_3C_LL_3g_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5 + C_5C_LR_5g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}
10.383 INVALID-ORDER-383 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                   H(s) = \frac{C_3L_3R_Lg_ms^2 + R_Lg_m + s^3\left(C_3C_5L_3R_5R_Lg_m - C_3C_5L_3R_L\right) + s\left(C_5R_5R_Lg_m - C_5R_L\right)}{g_m + s^4\left(C_3C_5C_LL_3R_5R_Lg_m + C_3C_5L_3R_5g_m + 2C_3C_5L_3R_Lg_m + C_3C_5L_3R_Lg_m\right) + s^2\left(C_3C_5R_5R_Lg_m + C_3C_5R_Lg_m + C_5C_LR_L\right) + s\left(C_3R_Lg_m + C_5R_Lg_m + C_5R_Lg_m + C_5R_Lg_m\right)}
10.384 INVALID-ORDER-384 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                                           H(s) = \frac{g_m + s^4 \left( C_3 C_5 C_L L_3 R_5 R_L g_m - C_3 C_5 C_L L_3 R_L \right) + s^3 \left( C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 g_m + C_5 C_L R_5 R_L g_m - C_5 C_L R_L \right) + s \left( C_5 R_5 g_m - C_5 + C_L R_L g_m \right)}{s^4 \left( C_3 C_5 C_L L_3 R_L g_m + C_3 C_5 C_L L_3 R_L g_m + C_3 C_5 C_L R_L g_m + C_3 C_5 C_L R_L g_m + C_5 C_L R_5 g_m + C_5 C_L
10.385 INVALID-ORDER-385 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                        H(s) = \frac{C_3C_LL_3L_Lg_ms^4 + g_m + s^5\left(C_3C_5C_LL_3L_LR_5g_m - C_3C_5C_LL_3L_L\right) + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_LR_5g_m - C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_LL_Lg_m\right) + s\left(C_5R_5g_m - C_5\right)}{2C_3C_5C_LL_3L_Lg_ms^5 + s^4\left(C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_3 + C_3C_5C_LL_L\right) + s^3\left(2C_3C_5L_3g_m + C_3C_LL_3g_m + C_3C_LL_Lg_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_L\right) + s^3\left(C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_Lg_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_L\right) + s^3\left(C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_L\right) + s^3\left(
10.386 INVALID-ORDER-386 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
              H(s) = \frac{C_3L_3L_Lg_ms^3 + L_Lg_ms + s^4\left(C_3C_5L_3L_LR_5g_m - C_3C_5L_3L_L\right) + s^2\left(C_5L_LR_5g_m - C_5L_L\right)}{g_m + s^5\left(C_3C_5L_LL_3L_LR_5g_m + C_3C_5L_LL_3L_L\right) + s^4\left(2C_3C_5L_3L_Lg_m + C_3C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3R_5g_m + C_3C_5L_LR_5g_m + C_3C_5L_LR_5g_m + C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_Lg_m + C_4L_Lg_m\right) + s\left(C_5R_5g_m + C_5C_LL_LR_5g_m + C_5C_LL_L\right) + s^2\left(C_5L_LR_5g_m + C_5C_LL_L\right) + s^2\left(C
10.387 INVALID-ORDER-387 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{2s}}, \infty, R_5 + \frac{1}{C_{5s}}, L_L s + R_L + \frac{1}{C_{Ls}}\right)
                                      \frac{g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_5 g_m - C_3 C_5 C_L L_3 L_L\right) + s^4 \left(C_3 C_5 C_L L_3 R_5 R_L g_m - C_3 C_5 C_L L_3 R_L g_m\right) + s^3 \left(C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_L R_5 g_m - C_5 C_L L_L\right) + s^2 \left(C_3 L_3 g_m + C_5 C_L R_5 R_L g_m - C_5 C_L R_L + C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m + C_5 C_L L_2 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_2 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 C_L L_3 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_2 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_3 C_5 R_5 g_m + C_5 C_L L_3 R_5 g_m\right) + s^2 \left(C_5 C_L L_3 R_5 g_m\right) + s^2 \left(
10.388 INVALID-ORDER-388 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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 $H(s) = \frac{R_L g_m + s^5 \left( C_3 C_5 C_L L_3 L_L R_5 g_m - C_3 C_5 C_L L_3 L_L R_5 g_m - C_3 C_5 L_4 R_5 R_L g_m - C_5 L_4 R_5 R_L g_m$ 

 $H(s) = \frac{C_3L_3L_LR_Lg_ms^3 + L_LR_Lg_ms + s^4\left(C_3C_5L_3L_LR_5R_Lg_m - C_3C_5L_3L_LR_L\right) + s^2\left(C_5L_LR_5R_Lg_m - C_5L_LR_L\right)}{R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_5R_Lg_m + C_3C_5L_3L_LR_5g_m + C_3C_5L_3L_Rg_m + C_3C_5L_3L_R$ 

10.389 INVALID-ORDER-389  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.390 INVALID-ORDER-390 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C_{3}C_{L}L_{3}L_{L}R_{L}g_{m}s^{4} + R_{L}g_{m} + s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}\right) + s^{3}\left(C_{3}C_{5}L_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}L_{3}R_{L} + C_{5}C_{L}L_{L}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{L}g_{m} - C_{5}C_{L}L_{5}R_{L}g_{m} - 
H(s) = \frac{C_3C_LL_3L_LR_2g_ms^4 + R_Lg_m + s^3\left(C_3C_5C_LL_3L_LR_5R_Lg_m - C_3C_5C_LL_3L_LR_L\right) + s^3\left(C_3C_5L_3R_5R_Lg_m - C_3C_5L_3R_5R_Lg_m - C_3C_5L_LR_5R_Lg_m - C_3C_5L_LR_5R_Lg_m - C_3C_5L_LR_5R_Lg_m - C_3C_5L_LR_5R_Lg_m - C_3C_5L_LR_5R_Lg_m - C_3C_5L_LR_5R_Lg_m + C_3C_5C_LL_3L_LR_5R_Lg_m + C_3C_5C_LL_3R_5R_Lg_m 
10.391 INVALID-ORDER-391 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                                                                                                                                 H(s) = \frac{C_3C_5L_3L_5R_Lg_ms^4 - C_3C_5L_3R_Ls^3 - C_5R_Ls + R_Lg_m + s^2\left(C_3L_3R_Lg_m + C_5L_5R_Lg_m\right)}{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(2C_3C_5L_3R_Lg_m + C_3C_5L_3 + C_3C_5L_5R_Lg_m\right) + s^2\left(C_3C_5R_L + C_3L_3g_m + C_5L_5g_m\right) + s\left(C_3R_Lg_m + 2C_5R_Lg_m + C_5C_5R_Lg_m\right)}
10.392 INVALID-ORDER-392 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                   H(s) = \frac{C_3C_5L_3L_5g_ms^4 - C_3C_5L_3s^3 - C_5s + g_m + s^2\left(C_3L_3g_m + C_5L_5g_m\right)}{C_3C_5C_LL_3L_5g_ms^5 + C_3C_5C_LL_3s^4 + s^3\left(2C_3C_5L_3g_m + C_3C_5L_5g_m + C_3C_LL_3g_m + C_5C_LL_5g_m\right) + s^2\left(C_3C_5 + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}
10.393 INVALID-ORDER-393 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                    H(s) = \frac{C_3C_5L_3L_5R_Lg_ms^4 - C_3C_5L_3R_Ls^3 - C_5R_Ls + R_Lg_m + s^2\left(C_3L_3R_Lg_m + C_5L_5R_Lg_m\right)}{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_L + C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_5L_3R_Lg_m + C_3C_5L_3R_Lg_m + C_3C_LL_3R_Lg_m + C_5C_LL_5R_Lg_m\right) + s^2\left(C_3C_5R_L + C_3L_3g_m + C_5C_LR_L + C_5L_5g_m\right) + s\left(C_3R_Lg_m + C_5C_LR_Lg_m\right) + s^2\left(C_3C_5R_L + C_3C_5R_Lg_m + C_5C_LR_L + C_5C_Lg_m\right) + s^2\left(C_3C_5R_L + C_3C_5R_L + C_5C_LR_L + C_5C_Lg_m\right) + s^2\left(C_3C_5R_L + C_3C_5R_L + C_5C_LR_L + C_5C_Lg_m\right) + s^2\left(C_3C_5R_L + C_3C_5R_Lg_m + C_5C_LR_L + C_5C_Lg_m\right) + s^2\left(C_3C_5R_L + C_3C_5R_L + C_5C_LR_L + C_5C_Lg_m\right) + s^2\left(C_3C_5R_L + C_5C_LR_L + C_5C_
10.394 INVALID-ORDER-394 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                                           H(s) = \frac{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(-C_3C_5C_LL_3R_L + C_3C_5L_3L_5g_m\right) + s^3\left(-C_3C_5L_3 + C_3C_LL_3R_Lg_m + C_5C_LL_5R_Lg_m\right) + s^2\left(C_3L_3g_m - C_5C_LR_L + C_5L_5g_m\right) + s\left(-C_5 + C_LR_Lg_m\right)}{C_3C_5C_LL_3L_5g_ms^5 + s^4\left(2C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_3 + C_3C_5C_LL_3R_Lg_m + C_3C_5L_3g_m + C_3C_5L_3g_m + C_3C_5L_3g_m + C_3C_LL_3g_m + C_5C_LL_5g_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_LR_Lg_m\right) + s^2\left(C_3C_5 + C_3C_LR_Lg_m + C_5C_LR_Lg_m + C_5C_
10.395 INVALID-ORDER-395 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                        H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 - C_3C_5C_LL_3L_Ls^5 - C_5s + g_m + s^4\left(C_3C_5L_3L_5g_m + C_3C_LL_3L_Lg_m + C_5C_LL_5L_Lg_m\right) + s^3\left(-C_3C_5L_3 - C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_5L_5g_m + C_LL_Lg_m\right)}{s^5\left(C_3C_5C_LL_3L_5g_m + 2C_3C_5C_LL_3L_Lg_m + C_3C_5C_LL_3L_Lg_m + s^4\left(C_3C_5C_LL_3 + C_3C_5C_LL_L\right) + s^3\left(2C_3C_5L_3g_m + C_3C_LL_3g_m + C_3C_LL_2g_m + C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3L_2g_m + C_3C_5C_LL_3L_2g_m + C_3C_5C_LL_3L_3g_m + C
10.396 INVALID-ORDER-396 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                        H(s) = \frac{C_3C_5L_3L_5L_Lg_ms^5 - C_3C_5L_3L_Ls^4 - C_5L_Ls^2 + L_Lg_ms + s^3\left(C_3L_3L_Lg_m + C_5L_5L_Lg_m\right)}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_Ls^5 + C_5s + g_m + s^4\left(C_3C_5L_3L_5g_m + 2C_3C_5L_3L_Lg_m + C_3C_LL_3L_Lg_m + C_5C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_3L_5L_Lg_m + C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_Lg_m + C_5L_5g_m + 2C_5L_Lg_m\right)}
10.397 INVALID-ORDER-397 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                           \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_5R_Lg_m - C_3C_5C_LL_3L_L\right) + s^4\left(-C_3C_5C_LL_3R_L + C_3C_5L_3L_5g_m + C_3C_LL_5L_Lg_m\right) + s^3\left(-C_3C_5L_3 + C_3C_LL_3R_Lg_m + C_5C_LL_5R_Lg_m - C_5C_LL_L\right) + s^2\left(C_3L_3g_m - C_5C_LL_L\right) + s^2\left(C_3L_3g_m + C_3C_5L_LL_3L_2g_m + C_3C_5L_LL_3R_Lg_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3L_3g_m + C_3C_5L_LL_3R_Lg_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3L_3g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3L_3g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3L_3g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3L_3g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5L_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_2g_m\right) + s^2\left(C_3C_5C_LL_3R_Lg_m + C_3C_LL_2g_m\right) + s^2\left(C_3C
10.398 INVALID-ORDER-398 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{C_3C_5L_3L_5L_LR_Lg_ms^5 - C_3C_5L_3L_LR_Ls^4 - C_5L_LR_Ls^2 + L_LR_Lg_ms + s^3\left(C_3L_3L_LR_Lg_m + C_5L_5L_LR_Lg_m\right)}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_L + C_3C_5L_3L_LR_Lg_m + C_3C_5L_3L_Lg_m + C_3C_5L_3L_Lg_m + C_3C_5L_3L_Lg_m + C_3C_5L_3L_Lg_m + C_3C_5L_3L_Lg_m + C_3C_5L_3L_Lg_m + C
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 $\frac{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}g_{m}s^{6} + R_{L}g_{m} + s^{5}\left(-C_{3}C_{5}C_{L}L_{3}L_{L}R_{L} + C_{3}C_{5}L_{3}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{3}L_{L}R_{L}g_{m} + C_{5}C_{L}L_{3}L_{L}R_{L}g_{m} + C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}\right) + s^{3}\left(-C_{3}C_{5}L_{3}R_{L} + C_{3}L_{3}L_{L}g_{m} - C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m} + C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m} + C_{3}C_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{L}L_{L}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_$ 

10.399 INVALID-ORDER-399  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.400 INVALID-ORDER-400 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H(s) = \frac{C_3C_5C_LL_3L_5L_Lt_{Lgm}s - C_3C_5C_LL_3L_5L_Lt_{Lgm}s - C_3C_5C_LL_3L_5L_1t_{Lgm}s - C_3C_5C_LL_3L_1t_{Lgm}s - C_3C_5
10.401 INVALID-ORDER-401 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)
                                                                                                                                                                         H(s) = \frac{-C_3C_5L_3L_5R_Ls^4 + C_3L_3L_5R_Lg_ms^3 + L_5R_Lg_ms - R_L + s^2\left(-C_3L_3R_L - C_5L_5R_L\right)}{2R_Lg_m + s^4\left(2C_3C_5L_3L_5R_Lg_m + C_3C_5L_3L_5\right) + s^3\left(C_3C_5L_5R_L + C_3L_3L_5g_m\right) + s^2\left(2C_3L_3R_Lg_m + C_3L_3 + C_3L_5R_Lg_m + 2C_5L_5R_Lg_m + C_5L_5\right) + s\left(C_3R_L + L_5g_m\right) + 1}
10.402 INVALID-ORDER-402 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)
                                                                                                                                                                                H(s) = \frac{-C_3C_5L_3L_5s^4 + C_3L_3L_5g_ms^3 + L_5g_ms + s^2\left(-C_3L_3 - C_5L_5\right) - 1}{C_3C_5C_LL_3L_5s^5 + 2g_m + s^4\left(2C_3C_5L_3L_5g_m + C_3C_LL_3L_5g_m\right) + s^3\left(C_3C_5L_5 + C_3C_LL_3 + C_5C_LL_5\right) + s^2\left(2C_3L_3g_m + C_3L_5g_m + 2C_5L_5g_m + C_LL_5g_m\right) + s\left(C_3 + C_L\right)}
10.403 INVALID-ORDER-403 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{-C_3C_5L_3L_5R_Ls^4 + C_3L_3L_5R_Lg_ms^3 + L_5R_Lg_ms - R_L + s^2\left(-C_3L_3R_L - C_5L_5R_L\right)}{C_3C_5C_LL_3L_5R_Ls^5 + 2R_Lg_m + s^4\left(2C_3C_5L_3L_5R_Lg_m + C_3C_5L_3L_5R_Lg_m\right) + s^3\left(C_3C_5L_5R_L + C_3C_LL_3R_L + C_3L_3L_5R_Lg_m + C_5C_LL_5R_L\right) + s^2\left(2C_3L_3R_Lg_m + C_3L_5R_Lg_m + C_5L_5R_Lg_m + C_5L_5R_Lg_m\right) + s\left(C_3R_L + C_LR_L + L_5g_m\right) + s\left(C_3R_L + C_LR_L + C_LR_L + L_5g_m\right) + s\left(C_3R_L + C_LR_L 
10.404 INVALID-ORDER-404 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_3L_5R_Ls^5 + s^4\left(-C_3C_5L_3L_5R_Lg_m\right) + s^3\left(-C_3C_LL_3R_L + C_3L_3L_5g_m - C_5C_LL_5R_L\right) + s^2\left(-C_3L_3 - C_5L_5 + C_LL_5R_Lg_m\right) + s\left(-C_LR_L + L_5g_m\right) - 1}{2g_m + s^5\left(2C_3C_5C_LL_3L_5R_Lg_m + C_3C_5L_3L_5R_Lg_m + C_3C_LL_3L_5g_m\right) + s^3\left(C_3C_5L_3L_5R_Lg_m + C_3C_LL_3R_Lg_m + C_3C_LL_5R_Lg_m + C_5C_LL_5\right) + s^2\left(C_3C_LL_3L_5R_Lg_m + C_3C_LL_3L_5g_m + C_3C_LL_3R_Lg_m + C_3C_L
10.405 INVALID-ORDER-405 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
                                 -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}s^{6} + C_{3}C_{L}L_{3}L_{5}L_{L}g_{m}s^{5} + L_{5}g_{m}s + s^{4}\left(-C_{3}C_{5}L_{3}L_{5} - C_{3}C_{L}L_{3}L_{L} - C_{5}C_{L}L_{5}L_{L}\right) + s^{3}\left(C_{3}L_{3}L_{5}g_{m} + C_{L}L_{5}L_{L}g_{m}\right) + s^{2}\left(-C_{3}L_{3} - C_{5}L_{5} - C_{L}L_{L}\right) - 1
-C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}s^{6} + C_{3}C_{L}L_{3}L_{5}L_{L}s^{6} + C_{3}C_{L}L_{3}L_{5}L_{L}s^{6} + C_{3}C_{L}L_{5}L_{L}s^{6} + C_{3}C_{L
10.406 INVALID-ORDER-406 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{2s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_5L_Ls^5 + C_3L_3L_5L_Lg_ms^4 + L_5L_Lg_ms^2 - L_Ls + s^3\left(-C_3L_3L_L - C_5L_5L_L\right)}{C_3C_5C_LL_3L_5L_Ls^6 + s^5\left(2C_3C_5L_3L_5L_Lg_m + C_3C_LL_3L_5L_Lg_m\right) + s^4\left(C_3C_5L_3L_5 + C_3C_5L_3L_L + C_5C_LL_5L_L\right) + s^3\left(C_3L_3L_5L_g_m + 2C_3L_3L_Lg_m + 2C_5L_5L_Lg_m\right) + s^2\left(C_3L_3 + C_3L_L + C_5L_5 + C_LL_L\right) + s\left(L_5q_m + 2L_Lg_m\right)}
10.407 INVALID-ORDER-407 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                 10.408 INVALID-ORDER-408 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{28}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -C_3C_5L_3L_5L_LR_Ls^5 + C_3L_3L_5L_LR_Lg_ms^4 + L_5L_LR_Lg_ms^2 - L_LR_Ls + s^3\left(-C_3L_3L_LR_L - C_5L_5L_LR_L\right)
H(s) = \frac{C_3C_5L_3L_5L_LR_Ls^6 + R_L + s^5\left(2C_3C_5L_3L_5L_LR_Lg_m + C_3C_5L_3L_5L_LR_Lg_m + S^4\left(C_3C_5L_3L_5L_LR_Lg_m + C_3C_5L_5L_LR_L\right) + s^4\left(C_3C_5L_3L_5L_RL_g_m + C_3C_5L_5L_LR_L\right) + s^4\left(C_3C_5L_3L_5L_RL_g_m + C_3C_5L_5L_RL_g_m + C_3C_5L_5L_RL_g_m\right) + s^4\left(C_3C_5L_3L_5L_RL_g_m + C_3C_5L_5L_RL_g_m\right) + s^4\left(C_3C_5L_3L_5L_RL_g_m\right) + s^4\left(C_3C_5L_3L_gL_g_m\right) + s^4\left(C_3C_5L_gL_gL_g_m\right) + s^4\left(C_3C_5L_gL_gL_g_m\right) + s^4\left(C_3C_5L_gL_gL_gL_g_m\right) + s^4\left(C_3C_5
10.409 INVALID-ORDER-409 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{L}s^{6}-R_{L}+s^{5}\left(-C_{3}C_{5}L_{3}L_{5}L_{L}+C_{3}C_{L}L_{3}L_{5}L_{L}R_{L}g_{m}\right)+s^{4}\left(-C_{3}C_{5}L_{3}L_{5}R_{L}-C_{3}C_{L}L_{3}L_{L}R_{L}+C_{3}L_{3}L_{5}L_{L}g_{m}-C_{5}C_{L}L_{5}L_{L}R_{L}\right)
                                 \frac{C_3C_5C_LL_3L_5L_LR_Lg_m + C_3C_5L_3L_5L_LR_Lg_m + C_3C_5L_3L_5L_Rg_m + C_3C_5L_3L_
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10.410 INVALID-ORDER-410 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_LL_3L_5L_LR_Lg_ms^5 + L_5R_Lg_ms - R_L + s^4\left(-C_3C_5L_3L_5R_L - C_3C_LL_3L_LR_L - C_5C_6L_3L_5R_L - C_3C_6L_3L_5R_L - C_5C_6L_3L_5R_L - C_5C_6L_5R_L - C_5C_
H(s) = \frac{-C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_LL_3L_5L_LR_Lg_ms^5 + L_5R_Lg_ms^5 + 
10.411 INVALID-ORDER-411 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                          H(s) = \frac{C_3C_5L_3L_5R_Lg_ms^4 + R_Lg_m + s^3\left(C_3C_5L_3R_5R_Lg_m - C_3C_5L_3R_L\right) + s^2\left(C_3L_3R_Lg_m + C_5L_5R_Lg_m\right) + s\left(C_5R_5R_Lg_m - C_5R_L\right)}{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(C_3C_5L_3R_5g_m + C_3C_5L_3 + C_3C_5L_5R_Lg_m\right) + s^2\left(C_3C_5R_5R_Lg_m + C_3C_5R_L + C_3L_3g_m + C_5L_5g_m\right) + s\left(C_3R_Lg_m + C_5R_5g_m + 2C_5R_Lg_m + C_5R_5g_m\right)}
10.412 INVALID-ORDER-412 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                 H(s) = \frac{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_3\right) + s^2\left(C_3L_3g_m + C_5L_5g_m\right) + s\left(C_5R_5g_m - C_5\right)}{C_3C_5C_LL_3L_5g_ms^5 + s^4\left(C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_3\right) + s^3\left(2C_3C_5L_3g_m + C_3C_5L_3g_m + C_3C_LL_3g_m\right) + s^2\left(C_3C_5R_5g_m + C_3C_5 + C_5C_LR_5g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_4g_m\right)}
10.413 INVALID-ORDER-413 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{3s}}, \infty, L_5 s + R_5 + \frac{1}{C_{5s}}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_3C_5L_3L_5R_Lg_m s^4 + R_Lg_m + s^3\left(C_3C_5L_3R_5R_Lg_m - C_3C_5L_3R_L\right) + s^2\left(C_3L_3R_Lg_m + C_5L_5R_Lg_m\right) + s\left(C_5R_5R_Lg_m - C_5R_L\right)}{C_3C_5C_LL_3L_5R_Lg_m s^5 + g_m + s^4\left(C_3C_5C_LL_3R_5R_Lg_m + C_3C_5L_3R_Lg_m + C_3C_5L_3R_L
10.414 INVALID-ORDER-414 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{3} s}, \infty, L_5 s + R_5 + \frac{1}{C_{5} s}, R_L + \frac{1}{C_{L} s}\right)
H(s) = \frac{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_5R_Lg_m - C_3C_5L_Ll_3R_Lg_m + C_3C_5L_Ll_3R_Lg_m + C_3C_5L_Ll_3R_Lg_m + C_5C_LL_5R_Lg_m\right) + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_3R_Lg_m + C_5C_LL_5R_Lg_m\right) + s^2\left(C_3L_3g_m + C_5C_LR_5R_Lg_m - C_5C_LR_L + C_5L_5g_m\right) + s\left(C_5R_5g_m - C_5C_LR_L + C_5L_5g_m\right) + s\left(C_5R_5g_m - C_5C_LR_L + C_5C_LR_5R_Lg_m + C_5C_LR_
10.415 INVALID-ORDER-415 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                            \frac{C_{3}C_{5}C_{L}L_{3}L_{5}L_{g}{_{m}}s^{6}+g_{m}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}g_{m}-C_{3}C_{5}L_{L}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}g_{m}+s^{4}\left(C_{3}C_{5}L_{3}L_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}g_{m}\right)+s^{4}\left(C_{3}C_{5}L_{3}L_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}-C_{3}C_{5}L_{L}L_{R}g_{m}-C_{5}C_{L}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C_{L}L_{L}R_{5}g_{m}+C_{5}C
10.416 INVALID-ORDER-416 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_3C_5L_3L_5L_2g_ms^5 + L_Lg_ms + s^4\left(C_3C_5L_3L_LR_5g_m - C_3C_5L_3L_L\right) + s^3\left(C_3L_3L_Lg_m + C_5L_5L_Lg_m\right) + s^2\left(C_5L_LR_5g_m - C_5L_L\right)}{C_3C_5C_LL_3L_5L_2g_ms^6 + g_m + s^5\left(C_3C_5L_LL_3L_LR_5g_m + C_3C_5L_3L_Lg_m + C_3C_5L_3L_Lg_m + C_3C_5L_LL_2g_m\right) + s^3\left(C_3C_5L_3L_Lg_m + C_3C_5L_LR_5g_m + C_3C
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10.417 INVALID-ORDER-417  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{3} s}, \infty, L_5 s + R_5 + \frac{1}{C_{5} s}, L_L s + R_L + \frac{1}{C_{L} s}\right)$ 

 $\frac{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}g_{m}s^{6}+g_{m}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{L}\right)+s^{4}\left(C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}g_{m}+S^{3}\left(C_{3}C_{5}L_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}L_{L}L_{2}L_{L}g_{m}\right)+s^{4}\left(C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}L_{2}L_{2}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}g_{m}+C_{3$ 

10.418 INVALID-ORDER-418  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $C_3C_5L_3L_5L_LR_Lg_ms^5 + L_LR_Lg_ms + s^4(C_3C_5L_3L_LR_5R_Lg_m - C_3C_5L_3L_LR_L)$  $H(s) = \frac{C_3C_5L_3L_5L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_5R_Lg_m + C_3C_5L_3L_LR_Lg_m + s^5\left(C_3C_5L_LL_3L_LR_Lg_m + C_3C_5L_3L_LR_Lg_m + c_3C_5L_3L_LR_Lg_m + s^5\left(C_3C_5L_3L_LR_Lg_m + c_3C_5L_3L_LR_Lg_m + c_3C_5L_3L_LR_Lg_m$ 

10.419 INVALID-ORDER-419  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $\frac{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{L}g_{m}s^{6}+R_{L}g_{m}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m}-C_{3}C_{5}L_{L}L_{L}R_{L}+C_{3}C_{5}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}R_{L}g_{m}+C_{5}C_{L}L_{5}L_{L}$ 

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10.420 INVALID-ORDER-420 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{L}g_{m}s^{6} + R_{L}g_{m} + s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}\right) + s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{L}g_{m} + C_{3}C_{5}L_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{5}L_{5}R_{L}g_{m} + C_{5}C_{5}L_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{5}R_{L}g_{m} + C_{5}C_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}L_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_Lg_ms^5 + R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_5R_Lg_m - C_3C_5C_LL_3L_LR_L\right) + s^5\left(C_3C_5L_LL_3L_LR_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + C_3C_5C_LL_3L_Lg_m + C_3C_5C_LL
10.421 INVALID-ORDER-421 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)
H(s) = \frac{-C_3C_5L_3L_5R_5R_Ls^4 - R_5R_L + s^3\left(C_3L_3L_5R_5R_Lg_m - C_3L_3L_5R_L\right) + s^2\left(-C_3L_3R_5R_L - C_5L_5R_5R_L\right) + s\left(L_5R_5R_Lg_m - L_5R_L\right)}{2R_5R_Lg_m + R_5 + s^4\left(2C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_5\right) + s^3\left(C_3C_5L_5R_5R_L + C_3L_3L_5R_5g_m + 2C_3L_3L_5R_5g_m + 2C_3L_3R_5R_Lg_m + C_3L_5R_5R_Lg_m 
10.422 INVALID-ORDER-422 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5L_3L_5R_5s^4 - R_5 + s^3\left(C_3L_3L_5R_5g_m - C_3L_3L_5\right) + s^2\left(-C_3L_3R_5 - C_5L_5R_5\right) + s\left(L_5R_5g_m - L_5\right)}{C_3C_5C_LL_3L_5R_5s^5 + 2R_5g_m + s^4\left(2C_3C_5L_3L_5R_5g_m + C_3C_LL_3L_5\right) + s^3\left(C_3C_5L_3R_5 + C_3C_LL_3R_5 + 2C_3L_3R_5g_m + C_5C_LL_5R_5\right) + s^2\left(2C_3L_3R_5g_m + C_3L_5R_5g_m + C_3L_5R_5g_m + C_LL_5\right) + s\left(C_3R_5 + C_LR_5 + 2L_5g_m\right)}
10.423 INVALID-ORDER-423 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_3C_5L_3L_5R_5R_Ls^4 - R_5R_L + s^3\left(C_3L_3L_5R_5R_Lg_m - C_3L_3L_5R_L\right) + s^2\left(-C_3L_3R_5R_L - C_5L_5R_5R_L\right) + s\left(L_5R_5R_Lg_m - L_5R_5R_L\right) + s\left(L_5R_5R_Lg_m - L_5R_5R_Lg_m - L_5R_5R_Lg_m\right) + s\left(L_5R_5R_Lg_m
H(s) = \frac{-C_3C_5L_3L_5R_5R_Ls^5 - R_5R_L + s^* \left( C_3L_3L_5R_5R_Lg_m - C_3L_3L_5R_5\right) + s^* \left( C_3L_3L_5R_5R_L - C_5L_5R_5R_L \right) + s \left( L_5R_5R_Lg_m - L_5R_5R_Lg_m - L_5R_5R_Lg_m + R_5 + s^4 \left( 2C_3C_5L_3L_5R_5R_Lg_m + C_3C_4L_3L_5R_5 + C_3C_4L_3L_5R_L \right) + s^3 \left( C_3C_5L_3L_5R_5R_L + C_3C_4L_3R_5R_L + C_3L_3L_5R_5R_Lg_m + C_3L_3L_5R_5R_Lg_m
10.424 INVALID-ORDER-424 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_3L_5R_5R_Ls^5 - R_5 + s^4\left(-C_3C_5L_3L_5R_5R_Lg_m - C_3C_LL_3L_5R_5R_Lg_m - C_3C_LL_3R_5R_L + C_3L_3L_5R_5g_m - C_3L_3L_5R_5R_L + C_3C_LL_3R_5R_L + C_3
10.425 INVALID-ORDER-425 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
                                                   \frac{-C_3C_5C_LL_3L_5L_R_5s^6-R_5+s^5\left(C_3C_LL_3L_5L_R_5g_m-C_3C_LL_3L_5L_L\right)+s^4\left(-C_3C_5L_3L_5R_5-C_3C_LL_3L_LR_5-C_5C_LL_5L_LR_5\right)+s^3\left(C_3L_3L_5R_5g_m-C_3L_3L_5R_5g_m-C_3L_3L_5R_5g_m-C_3L_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C_3C_LL_3L_5R_5g_m+C
10.426 INVALID-ORDER-426 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_5L_LR_5s^5 - L_LR_5s + s^4\left(C_3L_3L_5L_LR_5g_m - C_3L_3L_LR_5 - C_5L_5L_LR_5\right) + s^3\left(-C_3L_3L_LR_5 - C_5L_5L_LR_5\right) + s^2\left(L_5L_LR_5g_m - L_5L_5L_2R_5 - L_5L_3L_5L_2R_5\right) + s^2\left(L_5L_3L_5L_4R_5 - L_5L_5L_4R_5\right) + s^2\left(L_5L_4R_5g_m - L_5L_5L_4R_5\right) + s^2\left(L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_5L_4R_5\right) + s^2\left(L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_4R_5\right) + s^2\left(L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_4R_5\right) + s^2\left(L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_4R_5\right) + s^2\left(L_5L_4R_5g_m - L_5L_4R_5g_m - L_5L_5L_4R_5g_m - L_5L_5L_4R_5g_m - L_5L_5L_4R_5g_m - L_5L_5L_4R_5g_m - L_5L_5L_5R_5g_m -
10.427 INVALID-ORDER-427 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                   -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6}-R_{5}+s^{5}\left(-C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}C_{L}L_{3}L_{5}L_{L}\right)+s^{4}\left(-C_{3}C_{5}L_{3}L_{5}R_{5}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{L}L_{3}L_{5
10.428 INVALID-ORDER-428 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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 $-C_3C_5L_3L_5L_LR_5R_Ls^5 - L_LR_5R_Ls + s$ 

10.429 INVALID-ORDER-429  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_1 L_1 s^2 + 1}\right)$ 

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + R_5R_L + s^5\left(2C_3C_5L_3L_5L_LR_5R_Lg_m + C_3C_5L_3L_5L_LR_5R_Lg_m + C_3C_5L_3L_5L_LR_5R_L + C_3C_5L_3L_5L_RR_5R_L + C_3C_5L_5L_5R_5R_5R_L + C_3C_5L_5L_5R_5R_5R_L + C_3C_5L_5R_5R_5R_5R_L + C_3C_5L_5R_5R_5R_5R_5R_L + C_3C_5L_5R$ 

 $\frac{C_3C_5C_LL_3L_5L_LR_5R_Lg_m + C_3C_5L_3L_5L_LR_5R_Lg_m + C_3C_5L_3L_5L_LR_5}{2R_5R_Lg_m + R_5 + s^6\left(2C_3C_5C_LL_3L_5L_LR_5R_Lg_m + C_3C_5L_3L_5L_LR_5g_m + C_3C_LL_3L_5L_LR_5g_m + C_3C_LL_3L_5L_$ 

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10.430 INVALID-ORDER-430 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
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 $H(s) = \frac{1}{2R_5R_Lg_m + R_5 + s^6\left(2C_3C_5C_LL_3L_5L_LR_5R_Lg_m + C_3C_5C_LL_3L_5L_LR_5R_L + C_3C_5C_LL_3L_5L_LR_5g_m + 2C_3C_LL_3L_5L_LR_5g_m + 2C_3C_LL_3L_5L_Rg_m + 2C_3C_LL$ 

10.431 INVALID-ORDER-431  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)$ 

 $H(s) = \frac{C_3L_3L_5R_Lg_ms^3 + L_5R_Lg_ms + R_5R_Lg_m - R_L + s^4\left(C_3C_5L_3L_5R_5R_Lg_m - C_3C_5L_3L_5R_L\right) + s^2\left(C_3L_3R_5R_Lg_m - C_3L_3R_L + C_5L_5R_5R_Lg_m - C_5L_5R_L\right)}{R_5g_m + 2R_Lg_m + s^4\left(C_3C_5L_3L_5R_5g_m + 2C_3C_5L_3L_5R_Lg_m + C_3C_5L_5R_Lg_m + C_3C_5L_5R_Lg_m + C_3L_3R_Lg_m + C_3L_3R_Lg_m + C_5L_5R_Lg_m + C_5L_5R_Lg$ 

10.432 INVALID-ORDER-432  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3L_3L_5g_ms^3 + L_5g_ms + R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5\right) + s^2\left(C_3L_3R_5g_m - C_3L_3 + C_5L_5R_5g_m - C_5L_5\right) - 1}{2g_m + s^5\left(C_3C_5C_LL_3L_5g_m + C_3C_5L_L_3L_5g_m + C_3C_5L_L_3L_5g_m + C_3C_5L_L_3L_5g_m + C_3C_5L_L_3L_5g_m + C_3C_5L_L_3L_5g_m + C_3C_5L_L_3L_5g_m + C_5C_LL_5\right) + s^2\left(2C_3L_3g_m + C_3L_5g_m + C_5L_5g_m + C_5L_5g_m + C_5L_5g_m + C_5C_5g_m + C_5C_5g_m + C_5G_5g_m + C_5G_5g_$ 

10.433 INVALID-ORDER-433  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $C_{3}L_{3}L_{5}R_{L}g_{m}s^{3} + L_{5}R_{L}g_{m}s + R_{5}R_{L}g_{m} - R_{L} + s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{5}L_{3}L_{5}R_{L}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m} - C_{3}L_{3}R_{5}R_{L}g_{m} - C_{3}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m} - C_{3}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{5}R_{L}g_{$  $H(s) = \frac{C_3L_3L_5R_Lg_ms^\circ + L_5R_Lg_ms + R_5R_Lg_m - R_L + s^\circ \left(C_3C_5L_3L_5R_5R_Lg_m - C_3C_5L_3L_5R_L\right) + s^\circ \left(C_3L_3R_5R_Lg_m - C_3L_3R_5R_Lg_m - C$ 

10.434 INVALID-ORDER-434  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_3L_5R_5g_m - C_3C_5L_LL_3L_5R_Lg_m - C_3C_5L_LL_3L_5R_Lg_m - C_3C_LL_3R_5R_Lg_m - C_3C_LL_3R_Lg_m - C_3C_LL_3R_Lg_m$ 

10.435 INVALID-ORDER-435  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$ 

 $\frac{C_3C_LL_3L_5L_Lg_ms^5 + L_5g_ms + R_5g_m + s^6\left(C_3C_5C_LL_3L_5L_LR_5g_m - C_3C_5C_LL_3L_5L_L\right) + s^4\left(C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5 + C_3C_LL_3L_LR_5g_m - C_3C_LL_3L_L + C_5C_LL_5L_LR_5g_m - C_5C_LL_5L_L\right) + s^3\left(C_3C_5C_LL_3L_5L_Lg_ms^6 + 2g_m + s^5\left(C_3C_5C_LL_3L_5R_5g_m + C_3C_5C_LL_5L_L\right) + s^4\left(2C_3C_5L_3L_5g_m + C_3C_LL_3L_5g_m + 2C_3C_LL_5L_Lg_m\right) + s^3\left(C_3C_5L_4L_5L_2g_m + C_3C_5C_LL_3L_5R_5g_m + C_3C_5C_LL_3L_5R_5g_$ 

10.436 INVALID-ORDER-436  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $C_{3}L_{3}L_{5}L_{L}g_{m}s^{4} + L_{5}L_{L}g_{m}s^{2} + s^{5}\left(C_{3}C_{5}L_{3}L_{5}L_{L}R_{5}g_{m} - C_{3}C_{5}L_{3}L_{5}L_{L}\right) + s^{3}\left(C_{3}L_{3}L_{L}R_{5}g_{m} - C_{3}L_{3}L_{L} + C_{5}L_{5}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m} - C_{3}L_{3}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{3}L_{L}R_{5}g_{m}\right) + s^{2}\left(C_{3}L_{L}$ 

10.437 INVALID-ORDER-437  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $\frac{R_5g_m + s^6 \left(C_3C_5C_LL_3L_5L_LR_5g_m - C_3C_5C_LL_3L_5L_L\right) + s^5 \left(C_3C_5C_LL_3L_5R_Lg_m - C_3C_5C_LL_3L_5R_Lg_m + S^4 \left(C_3C_5L_LL_3L_5R_Lg_m - C_3C_5L_LL_3L_5R_Lg_m + S^4 \left(C_3C_5L_LL_3L_5R_Lg_m - C_3C_5L_LL_3L_5R_Lg_m + C_3C_LL_3L_5R_Lg_m + C_3C_LL_3$ 

10.438 INVALID-ORDER-438  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $C_3L_3L_5L_LR_Lg_ms^4 +$  $\frac{1}{R_5 R_L g_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_4 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_L R_5 g_m + 2 C_5 L_5$ 

10.439 INVALID-ORDER-439  $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $\frac{1}{R_5 g_m + 2 R_L g_m + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L L_5 L_L R_5 g_m + 2 C_3 C_5 L_L R_5 g_m + 2 C_5 L_L R_$ 

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10.440 INVALID-ORDER-440 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
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 $H(s) = \frac{-3.5 L_{1} - 3.5 L_{2} - 3.5 L_{3} - 3.5 L_$ 

10.441 INVALID-ORDER-441 
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L\right)$$

 $H(s) = \frac{-C_3C_5L_3R_5R_Ls^3 - C_5R_5R_Ls + R_5R_Lg_m - R_L + s^4\left(C_3C_5L_3L_5R_5R_Lg_m - C_3C_5L_3L_5R_L\right) + s^2\left(C_3L_3R_5R_Lg_m - C_3L_3R_L + C_5L_5R_5R_Lg_m - C_5L_5R_L\right)}{R_5g_m + 2R_Lg_m + s^4\left(C_3C_5L_3L_5R_5g_m + 2C_3C_5L_3L_5R_5g_m + 2C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_$ 

10.442 INVALID-ORDER-442 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{-C_3C_5L_3R_5s^3 - C_5R_5s + R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5\right) + s^2\left(C_3L_3R_5g_m - C_3L_3 + C_5L_5R_5g_m - C_5L_5\right) - 1}{2g_m + s^5\left(C_3C_5C_LL_3L_5R_5g_m + C_3C_5L_4R_5\right) + s^4\left(C_3C_5C_LL_3R_5g_m + C_3C_5L_4R_5g_m + C_3C_5L_5R_5g_m +$ 

10.443 INVALID-ORDER-443 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

 $\frac{- \cup_{3} \cup_{5} L_{3} R_{5} R_{L} s^{\circ} - \cup_{5} R_{5} R_{L} s + R_{5} R_{L} g_{m} - R_{L} + s^{\circ} \left( \cup_{3} \cup_{5} L_{3} L_{5} R_{5} R_{L} g_{m} - \cup_{3} \cup_{5} L_{3} L_{5} R_{L} g_{m} - C_{3} C_{5} L_{3} L_{5} R_{L} g_{m} + C_{3} C_{5} L_{5} R_{L} g_{m} + C_{5} C_{5} L_{5} R_{L} g_{m} + C_{5} C_{5} L_{5} R_{L} g_{m} + C_{5} C_{5} L_{5} R_{5} R_{L} g_{m} + C_{5} C_{5}$ 

10.444 INVALID-ORDER-444 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_3L_5R_5R_Lg_m - C_3C_5C_LL_3L_5R_L\right) + s^4 \left( -C_3C_5C_LL_3R_5R_L + C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5\right) + s^3 \left( -C_3C_5L_3R_5 + C_3C_LL_3R_5R_Lg_m - C_3C_LL_3R_5R_Lg_m - C_3C_LL_3R_5R_Lg_m - C_3C_LL_3R_5R_Lg_m - C_3C_5L_3R_5g_m + C_3C_5C_LL_3R_5R_Lg_m + C$ 

10.445 INVALID-ORDER-445 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

10.446 INVALID-ORDER-446 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $-C_{3}C_{5}L_{3}L_{L}R_{5}s^{4}-C_{5}L_{L}R_{5}s^{2}+s^{5}\left(C_{3}C_{5}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}C_{5}L_{3}L_{5}L_{L}\right)+s^{3}\left(C_{3}L_{3}L_{L}R_{5}g_{m}-C_{3}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}L_{5}$  $H(s) = \frac{-C_3C_5L_3L_LR_5s^2 + c_5L_LR_5s^2 + s^3\left(C_3C_5L_3L_5L_LR_5g_m - C_3C_5L_3L_5L_L\right) + s^3\left(C_3L_5L_LR_5g_m - C_3L_5L_LR_5g_m -$ 

10.447 INVALID-ORDER-447 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $\frac{R_{5}g_{m}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}\right)+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}-C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}\right)+s^{4}\left(-C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}\right)+s^{4}\left(-C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5}R_{L}+C_{3}C_{5}C_{L}L_{5$ 

10.448 INVALID-ORDER-448 
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

 $\overline{R_5 R_L g_m + R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_4 L_4 L_2 L_1 R_5 R_L + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 L_3 L_5 R_L g_m + C_3 C_5 L_5 L_5 R_L g_m + C_5 C_5 L_5 L_5 L_5 R_L g_m + C_5 C_5 L$ 

10.449 INVALID-ORDER-449 
$$Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{C_LL_RL_s^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{R_5 R_L g_m - R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m - C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m - C_3 C_5 C_L L_3 L_5 L_L R_L \right) + s^5 \left( -C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5 L_L R_5 R_L g_m$ 

10.450 INVALID-ORDER-450 
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $\frac{-c}{R_5g_m + 2R_Lg_m + s^6\left(C_3C_5C_LL_3L_5L_LR_5g_m + 2C_3C_5C_LL_3L_5L_LR_Lg_m + C_3C_5C_LL_3L_5R_Lg_m + C_3C_5C_LL_3L_LR_5R_Lg_m + C_3C_5C_LL_3L_2R_5R_Lg_m + C_3C_5C_LL_3L_2R_5R_Lg_m + C_3C_5C_LL_3L_3L_3R_5R_Lg_m + C_3C_5C_LL_3L_3L_3R_5R_Lg_m + C_3C_5C_LL_3L_3L_3R_5R_Lg_m + C_3C_5C_L$ 

10.451 INVALID-ORDER-451  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s}\right)$ 

$$H(s) = \frac{{s^2 \left( {{C_L}{L_3}{R_5}{R_L}{g_m} - {C_L}{L_3}{R_L}} \right) + s\left( {{L_3}{R_5}{g_m} - {L_3}} \right)}}{{{R_5}{g_m} + {s^3}\left( {{C_3}{C_L}{L_3}{R_5}{g_m} + {C_3}{C_L}{L_3}{R_L}} \right) + s^2 \left( {{C_3}{L_3}{R_5}{g_m} + {C_3}{L_3}{R_5}{g_m} + {C_L}{L_3}{R_5}{g_m} + 2{C_L}{L_3}{R_L}{g_m} + {C_L}{L_3} \right) + s\left( {{C_L}{R_5}{R_L}{g_m} + {C_L}{R_L} + 2{L_3}{g_m}} \right) + 1}}$$

**10.452** INVALID-ORDER-452  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s^2+1}}, \infty, R_5, L_L s + \frac{1}{C_{Ls}}\right)$ 

$$H(s) = \frac{s^3 \left( C_L L_3 L_L R_5 g_m - C_L L_3 L_L \right) + s \left( L_3 R_5 g_m - L_3 \right)}{2 C_L L_3 L_L g_m s^3 + 2 L_3 g_m s + R_5 g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m + C_3 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 g_m + C_3 L_3 + C_L L_3 R_5 g_m + C_L L_3 + C_L L_1 R_5 g_m + C_L L_1 \right) + 1}$$

10.453 INVALID-ORDER-453  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{s^3 \left( C_L L_3 L_L R_5 g_m - C_L L_3 L_L \right) + s^2 \left( C_L L_3 R_5 R_L g_m - C_L L_3 R_L \right) + s \left( L_3 R_5 g_m - L_3 \right)}{R_5 g_m + s^4 \left( C_3 C_L L_3 L_L R_5 g_m + C_3 C_L L_3 L_L \right) + s^3 \left( C_3 C_L L_3 R_5 R_L g_m + C_3 L_L R_5 g_m + C_3 L_4 R_5 g_m + C_4 L_4 R_5 g_m + C$$

10.454 INVALID-ORDER-454  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{s^3 \left( C_L L_3 L_L R_5 R_L g_m - C_L L_3 L_L R_L \right) + s^2 \left( L_3 L_L R_5 g_m - L_3 L_L \right) + s \left( L_3 R_5 R_L g_m - L_3 R_L \right)}{R_5 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m + C_3 C_L L_3 L_L R_5 g_m + C_2 L_3 L_L R_5 g_m + C_3 L_2 R_5 g_m + C_3 L_3 L_L R_5 g_m + C_3 L_3 L_L R_5 g_m + C_3 L_2 R_5 g_m + C_3 L_3 L_L R_5 g_m + C_3 L_3 L_L R_5 g_m + C_3 L_3$$

10.455 INVALID-ORDER-455  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{s^3 \left( C_L L_3 L_L R_5 R_L g_m - C_L L_3 L_L R_L \right) + s \left( L_3 R_5 R_L g_m - L_3 R_L \right)}{R_5 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m + C_3 C_L L_3 L_L R_5 g_m + 2 C_L L_3 L_L R_5 g_m + 2 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m + C_3 L_3 R_L + C_L L_3 R_5 R_L g_m + C_L L_3 R_L + C_L L_3 R_5 R_L g_m + C_L L_3 R_L + C_L L_3 R_5 R_L g_m + C_L L_3 R_L \right) + s \left( L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L \right) + s \left( L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L \right) + s \left( L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_3 R_5 R_L g_m + C_4 L_3 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L g_m + C_4 L_4 R_L + C_4 L_4 R_5 R_L + C$$

**10.456** INVALID-ORDER-456  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{1}{C_5s}, R_L\right)$ 

$$H(s) = \frac{-C_5L_3R_Ls^2 + L_3R_Lg_ms}{C_3C_5L_3R_Ls^3 + R_Lg_m + s^2\left(C_3L_3R_Lg_m + 2C_5L_3R_Lg_m + C_5L_3\right) + s\left(C_5R_L + L_3g_m\right)}$$

**10.457** INVALID-ORDER-457  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{-C_5 L_3 s^2 + L_3 g_m s}{C_5 s + g_m + s^3 \left( C_3 C_5 L_3 + C_5 C_L L_3 \right) + s^2 \left( C_3 L_3 g_m + 2 C_5 L_3 g_m + C_L L_3 g_m \right)}$$

10.458 INVALID-ORDER-458 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \frac{1}{C_{5s}}, \frac{R_{L}}{C_{L}R_{L}s+1}\right)$$

$$H(s) = \frac{-C_5L_3R_Ls^2 + L_3R_Lg_ms}{R_Lg_m + s^3\left(C_3C_5L_3R_L + C_5C_LL_3R_L\right) + s^2\left(C_3L_3R_Lg_m + 2C_5L_3R_Lg_m + C_5L_3 + C_LL_3R_Lg_m\right) + s\left(C_5R_L + L_3g_m\right)}$$

**10.459** INVALID-ORDER-459 
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{-C_5C_LL_3R_Ls^3 + L_3g_ms + s^2\left(-C_5L_3 + C_LL_3R_Lg_m\right)}{C_3C_5C_LL_3R_Ls^4 + g_m + s^3\left(C_3C_5L_3 + C_3C_LL_3R_Lg_m + 2C_5C_LL_3R_Lg_m + C_5C_LL_3\right) + s^2\left(C_3L_3g_m + C_5C_LR_L + 2C_5L_3g_m + C_LL_3g_m\right) + s\left(C_5 + C_LR_Lg_m\right)}$$

**10.460** INVALID-ORDER-460 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5C_LL_3L_Ls^4 - C_5L_3s^2 + C_LL_3L_Lg_ms^3 + L_3g_ms}{C_3C_5C_LL_3L_Ls^5 + C_5s + g_m + s^4\left(C_3C_LL_3L_Lg_m + 2C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3 + C_5C_LL_3 + C_5C_LL_3\right) + s^2\left(C_3L_3g_m + 2C_5L_3g_m + C_LL_3g_m\right) + s^3\left(C_3C_5L_3L_2s^5 + C_5s^2 + g_m + s^4\left(C_3C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3 + C_5C_LL_3 + C_5C_LL_3\right) + s^2\left(C_3L_3g_m + 2C_5L_3g_m + C_LL_3g_m\right) + s^3\left(C_3C_5L_3L_3S_m + C_5C_LL_3\right) + s^3\left(C_3C_5L_3S_m + C_5C_LS_m\right) + s^3\left(C_3C_5L_3S_m + C_5C_LS_m\right) + s^3\left(C_3C_5L_3S_m + C_5C_LS_m\right) + s^3\left(C_3C_5L_3S_m + C_5C_LS_m\right) + s^3\left(C_3C_5S_m + C_5C_5S_m\right) + s^3\left(C_3C_5S_m + C_5S_m\right) + s^3\left(C_3C_5S_m + C_5S_m\right) + s^3\left(C_3C_5S_m + C_5S_m\right) + s^3\left(C_3S_m + C_$$

10.461 INVALID-ORDER-461 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{-C_5L_3L_Ls^2 + L_3L_Lg_ms}{L_3g_m + L_Lg_m + s^3\left(C_3C_5L_3L_L + C_5C_LL_3L_L\right) + s^2\left(C_3L_3L_Lg_m + 2C_5L_3L_Lg_m + C_LL_3L_Lg_m\right) + s\left(C_5L_3 + C_5L_L\right)}$$

**10.462** INVALID-ORDER-462 
$$Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{-C_5C_LL_3L_Ls^4 + L_3g_ms + s^3\left(-C_5C_LL_3R_L + C_LL_3L_Lg_m\right) + s^2\left(-C_5L_3 + C_LL_3R_Lg_m\right)}{C_3C_5C_LL_3L_Ls^5 + g_m + s^4\left(C_3C_5C_LL_3L_Lg_m + 2C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3 + C_3C_LL_3R_Lg_m + C_5C_LL_3 + C_5C$$

**10.463** INVALID-ORDER-463 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

$$H(s) = \frac{-C_5L_3L_LR_Ls^2 + L_3L_LR_Lg_ms}{L_3R_Lg_m + L_LR_Lg_m + s^3\left(C_3C_5L_3L_LR_L + C_5C_LL_3L_LR_L\right) + s^2\left(C_3L_3L_LR_Lg_m + 2C_5L_3L_LR_Lg_m + C_5L_3L_L + C_LL_3L_LR_Lg_m\right) + s\left(C_5L_3R_L + C_5L_LR_L + L_3L_Lg_m\right)}$$

10.464 INVALID-ORDER-464 
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$I(s) = \frac{-C_5C_LL_3L_LR_Ls^4 + L_3R_Lg_ms + s^3\left(-C_5L_3L_L + C_LL_3L_LR_Lg_m\right) + s^2\left(-C_5L_3R_L + L_3L_Lg_m\right)}{C_3C_5C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_3C_5L_3L_L + C_3C_LL_3L_LR_Lg_m + C_5C_LL_3L_L\right) + s^3\left(C_3C_5L_3R_L + C_3L_3L_Lg_m + C_5C_LL_3L_Lg_m\right) + s^2\left(C_3L_3R_Lg_m + C_5L_3R_Lg_m + C_5L_3R_Lg_m + C_5L_3R_Lg_m\right) + s^2\left(C_3L_3R_Lg_m + C_5L_3R_Lg_m\right) + s^2\left(C_3L_3R_Lg_m\right) + s^2\left(C_3R_Lg_m\right) + s^2\left(C_3R_Lg_m\right)$$

10.465 INVALID-ORDER-465 
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{-C_5C_LL_3L_LR_Ls^4 - C_5L_3R_Ls^2 + C_LL_3L_LR_Lg_ms^3 + L_3R_Lg_ms}{C_3C_5C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_3C_LL_3L_LR_Lg_m + 2C_5C_LL_3L_LR_Lg_m + C_5C_LL_3L_LR_Lg_m + C_5C_LL_3R_L + C_5C_LL_3R_L + C_5C_LL_3R_L + C_5C_LL_3R_Lg_m + s^2\left(C_3L_3R_Lg_m + 2C_5L_3R_Lg_m + C_5L_3R_Lg_m + C_5R_Lg_m +$$

**10.466** INVALID-ORDER-466 
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$H(s) = \frac{-C_5L_3R_5R_Ls^2 + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{C_3C_5L_3R_5R_Ls^3 + R_5R_Lg_m + R_L + s^2\left(C_3L_3R_5R_Lg_m + C_3L_3R_L + 2C_5L_3R_5R_Lg_m + C_5L_3R_5\right) + s\left(C_5R_5R_L + L_3R_5g_m + 2L_3R_Lg_m + L_3\right)}$$

**10.467** INVALID-ORDER-467  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right)$  $H(s) = \frac{-C_5L_3R_5s^2 + s\left(L_3R_5g_m - L_3\right)}{R_5g_m + s^3\left(C_3C_5L_3R_5 + C_5C_LL_3R_5\right) + s^2\left(C_3L_3R_5g_m + C_3L_3 + 2C_5L_3R_5g_m + C_LL_3R_5g_m + C_LL_3\right) + s\left(C_5R_5 + 2L_3g_m\right) + 1}$ **10.468** INVALID-ORDER-468  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$  $H(s) = \frac{-C_5L_3R_5R_Ls^2 + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{R_5R_Lg_m + R_L + s^3\left(C_3C_5L_3R_5R_L + C_5C_LL_3R_5R_L\right) + s^2\left(C_3L_3R_5R_Lg_m + C_3L_3R_L + 2C_5L_3R_5R_Lg_m + C_5L_3R_5R_Lg_m + C_LL_3R_5R_Lg_m + C_LL_3R_L\right) + s\left(C_5R_5R_L + L_3R_5g_m + 2L_3R_Lg_m + L_3\right)}$ 

**10.469** INVALID-ORDER-469  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_{Ls}}\right)$ 

 $H(s) = \frac{-C_5C_LL_3R_5R_Ls^3 + s^2\left(-C_5L_3R_5 + C_LL_3R_5R_Lg_m - C_LL_3R_L\right) + s\left(L_3R_5g_m - L_3\right)}{C_3C_5C_LL_3R_5R_Ls^4 + R_5g_m + s^3\left(C_3C_5L_3R_5 + C_3C_LL_3R_5R_Lg_m + C_3C_LL_3R_5R_Lg_m + C_5C_LL_3R_5g_m + C_3L_3R_5g_m + C_3L_3R_5g_m$ 

**10.470** INVALID-ORDER-470  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{-C_5C_LL_3L_LR_5s^4 - C_5L_3R_5s^2 + s^3\left(C_LL_3L_LR_5g_m - C_LL_3L_L\right) + s\left(L_3R_5g_m - L_3\right)}{C_3C_5C_LL_3L_LR_5s^5 + R_5g_m + s^4\left(C_3C_LL_3L_LR_5g_m + C_3C_LL_3L_LR_5g_m\right) + s^3\left(C_3C_5L_3R_5 + C_5C_LL_3R_5 + C_5C_LL_3R_5 + C_5C_LL_3R_5g_m + C_LL_3R_5g_m + C_LL$ 

10.471 INVALID-ORDER-471  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{-C_5L_3L_LR_5s^2 + s\left(L_3L_LR_5g_m - L_3L_L\right)}{L_3R_5g_m + L_3 + L_LR_5g_m + L_L + s^3\left(C_3C_5L_3L_LR_5 + C_5C_LL_3L_LR_5\right) + s^2\left(C_3L_3L_LR_5g_m + C_3L_3L_LR_5g_m + C_LL_3L_LR_5g_m + C_LL_3L_L\right) + s\left(C_5L_3R_5 + C_5L_LR_5 + 2L_3L_Lg_m\right)}$ 

10.472 INVALID-ORDER-472  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{-C_5C_LL_3L_LR_5s^4 + s^3\left(-C_5C_LL_3R_5R_L + C_LL_3L_LR_5g_m - C_LL_3L_L\right) + s^2\left(-C_5L_3R_5 + C_LL_3R_5R_Lg_m - C_LL_3R_L\right) + s\left(L_3R_5g_m - C_LL_3R$ 

**10.473** INVALID-ORDER-473  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

 $\frac{-C_5L_3L_LR_5R_Lg_m-L_3L_LR_5}{L_3R_5R_Lg_m+L_3R_L+L_LR_5R_Lg_m+L_LR_L+s^3\left(C_3C_5L_3L_LR_5R_L+C_5C_LL_3L_LR_5R_L\right)+s^2\left(C_3L_3L_LR_5R_Lg_m+C_3L_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_LR_5+C_LL_3L_1R_5+C_LL_3L_1R_5+C_LL$ 

10.474 INVALID-ORDER-474  $Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, \frac{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}{C_{L}L_{L}s^{2}+1}\right)$ 

 $H(s) = \frac{-C_5C_LL_3L_LR_5R_Ls^4 + s^3\left(-C_5L_3L_LR_5 + C_LL_3L_LR_5R_Lg_m - C_LL_3L_LR_L\right) + s^2\left(-C_5L_3R_5R_L + L_3L_LR_5g_m - C_LL_3L_LR_5R_Lg_m - C_LL_3L_LR_5R_Lg_m + C_5L_3L_LR_5g_m + C$ 

10.475 INVALID-ORDER-475  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $-C_5C_LL_3L_LR_5R_Ls^4 - C_5L_3R_5R_Ls^2 + s^3\left(C_LL_3L_LR_5R_Lg_m - C_LL_3L_LR_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)$  $H(s) = \frac{-C_5C_LL_3L_LR_5R_Ls^4 - C_5L_3R_5R_Ls^2 + s^3\left(C_LL_3L_LR_5R_Lg_m - C_LL_3L_LR_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{C_3C_5C_LL_3L_LR_5R_Ls^5 + R_5R_Lg_m + R_L + s^4\left(C_3C_LL_3L_LR_5R_Lg_m + C_5C_LL_3L_LR_5\right) + s^3\left(C_3C_5L_3R_5R_L + C_5C_LL_3R_5R_L + C_5C_LL_3L_LR_5R_L + C_5C_LL_3L_LR_5R_LR_5R_L + C_5C_LL_3L_LR_5R_LR_5R_L + C_5C_LL_3L_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR_5R_LR$  **10.476** INVALID-ORDER-476  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$  $H(s) = \frac{L_3 R_L g_m s + s^2 \left(C_5 L_3 R_5 R_L g_m - C_5 L_3 R_L\right)}{R_L g_m + s^3 \left(C_3 C_5 L_3 R_5 R_L g_m + C_3 C_5 L_3 R_L\right) + s^2 \left(C_3 L_3 R_L g_m + C_5 L_3 R_5 g_m + 2 C_5 L_3 R_L g_m + C_5 L_3\right) + s \left(C_5 R_5 R_L g_m + C_5 R_L + L_3 g_m\right)}$ 10.477 INVALID-ORDER-477  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_{Ls}}\right)$  $H(s) = \frac{L_3 g_m s + s^2 \left( C_5 L_3 R_5 g_m - C_5 L_3 \right)}{q_m + s^3 \left( C_3 C_5 L_3 R_5 q_m + C_3 C_5 L_3 + C_5 C_L L_3 R_5 q_m + C_5 C_L L_3 \right) + s^2 \left( C_3 L_3 q_m + 2 C_5 L_3 q_m + C_L L_3 q_m \right) + s \left( C_5 R_5 q_m + C_5 C_L L_3 R_5 q_m + C_5 C_L L_5 R_5 q_m +$ 10.478 INVALID-ORDER-478  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$  $H(s) = \frac{L_3 R_L g_m s + s^2 \left(C_5 L_3 R_5 R_L g_m - C_5 L_3 R_L\right)}{R_L g_m + s^3 \left(C_3 C_5 L_3 R_5 R_L g_m + C_3 C_5 L_3 R_L + C_5 C_L L_3 R_5 R_L g_m + C_5 C_L L_3 R_L\right) + s^2 \left(C_3 L_3 R_L g_m + C_5 L_3 R_5 g_m + 2 C_5 L_3 R_L g_m + C_5 L_3 R_L g_m\right) + s \left(C_5 R_5 R_L g_m + C_5 R_L + L_3 g_m\right)}$ 10.479 INVALID-ORDER-479  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{L_{3}g_{m}s + s^{3}\left(C_{5}C_{L}L_{3}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{3}R_{L}\right) + s^{2}\left(C_{5}L_{3}R_{5}g_{m} - C_{5}L_{3} + C_{L}L_{3}R_{L}g_{m}\right)}{g_{m} + s^{4}\left(C_{3}C_{5}C_{L}L_{3}R_{5}g_{m} + C_{3}C_{5}L_{4}R_{L}\right) + s^{3}\left(C_{3}C_{5}L_{3}R_{5}g_{m} + C_{5}C_{L}L_{3}R_{5}g_{m} + C_{5}C_{L}L_{3}R_{L}g_{m} + C_{5}C_{L}L_{3}R_$ **10.480** INVALID-ORDER-480  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$  $H(s) = \frac{C_L L_3 L_L g_m s^3 + L_3 g_m s + s^4 \left(C_5 C_L L_3 L_L R_5 g_m - C_5 C_L L_3 L_L\right) + s^2 \left(C_5 L_3 R_5 g_m - C_5 L_3\right)}{g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_5 g_m + C_3 C_5 L_L L_3 L_L R_5 g_m + C_5 C_L L_3 R_5 g_m + C_5$ **10.481** INVALID-ORDER-481  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_3L_Lg_ms + s^2\left(C_5L_3L_LR_5g_m - C_5L_3L_L\right)}{L_3g_m + L_Lg_m + s^3\left(C_3C_5L_3L_LR_5g_m + C_3C_5L_3L_L + C_5C_LL_3L_LR_5g_m + C_5C_LL_3L_L\right) + s^2\left(C_3L_3L_Lg_m + 2C_5L_3L_Lg_m + C_LL_3L_Lg_m\right) + s\left(C_5L_3R_5g_m + C_5L_3 + C_5L_LR_5g_m + C_5L_LR_5g_m + C_5L_LR_5g_m\right)}$  $H(s) = \frac{L_3 g_m s + s^4 \left(C_5 C_L L_3 L_L R_5 g_m - C_5 C_L L_3 L_L\right) + s^3 \left(C_5 C_L L_3 R_5 R_L g_m - C_5 C_L L_3 R_L + C_L L_3 L_L g_m\right) + s^2 \left(C_5 L_3 R_5 g_m - C_5 L_3 R_5 g_m - C_5 L_3 R_L g_m\right)}{g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_5 g_m + C_3 C_5 C_L L_3 L_L g_m\right) + s^3 \left(C_3 C_5 L_1 R_5 g_m + C_5 C_L L_3 R_5 g_m + C_5$ 

10.482 INVALID-ORDER-482  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

10.483 INVALID-ORDER-483  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{L_3L_LR_Lg_ms + s^2\left(C_5L_3L_LR_5R_Lg_m - C_5L_3L_LR_L\right)}{L_3R_Lg_m + L_LR_Lg_m + s^3\left(C_3C_5L_3L_LR_5R_Lg_m + C_3C_5L_3L_LR_L + C_5C_LL_3L_LR_5R_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR$ 

10.484 INVALID-ORDER-484  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

 $L_{3}R_{L}g_{m}s + s^{4}\left(C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{3}L_{L}R_{L}\right) + s^{3}\left(C_{5}L_{3}L_{L}R_{5}g_{m} - C_{5}L_{3}L_{L} + C_{L}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{3}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{5}L_{3}R_{L}g_{m}\right) + s^{2}$  $H(s) = \frac{L_3 R_L g_m s + s^2 \left( C_5 C_L L_3 L_L R_5 R_L g_m - C_5 C_L L_3 L_L R_L \right) + s^2 \left( C_5 L_3 L_L R_5 g_m - C_5 L_3 L_L R_L g_m \right) + s^2 \left( C_5 L_3 R_5 R_L g_m - C_5 L_4 L_4 L_4 L_4 R_5 g_m - C_5 L_4 L_4 L_4 R_5 g_m - C_5 L_4 R_5 R_L g_m + C_5 C_4 L_3 L_4 R_5 g_m - C_5 L_4 R_5 R_L g_m + C_5 C_4 R_5 R_L g_m$ 

10.485 INVALID-ORDER-485  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $C_{L}L_{3}L_{L}R_{L}g_{m}s^{3} + L_{3}R_{L}g_{m}s + s^{4}\left(C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} - C_{5}C_{L}L_{3}L_{L}R_{L}\right) + s^{2}\left(C_{5}L_{3}R_{5}R_{L}g_{m} - C_{5}L_{3}R_{L}\right)$  $\frac{C_L C_3 C_L C_2 C_L C_3 C_L C_2 C_$  **10.486** INVALID-ORDER-486  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$  $H(s) = \frac{C_5L_3L_5R_Lg_ms^3 - C_5L_3R_Ls^2 + L_3R_Lg_ms}{C_3C_5L_3L_5R_Lg_ms^4 + R_Lg_m + s^3\left(C_3C_5L_3R_L + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_Lg_m + 2C_5L_3R_Lg_m + C_5L_3 + C_5L_5R_Lg_m\right) + s\left(C_5R_L + L_3g_m\right)}$ **10.487** INVALID-ORDER-487  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$  $H(s) = \frac{C_5 L_3 L_5 g_m s^3 - C_5 L_3 s^2 + L_3 g_m s}{C_5 s + q_m + s^4 (C_3 C_5 L_3 L_5 q_m + C_5 C_L L_3 L_5 q_m) + s^3 (C_3 C_5 L_3 + C_5 C_L L_3) + s^2 (C_3 L_3 q_m + 2 C_5 L_3 q_m + C_5 L_5 q_m + C_L L_3 q_m)}$ 10.488 INVALID-ORDER-488  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$  $H(s) = \frac{C_5 L_3 L_5 R_L g_m s^3 - C_5 L_3 R_L s^2 + L_3 R_L g_m s}{R_L g_m + s^4 \left( C_3 C_5 L_3 L_5 R_L g_m + C_5 C_L L_3 L_5 R_L g_m \right) + s^3 \left( C_3 C_5 L_3 R_L + C_5 C_L L_3 R_L + C_5 L_3 L_5 g_m \right) + s^2 \left( C_3 L_3 R_L g_m + 2 C_5 L_3 R_L g_m + C_5 L_3 + C_5 L_5 R_L g_m + C_L L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 g_m \right) + s \left( C_5 R_L + L_3 g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m \right) + s \left( C_5 R_L + L_3 R_L g_m$ 10.489 INVALID-ORDER-489  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$  $\frac{C_5C_LL_3L_5R_Lg_ms^4 + L_3g_ms + s^3\left(-C_5C_LL_3R_L + C_5L_3L_5g_m\right) + s^2\left(-C_5L_3 + C_LL_3R_Lg_m\right)}{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_L + C_3C_5L_3L_5g_m\right) + s^3\left(C_3C_5L_3R_Lg_m + 2C_5C_LL_3R_Lg_m + C_5C_LL_3R_Lg_m\right) + s^2\left(C_3L_3g_m + C_5C_LL_3R_L + C_5C_LL_3R_Lg_m\right) + s^2\left(C_3L_3g_m + C_5C_LR_Lg_m\right) + s^2\left(C_3L_$ 10.490 INVALID-ORDER-490  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$  $H(s) = \frac{C_5C_LL_3L_5L_Lg_ms^5 - C_5C_LL_3L_Ls^4 - C_5L_3s^2 + L_3g_ms + s^3\left(C_5L_3L_5g_m + C_LL_3L_Lg_m\right)}{C_3C_5C_LL_3L_5g_ms^6 + C_3C_5C_LL_3L_Ls^5 + C_5s + g_m + s^4\left(C_3C_5L_3L_5g_m + C_5C_LL_3L_5g_m + 2C_5C_LL_3L_5g_m + C_5C_LL_3L_5g_m + C_5C_LL_5g_m + C_5C_LL_5g_$ 10.491 INVALID-ORDER-491  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$  $H(s) = \frac{C_5L_3L_5L_Lg_ms^3 - C_5L_3L_Ls^2 + L_3L_Lg_ms}{L_3g_m + L_Lg_m + s^4\left(C_3C_5L_3L_5L_Lg_m + C_5C_LL_3L_5L_Lg_m\right) + s^3\left(C_3C_5L_3L_L + C_5C_LL_3L_L\right) + s^2\left(C_3L_3L_Lg_m + C_5L_3L_5g_m + 2C_5L_3L_Lg_m + C_5L_5L_Lg_m + C_5L_3L_Lg_m\right) + s\left(C_5L_3 + C_5L_L\right)}$  $H(s) = \frac{C_5C_LL_3L_5L_Lg_ms^5 + L_3g_ms + s^4\left(C_5C_LL_3L_5R_Lg_m - C_5C_LL_3L_L\right) + s^3\left(-C_5C_LL_3R_L + C_5L_3L_5g_m + C_LL_3L_Lg_m\right) + s^2\left(-C_5L_3 + C_LL_3R_Lg_m\right)}{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_5R_Lg_m + C_3C_5L_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3L_5R_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3L_5R_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3L_5R_Lg_m + C_5C_LL_3R_Lg_m + C_5C_LL_3R_Lg_m\right) + s^3\left(C_3C_5L_3L_5R_Lg_m + C_5C_LL_3R_Lg_m + C_5C_LL_3R_Lg_m\right) + s^3\left(C_3C_5L_3R_Lg_m + C_5C_LL_3R_Lg_m\right) + s^3\left($ 

10.492 INVALID-ORDER-492  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

10.493 INVALID-ORDER-493  $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{C_5L_3L_5L_LR_Lg_ms^3 - C_5L_3L_LR_Ls^2 + L_3L_LR_Lg_ms}{L_3R_Lg_m + L_LR_Lg_m + s^4\left(C_3C_5L_3L_5L_LR_Lg_m + C_5C_LL_3L_5L_LR_Lg_m\right) + s^3\left(C_3C_5L_3L_LR_L + C_5C_LL_3L_LR_L + C_5L_3L_LR_Lg_m\right) + s^2\left(C_3L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m\right) + s\left(C_5L_3R_L + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m\right) + s\left(C_5L_3R_L + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m\right) + s\left(C_5L_3R_L + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m\right) + s\left(C_5L_3R_L + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m + C_5L_3L_LR_Lg_m\right) + s\left(C_5L_3R_L + C_5L_3R_L + C_5L$ 

10.494 INVALID-ORDER-494  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, L_{5s} + \frac{1}{C_5s}, \frac{C_LL_RL_s^2+L_Ls+R_L}{C_LL_s^2+1}\right)$ 

 $C_5C_LL_3L_5L_LR_Lg_ms^5 + L_3R_Lg_ms + s^4\left(-C_5C_LL_3L_LR_L + C_5L_3L_5L_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_L + C_LL_3L_LR_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_LR_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_2R_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_3L_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_3L_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_3L_Lg_m\right) + s^3\left(C_5L_3L_5R_Lg_m - C_5L_3L_2R_Lg_m\right) + s^3\left(C_5L_3L_3L_2R_Lg_m\right) + s^3\left(C_5L_3L_3L_2R_Lg_m\right) + s^3\left(C_5L_3L_3L_2R_Lg_$ 

10.495 INVALID-ORDER-495  $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $C_5C_LL_3L_5L_LR_Lg_ms^5 - C_5C_LL_3L_LR_Ls^4 - C_5L_3R_Ls^2 + L_3R_Lg_ms + s^3\left(C_5L_3L_5R_Lg_m + C_LL_3L_LR_Lg_m\right)$  $\frac{1}{C_3C_5C_LL_3L_5L_LR_Lq_ms^6 + R_Lq_m + s^5\left(C_3C_5C_LL_3L_LR_L + C_5C_LL_3L_5L_Lq_m\right) + s^4\left(C_3C_5L_3L_5R_Lq_m + C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_LR_Lq_m + S^5\left(C_3C_5C_LL_3L_LR_Lq_m + S^5\left(C_3C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_LR_Lq_m + S^5\left(C_3C_5C_LL_3L_LR_L + C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_LR_Lq_m + S^5\left(C_3C_5C_LL_3L_LR_L + C_5C_LL_3L_LR_Lq_m + C_5C_LL_3L_Lq_m + C_5C_LL_3L_1q_m + C_5C_LL_3L_1$ 

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H(s) = \frac{-C_5L_3L_5R_Ls^3 + L_3L_5R_Lg_ms^2 - L_3R_Ls}{C_3C_5L_3L_5R_Ls^4 + R_L + s^3\left(C_3L_3L_5R_Lg_m + 2C_5L_3L_5R_Lg_m + C_5L_3L_5\right) + s^2\left(C_3L_3R_L + C_5L_5R_L + L_3L_5g_m\right) + s\left(2L_3R_Lg_m + L_3 + L_5R_Lg_m\right)}
10.497 INVALID-ORDER-497 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                 H(s) = \frac{-C_5L_3L_5s^3 + L_3L_5g_ms^2 - L_3s}{s^4\left(C_3C_5L_3L_5 + C_5C_LL_3L_5\right) + s^3\left(C_3L_3L_5q_m + 2C_5L_3L_5q_m + C_LL_3L_5q_m\right) + s^2\left(C_3L_3 + C_5L_5 + C_LL_3\right) + s\left(2L_3q_m + L_5q_m\right) + 1}
10.498 INVALID-ORDER-498 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                                 H(s) = \frac{-C_5L_3L_5R_Ls^3 + L_3L_5R_Lg_ms^2 - L_3R_Ls}{R_L + s^4\left(C_3C_5L_3L_5R_L + C_5C_LL_3L_5R_L\right) + s^3\left(C_3L_3L_5R_Lg_m + 2C_5L_3L_5R_Lg_m + C_5L_3L_5 + C_LL_3L_5R_Lg_m\right) + s^2\left(C_3L_3R_L + C_5L_3R_L + L_3L_5g_m\right) + s\left(2L_3R_Lg_m + L_3 + L_5R_Lg_m\right)}
10.499 INVALID-ORDER-499 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_5C_LL_3L_5R_Ls^4 - L_3s + s^3\left(-C_5L_3L_5 + C_LL_3L_5R_Lg_m\right) + s^2\left(-C_LL_3R_L + L_3L_5g_m\right)}{C_3C_5C_LL_3L_5R_Ls^5 + s^4\left(C_3C_5L_3L_5 + C_3C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m + C_5
10.500 INVALID-ORDER-500 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{L_{5s}}{C_5L_{5s}^2+1}, L_Ls + \frac{1}{C_{Ls}}\right)
H(s) = \frac{-C_5C_LL_3L_5L_Ls^5 + C_LL_3L_5L_Lg_ms^4 + L_3L_5g_ms^2 - L_3s + s^3\left(-C_5L_3L_5 - C_LL_3L_L\right)}{C_3C_5C_LL_3L_5L_Ls^6 + s^5\left(C_3C_LL_3L_5L_Lg_m + 2C_5C_LL_3L_5L_Lg_m\right) + s^4\left(C_3C_5L_3L_5 + C_5C_LL_3L_5 + C_5C_LL_3L_5\right) + s^3\left(C_3L_3L_5g_m + 2C_5L_3L_5g_m + 2C_5L_5g_m + 2C_5
10.501 INVALID-ORDER-501 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                     H(s) = \frac{-C_5L_3L_5L_Ls^3 + L_3L_5L_Lg_ms^2 - L_3L_Ls}{L_3 + L_L + s^4\left(C_3C_5L_3L_5L_L + C_5C_LL_3L_5L_L\right) + s^3\left(C_3L_3L_5L_Lg_m + 2C_5L_3L_5L_Lg_m + C_LL_3L_5L_Lg_m\right) + s^2\left(C_3L_3L_L + C_5L_3L_5 + C_5L_5L_L + C_LL_3L_L\right) + s\left(L_3L_5g_m + 2L_3L_Lg_m + L_5L_Lg_m\right)}
10.502 INVALID-ORDER-502 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_5C_LL_3L_5L_Ls^5 - L_3s + s^4\left(-C_5C_LL_3L_5R_L + C_LL_3L_5L_Lg_m\right) + s^3\left(-C_5L_3L_5 + C_LL_3L_5R_Lg_m - C_LL_3L_L\right) + s^2\left(-C_LL_3R_L + L_3L_5R_Lg_m - C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5L_Ls^6 + s^5\left(C_3C_5C_LL_3L_5R_L + C_3C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3L_5R_Lg_m\right) + s^4\left(-C_5C_LL_3
10.503 INVALID-ORDER-503 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{-C_5L_3L_5L_LR_Ls^3 + L_3L_5L_LR_Lg_ms^2 - L_3L_LR_Ls}{L_3R_L + L_LR_L + s^4\left(C_3C_5L_3L_5L_LR_L + C_5C_LL_3L_5L_LR_L\right) + s^3\left(C_3L_3L_5L_LR_Lg_m + 2C_5L_3L_5L_LR_Lg_m + C_5L_3L_5L_LR_Lg_m\right) + s^2\left(C_3L_3L_LR_L + C_5L_3L_5R_L + C_5L_5R_L + C_5L_3L_5R_L + C_5L_5R_L 
10.504 INVALID-ORDER-504 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{C_LL_RL_s^2+L_Ls+R_L}{C_LL_s^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -C_5C_LL_3L_5L_LR_Ls^5 - L_3R_Ls + s^4\left(-C_5L_3L_5L_L + C_LL_3L_5L_LR_Lg_m\right) + s^3\left(-C_5L_3L_5R_L - C_LL_3L_LR_L + C_LL_3L_5L_LR_Lg_m\right) + s^3\left(-C_5L_3L_5R_L - C_LL_3L_5R_L - C_LL_3L_5R_L\right) + s^3\left(-C_5L_3L_5R_L - C_LL_3L_5R_L\right) + s^3\left(-C_5L_3L_5R_L - C_LL_3L_5R_L\right) + s^3\left(-C_5L_3L_5R_L - C_LL_3L_5R_L\right) + s^3\left(-C_5L_3L_5R_L\right) + s^3\left(-C_5L_3R_L\right) + s^3\left(-C_
H(s) = \frac{-C_5C_LL_3L_5L_LR_Ls^3 - L_3R_Ls + s^4\left(-C_5L_3L_5L_LR_Lg_m\right) + s^3\left(-C_5L_3L_5R_L - C_LL_3L_5R_L + C_LL_3L_5L_RR_Lg_m\right) + s^3\left(-C_5L_3L_5L_LR_Lg_m\right) 
10.505 INVALID-ORDER-505 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -C_5C_LL_3L_5L_LR_Ls^5 + C_LL_3L_5L_LR_Lg_ms^4 + L_3L_5R_Lg_ms^2 - L_3R_Ls + s^3\left(-C_5L_3L_5R_L - C_LL_3L_LR_L\right)
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**10.496** INVALID-ORDER-496  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, R_L\right)$ 

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H(s) = \frac{C_5L_3L_5g_ms^3 + L_3g_ms + s^2\left(C_5L_3R_5g_m - C_5L_3\right)}{g_m + s^4\left(C_3C_5L_3L_5g_m + C_5C_LL_3L_5g_m\right) + s^3\left(C_3C_5L_3R_5g_m + C_3C_LL_3R_5g_m + C_5C_LL_3\right) + s^2\left(C_3L_3g_m + 2C_5L_3g_m + C_5L_5g_m + C_LL_3g_m\right) + s\left(C_5R_5g_m + C_5C_LL_3R_5g_m + C_5C_LL_3\right) + s^2\left(C_3L_3g_m + C_5L_3g_m + C_5L_3g_m + C_5L_3g_m\right) + s^2\left(C_3L_3g_m + C_5C_LL_3g_m\right) + s^2\left(C_3L_3g_m 
10.508 INVALID-ORDER-508 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{C_5L_3L_5R_Lg_ms^3 + L_3R_Lg_ms + s^2\left(C_5L_3R_5R_Lg_m - C_5L_3R_L\right)}{R_Lg_m + s^4\left(C_3C_5L_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m + C_5C_LL_3R_5R_Lg_m + C_5C_LL_3R_5R_Lg_m + C_5L_3R_5g_m + C_5L_3R
10.509 INVALID-ORDER-509 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{C_5C_LL_3L_5R_Lg_ms^4 + L_3g_ms + s^3\left(C_5C_LL_3R_5R_Lg_m - C_5C_LL_3R_5R_Lg_m - C_5L_3L_5g_m\right) + s^2\left(C_5L_3R_5g_m - C_5L_3 + C_LL_3R_Lg_m\right)}{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_5R_Lg_m + C_3C_5L_4R_5g_m + C_5C_LL_3R_5g_m + C_5C_LL_3R_5
10.510 INVALID-ORDER-510 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{C_5C_LL_3L_5L_g_ms^5 + L_3g_ms + s^4\left(C_5C_LL_3L_LR_5g_m - C_5C_LL_3L_L\right) + s^3\left(C_5L_3L_5g_m + C_LL_3L_Lg_m\right) + s^2\left(C_5L_3R_5g_m - C_5L_3\right)}{C_3C_5C_LL_3L_5L_g_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_LR_5g_m + C_3C_5L_3L_Lg_m + C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3L_5g_m + C_5C_LL_3L_Lg_m\right) + s^3\left(C_3C_5L_3L_5g_m + C_5C_LL_3L_Lg_m\right) + s^3\left(C_5L_3L_5g_m + C_5C_LL_3L_2g_m\right) + s^3\left(C_5L_3L_5g_m + C_5C_LL_3L_2g_m\right) + s^3\left(C_5L_3L_5g_m + C_5C_LL_3L_2g_m\right) + s^3\left(C_5L_3L_5g_m + C_5C_LL
10.511 INVALID-ORDER-511 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{C_5L_3L_5L_1g_ms^3 + L_3L_1g_ms + s^2\left(C_5L_3L_1R_5g_m - C_5L_3L_L\right)}{L_3g_m + L_1g_m + s^4\left(C_3C_5L_3L_5L_1g_m + C_5C_LL_3L_5L_1g_m\right) + s^3\left(C_3C_5L_3L_1R_5g_m + C_3C_5L_3L_1R_5g_m + C_5C_LL_3L_1\right) + s^2\left(C_3L_3L_1g_m + C_5L_3L_1g_m + C_5L_3L_1g_m + C_5L_3L_1g_m\right) + s\left(C_5L_3R_5g_m + C_5L_3L_1g_m + C_5L_3L_1g_m + C_5L_3L_1g_m\right) + s\left(C_5L_3R_5g_m + C_5L_3L_1g_m + C_5L_3L_1g_m + C_5L_3L_1g_m + C_5L_3L_1g_m\right) + s\left(C_5L_3R_5g_m + C_5L
10.512 INVALID-ORDER-512 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C_5C_LL_3L_5L_Lg_ms^5 + L_3g_ms + s^4\left(C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_LR_5g_m - C_5C_LL_3L_L\right) + s^3\left(C_5C_LL_3R_5R_Lg_m - - C_5C_LL_3R_5R_Lg_m - C_5C_LL_3R_5R_Lg_m\right) + s^3\left(C_5C_LL_3R_5R_Lg_m - C_5C_LL_3R_5R_Lg_m - C_5C_LR_5R_Lg_m - C_5C_LR_
H(s) = \frac{C_5C_LL_3L_5L_Lg_ms^5 + L_3g_ms + s^4\left(C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_LR_5g_m - C_5C_LL_3L_L\right) + s^3\left(C_5C_LL_3R_5R_Lg_m - C_5C_LL_3L_L\right) + s^3\left(C_5C_LL_3R_5R_Lg_m - C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_
10.513 INVALID-ORDER-513 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C_5L_3L_5L_LR_Lg_ms^3 + L_3L_LR_Lg_ms + s^2(C_5L_3L_LR_5R_Lg_m - C_5L_3L_LR_L)
H(s) = \frac{C_5L_3L_5L_LR_Lg_ms + s \cdot (C_5L_3L_LI_Lg_ms + s \cdot (C_5L_3L_LI_Lg_m + c_5L_3L_LI_Lg_m - c_5L
10.514 INVALID-ORDER-514 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C_5C_LL_3L_5L_LR_Lg_ms^5 + L_3R_Lg_ms + s^4(C_5C_LL_3L_LR_5R_Lg_m - C_5C_LL_3L_LR_Lg_m)
H(s) = \frac{C_5C_LL_3L_5L_LR_Lg_ms + s + L_3R_Lg_ms + s + 
10.515 INVALID-ORDER-515 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C_5C_LL_3L_5L_LR_Lg_ms^5 + L_3R_Lg_ms + s^4\left(C_5C_LL_3L_LR_5R_Lg_m - C_5C_LL_3L_LR_L\right)
                                                   \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_5R_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + s^4\left(C_3C_5L_3L_5R_Lg_m + C_5C_LL_3L_LR_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C_5C_LL_3L_Lg_m + C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104
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 $H(s) = \frac{C_5L_3L_5R_Lg_ms^3 + L_3R_Lg_ms + s^2\left(C_5L_3R_5R_Lg_m - C_5L_3R_L\right)}{C_3C_5L_3L_5R_Lg_ms^4 + R_Lg_m + s^3\left(C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_L + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_Lg_m + C_5L_3R_5g_m + C_5L_3R_Lg_m + C_5L_3R_Lg_m\right) + s\left(C_5R_5R_Lg_m + C_5R_L + L_3g_m\right)}$ 

**10.506** INVALID-ORDER-506  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)$ 

10.507 INVALID-ORDER-507  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_{Ls}}\right)$ 

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H(s) = \frac{-C_5L_3L_5R_5s^3 - L_3R_5s + s^2\left(L_3L_5R_5g_m - L_3L_5\right)}{R_5 + s^4\left(C_3C_5L_3L_5R_5 + C_5C_LL_3L_5R_5\right) + s^3\left(C_3L_3L_5R_5g_m + C_3L_3L_5R_5g_m + C_LL_3L_5R_5g_m + C_LL_3L_5\right) + s^2\left(C_3L_3R_5 + C_5L_3R_5 + C_LL_3R_5 + C
10.518 INVALID-ORDER-518 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{-C_5L_3L_5R_5R_Ls^3 - L_3R_5R_Ls + s^2\left(L_3L_5R_5R_Lg_m - L_3L_5R_L\right)}{R_5R_L + s^4\left(C_3C_5L_3L_5R_5R_L + C_5C_LL_3L_5R_5R_L\right) + s^3\left(C_3L_3L_5R_5R_Lg_m + C_3L_3L_5R_5R_Lg_m + C_5L_3L_5R_5R_Lg_m + C_5L_3L_5R_5R_L + C_5L_5R_5R_L + C_5L_
10.519 INVALID-ORDER-519 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_5C_LL_3L_5R_5R_Ls^4 - L_3R_5s + s^3\left(-C_5L_3L_5R_5R_Lg_m - C_LL_3L_5R_L\right) + s^2\left(-C_LL_3R_5R_L + L_3L_5R_5g_m - L_3L_5R_5R_Ls^4 - L_3L_5R_5R_L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -C_5C_LL_3L_5R_5R_Ls^4 - L_3R_5s + s^3\left(-C_5L_3L_5R_5 + C_LL_3L_5R_5R_Lg_m - C_LL_3L_5R_L\right) + s^2\left(-C_LL_3R_5R_L + L_3L_5R_5g_m - L_3L_5R_5R_L\right) + s^2\left(-C_LL_3R_5R_L + L_3L_5R_L\right) + s^2\left(-C_LL_3R_5R_L\right) + s^2\left(-C_LL_3R_
10.520 INVALID-ORDER-520 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_5C_LL_3L_5L_LR_5s^5 - L_3R_5s + s^4\left(C_LL_3L_5L_LR_5g_m - C_LL_3L_5L_L\right) + s^3\left(-C_5L_3L_5R_5 - C_LL_3L_LR_5\right) + s^2\left(L_3L_5R_5g_m - L_3L_5R_5g_m - L_3L_5L_LR_5g_m\right) + s^4\left(C_3C_5L_3L_5L_LR_5g_m + C_3C_LL_3L_5L_LR_5g_m\right) + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_LL_3L_5L_LR_5g_m\right) + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_LL_3L_5L_R_5g_m\right) + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_LL_3L_5R_5g_m\right) + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5R_5g_m\right) + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_5L_5R_5g_m\right) + s^4\left(C_3C_5L_5R_5g_m + C_3C_5L_5R_5g_m\right) + 
10.521 INVALID-ORDER-521 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{-C_5L_3L_5L_LR_5s^3 - L_3L_LR_5s + s^2\left(L_3L_5L_LR_5g_m - L_3L_5L_L\right)}{L_3R_5 + L_LR_5 + s^4\left(C_3C_5L_3L_5L_LR_5 + C_5C_LL_3L_5L_LR_5\right) + s^3\left(C_3L_3L_5L_LR_5g_m + C_3L_3L_5L_LR_5g_m + C_LL_3L_5L_L\right) + s^2\left(C_3L_3L_LR_5 + C_5L_3L_5R_5 + C_5L_5L_5R_5 
10.522 INVALID-ORDER-522 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_5C_LL_3L_5L_LR_5s^5 - L_3R_5s + s^4(-C_5C_LL_3L_5R_5R_L + C_L
H(s) = \frac{-c_3C_1L_3L_5L_1R_5s^6 + R_5 + s^5\left(C_3C_5C_LL_3L_5R_5R_L + C_3C_LL_3L_5L_LR_5g_m + C_3C_LL_3L_5L_LR_5g_m + s^4\left(C_3C_5L_3L_5R_5 + C_3C_LL_3L_5R_5 + C_3C_LL_3L_5R_
10.523 INVALID-ORDER-523 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_5L_3L_5L_LR_5R_Ls^3-L_3L_LR_5R_Ls+s^2\left(L_3L_5L_LR_5R_Lg_m-L_3L_5L_LR_L\right)
H(s) = \frac{-C_5L_3L_5L_LR_5R_Ls + s^2 \left( L_3L_5L_LR_5R_Ls + s^2 \left( L_3L_5L_LR_5R_Lg_m - L_3L_5L_LR_5R_Lg_m - L_3L_5L_LR_5\right) + s^2 \left( L_3L_5L_LR_5R_Lg_m - L_
10.524 INVALID-ORDER-524 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_5C_LL_3L_5L_LR_5R_L
H(s) = \frac{-C_5C_LL_3L_5L_LR_5R_L}{C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + R_5R_L + s^5\left(C_3C_5L_3L_5L_LR_5R_Lg_m + C_3C_LL_3L_5L_LR_5R_Lg_m + C_5C_LL_3L_5L_Rs_RL_g_m + C_5C_LL_g_Ls_Rs_RL_g_m + C_5C_LL_g_Ls_Rs_Rr_g_m + C_5C_LL_g_Ls_Rs_Rr_g_m + C_5C_LL_g_Ls_Rs_Rr_g_m + C_5C_LL_g_Ls_Rs_Rr_g_m + C_5C_LL_g_Ls_Rr_g_m + C_5C
10.525 INVALID-ORDER-525 Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C_5C_LL_3L_5L_LR_5R_Ls^5 - L_3R_5R_Ls + s
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + R_5R_L + s^5\left(C_3C_LL_3L_5L_LR_5R_Lg_m + C_3C_LL_3L_5L_LR_5R_Lg_m + C_5C_LL_3L_5L_LR_5R_L + C_5C_LL_3L_5L_RR_5R_L + C_5C_LL_3L_5L_RR_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         105
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 $H(s) = \frac{-C_5L_3L_5R_5R_Ls^3 - L_3R_5R_Ls + s^2\left(L_3L_5R_5R_Lg_m - L_3L_5R_L\right)}{C_3C_5L_3L_5R_5R_Ls^4 + R_5R_L + s^3\left(C_3L_3L_5R_5R_Lg_m + C_3L_3L_5R_5R_Lg_m + C_5L_3L_5R_5\right) + s^2\left(C_3L_3R_5R_L + C_5L_5R_5R_L + L_3L_5R_5g_m + 2L_3L_5R_Lg_m + L_3L_5\right) + s\left(2L_3R_5R_Lg_m + L_3R_5 + L_5R_5R_Lg_m + L_5R_L\right)}$ 

**10.516** INVALID-ORDER-516  $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, R_L\right)$ 

10.517 INVALID-ORDER-517  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{1}{C_{Ls}}\right)$ 

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10.526 INVALID-ORDER-526 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L\right)
                           H(s) = \frac{L_3L_5R_Lg_ms^2 + s^3\left(C_5L_3L_5R_5R_Lg_m - C_5L_3L_5R_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{R_5R_Lg_m + R_L + s^4\left(C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_L\right) + s^3\left(C_3L_3L_5R_Lg_m + C_5L_3L_5R_Lg_m + C_5L_3L_5\right) + s^2\left(C_3L_3R_5R_Lg_m + C_5L_3R_Lg_m + C_5L_5R_Lg_m + C
10.527 INVALID-ORDER-527 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{1}{C_{LS}}\right)
                                                                                H(s) = \frac{L_3L_5g_ms^2 + s^3\left(C_5L_3L_5R_5g_m - C_5L_3L_5\right) + s\left(L_3R_5g_m - L_3\right)}{R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + C_5C_LL_3L_5R_5g_m + C_5C_LL_3L_5\right) + s^3\left(C_3L_3L_5g_m + C_LL_3L_5g_m\right) + s^2\left(C_3L_3R_5g_m + C_3L_3 + C_5L_5R_5g_m + C_5L_3R_5g_m + C_LL_3\right) + s\left(2L_3g_m + L_5g_m\right) + 1}
10.528 INVALID-ORDER-528 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)
                                      \frac{L_{3}L_{5}R_{L}g_{m}s^{2}+s^{3}\left(C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}\right)+s\left(L_{3}R_{5}R_{L}g_{m}-L_{3}R_{L}\right)}{R_{5}R_{L}g_{m}+R_{L}+s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}
10.529 INVALID-ORDER-529 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   s^{4} \left(C_{5} C_{L} L_{3} L_{5} R_{5} R_{L} g_{m}-C_{5} C_{L} L_{3} L_{5} R_{L}\right)+s^{3} \left(C_{5} L_{3} L_{5} R_{5} g_{m}-C_{5} L_{3} L_{5}+C_{L} L_{3} L_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} L_{3} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{5} R_{L} g_{m}-C_{L} R_{5} R_{L} g_{m}\right)+s^{2} \left(C_{L} R_{5} R_{L} g_{m}-C_{L} R_{5} R_{L} g_{m}\right)+
                                        \frac{s^{*}(C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m})+s^{*}(C_{L}L_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_{L}g_{m}+C_{L}L_{3}L_{5}R_
10.530 INVALID-ORDER-530 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H(s) = \frac{C_L L_3 L_5 L_L g_m s^4 + L_3 L_5 g_m s^2 + s^5 \left(C_5 C_L L_3 L_5 L_L R_5 g_m - C_5 C_L L_3 L_5 L_L\right) + s^3 \left(C_5 L_3 L_5 R_5 g_m - C_5 L_3 L_5 R_5 g_m + C_5 C_L L_3 L_5 L_2 R_5 g_m + C_5 C_L L_3 L_5 R_5 g_m + C_5 C_L L_3 L_5 L_2 R_5 g_m
10.531 INVALID-ORDER-531 Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{C_{5}L_{5}R_{5}s^{2}+L_{5}s+R_{5}}{C_{5}L_{5}s^{2}+1}, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right)
H(s) = \frac{L_3L_5L_Lg_ms^2 + s^3\left(C_5L_3L_5L_LR_5g_m - C_5L_3L_5L_L\right) + s\left(L_3L_LR_5g_m - L_3L_L\right)}{L_3R_5g_m + L_3 + L_LR_5g_m + L_L + s^4\left(C_3C_5L_3L_5L_LR_5g_m + C_3C_5L_3L_5L_LR_5g_m + C_5L_3L_5L_L\right) + s^3\left(C_3L_3L_5L_Lg_m + 2C_5L_3L_5L_Lg_m + C_5L_3L_5L_Lg_m + C_5L_5L_Lg_m + C_5L_5L
10.532 INVALID-ORDER-532 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10.533 INVALID-ORDER-533 Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{C_{5}L_{5}R_{5}s^{2}+L_{5}s+R_{5}}{C_{5}L_{5}s^{2}+1}, \frac{L_{L}R_{L}s}{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H(s) = \frac{L_3L_5L_LR_2g_m - L_3R_5L_LR_2g_m - L
10.534 INVALID-ORDER-534 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{C_LL_RL_s^2+L_Ls+R_L}{C_LL_s^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H(s) = \frac{s \cdot (C_5C_LL_3L_5L_LR_5g_m + C_5C_LL_3L_5L_LR_5g_m + C_3C_5L_3L_5L_LR_5g_m + C_3C_5L_3L_5L_LR_5g_m + C_5C_LL_3L_5L_LR_5g_m + C_5C_LL_3L_5L_RR_5g_m + C_5C_LL_3L_5L_
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 $\frac{1}{R_5 R_L q_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_5 R_L q_m + C_3 C_5 L_L L_3 L_5 L_L R_L q_m + C_5 C_L L_3 L_5 L_L R_5 q_m + C_5 C_L L_5 L_5 L_L R$ 

10.535 INVALID-ORDER-535  $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

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10.536 INVALID-ORDER-536 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, R_L\right)
H(s) = \frac{-C_5L_3R_5R_Ls^2 + s^3\left(C_5L_3L_5R_5R_Lg_m - C_5L_3L_5R_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{R_5R_Lg_m + R_L + s^4\left(C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_L\right) + s\left(C_3C_5L_3R_5R_L + C_5L_3L_5R_5g_m + C_5L_3L_5\right) + s^2\left(C_3L_3R_5R_Lg_m + C_5L_3R_5 + C_5L_5R_5R_Lg_m + C_5L_5R_
10.537 INVALID-ORDER-537 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{1}{C_{Ls}}\right)
                                            H(s) = \frac{-C_5L_3R_5s^2 + s^3\left(C_5L_3L_5R_5g_m - C_5L_3L_5\right) + s\left(L_3R_5g_m - L_3\right)}{R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + C_5C_LL_3L_5\right) + s^3\left(C_3C_5L_3R_5 + C_5C_LL_3R_5 
10.538 INVALID-ORDER-538 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{-C_5L_3R_5R_Ls^2 + s^3\left(C_5L_3L_5R_5R_Lg_m - C_5L_3L_5R_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{R_5R_Lg_m + R_L + s^4\left(C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_L\right) + s^3\left(C_3C_5L_3R_5R_L + C_5C_LL_3R_5R_L + C_5C_LL_3R_5R_L\right) + s^2\left(C_3L_3R_5R_Lg_m + C_5L_3L_5R_Lg_m + C_5L_3L_5R_Lg_m + C_5L_3R_5R_Lg_m + C_5L_3R_5R_L
10.539 INVALID-ORDER-539 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  s^{4}\left(C_{5}C_{L}L_{3}L_{5}R_{5}R_{L}g_{m}-C_{5}C_{L}L_{3}L_{5}R_{L}\right)+s^{3}\left(-C_{5}C_{L}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(-C_{5}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(-C_{5}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(-C_{5}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(-C_{5}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(-C_{5}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(-C_{5}L_{3}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{5}R_{L}+C_{5}L_{3}L_{5}R_{L}+C_{5}L_{3}L_{5}R_{L}+C_{5}L_{5}L_{5}R_{L}+C_{5}L_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}L_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_{5}R_{L}+C_
                                        \frac{s^4 \left(C_5 C_L L_3 L_5 R_5 R_L g_m - C_5 C_L L_3 L_5 R_L g_m - C_5 C_L L_3 L_5 R_L g_m - C_5 L_4 L_5 R_5 g_m - C_5 L_3 L_5 R_5 g_m + C_5 C_L L_3 R_5 R_L g_m 
10.540 INVALID-ORDER-540 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H(s) = \frac{-C_5C_LL_3L_LR_5s^4 - C_5L_3R_5s^2 + s^3\left(C_5C_LL_3L_5L_LR_5g_m - C_5C_LL_3L_5L_L\right) + s^3\left(C_5L_3L_5R_5g_m - C_5L_3L_5R_5g_m - C_5L_3L_5R_5g_m - C_5L_3L_5L_5R_5g_m - C_5L_3L_5L_5R_5g_m + C_5C_LL_3L_5L_5R_5g_m + C_5C_LL_3L_5L_5R_5g_m + C_5C_LL_3L_5R_5g_m + C_5C_LL_3L_5R_5
10.541 INVALID-ORDER-541 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{-C_5L_3L_LR_5s^2 + s^3\left(C_5L_3L_5L_LR_5g_m - C_5L_3L_5L_L\right) + s\left(L_3L_LR_5g_m - L_3L_L\right)}{L_3R_5g_m + L_3 + L_LR_5g_m + L_L + s^4\left(C_3C_5L_3L_5L_LR_5g_m + C_3C_5L_3L_5L_L\right) + s^3\left(C_3C_5L_3L_LR_5 + C_5C_LL_3L_LR_5 + C
10.542 INVALID-ORDER-542 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 s^5 \left( C_5 C_L L_3 L_5 L_L R_5 g_m - C_5 C_L L_3 \right)
H(s) = \frac{s^{\circ}\left(C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} - C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} - C_{5}C_{L}L_{3
10.543 INVALID-ORDER-543 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C_5L_3L_LR_5R_Ls^2 + s^3(C_5L_3L_5L_LR_5R_Lg_m - C_5L_3L_5L_LR_L) + s
                                        10.544 INVALID-ORDER-544 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
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10.545 INVALID-ORDER-545 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)
```

 $H(s) = \frac{1}{R_5 R_L g_m + R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L + C_5 C_L L_3 L_5 L_L R_5 g_m + C_5 C_L L_5 L_5 L_L R_5 g_m + C_5 C_L L_5 L_5 L_L R_5 g_m + C_5 C_L L_5 L_L R_5$ 

**10.546** INVALID-ORDER-546  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_{Ls}}\right)$ 

$$H(s) = \frac{R_5 g_m + s^2 \left(C_3 L_3 R_5 g_m - C_3 L_3\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2 g_m + s^3 \left(C_3 C_L L_3 R_5 g_m + C_3 C_L L_3\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L R_3 + 2 C_3 L_3 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L\right)}$$

10.547 INVALID-ORDER-547  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_5 R_L g_m - R_L + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_3 R_L \right) + s \left( C_3 R_3 R_5 R_L g_m - C_3 R_3 R_L \right)}{R_5 g_m + 2 R_L g_m + s^3 \left( C_3 C_L L_3 R_5 R_L g_m + C_3 C_L L_3 R_L \right) + s^2 \left( C_3 C_L R_3 R_5 R_L g_m + C_3 C_L R_3 R_L + C_3 L_3 R_5 g_m + 2 C_3 L_3 R_L g_m + C_3 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_3 R_L g_m + C_3 R_2 R_L g_m$$

**10.548** INVALID-ORDER-548  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^3 \left(C_3 C_L L_3 R_5 R_L g_m - C_3 C_L L_3 R_L\right) + s^2 \left(C_3 C_L R_3 R_5 R_L g_m - C_3 C_L R_3 R_L + C_3 L_3 R_5 g_m - C_3 L_3\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 + C_L R_5 R_L g_m - C_L R_L\right) - 1}{2 g_m + s^3 \left(C_3 C_L L_3 R_5 g_m + 2 C_3 C_L L_3 R_L g_m + C_3 C_L R_3 R_5 g_m + 2 C_3 C_L R_3 R_L g_m + C_3 C_$$

**10.549** INVALID-ORDER-549  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^4 \left(C_3 C_L L_3 L_L R_5 g_m - C_3 C_L L_3 L_L\right) + s^3 \left(C_3 C_L L_L R_3 R_5 g_m - C_3 C_L L_L R_3\right) + s^2 \left(C_3 L_3 R_5 g_m - C_3 L_3 + C_L L_L R_5 g_m - C_L L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2 C_3 C_L L_3 L_L g_m s^4 + 2 g_m + s^3 \left(C_3 C_L L_3 R_5 g_m + C_3 C_L L_L R_3 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2 C_3 C_L L_3 L_L g_m s^4 + 2 g_m + s^3 \left(C_3 C_L L_3 R_5 g_m + C_3 C_L L_L R_5 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2 C_3 C_L L_3 L_L g_m s^4 + 2 g_m + s^3 \left(C_3 C_L L_3 R_5 g_m + C_3 C_L L_L R_5 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_3 R_5 g_m + C_3 C_L L_L\right) + s \left(C_3 R_3 R_5 g_m + C_3 R_5$$

10.550 INVALID-ORDER-550  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

**10.551** INVALID-ORDER-551  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_5 g_m + s^4 \left(C_3 C_L L_3 L_L R_5 g_m - C_3 C_L L_3 L_L\right) + s^3 \left(C_3 C_L L_3 R_5 R_L g_m - C_3 C_L L_3 R_L\right) + s^3 \left(C_3 C_L L_3 R_5 R_L g_m - C_3 C_L L_L R_3 R_5 g_m - C_3 C_L L_L R_3\right) + s^2 \left(C_3 C_L R_3 R_5 R_L g_m - C_3 C_L R_3 R_L + C_3 L_L R_5 g_m - C_3 L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 L_L\right) + s \left(C_3 R_3 R_5 g_m - C_3 L_L R_5 R_L g_m - C_3 C_L L_L R_5 g_m - C_3 L_L R_5 R_L g_m - C_3 C_L R_3 R_L g_m + C$$

10.552 INVALID-ORDER-552  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{s^3 \left( C_3 L_3 L_L R_5 R_L g_m - C_3 L_4 L_R L_1 \right) + s^2 \left( C_3 L_L R_3 R_5 R_L g_m - C_3 L_L R_3 R_L \right) + s \left( L_L R_5 R_L g_m - L_L R_L \right)}{R_5 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m + C_3 C_L L_4 R_3 R_L + C_3 L_4 L_4 R_4 R_L$$

10.553 INVALID-ORDER-553  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m - C_3 C_L L_L R_3 R_L g_m - C_3 C_L L_L R_3 R_L + C_3 L_3 L_L R_5 g_m - C_3 L_3 L_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_3 L_L R_5 g_m - C_3 L_4 R_3 R_5 g_m - C_3 L_4 R_5 R_$$

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10.554 INVALID-ORDER-554 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left( C_3 C_L L_3 L_L R_5 R_L g_m - C_3 C_L L_L R_3 R_5 R_L g_m - C_3 C_L L_L R_3 R_L \right) + s^2 \left( C_3 L_3 R_5 R_L g_m - C_3 L_L L_R R_5 R_L g_m - C_3 L_L R_
10.555 INVALID-ORDER-555 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                                                                                                                 H(s) = \frac{-C_3C_5L_3R_Ls^3 + R_Lg_m + s^2\left(-C_3C_5R_3R_L + C_3L_3R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{g_m + s^3\left(2C_3C_5L_3R_Lg_m + C_3C_5L_3\right) + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5R_L + C_3L_3g_m\right) + s\left(C_3R_3g_m + C_3R_Lg_m + 2C_5R_Lg_m + C_5\right)}
10.556 INVALID-ORDER-556 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                     H(s) = \frac{-C_3C_5L_3s^3 + g_m + s^2\left(-C_3C_5R_3 + C_3L_3g_m\right) + s\left(C_3R_3g_m - C_5\right)}{C_3C_5C_LL_3s^4 + s^3\left(C_3C_5C_LR_3 + 2C_3C_5L_3g_m + C_3C_LL_3g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5 + C_3C_LR_3g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_Lg_m\right)}
10.557 INVALID-ORDER-557 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                                                 H(s) = \frac{-C_3C_5L_3R_Ls^3 + R_Lg_m + s^2\left(-C_3C_5R_3R_L + C_3L_3R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{C_3C_5C_LL_3R_Ls^4 + g_m + s^3\left(C_3C_5C_LR_3R_L + 2C_3C_5L_3R_Lg_m + C_3C_5L_3 + C_3C_LR_3R_Lg_m\right) + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5R_3 + C_3C_5R_3R_Lg_m + C_3C_5R_3R
10.558 INVALID-ORDER-558 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                                                 H(s) = \frac{-C_3C_5C_LL_3R_Ls^4 + g_m + s^3\left(-C_3C_5C_LR_3R_L - C_3C_5L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(-C_3C_5R_3 + C_3C_LR_3R_Lg_m + C_3L_3g_m - C_5C_LR_L\right) + s\left(C_3R_3g_m - C_5 + C_LR_Lg_m\right)}{s^4\left(2C_3C_5C_LL_3R_Lg_m + C_3C_5C_LR_3R_Lg_m + C_3C_5C_LR_3 + C_3C_5C_LR_3 + C_3C_5C_LR_3 + C_3C_LL_3g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5C_LR_3g_m + C_3C_5C_LR_2g_m + C_3C_5C_LR_3g_m + C_3C_5C_LR_3g_
10.559 INVALID-ORDER-559 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                                 H(s) = \frac{-C_3C_5C_LL_3L_Ls^5 + g_m + s^4\left(-C_3C_5C_LL_R_3 + C_3C_LL_Rg_m\right) + s^3\left(-C_3C_5L_3 + C_3C_LL_Rg_m - C_5C_LL_L\right) + s^2\left(-C_3C_5R_3 + C_3L_3g_m + C_LL_g_m\right) + s\left(C_3R_3g_m - C_5\right)}{2C_3C_5C_LL_3L_Lg_ms^5 + s^4\left(C_3C_5C_LL_3 + 2C_3C_5C_LL_Rg_m + C_3C_LL_Lg_m\right) + s^3\left(C_3C_5C_LL_3g_m + C_3C_LL_Lg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_LL_Lg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_LL_Rg_m + C_3C_LL_Lg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_LL_Rg_m + C_3C_LL_Rg_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_LL_Rg_
10.560 INVALID-ORDER-560 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                            H(s) = \frac{-C_3C_5L_3L_Ls^4 + L_Lg_ms + s^3\left(-C_3C_5L_LR_3 + C_3L_3L_Lg_m\right) + s^2\left(C_3L_LR_3g_m - C_5L_L\right)}{C_3C_5C_LL_3L_Ls^5 + g_m + s^4\left(C_3C_5C_LL_LR_3 + 2C_3C_5L_3L_Lg_m\right) + s^3\left(C_3C_5L_3 + 2C_3C_5L_LR_3g_m + C_3C_5L_L\right) + s^2\left(C_3C_5R_3 + C_3L_3g_m + C_5L_Lg_m\right) + s^2\left(C_3R_3g_m + C_5L_L\right)}
10.561 INVALID-ORDER-561 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                       -C_{3}C_{5}C_{L}L_{3}L_{L}s^{5} + g_{m} + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L} - C_{3}C_{5}C_{L}L_{3}R_{L} - C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{3}\left(-C_{3}C_{5}C_{L}R_{3}R_{L} - C_{3}C_{5}L_{3} + C_{3}C_{L}L_{3}R_{L}g_{m} + C_{3}C_{L}L_{2}R_{3}g_{m} - C_{5}C_{L}L_{1}\right) + s^{2}\left(-C_{3}C_{5}R_{3} + C_{3}C_{L}R_{3}R_{L}g_{m} + C_{3}C_{L}L_{2}g_{m}\right) + s^{2}\left(-C_{3}C_{5}R_{3}R_{L}g_{m} + C_{3}C_{L}L_{2
10.562 INVALID-ORDER-562 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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10.563 INVALID-ORDER-563  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{-C_3C_5L_3L_LR_Ls^4 + L_LR_Lg_ms + s^3\left(-C_3C_5L_LR_3R_L + C_3L_3L_LR_Lg_m\right) + s^2\left(C_3L_LR_3R_Lg_m - C_5L_LR_L\right)}{C_3C_5C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_3C_5C_LL_LR_3R_L + 2C_3C_5L_3L_LR_Lg_m\right) + s^3\left(C_3C_5L_3R_L + 2C_3C_5L_LR_3R_Lg_m + C_3C_5L_LR_3R_Lg_m + C_3C_5L_LR$ 

 $H(s) = \frac{-C_3C_5C_LL_3L_LR_2s^5 + R_Lg_m + s^4\left(-C_3C_5C_LL_LR_3R_L - C_3C_5L_3L_LR_2g_m\right) + s^3\left(-C_3C_5L_3R_L - C_3C_5L_LR_3 + C_3C_LL_LR_3R_Lg_m + C_3L_LL_Rg_m\right) + s^2\left(-C_3C_5L_LR_3 + C_3C_LL_LR_3R_Lg_m + C_3C_LL_LR_3R_Lg_m + C_3C_LL_LR_3\right) + s^2\left(-C_3C_5R_3R_L + C_3C_5L_LR_3R_Lg_m + C_3C_5L_LR_3$ 

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10.564 INVALID-ORDER-564 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   H(s) = \frac{-C_3C_5C_LL_3L_LR_2m + s + (C_3C_5C_LL_3L_LR_2m + s + (C_3C_5C_LL_3L_LR_2m + s + (C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + c_3C_5C_LL_2R_3R_Lg_m + s + (C_3C_5C_LL_3L_2R_3R_Lg_m + C_3C_5C_LL_3L_2R_3R_Lg_m + c_3C_5C_LL_3R_2g_m + c_3C_5C_LL_3R
10.565 INVALID-ORDER-565 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)
                                H(s) = \frac{-C_3C_5L_3R_5R_Ls^3 + R_5R_Lg_m - R_L + s^2\left(-C_3C_5R_3R_5R_L + C_3L_3R_5R_Lg_m - C_3L_3R_L\right) + s\left(C_3R_3R_5R_Lg_m - C_3R_3R_L - C_5R_5R_L\right)}{R_5g_m + 2R_Lg_m + s^3\left(2C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5\right) + s^2\left(2C_3C_5R_3R_5R_Lg_m + C_3C_5R_3R_5 + C_3C_5R_5R_L + C_3L_3R_5g_m + 2C_3L_3R_Lg_m + C_3L_3\right) + s\left(C_3R_3R_5g_m + C_3R_3R_L - C_5R_5R_L\right)}
10.566 INVALID-ORDER-566 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_4 s}\right)
                                H(s) = \frac{-C_3C_5L_3R_5s^3 + R_5g_m + s^2\left(-C_3C_5R_3R_5 + C_3L_3R_5g_m - C_3L_3\right) + s\left(C_3R_3R_5g_m - C_3R_3 - C_5R_5\right) - 1}{C_3C_5C_LL_3R_5s^4 + 2g_m + s^3\left(C_3C_5C_LR_3R_5 + 2C_3C_5L_3R_5g_m + C_3C_LL_3\right) + s^2\left(2C_3C_5R_3R_5g_m + C_3C_LR_3R_5g_m + C_3C_LR_3 + 2C_3L_3g_m + C_5C_LR_5\right) + s\left(2C_3R_3g_m + C_3R_5g_m + C_3R_5g_m + C_4R_5g_m 
10.567 INVALID-ORDER-567 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_3C_5L_3R_5R_Ls^3 + R_5R_Lg_m - R_L + s^2\left(-C_3C_5R_3R_5R_L + C_3L_3R_5R_Lg_m - C_3L_3R_L\right) + s\left(C_3R_3R_5R_Lg_m - C_3R_3R_L - C_5R_5R_L\right)
H(s) = \frac{- C_3 C_5 L_3 R_5 R_L s^\circ + R_5 R_L g_m - R_L + s^\circ \left(- C_3 C_5 R_3 R_5 R_L + C_3 L_3 R_5 R_L g_m - C_3 L_3 R_5 R_L g_m - C_3 R_3 R_5 R_L g_m + C_3 C_5 R_5 R_L g_m + C_3 C_5 R_5 R_L g_m + C_3 C_5 R_5 R_L g_m + C_5 R_5 R_L g_m
10.568 INVALID-ORDER-568 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_{L,s}}\right)
H(s) = \frac{-C_3C_5C_LL_3R_5R_Ls^4 + R_5g_m + s^3\left(-C_3C_5C_LR_3R_5R_L - C_3C_5L_3R_5 + C_3C_LL_3R_5R_Lg_m - C_3C_LL_3R_5\right) + s^2\left(-C_3C_5R_3R_5 + C_3C_LR_3R_5R_Lg_m - C_3C_LR_3R_5 + C_3C_LR_3R_5R_Lg_m - C_3C_LR_3R_5 + C_3C_LR_3R_5R_Lg_m - C
10.569 INVALID-ORDER-569 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
                                    -C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + R_{5}g_{m} + s^{4}\left(-C_{3}C_{5}C_{L}L_{L}R_{3}R_{5} + C_{3}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{3}C_{L}L_{L}R_{3} + C_{5}C_{L}L_{L}R_{3} - C_{5}C_{L}L_{L}R_{3} - C_{5}C_{L}L_{L}R_{3} - C_{5}C_{L}L_{L}R_{5} + C_{3}C_{L}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{L}R_{3} - C_{5}C_{L}L_{L}R_{3} - C_{5}C_{L}L_{L}R_{5} - C_{5}C_{L}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{L}R_{3}g_{m} 
10.570 INVALID-ORDER-570 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_LR_5s^4 + s^3\left(-C_3C_5L_LR_3R_5 + C_3L_3L_LR_5g_m - C_3L_3L_L\right) + s^2\left(C_3L_LR_3R_5g_m - C_3L_LR_3 - C_5L_LR_5\right) + s\left(L_LR_5g_m - L_L\right)}{C_3C_5C_LL_3L_LR_5s^5 + R_5g_m + s^4\left(C_3C_5L_LR_3R_5 + 2C_3C_5L_LR_3R_5g_m + C_3C_LL_LR_3R_5g_m + C_3C_LL_LR_3 + 2C_3L_3L_LR_5g_m + C_3C_LL_LR_5g_m + C_3C_LL_LR_5g_m
10.571 INVALID-ORDER-571 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                    -C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + R_{5}g_{m} + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{5}R_{L} - C_{3}C_{5}C_{L}L_{3}R_{5}R_{L} - C_{3
10.572 INVALID-ORDER-572 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -C_3C_5L_3L_LR_5R_Ls^4 + s^3(-C_3C_5L_LR_3R_5R_Ls^4)
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 $\frac{1}{R_5 g_m + 2 R_L g_m + s^5 \left(2 C_3 C_5 C_L L_3 L_L R_5 R_L g_m + C_3 C_5 C_L L_2 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m + C_3 C_5 C_L L_3 L_2 R_5 R_L g_m$ 

 $-C_3C_5C_LL_3L_LR_5R_Ls^5 + R_5R_Lg_m - R_L + s^4\left(-C_3C_5C_LL_LR_3R_5R_L - C_3C_5L_3L_LR_5 + C_3C_LL_3L_LR_5R_Lg_m - C_3C_LL_3L_RS_R\right) + r_5R_Lg_m - r_5R_Lg_m$ 

10.573 INVALID-ORDER-573  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.574 INVALID-ORDER-574 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_3C_5C_LL_3L_LR_5R_Ls^5 + R_5R_Lg_m - R_L + s^4(-C_3C_5)
H(s) = \frac{1}{R_5 g_m + 2 R_L g_m + s^5 \left(2 C_3 C_5 C_L L_3 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_L R_5 R_L g_m + C_3 C_5 C_L L_2 R_5 R_L + 2 C_3 C_5 C_L L_3 L_2 R_5 R_L + 2 C_3 C_5 C_L L_3 R_5 R_L + 2 C_5 C_
10.575 INVALID-ORDER-575 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                        H(s) = \frac{R_L g_m + s^3 \left(C_3 C_5 L_3 R_5 R_L g_m - C_3 C_5 L_3 R_L\right) + s^2 \left(C_3 C_5 R_3 R_5 R_L g_m - C_3 C_5 R_3 R_L + C_3 L_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_5 R_5 R_L g_m - C_5 R_L\right)}{g_m + s^3 \left(C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 R_L g_m + C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 R_L g_m + C_3 C_5 R_3 R_L g_m + C_3 C_5 R_L g_m + C_3 C_5 R_L g_m + C_5 R_L g_m + C_5 R_5 R_L g_m + C_
10.576 INVALID-ORDER-576 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                    H(s) = \frac{g_m + s^3 \left( C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 \right) + s^2 \left( C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_3 L_3 g_m \right) + s \left( C_3 R_3 g_m + C_5 R_5 g_m - C_5 \right)}{s^4 \left( C_3 C_5 C_L L_3 R_5 g_m + C_3 C_5 C_L R_3 R_5 g_m + C_3 C_5 L_3 g_m + C_3 C_5 L_3 g_m + C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 R_5 g_m + C_5 C_L R_5 g_m + C_5 C_L \right) + s \left( C_3 g_m + 2 C_5 g_m + C_4 G_5 R_5 g_m + C_5 C_4 R_5 g_m + C_5 C_5 R_5 g_m + C_5 C_4 R_5 g_m + C_5 C_5 R_5 g_m + C
10.577 INVALID-ORDER-577 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
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10.577 INVALID-ORDER-577 
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_5}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L g_m + s^3 \left( C_3 C_5 L_3 R_5 R_L g_m - C_3 C_5 L_3 R_L \right) + s^2 \left( C_3 C_5 R_3 R_5 R_L g_m - C_3 C_5 R_3 R_L + C_3 L_3 R_L g_m \right) + s \left( C_3 R_3 R_L g_m + C_5 R_5 R_L g_m - C_5 R_L \right)}{g_m + s^4 \left( C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_L \right) + s^3 \left( C_3 C_5 C_L R_3 R_5 R_L g_m + C_3 C_5 L_3 R_L g_m + C_3 C_5 R_3 R_L g_m + C_3 C_5 R_L g_m +$$

10.578 INVALID-ORDER-578 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

10.579 INVALID-ORDER-579 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^5 \left( C_3 C_5 C_L L_3 L_L R_5 g_m - C_3 C_5 C_L L_3 L_L \right) + s^4 \left( C_3 C_5 C_L L_L R_3 R_5 g_m - C_3 C_5 C_L L_L R_3 + C_3 C_L L_L R_3 g_m + C_5 C_L L_L R_3 g_m + C_5 C_L L_L R_5 g_m - C_5 C_L L_L \right) + s^2 \left( C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_3 L_3 g_m + C_4 L_L R_5 g_m - C_5 C_L L_L R_5 g_m - C_5 C_L L_L R_5 g_m - C_5 C_L L_L R_5 g_m + C_5 C_L L_L$$

**10.580** INVALID-ORDER-580 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L g_m s + s^4 \left( C_3 C_5 L_L R_3 R_5 g_m - C_3 C_5 L_L R_3 + C_3 L_L R_3 g_m + C_5 L_L R_3 g_m + C_5 L_L R_5 g_m - C_5 L_L \right)}{g_m + s^5 \left( C_3 C_5 C_L L_3 L_L R_5 g_m + C_3 C_5 L_L L_3 R_5 g_m + C_3 C_5 L_L R_3 g_m + C_5 C_L L_L R_5 g_m + C_5 C_L R_5 g$$

10.581 INVALID-ORDER-581 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_5 g_m - C_3 C_5 C_L L_3 L_L\right) + s^4 \left(C_3 C_5 C_L L_3 R_5 R_L g_m - C_3 C_5 C_L L_3 R_5 g_m - C_3 C_5 C_L L_2 R_3 R_5 g_m - C_3 C_5 C_L L_2 R_3 R_5 R_L g_m - C_3 C_5 C_L R_3 R_L g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_4 R_3 g_m + C_5 C_4 L_4 R_3 g_m + C_5 C_4 L_4 R_5 g_m - C_3 C_5 C_L L_4 R_3 g_m + C_5 C_4 L_4 R_5 g_m + C_5 C_4 L$$

10.582 INVALID-ORDER-582 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L g_m s + s^4 \left( C_3 C_5 L_3 L_L R_5 R_L g_m - C_3 C_5 L_4 L_4 R_5 R_L g_m - C_3 C_5 L_4 R_5 R_L g_m + C_3 C_5 L_4 R_5$$

10.583 INVALID-ORDER-583 
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_L g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_5 R_L g_m - C_3 C_5 L_L L_R R_5 R_L g_m - C_3 C_5 L_L L_R R_5 R_L g_m - C_3 C_5 L_L L_R R_5 R_L g_m - C_3 C_5 L_L R_5 R_L g_m - C_3 C_5 L_L R_5 R_L g_m - C_3 C_5 L_L R_5 R_L g_m + C_3 C_5$$

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10.584 INVALID-ORDER-584 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R_{L}g_{m} + s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}\right) + s^{4}\left(C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}\right) + s^{4}\left(C_{3}C_{5}C_{L}L_{L}R_{5}R_{L}g_{m}\right) + s^{4}\left(C_{
H(s) = \frac{R_L g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_5 R_L g_m - C_3 C_5 C_L L_3 L_L R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_L R_3 R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_3 R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_3 R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_3 R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_L R_5 R_L g_m + 2 C_5 C_L L
10.585 INVALID-ORDER-585 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                          H(s) = \frac{C_3C_5L_3L_5R_Lg_ms^4 + R_Lg_m + s^3\left(-C_3C_5L_3R_L + C_3C_5L_5R_3R_Lg_m\right) + s^2\left(-C_3C_5R_3R_L + C_3L_3R_Lg_m + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(2C_3C_5L_3R_Lg_m + C_3C_5L_3 + C_3C_5L_5R_2g_m\right) + s^2\left(2C_3C_5R_3R_Lg_m + C_3C_5R_3 + C_3C_5
10.586 INVALID-ORDER-586 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                    H(s) = \frac{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(-C_3C_5L_3 + C_3C_5L_5R_3g_m\right) + s^2\left(-C_3C_5R_3 + C_3L_3g_m + C_5L_5g_m\right) + s\left(C_3R_3g_m - C_5\right)}{C_3C_5C_LL_3L_5g_ms^5 + s^4\left(C_3C_5C_LL_3 + C_3C_5C_LL_3 + C_3C_5C_LR_3 + 2C_3C_5L_3g_m + C_3C_5L_3g_m + C_3C_5L_5g_m\right) + s^2\left(2C_3C_5R_3g_m + C_3C_5 + C_3C_LR_3g_m + C_5C_L\right) + s\left(C_3g_m + 2C_5g_m + C_4g_m\right)}
10.587 INVALID-ORDER-587 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_3C_5L_3L_5R_Lg_ms^4 + R_Lg_m + s^3\left(-C_3C_5L_3R_L + C_3C_5L_5R_3R_Lg_m\right) + s^2\left(-C_3C_5R_3R_L + C_3L_3R_Lg_m + C_5L_5R_Lg_m\right) + s\left(C_3R_3R_Lg_m - C_5R_L\right)}{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_Lg_m + C_3C_5L_4R_Lg_m + C_3C_5L_3R_Lg_m + C_3C_5R_3R_Lg_m + 
10.588 INVALID-ORDER-588 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_{3s}}, \infty, L_5 s + \frac{1}{C_{5s}}, R_L + \frac{1}{C_{Ls}}\right)
H(s) = \frac{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(-C_3C_5C_LL_3R_Lg_m + C_3C_5L_Ls_Rg_m + C_3C_5L_Ls_Rg
10.589 INVALID-ORDER-589 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(-C_3C_5C_LL_3L_L + C_3C_5C_LL_3L_L + C_3C_5C_LL_3L_2g_m + s^4\left(-C_3C_5C_LL_3L_2g_m + C_3C_LL_3L_2g_m + C_3C_LL_3L_2g_m + s^4\left(-C_3C_5L_3L_2g_m + C_3C_LL_3L_2g_m + C_3C_LL_3L_2g_m + C_3C_LL_2R_3g_m 
10.590 INVALID-ORDER-590 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_3C_5L_3L_5L_Lg_ms^5 + L_Lg_ms + s^4\left(-C_3C_5L_3L_L + C_3C_5L_LR_3g_m\right) + s^3\left(-C_3C_5L_LR_3 + C_3L_3L_Lg_m + C_5L_5L_Lg_m\right) + s^2\left(C_3L_LR_3g_m - C_5L_L\right)}{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5L_LL_LR_3g_m\right) + s^4\left(C_3C_5L_LL_R_3g_m\right) + s^4\left(C_3C_5L_LL_R_3g_m + C_3C_5L_LL_R_3g_m\right) + s^4
10.591 INVALID-ORDER-591 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
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10.591 INVALID-ORDER-591  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_5R_Lg_m - C_3C_5C_LL_3L_L + C_3C_5C_LL_3R_L + C_3C_5C_LL_$ 

10.592 INVALID-ORDER-592  $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

 $H(s) = \frac{C_{3}C_{5}L_{3}L_{5}L_{L}R_{L}g_{m}s^{5} + L_{L}R_{L}g_{m}s + s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{L} + C_{3}C_{5}L_{3}L_{L}R_{L} + C_{3}C_{5}L_{3}L_{L}R_{L} + C_{3}C_{5}L_{3}L_{L}R_{L}g_{m} + s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{L}g_{m} + s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{L}g_{m} + s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{L}g_{m} + c_{3}C_{5}L_{3}L_{L}R_{L}g_{m} + c_{3}C_{5}L_{5}L_{L}R_{L}g_{m} + c_{3}C_{5}L_{L}R_{L}g_{m} + c_$ 

10.593 INVALID-ORDER-593  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_LR_gms^6 + R_Lg_m + s^5\left(-C_3C_5C_LL_3L_LR_L + C_3C_5C_LL_5L_LR_3R_Lg_m + C_3C_5L_LL_RR_3R_L + C_3C_5L_LR_3R_L + C_3C_5L_L$ 

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10.594 INVALID-ORDER-594 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + R_Lg_m + s^5\left(-C_3C_5C_LL_3L_LR_L + C_3C_5C_LL_5L_LR_3R_Lg_m\right) + s^4\left(-C_3C_5C_LL_LR_3R_Lg_m\right) + s^4\left(-C_3C_5C_LL_RR_3R_Lg_m\right) + s^4\left(-C_3C_5C_LR_3R_Lg_m\right) + s^4\left(-C_3C_5C_LR
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_Lg_ms^5 + R_Lg_m + s^5 \left(-C_3C_5C_LL_3L_LR_L + C_3C_5C_LL_5L_LR_3R_Lg_m\right) + s^4 \left(-C_3C_5C_LL_3L_LR_L + C_3C_5C_LL_5L_LR_3R_Lg_m\right) + s^4 \left(-C_3C_5C_LL_3L_5L_LR_2g_m\right) + s^4 \left(C_3C_5C_LL_3R_L + C_3C_5C_LL_3R_L + C_3C_5C_LL_2R_3R_Lg_m\right) + s^4 \left(C_3C_5C_LL_3R_L + C_3C_5C_LL_3R_L + C_3C_5C_
10.595 INVALID-ORDER-595 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)
                                          H(s) = \frac{-C_3C_5L_3L_5R_Ls^4 - R_L + s^3\left(-C_3C_5L_5R_3R_L + C_3L_3L_5R_Lg_m\right) + s^2\left(-C_3L_3R_L + C_3L_5R_3R_Lg_m - C_5L_5R_L\right) + s\left(-C_3R_3R_L + L_5R_Lg_m\right)}{2R_Lg_m + s^4\left(2C_3C_5L_3L_5R_Lg_m + C_3C_5L_3L_5\right) + s^3\left(2C_3C_5L_5R_3R_Lg_m + C_3C_5L_5R_3 + C_3C_5L_5R_L + C_3L_3L_5g_m\right) + s^2\left(2C_3L_3R_Lg_m + C_3L_5R_3g_m + C_3L_5R_Lg_m + C_5L_5\right) + s\left(2C_3R_3R_Lg_m + C_3R_3R_Lg_m + C_3R_3R_Lg
10.596 INVALID-ORDER-596 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_4 s}\right)
                                          H(s) = \frac{-C_3C_5L_3L_5s^4 + s^3\left(-C_3C_5L_5R_3 + C_3L_3L_5g_m\right) + s^2\left(-C_3L_3 + C_3L_5R_3g_m - C_5L_5\right) + s\left(-C_3R_3 + L_5g_m\right) - 1}{C_3C_5C_LL_3L_5s^5 + 2g_m + s^4\left(C_3C_5L_LL_5R_3 + 2C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_5L_5R_3g_m + C_3C_LL_3 + C_3C_LL_3 + C_3C_LL_3\right) + s^2\left(C_3C_LL_3 + C_3C_LL_5R_3g_m + C_5C_LL_5\right) + s^2\left(C_3C_LR_3 + 2C_3L_5g_m + C_4L_5g_m\right) + s^2\left(C_3R_3g_m + C_3C_LL_3 + C_3C_LL_3 + C_3C_LL_3\right) + s^2\left(C_3C_LL_3 + C_3C_LL_3 + C_3C_LL_3\right) + s^2\left(C_3C_LL_3 + C_3C_LL_3\right) + s^2\left(C_3C_LL_3\right) + s^
10.597 INVALID-ORDER-597 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_{3}C_{5}L_{3}L_{5}R_{L}s^{4}-R_{L}+s^{3}\left(-C_{3}C_{5}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{L}g_{m}\right)+s^{2}\left(-C_{3}L_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}g_{m}-C_{5}L_{5}R_{L}\right)+s\left(-C_{3}R_{3}R_{L}+L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{L}g_{m}+C_{5}L_{5}R_{
H(s) = \frac{-C_3C_5L_3L_5R_Ls^4 - R_L + s^3\left(-C_3C_5L_5R_3R_L + C_3L_5R_Lg_m\right) + s^4\left(-C_3L_5R_3R_Lg_m - C_5L_5R_L\right) + s\left(-C_3R_3R_L + L_5R_Lg_m\right)}{C_3C_5C_LL_3L_5R_Ls^5 + 2R_Lg_m + s^4\left(C_3C_5L_5R_3R_L + 2C_3C_5L_3L_5R_Lg_m\right) + s^3\left(2C_3C_5L_5R_3R_Lg_m + C_3C_5L_5R_3 + C_3C_5L_5R_5 + C_3C_5L_5R_5 + C_3C_5L_5R_5 + C_3C_5L_5R_5 + C_3C_5L_5R_5 + C_3C_5
10.598 INVALID-ORDER-598 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_3L_5R_Ls^5 + s^4\left(-C_3C_5C_LL_5R_3R_L - C_3C_5L_3L_5 + C_3C_LL_3L_5R_Lg_m\right) + s^3\left(-C_3C_5L_4R_3R_L + C_3C_LL_5R_3R_Lg_m + C_3L_4S_{RL}g_m + C_3L_4S_{RL}g_m + C_3C_LL_5R_3R_Lg_m + C_3C_LL_5R_2g_m + C_3C_LL
10.599 INVALID-ORDER-599 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
                                                        -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}s^{6} + s^{5}\left(-C_{3}C_{5}C_{L}L_{5}L_{L}R_{3} + C_{3}C_{L}L_{5}L_{L}R_{3} + C_{3}C_{L}L_{5}L_{L}R_{3}g_{m} - C_{5}C_{L}L_{5}L_{L}\right) + s^{3}\left(-C_{3}C_{5}L_{5}L_{L}R_{3} + C_{3}C_{L}L_{5}L_{L}R_{3} + C_{3}L_{5}L_{L}R_{3} + C_{3}L_{5}L_{L}R_{3}g_{m} + C_{5}C_{L}L_{5}L_{L}\right) + s^{3}\left(-C_{3}C_{5}L_{5}L_{L}R_{3} + C_{3}C_{L}L_{5}L_{L}R_{3}g_{m} + C_{5}C_{L}L_{5}L_{L}\right) + s^{4}\left(C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}g_{m} + C_{3}C_{5}L_{L}L_{5}L_{L}R_{3}g_{m} + C_{3}C_{L}L_{5}L_{L}R_{3}g_{m} + C_{3}C_{L}
10.600 INVALID-ORDER-600 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_5L_Ls^5 - L_Ls + s^4\left(-C_3C_5L_5L_LR_3 + C_3L_3L_5L_Lg_m\right) + s^3\left(-C_3L_3L_L + C_3L_5L_LR_3g_m - C_5L_5L_L\right) + s^2\left(-C_3L_LR_3 + L_5L_Lg_m\right)}{C_3C_5C_LL_3L_5L_Ls^6 + s^5\left(C_3C_5L_LL_5L_LR_3 + 2C_3C_5L_3L_5L_Lg_m\right) + s^4\left(C_3C_5L_3L_5 + 2C_3C_5L_5L_LR_3g_m + C_3C_5L_5L_LR_3g_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_5L_LR_3 + C_3L_5L_LR_3 + C_3L_5L_LR_3g_m + C_5C_LL_5L_L\right) + s^3\left(C_3C_5L_5L_LR_3 + C_3L_5L_LR_3 + C_3L_5L_LR_
10.601 INVALID-ORDER-601 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                        -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}s^{6} + s^{5}\left(-C_{3}C_{5}C_{L}L_{3}L_{5}R_{L} - C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{5}R_{3}R_{L} - C_{3}C_{5}L_{4}L_{5}L_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}L_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}L_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{5}R_{3}R_{L} - C_{3}C_{5}L_{4}L_{5}L_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}L_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}L_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{5}L_{5}R_{3}R_{L} - C_{3}C_{5}L_{4}L_{5}L_{L}g_{m} + C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} - C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} + C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} + C_{3}C_{L}L_{3}L_{5}R_{L}g_{m} + C_{3}C_{L}L_{5}L_{L}g_{m} + C_{3
10.602 INVALID-ORDER-602 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_I L_I R_I s^2 + L_I s + R_I}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -C_3C_5L_3L_5L_LR_Ls^5 - L_LR_Ls + s^4(-C_3C_5L_5L_5)
H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Ls^6 + R_L + s^5\left(C_3C_5C_LL_5L_LR_3R_L + 2C_3C_5L_3L_5L_LR_Lg_m + C_3C_5L_3L_5L_LR_Lg_m + C_3C_5L_5L_LR_3R_Lg_m + C_3C_5L_5L_Rg_m + C_3C_5L
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 $H(s) = \frac{-C_3C_5C_LL_3L_5L_LR_Ls^6 - R_L + s^5\left(-C_3C_5C_LL_5L_LR_3R_L - C_3C_5L_3L_5L_L + C_3C_LL_3L_5L_LR_Lg_m\right) + s^4\left(-C_3C_5L_3L_5L_LR_Lg_m\right) + s^4\left(-C$ 

10.603 INVALID-ORDER-603  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.604 INVALID-ORDER-604 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -C_3C_5C_LL_3L_5L_LR_Ls^6 - R_L + s^5(-C_3C_5C_LL_5L_LR_3R_L
H(s) = \frac{1}{2R_L g_m + s^6 \left(2C_3 C_5 C_L L_3 L_5 L_L R_L g_m + C_3 C_5 C_L L_3 L_5 L_L \right) + s^5 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 + C_5 C_L L_5 L_L R_5 + C_5 C_L L_5 L
10.605 INVALID-ORDER-605 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)
H(s) = \frac{C_3C_5L_3L_5R_Lg_ms^4 + R_Lg_m + s^3\left(C_3C_5L_3R_5R_Lg_m - C_3C_5L_3R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_5L_5R_Lg_m + S_4C_5R_5R_Lg_m - C_3C_5R_3R_Lg_m + C_5L_5R_Lg_m + S_4C_5R_5R_Lg_m + S_
10.606 INVALID-ORDER-606 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
H(s) = \frac{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_3 + C_3C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_3L_3g_m + C_5L_5g_m\right) + s\left(C_3R_3g_m + C_5R_5g_m - C_5\right)}{C_3C_5C_LL_3L_5g_ms^5 + s^4\left(C_3C_5C_LL_3R_5g_m + C_3C_5L_L_3R_5g_m + C_3C_5L_L_3g_m + C_3C_5L_5g_m + C
10.607 INVALID-ORDER-607 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_{3s}}, \infty, L_5 s + R_5 + \frac{1}{C_{5s}}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C_{3}C_{5}L_{3}L_{5}R_{L}g_{m}s^{4} + R_{L}g_{m} + s^{3}\left(C_{3}C_{5}L_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}L_{3}R_{L} + C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}L_{3}R_{L}\right) + s^{2}\left(C_{3}C_{5}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m} - C_{3}C_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(C_{3}C_{5}R_{5}R_{L}g_{
H(s) = \frac{C_3C_5L_3L_5R_Lg_ms + R_Lg_m + s + (C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + S + (C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5g_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_Lg_m + C_
10.608 INVALID-ORDER-608 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_3C_5C_LL_3L_5R_Lg_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_5R_Lg_m - C_3C_5C_LL_3R_Lg_m + C_3C_5L_Ls_Rg_m + C_3C_5L_
10.609 INVALID-ORDER-609 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_LR_5g_m - C_3C_5C_LL_3L_LR_3g_m\right) + s^4\left(C_3C_5C_LL_2R_3g_m - C_3C_5L_LR_3R_5g_m - C_3C_5L_LR_3L_g_m + C_3C_LL_2L_g_m\right) + s^3\left(C_3C_5L_LR_3R_5g_m - C_3C_5L_3L_2g_m\right) + s^4\left(C_3C_5C_LL_3L_2g_m + C_3C_5L_LR_3g_m + C_3C_5L
10.610 INVALID-ORDER-610 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C_{3}C_{5}L_{3}L_{5}L_{L}g_{m}s^{5} + L_{L}g_{m}s + s^{4}\left(C_{3}C_{5}L_{3}L_{L}R_{5}g_{m} - C_{3}C_{5}L_{3}L_{L} + C_{3}C_{5}L_{5}L_{L}R_{3}g_{m}\right) + s^{3}\left(C_{3}C_{5}L_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}L_{L} + C_{3}C_{5}L_{5}L_{L}R_{3}g_{m}\right) + s^{3}\left(C_{3}C_{5}L_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{L}R_{3}g_{m}\right) + s^{3}\left(C_{3}C_{5}L_{L}R_{3}g_{m}\right) + s^{3}\left(C_{3}C_{5
H(s) = \frac{C_3C_5L_3L_5L_2g_ms^5 + L_Lg_ms + s^4\left(C_3C_5L_3L_LR_5g_m - C_3C_5L_3L_L + C_3C_5L_5L_LR_3g_m\right) + s^3\left(C_3C_5L_LR_3R_5g_m - C_3C_5L_LR_3R_5g_m - C_3C_5L_LR_3R_5g_m - C_3C_5L_LR_3R_5g_m + 
10.611 INVALID-ORDER-611 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_5R_Lg_m + C_3C_5C_LL_3L_LR_5g_m - C_3C_5C_LL_3L_LR_5g_m - C_3C_5C_LL_3R_5R_Lg_m - C_3C_5C_LL_3R_5R_Lg_m - C_3C_5C_LL_3R_5R_Lg_m - C_3C_5C_LL_3R_5R_Lg_m + C_3C_5C_LL_3R_5g_m - C_3C_5C_LL_3R_5g_m - C_3C_5C_LL_3R_5g_m + C_3C_5C_LL_3R_5g_m - C_
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10.613 INVALID-ORDER-613  $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_5R_Lg_m + C_3C_5C_LL_3L_LR_L + C_3C_5C_LL_5L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_L + C_3C_5L_3L_LR_3R_LR_3R_L + C_3C_5L_3L_LR_3R_L + C_3C_5L_3L_LR_3R_2R_2 + C_3C_5L_3L_LR_3R_2R_2 + C_3C_5L_3L_2R_3R_2 + C_3C_5L_3L_2R_3R_2 + C_3C_5L_$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_LR_2g_ms^6 + R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_5R_Lg_m - C_3C_5C_LL_3L_LR_5 + C_3C_5C_LL_3L_LR_5 + C_3C_5C_LL_3L_LR_5 + C_3C_5C_LL_3L_LR_5 + C_3C_5C_LL_3L_LR_5 + C_3C_5C_LL_3L_LR_3 + C_3C_5C_LL_3L_2R_3 + C_3C_5C_LL_3L_3L_3 + C_3C_5C_LL_3L_3 + C_3C_5C_LL_3L_3L_3 + C_3C_5C_LL_3L_3L_3 + C_3C_5C_LL_3L_$ 

10.612 INVALID-ORDER-612  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_R R_L s^2 + L_L s + R_L}\right)$ 

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10.614 INVALID-ORDER-614 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + R_Lg_m + s^5(C_3C_5C_LL_3L_LR_5R_Lg_m)
H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_5R_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + C_3C_5C_LL_3L_LR_Lg_m + C_3C_5C_LL_3R_LR_Lg_m + C_3C_5C_LL_3R_Lg_m + C_3C_5C_LL_3R_Lg_
10.615 INVALID-ORDER-615 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)
H(s) = \frac{-C_3C_5L_3L_5R_5R_Ls^4 - R_5R_L + s^3\left(-C_3C_5L_5R_3R_5R_L + C_3L_3L_5R_5R_Lg_m - C_3L_3L_5R_L\right) + s^2\left(-C_3L_3R_5R_L + C_3L_5R_3R_5R_Lg_m - C_3L_5R_3R_L - C_5L_5R_5R_L\right) + s\left(-C_3R_3R_5R_L + C_3L_5R_3R_5R_Lg_m + C_3L_5R_5R_Lg_m + C
10.616 INVALID-ORDER-616 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5L_3L_5R_5s^4 - R_5 + s^3\left(-C_3C_5L_5R_3R_5 + C_3L_3L_5R_5g_m - C_3L_3L_5\right) + s^2\left(-C_3L_3R_5 + C_3L_5R_3R_5g_m - C_3L_5R_3 - C_5L_5R_5\right) + s\left(-C_3R_3R_5 + L_5R_5g_m - C_3L_5R_5g_m + C_3C_5L_5R_5\right) + s\left(-C_3R_3R_5 + L_5R_5g_m + C_3C_5L_5R_5\right) + s\left(-C_3R_3R_5 + L_5R_5g_m + C_3C_5L_5R_5\right) + s\left(-C_3R_3R_5g_m + C_3C_5L_5R_5\right) + s\left(-C_3R_3R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -C_{3}C_{5}L_{3}L_{5}R_{5}s^{4}-R_{5}+s^{3}\left(-C_{3}C_{5}L_{5}R_{3}R_{5}+C_{3}L_{3}L_{5}R_{5}g_{m}-C_{3}L_{3}L_{5}\right)+s^{2}\left(-C_{3}L_{3}R_{5}+C_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}L_{5}R_{3}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}\right)+s\left(-C_{3}R_{3}R_{5}+L_{5}R_{5}g_{m}-C_{3}L_{5}R_{5}\right)+s\left(-C_{3}R_{5}R_{5}+L_{5}R_{5}g_{m}-C_{5}R_{5}R_{5}\right)+s\left(-C_{3}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}R_{5}\right)+s\left(-C_{3}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}\right)+s\left(-C_{3}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}\right)+s\left(-C_{3}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}R_{5}+L_{5}
10.617 INVALID-ORDER-617 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H(s) = \frac{C_3C_5L_3L_5R_5R_Ls^5 + 2R_5R_Lg_m + R_5 + s^4\left(C_3C_5L_Ls_Rs_5R_Lg_m + C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3L_5R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m 
10.618 INVALID-ORDER-618 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_3L_5R_5R_Ls^5 - R_5 + s^4\left(-C_3C_5C_LL_5R_3R_5R_L - C_3C_5L_3L_5R_5 + C_3C_LL_3L_5R_5R_Lg_m - C_3C_LL_3L_5R_L\right) + s^3\left(-C_3C_5L_5R_3R_5R_Lg_m + C_3C_5L_5R_3R_5R_Lg_m + C_3C_5L_5R_3R_5R_Lg_m + C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_5g_m + C
10.619 INVALID-ORDER-619 Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, L_Ls + \frac{1}{C_Ls}\right)
                                          -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6}-R_{5}+s^{5}\left(-C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}+C_{3}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{3}C_{L}L_{3}L_{5}L_{L}\right)+s^{4}\left(-C_{3}C_{5}L_{3}L_{5}R_{5}-C_{3}C_{L}L_{3}L_{L}R_{5}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}
10.620 INVALID-ORDER-620 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -C_3C_5L_3L_5L_LR_5s^5 - L_LR_5s + s^4(-C_3C_5L_5L_LR_3R_5 + C_3L_5)
10.621 INVALID-ORDER-621 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s - R_{5} + s - (-C_{3}C_{5}C_{L}L_{3}L_{5}R_{L} - C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5} + C_{3}C_{L}L_{5}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{5}L_{L}R_{5}g_{m} - C_{3}C_{L}L_{5}L_{L}R_{5}g_{m} + c_{3}C_{L}L_{5}L_{L}R_{5}g_{m} + c_{3}C_{5}C_{L}L_{5}L_{L}R_{5}g_{m} + c_{3}C_{5}C_{L}L_{5}L_{5}R_{5}g_{m} + c
10.622 INVALID-ORDER-622 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + R_5R_L + s^5\left(C_3C_5C_LL_5L_LR_3R_5R_L + 2C_3C_5L_3L_5L_LR_5R_Lg_m + C_3C_5L_3L_5L_LR_5 + C_3C_LL_3L_5L_LR_5 + C_3C_LL_3L_5L_2L_5L_2L_5L_3L_5L_2L_5L_5L_5L
```

10.623 INVALID-ORDER-623  $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_1 L_1 s^2 + 1}\right)$ 

$$H(s) = \frac{R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m - C_3C_5L_5R_3 + C_3L_5R_5g_m - C_3C_5L_5R_3 + C_3L_3L_5g_m\right) + s^2\left(C_3L_3R_5g_m - C_3L_3 + C_3L_5R_3g_m + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_3R_3R_5g_m - C_3L_5R_5g_m + C_3C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5R_5g_m + C_5L_5R_5g_m + C_5L_5R_5g_m + C_5L_5R_5g_m + C_5L_5R_5g_m + C_5C_5L_5R_5g_m +$$

10.627 INVALID-ORDER-627 
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left( C_3 C_5 L_3 L_5 R_5 R_L g_m - C_3 C_5 L_3 L_5 R_L g_m + C_3 C_5 L_4 L_5 R_3 R_L g_m + C_3 C_5 L_5 R_5 R_L g_m + C_5 C_5$$

10.628 INVALID-ORDER-628 
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_3L_5R_5R_Lg_m - C_3C_5C_LL_3L_5R_Lg_m - C_3C_5C_LL_5R_3R_Lg_m - C_3C_5C_LL_5R_3R_Lg_m - C_3C_5L_4L_5R_2g_m - C_3C_5L_4L_5R_2g_m - C_3C_5L_4L_5R_2g_m - C_3C_5L_4L_5R_2g_m - C_3C_5L_4L_5R_2g_m - C_3C_5L_4L_5R_3R_2g_m - C_3C_5L_4R_3R_5g_m - C_3C_5L_4R_5g_m -$$

10.629 INVALID-ORDER-629 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5g_m + s^6 \left( C_3C_5C_LL_3L_5L_LR_5g_m - C_3C_5C_LL_3L_5L_L \right) + s^5 \left( C_3C_5C_LL_5L_LR_3R_5g_m - C_3C_5C_LL_5L_LR_3 + C_3C_LL_3L_5L_Lg_m \right) + s^4 \left( C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5 + C_3C_LL_3L_LR_5g_m - C_3C_LL_3L_LR_5g_m$$

10.630 INVALID-ORDER-630 
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.631 INVALID-ORDER-631 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_5 g_m - C_3 C_5 C_L L_3 L_5 L_L\right) + s^5 \left(C_3 C_5 C_L L_3 L_5 R_L g_m - C_3 C_5 C_L L_3 L_5 R_L g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 R_5 R$$

10.632 INVALID-ORDER-632 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{1}{R_5 R_L g_m + R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_4 L_5 L_L R_3 R_L + C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_3 C_5 L_5 L_5 L_L R_5 g_m + 2 C_5 L_5 L_5 L_L R_5 g_m + 2 C_5 L_5 L_L R_5 g_m +$$

10.633 INVALID-ORDER-633 
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{R_5 R_L g_m - R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m - C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m - C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5 L_L R_5 R_$$

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10.634 INVALID-ORDER-634 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
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 $H(s) = \frac{1}{R_5 g_m + 2 R_L g_m + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_3 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L R_5 R_L g_m + 2 C_5 C_L L_5 L_L$ 

10.635 INVALID-ORDER-635 
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, R_L\right)$$

 $H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left(C_3 C_5 L_3 L_5 R_L g_m - C_3 C_5 L_3 R_5 R_L g_m - C_3 C_5 L_5 R_3 R_5 R_L g_m - C_3 C_5 L_5 R_3 R_5 R_L + C_3 L_5 R_3 R_5 R_L g_m - C_3 C_5 L_5 R_3 R_5 R_L + C_3 L_5 R_5 R_L g_m - C_3 L_5 R_L g$ 

**10.636** INVALID-ORDER-636 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

10.637 INVALID-ORDER-637 
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \frac{R_L}{C_LR_Ls + 1}\right)$$

 $H(s) = \frac{R_5 R_L g_m - R_L + s^4 \left( C_3 C_5 L_1 L_5 R_5 R_L g_m + C_3 C_5 L_1 L_5 R_5 R_L g_m$ 

10.638 INVALID-ORDER-638 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{R_5g_m + s^5 \left( C_3C_5C_LL_3L_5R_Lg_m - C_3C_5C_LL_3R_5R_L + C_3C_5C_LL_5R_3R_5R_Lg_m - C_3C_5C_LL_5R_3R_L + C_3C_5C_LL_5R_L + C_3C_5C_L$ 

10.639 INVALID-ORDER-639 
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$$

10.640 INVALID-ORDER-640 
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{s^5 \left( C_3 C_5 L_3 L_5 L_L R_5 g_m + C_3 C_5 L_4 L_2 L_2 R_5 g_m + C_3 C_5 L_4 L_4 L_2 R_5 g_m + C_3 C_5 L_4 L_4 L_4 R_5 g_m + C_3 C_5 L_5 L_5 L_5 R_5 g_m + C_3 C_5 L_5 L_5 R_5 g_m + C_5 L_5 L_5 R_5$ 

**10.641** INVALID-ORDER-641 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{R_5 g_m + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_5 g_m - C_3 C_5 C_L L_3 L_5 R_L g_m - C_3 C_5 C_L L_3 L_5 R_L - C_3 C_5 C_L L_3 L_L R_5 + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m - C_3 C_5 C_L L_5 L_L R_5 g_m + C_3 C_5 C_L L_3 L_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5 R_L g_m + C_5 C_L L_5 R_L g_m + C_5 C_L L_5 R_L g_m + C_5 C_L L_$ 

10.642 INVALID-ORDER-642 
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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10.643 INVALID-ORDER-643 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{R_5 R_L g_m - R_L + s^* \left( C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + C_3 C_5 C_L L_3 L_5 L_L R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_
10.644 INVALID-ORDER-644 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                      \overline{R_{5}g_{m} + 2R_{L}g_{m} + s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + 2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m
10.645 INVALID-ORDER-645 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, R_L + \frac{1}{C_L s}\right)
                                                         H(s) = \frac{s^2 \left( C_L L_3 R_3 R_5 R_L g_m - C_L L_3 R_3 R_L \right) + s \left( L_3 R_3 R_5 g_m - L_3 R_3 \right)}{R_3 R_5 g_m + R_3 + s^3 \left( C_3 C_L L_3 R_3 R_5 R_L g_m + C_3 C_L L_3 R_3 R_5 g_m + C_3 L_3 R_3 R_5 g_m + C_2 L_3 R_3 R_5 g_m + C_L L_3 R_3 R_L g_m + C_L L_3 R_3 R_5 R_L g_m + C_L L_3 R_5 R_L g_m
10.646 INVALID-ORDER-646 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, L_L s + \frac{1}{C_{Ls}}\right)
                                                 10.647 INVALID-ORDER-647 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{s^3 \left( C_L L_3 L_L R_3 R_5 g_m - C_L L_3 L_L R_3 \right) + s^2 \left( C_L L_3 R_3 R_5 R_L g_m - C_L L_3 R_3 R_L \right) + s \left( L_3 R_3 R_5 g_m - L_3 R_3 \right)}{R_3 R_5 g_m + R_3 + s^4 \left( C_3 C_L L_3 L_L R_3 R_5 g_m + C_3 C_L L_3 R_3 R_5 R_L g_m + C_3 L_4 R_3 R_5 g_m + C_4 L_3 L_L R_3 g_m + C_4 L_3 L_L R_3 g_m + C_4 L_3 R_3 R_5 g_m + C_4 L_3 R_5 R_5 g_m + C
10.648 INVALID-ORDER-648 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{s^3 \left( C_L L_3 L_L R_3 R_5 R_L g_m - C_L L_3 L_L R_3 R_5 g_m - L_3 L_L R_3 \right) + s^2 \left( L_3 L_L R_3 R_5 g_m - L_3 L_L R_3 \right) + s \left( L_3 R_3 R_5 R_L g_m - L_3 R_3 R_L \right)}{R_3 R_5 R_L g_m + R_3 R_L + s^4 \left( C_3 C_L L_3 L_L R_3 R_5 R_L g_m + C_3 L_4 L_3 R_5 g_m + C_4 L_3 L_L R_3 R_5 g_m + C_4 L_3 L_L R_3 R_5 R_L g_m + C_4 L_3 L
10.649 INVALID-ORDER-649 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                     s^{3}\left(C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{L}L_{3}L_{L}R_{3}R_{L}\right)+s\left(L_{3}R_{3}R_{5}R_{L}g_{m}-L_{3}R_{3}R_{L}\right)\\ R_{3}R_{5}R_{L}g_{m}+R_{3}R_{L}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{2}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{L}L_{3}R_{3}R_{5}R_{L}g_
10.650 INVALID-ORDER-650 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                                                                                                                                       H(s) = \frac{-C_5L_3R_3R_Ls^2 + L_3R_3R_Lg_ms}{C_3C_5L_3R_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_3L_3R_3R_Lg_m + 2C_5L_3R_3R_Lg_m + C_5L_3R_3 + C_5L_3R_L\right) + s\left(C_5R_3R_L + L_3R_3g_m + L_3R_Lg_m\right)}
10.651 INVALID-ORDER-651 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
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$$H(s) = \frac{-C_5L_3R_3s^2 + L_3R_3g_ms}{R_3g_m + s^3\left(C_3C_5L_3R_3 + C_5C_LL_3R_3\right) + s^2\left(C_3L_3R_3g_m + 2C_5L_3R_3g_m + C_5L_3 + C_LL_3R_3g_m\right) + s\left(C_5R_3 + L_3g_m\right)}$$

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10.652 INVALID-ORDER-652 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                  H(s) = \frac{-C_5L_3R_3R_Ls^2 + L_3R_3R_Lg_ms}{R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_L + C_5C_LL_3R_3R_L\right) + s^2\left(C_3L_3R_3R_Lg_m + 2C_5L_3R_3R_Lg_m + C_5L_3R_3 + C_5L_3R_L + C_LL_3R_3R_Lg_m\right) + s\left(C_5R_3R_L + L_3R_3g_m + L_3R_Lg_m\right)}
10.653 INVALID-ORDER-653 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                                         H(s) = \frac{-C_5C_LL_3R_3R_Ls^3 + L_3R_3g_ms + s^2\left(-C_5L_3R_3 + C_LL_3R_3R_Lg_m\right)}{C_3C_5C_LL_3R_3R_Ls^4 + R_3g_m + s^3\left(C_3C_5L_3R_3 + C_3C_LL_3R_3R_Lg_m + C_5C_LL_3R_3 + C_5C_LL_3R_3\right) + s^2\left(C_3L_3R_3g_m + C_5C_LL_3R_3g_m + C_5L_3R_3g_m + C_5L
10.654 INVALID-ORDER-654 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                   H(s) = \frac{-C_5C_LL_3L_LR_3s^4 - C_5L_3R_3s^2 + C_LL_3L_LR_3g_ms^3 + L_3R_3g_ms}{C_3C_5C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_3C_LL_3L_LR_3g_m + 2C_5C_LL_3L_LR_3g_m + C_5C_LL_3L_L\right) + s^3\left(C_3C_5L_3R_3 + C_5C_LL_3R_3 + C_5C_LL_3R_3g_m + 2C_5L_3R_3g_m + C_5L_3R_3g_m 
10.655 INVALID-ORDER-655 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                     H(s) = \frac{-C_5L_3L_LR_3s^2 + L_3L_LR_3g_ms}{L_3R_3g_m + L_LR_3g_m + s^3\left(C_3C_5L_3L_LR_3 + C_5C_LL_3L_LR_3\right) + s^2\left(C_3L_3L_LR_3g_m + 2C_5L_3L_LR_3g_m + C_5L_3L_L + C_LL_3L_LR_3g_m\right) + s\left(C_5L_3R_3 + C_5L_LR_3 + L_3L_Lg_m\right)}
10.656 INVALID-ORDER-656 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_3L_LR_3s^4 + L_3R_3g_ms + s^3\left(-C_5C_LL_3R_3R_L + C_LL_3L_LR_3g_m\right) + s^2\left(-C_5L_3R_3 + C_LL_3R_3R_Lg_m\right)}{C_3C_5C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_3C_5C_LL_3R_3R_L + C_3C_LL_3L_LR_3g_m + C_5C_LL_3L_L\right) + s^3\left(C_3C_5L_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_
10.657 INVALID-ORDER-657 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                H(s) = \frac{-C_5L_3L_LR_3R_Lg_ms}{L_3R_3R_Lg_m + L_LR_3R_Lg_m + s^3\left(C_3C_5L_3L_LR_3R_L + C_5C_LL_3L_LR_3R_L\right) + s^2\left(C_3L_3L_LR_3R_Lg_m + 2C_5L_3L_LR_3R_Lg_m + C_5L_3L_LR_3 + C_5L_3L_LR_3R_Lg_m\right) + s\left(C_5L_3R_3R_L + C_5L_LR_3R_L + L_3L_LR_3g_m + L_3L_LR_3g_m + L_3L_LR_3g_m\right) + s\left(C_5L_3R_3R_L + C_5L_LR_3R_L + C_5L_LR_3R_L + L_3L_LR_3g_m + L_3L_LR_3g_m\right) + s\left(C_5L_3R_3R_L + C_5L_LR_3R_L + C_5L_
10.658 INVALID-ORDER-658 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                       \frac{-C_5C_LL_3L_LR_3R_Ls^4 + L_3R_3R_Lg_ms + s^3\left(-C_5L_3L_LR_3 + C_LL_3L_LR_3R_Lg_m\right) + s^2\left(-C_5L_3R_3R_L + L_3L_LR_3g_m\right)}{C_3C_5C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(C_3C_5L_3L_LR_3 + C_5C_LL_3L_LR_3R_Lg_m + C_5C_LL_3L
10.659 INVALID-ORDER-659 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{-C_5C_LL_3L_LR_3R_Ls^4 - C_5L_3R_3R_Ls^2 + C_LL_3L_LR_3R_Lg_ms^3 + L_3R_3R_Lg_ms}{C_3C_5C_LL_3L_LR_3R_Lg_m + s^4\left(C_3C_LL_3L_LR_3R_Lg_m + 2C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3R_L + C_5C_LL_3L_LR_3
10.660 INVALID-ORDER-660 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)
                                                                                                           H(s) = \frac{-C_5L_3R_3R_5R_Ls^2 + s\left(L_3R_3R_5R_Lg_m - L_3R_3R_L\right)}{C_3C_5L_3R_3R_5R_Ls^3 + R_3R_5R_Lg_m + R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m + C_3L_3R_3R_5R_Lg_m + C_5L_3R_3R_5R_L\right) + s\left(C_5R_3R_5R_L + L_3R_3R_5g_m + 2L_3R_3R_Lg_m + L_3R_3 + L_3R_5R_Lg_m + L_3R_L\right)}
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H(s) = \frac{-C_5L_3R_3R_5s^2 + s\left(L_3R_3R_5g_m - L_3R_3\right)}{R_3R_5g_m + R_3 + s^3\left(C_3C_5L_3R_3R_5 + C_5C_LL_3R_3R_5\right) + s^2\left(C_3L_3R_3R_5g_m + C_3L_3R_3 + 2C_5L_3R_3R_5g_m + C_5L_3R_3R_5g_m + C_LL_3R_3\right) + s\left(C_5R_3R_5 + 2L_3R_3g_m + L_3R_5g_m + L_3R_5g_m + C_5L_3R_3R_5g_m + C_5L_3R_5g_m + C_5L_5g_m 
 10.662 INVALID-ORDER-662 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
 H(s) = \frac{-C_5L_3R_3R_5R_Ls^2 + s\left(L_3R_3R_5R_Lg_m - L_3R_3R_L\right)}{R_3R_5R_Lg_m + R_3R_L + s^3\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s^2\left(C_3L_3R_3R_5R_Lg_m + C_3L_3R_3R_5R_Lg_m + C_5L_3R_3R_5R_Lg_m + C_5L_3R_3R_5R_L + C_
 10.663 INVALID-ORDER-663 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
 H(s) = \frac{-C_5C_LL_3R_3R_5R_Ls^3 + s^2\left(-C_5L_3R_3R_5 + C_LL_3R_3R_5R_Lg_m - C_LL_3R_3R_L\right) + s\left(L_3R_3R_5g_m - L_3R_3\right)}{C_3C_5C_LL_3R_3R_5R_Ls^4 + R_3R_5g_m + R_3 + s^3\left(C_3C_5L_3R_3R_5 + C_3C_LL_3R_3R_5R_Lg_m + C_5C_LL_3R_3R_5R_Lg_m + C_5C_LL
 10.664 INVALID-ORDER-664 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
 H(s) = \frac{-C_5C_LL_3L_LR_3R_5s^4 - C_5L_3R_3R_5s^2 + s^3\left(C_LL_3L_LR_3R_5g_m - C_LL_3L_LR_3\right) + s\left(L_3R_3R_5g_m - L_3R_3\right)}{C_3C_5C_LL_3L_LR_3R_5s^5 + R_3R_5g_m + R_3 + s^4\left(C_3C_LL_3L_LR_3R_5g_m + C_3C_LL_3L_LR_3\right) + s^3\left(C_3C_5L_3L_LR_3R_5s^5 + C_5C_LL_3L_LR_3R_5s^5 + C_5C_LL_3L_LR_3R_5s^6 
 10.665 INVALID-ORDER-665 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
 H(s) = \frac{-C_5L_3L_LR_3R_5s^2 + s\left(L_3L_LR_3R_5g_m - L_3L_LR_3\right)}{L_3R_3R_5g_m + L_2R_3R_5g_m + L_2R_3 + s^3\left(C_3C_5L_3L_LR_3R_5 + C_5C_LL_3L_LR_3R_5\right) + s^2\left(C_3L_3L_LR_3R_5g_m + C_3L_3L_LR_3 + 2C_5L_3L_LR_3R_5g_m + C_5L_3L_LR_3\right) + s\left(C_5L_3R_3R_5 + C_5L_LR_3R_5 + 2L_3L_LR_3g_m + L_3L_LR_3g_m + L_3L_LR
 10.666 INVALID-ORDER-666 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
 H(s) = \frac{-C_5C_LL_3L_LR_3R_5s^5 + s^6(-C_5C_LL_3L_LR_3R_5R_L + C_5C_LL_3L_LR_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3L_RR_3R_5R_L + C_5C_LL_3L_RR_3R_5R_L + C_5C_LL_3L_RR_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3R_5R_L + C_5C_LL_3R_5R_5R_L + C_5C_LL_3R_5R_5R_L + C_5C_LL_3R_5R
 10.667 INVALID-ORDER-667 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -C_5L_3L_LR_3R_5R_Ls^2 + s\left(L_3L_LR_3R_5R_Lg_m - L_3L_LR_3R_L\right)
                                                 \frac{-C_5L_3L_LR_3R_5R_Ls^2 + s\left(L_3L_LR_3R_5R_Lg_m - L_3L_LR_3R_L\right)}{L_3R_3R_5R_Lg_m + L_2R_3R_5L_Lg_m + L_2R_3R_5R_Lg_m + L_2R_3R_5R_Lg_m + L_2R_3R_5R_Lg_m + C_5L_3L_LR_3R_5R_Lg_m + C_5L_3L_LR_3R_5
 10.668 INVALID-ORDER-668 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
 H(s) = \frac{-C_5C_LL_3L_LR_3R_5R_Ls^5 + R_3R_5R_Lg_m + R_3R_L + s^4\left(C_3C_5L_3L_LR_3R_5 + C_3C_LL_3L_LR_3R_5R_Lg_m + C_5C_LL_3L_LR_3R_5 
10.669 INVALID-ORDER-669 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -C_5C_LL_3L_LR_3R_5R_Ls^4 - C_5L_3R_3R_5R_Ls^2
 H(s) = \frac{-C_5C_LL_3L_LR_3R_5R_Ls^5 + R_3R_5R_Lg_m + R_3R_L + s^4\left(C_3C_LL_3L_LR_3R_5R_Lg_m + C_3C_LL_3L_LR_3R_5R_Lg_m + C_5C_LL_3L_LR_3R_5R_Lg_m + C_5C_LL_3L_Rg_m + C_5C_LL
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**10.661** INVALID-ORDER-661  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$ 

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H(s) = \frac{L_3 R_3 R_L g_m s + s^2 \left( C_5 L_3 R_3 R_5 R_L g_m - C_5 L_3 R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_3 C_5 L_3 R_3 R_5 R_L g_m + C_3 C_5 L_3 R_3 R_L \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_5 L_3 R_2 R_L g_m + C_5 L_3 R_2 R_L g_m + C_5 L_3 R_2 R_L g_m + C_5 L_3 R
10.671 INVALID-ORDER-671 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                   H(s) = \frac{L_3 R_3 g_m s + s^2 \left(C_5 L_3 R_3 R_5 g_m - C_5 L_3 R_3\right)}{R_3 g_m + s^3 \left(C_3 C_5 L_3 R_3 R_5 g_m + C_3 C_5 L_3 R_3 + C_5 C_L L_3 R_3 R_5 g_m + C_5 C_L L_3 R_3\right) + s^2 \left(C_3 L_3 R_3 g_m + 2 C_5 L_3 R_3 g_m + C_5 L_3 R_5 g_m + C_5 L_3 R_5 g_m + C_5 R_3 R_5 g_m + C_5 R_5 R_5 R_5 g_m + C_5 R_5 R_5 g_m + C_5 R_5 R_5 R_5 g_m + C_5 R_5 R_5 g_m + 
10.672 INVALID-ORDER-672 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_3 R_3 R_L g_m s + s^2 \left( C_5 L_3 R_3 R_5 R_L g_m - C_5 L_3 R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_3 C_5 L_3 R_3 R_5 R_L g_m + C_3 C_5 L_3 R_3 R_L + C_5 C_L L_3 R_3 R_5 R_L g_m + C_5 C_L L_3 R_3 R_L g_m + C_5 L_3
10.673 INVALID-ORDER-673 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_2 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L_3R_3g_ms + s^3\left(C_5C_LL_3R_3R_5R_Lg_m - C_5C_LL_3R_3R_L\right) + s^2\left(C_5L_3R_3R_5g_m - C_5L_3R_3 + C_LL_3R_3R_Lg_m\right)
                                     \frac{L_3 R_3 g_m s + s^* \left(C_5 C_L L_3 R_3 R_5 R_L g_m - C_5 C_L L_3 R_3 R_5 g_m - C_5 L_3 R_3 + C_L L_3 R_3 R_L g_m\right)}{R_3 g_m + s^4 \left(C_3 C_5 C_L L_3 R_3 R_5 g_m + C_3 C_5 L_4 R_3 R_L g_m + C_5 C_L L_3 R_L g_m + C_5 C_L
10.674 INVALID-ORDER-674 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C_{L}L_{3}L_{L}R_{3}g_{m}s^{3} + L_{3}R_{3}g_{m}s + s^{4}\left(C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{3}L_{L}R_{3}\right) + s^{2}\left(C_{5}L_{3}R_{3}R_{5}g_{m} - C_{5}L_{3}R_{3}\right)
10.675 INVALID-ORDER-675 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                    \frac{L_3L_LR_3g_ms + s^2\left(C_5L_3L_LR_3R_5g_m - C_5L_3L_LR_3\right)}{L_3R_3g_m + L_LR_3g_m + s^3\left(C_3C_5L_3L_LR_3R_5g_m + C_3C_5L_3L_LR_3 + C_5C_LL_3L_LR_3\right) + s^2\left(C_3L_3L_LR_3g_m + C_5L_3L_LR_3g_m 
10.676 INVALID-ORDER-676 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L_3R_3g_ms + s^4(C_5C_LL_3L_LR_3R_5g_m - C_5C_LL_3L_LR_3) + s^3(C_5C_LL_3L_LR_3) + s^3(C_5C_LL_3L_2L_2) + s^3(C_5C_LL_3L_2L_2) + s^3(C_5C_LL_3L_2) + s^3(C_5C_LL_3L_2) + s^3(C_5C_LL_3L_2) + s^3(C_5C_LL_3L_2) + s^3(C_5C_LL_3L_2) 
H(s) = \frac{L_3 R_3 g_m s + s \cdot (C_3 C_5 L L_3 L_L R_3 R_5 g_m + C_5 C_L L_3 L_L R_3) + s \cdot (C_5 C_L L_3 L_L R_3 R_5 g_m + C_5 C_L L_3 L_L R_3) + s \cdot (C_5 C_L L_3 L_L R_3 g_m + C_5 C_L L_3 L_L R_3 g_m 
10.677 INVALID-ORDER-677 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L_3L_LR_3R_Lg_ms + s^2\left(C_5L_3L_LR_3R_5R_Lg_m - C_5L_3L_LR_3R_L\right)
10.678 INVALID-ORDER-678 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L_3R_3R_Lg_ms + s^4(C_5C_LL_3L_1)
10.679 INVALID-ORDER-679 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \frac{-}{R_{3}R_{L}g_{m}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R
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10.670 INVALID-ORDER-670  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$ 

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H(s) = \frac{C_5L_3L_5R_3g_ms^3 - C_5L_3R_3s^2 + L_3R_3g_ms}{R_3g_m + s^4\left(C_3C_5L_3L_5R_3g_m + C_5C_LL_3L_5R_3g_m\right) + s^3\left(C_3C_5L_3R_3 + C_5C_LL_3R_3 + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_3g_m + C_5L_3R_3g_m + C_5L_3R_3g_m + C_5L_3R_3g_m\right) + s\left(C_5R_3 + L_3g_m\right)}
10.682 INVALID-ORDER-682 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_5L_3L_5R_3R_Lg_ms^3 - C_5L_3R_3R_Lg_ms}{R_3R_Lg_m + s^4\left(C_3C_5L_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3R_Lg_m\right) + s^3\left(C_3C_5L_3R_3R_L + C_5L_3R_3R_Lg_m + C_5L_3L_5R_3R_Lg_m + C_5L_3R_3R_Lg_m + C_5L_3R_3R
10.683 INVALID-ORDER-683 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C_5C_LL_3L_5R_3R_Lg_ms^4 + L_3R_3g_ms + s^3\left(-C_5C_LL_3R_3R_L + C_5L_3L_5R_3g_m\right) + s^2\left(-C_5L_3R_3 + C_LL_3R_3R_Lg_m\right)
H(s) = \frac{C_5C_LL_3L_5R_3R_Lg_ms^4 + L_3R_3g_ms + s^3\left(-C_5C_LL_3R_3R_L + C_5L_3L_5R_3g_m\right) + s^2\left(-C_5L_3R_3 + C_LL_3R_3R_Lg_m\right)}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_3C_5L_4R_3R_L + C_5C_LL_3R_3R_Lg_m\right) + s^3\left(C_3C_5L_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5L_4R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5L_4R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5L_4R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5C_LL_3R_3R_Lg_m\right) + s^2\left(-C_5C_LL_3R_3R_Lg_m
10.684 INVALID-ORDER-684 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_5C_LL_3L_5L_LR_3g_ms^5 - C_5C_LL_3L_LR_3s^4 - C_5L_3R_3s^2 + L_3R_3g_ms + s^3\left(C_5L_3L_5R_3g_m + C_LL_3L_LR_3g_m\right)}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3g_m + C_5C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C_5C_LL_3L_5L_LR_3g_ms^5 - C_5C_LL_3L_LR_3s^4 - C_5L_3R_3s^2 + L_3R_3g_ms + s^3\left(C_5L_3L_5R_3g_m + C_LL_3L_LR_3g_m\right)
10.685 INVALID-ORDER-685 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_5L_3L_5L_LR_3g_ms^3 - C_5L_3L_LR_3s^2 + L_3L_LR_3g_ms}{L_3R_3g_m + L_LR_3g_m + s^4\left(C_3C_5L_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m\right) + s^3\left(C_3C_5L_3L_LR_3 + C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3g_m + C_5L_3L_LR_3g_m + C
10.686 INVALID-ORDER-686 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H(s) = \frac{C_3C_5C_LL_3L_5R_3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5L_LL_3L_5R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3g_m + C_5C_LL_3L_5R_3g_m + C_5C_LL_3L_5R_3g_m + c_5C_LL_3L
10.687 INVALID-ORDER-687 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C_5L_3L_5L_LR_3R_Lg_ms^3 - C_5L_3L_LR_3R_Ls^2 + L_3L_LR_3R_Lg_ms
H(s) = \frac{C_5L_3L_5L_LR_3R_Lg_ms^{\circ} - C_5L_3L_LR_3R_Lg_ms^{\circ} - C_5L_3L_LR_3R_Lg_ms^{\circ}}{L_3R_3R_Lg_m + L_LR_3R_Lg_m + s^4\left(C_3C_5L_3L_5L_LR_3R_Lg_m + C_5C_LL_3L_LR_3R_Lg_m + S^2\left(C_3L_3L_LR_3R_Lg_m + C_5L_3L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3R
10.688 INVALID-ORDER-688 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C_5C_LL_3L_5L_LR_3R_Lg_ms^5 + L_3R_5
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3R_Lg_m + s_5\left(C_3C_5C_LL_3L_LR_3R_L + C_3C_5L_3L_LR_3g_m + C_5C_LL_3L_LR_3g_m + C_
10.689 INVALID-ORDER-689 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C_5C_LL_3L_5L_LR_3R_Lg_ms^5 - C_5C_LL_3L_LR_3R_Ls^4 - C_5C_LL_3L_2R_3R_Ls^4
H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_3R_L + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_Lg_m + C_5C_LL_3L_5R_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122
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 $H(s) = \frac{C_5L_3L_5R_3R_Lg_ms^3 - C_5L_3R_3R_Ls^2 + L_3R_3R_Lg_ms}{C_3C_5L_3L_5R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_L + C_5L_3L_5R_3g_m + C_5L_3L_5R_Lg_m\right) + s^2\left(C_3L_3R_3R_Lg_m + 2C_5L_3R_3R_Lg_m + C_5L_3R_3 + C_5L_3R_L + C_5L_5R_3R_Lg_m\right) + s\left(C_5R_3R_L + L_3R_3g_m + L_3R_Lg_m\right)}$ 

10.680 INVALID-ORDER-680  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$ 

10.681 INVALID-ORDER-681  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ 

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H(s) = \frac{-C_5L_3L_5R_3s^3 + L_3L_5R_3g_ms^2 - L_3R_3s}{R_3 + s^4\left(C_3C_5L_3L_5R_3 + C_5C_LL_3L_5R_3\right) + s^3\left(C_3L_3L_5R_3g_m + 2C_5L_3L_5R_3g_m + C_5L_3L_5R_3g_m\right) + s^2\left(C_3L_3R_3 + C_5L_5R_3 + C_LL_3R_3 + L_3L_5g_m\right) + s\left(2L_3R_3g_m + L_3 + L_5R_3g_m\right)}
10.692 INVALID-ORDER-692 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{-C_5L_3L_5R_3R_Ls^3 + L_3L_5R_3R_Lg_ms^2 - L_3R_3R_Ls}{R_3R_L + s^4\left(C_3C_5L_3L_5R_3R_L + C_5C_LL_3L_5R_3R_L\right) + s^3\left(C_3L_3L_5R_3R_Lg_m + 2C_5L_3L_5R_3R_Lg_m + C_5L_3L_5R_3R_Lg_m\right) + s^2\left(C_3L_3R_3R_L + C_5L_3R_3R_L + C_5L_3R_3R_L + C_5L_3R_3R_L + C_5L_3R_3R_Lg_m\right) + s^2\left(C_3L_3R_3R_L + C_5L_3R_3R_L + C_5R_3R_L + C_5R_3
10.693 INVALID-ORDER-693 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_3L_5R_3R_Ls^4 - L_3R_3s + s^3\left(-C_5L_3L_5R_3 + C_LL_3L_5R_3R_Lg_m\right) + s^2\left(-C_LL_3R_3R_L + L_3L_5R_3g_m\right)}{C_3C_5C_LL_3L_5R_3R_Ls^5 + R_3 + s^4\left(C_3C_5L_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3R_Lg_m + C_5C_LL_3L_5R_3g_m + C_5C_LL_3L_5R_3
10.694 INVALID-ORDER-694 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{-C_5C_LL_3L_5L_LR_3s^5 + C_LL_3L_5L_LR_3g_ms^4 + L_3L_5R_3g_ms^2 - L_3R_3s + s^3\left(-C_5L_3L_5R_3 - C_LL_3L_LR_3\right)}{C_3C_5C_LL_3L_5L_LR_3s^6 + R_3 + s^5\left(C_3C_LL_3L_5L_LR_3g_m + 2C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L
10.695 INVALID-ORDER-695 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_5L_3L_5L_LR_3s^3 + L_3L_5L_LR_3g_ms^2 - L_3L_LR_3s}{L_3R_3 + L_LR_3 + s^4\left(C_3C_5L_3L_5L_LR_3 + C_5C_LL_3L_5L_LR_3\right) + s^3\left(C_3L_3L_5L_LR_3g_m + 2C_5L_3L_5L_LR_3g_m + C_5L_3L_5L_LR_3g_m\right) + s^2\left(C_3L_3L_LR_3 + C_5L_3L_5R_3 + C_5L_5L_5R_3 + C_5L_5L
10.696 INVALID-ORDER-696 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_5C_LL_3L_5L_LR_3s^5 - L_3R_3s + s^4(-C_5C_LL_3L_5R_3s^5 - L_3R_3s^5 - L_3
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3s^6 + R_3 + s^5\left(C_3C_5C_LL_3L_5R_3R_L + C_3C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5R_3R_Lg_m + C_3C_LL_3L_5R_3R_Lg_m + C_3C_
10.697 INVALID-ORDER-697 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_5L_3L_5L_LR_3R_Ls^3 + L_3L_5L_LR_3R_Lg_ms^2 - L_3L_LR_3R_Ls
H(s) = \frac{- \cup_{5} L_{3} L_{5} L_{L} R_{3} R_{L} + s^{4} \left( C_{3} C_{5} L_{3} L_{5} L_{L} R_{3} R_{L} + C_{5} L_{4} L_{5} L_{L} R_{3} R_{L} + C_{5} L_{5} L_{L
10.698 INVALID-ORDER-698 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_5C_LL_3L_5L_}{C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + R_3R_L + s^5\left(C_3C_5L_3L_5L_LR_3 + C_3C_LL_3L_5L_LR_3R_Lg_m + C_5C_LL_3L_5L_LR_3 + C_5C_LL_3L_5L_1R_3 + C_5C_LL_3L_5L_1R_3 + C_5C_LL_3L_5L_1R_3 + C_5C_LL_3L_5L_1R_3 + C_5C_LL_3L_5L_1R_3 + C_5C_LL_3L_5L_1
10.699 INVALID-ORDER-699 Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -C_5C_LL_3L_5L_LR_3R_Ls^5 + C_LL_3L_5L_LR_3R_1
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + R_3R_L + s^5\left(C_3C_LL_3L_5L_LR_3R_Lg_m + 2C_5C_LL_3L_5L_LR_3R_Lg_m + C_5C_LL_3L_5L_LR_3 + C_5C_LL_3L_5L_LR_3R_L + C_5C_LL_3L_5L_RR_3R_L + C_5C_LL_3L_5L_RR_3R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123
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 $H(s) = \frac{-C_5L_3L_5R_3R_Ls^3 + L_3L_5R_3R_Lg_ms^2 - L_3R_3R_Ls}{C_3C_5L_3L_5R_3R_Ls^4 + R_3R_L + s^3\left(C_3L_3L_5R_3R_Lg_m + 2C_5L_3L_5R_3R_Lg_m + C_5L_3L_5R_3\right) + s^2\left(C_3L_3R_3R_L + L_3L_5R_3g_m + L_3L_5R_3g_m + L_3L_5R_2g_m\right) + s\left(2L_3R_3R_Lg_m + L_3R_3 + L_3R_L + L_5R_3R_Lg_m\right)}$ 

**10.690** INVALID-ORDER-690  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$ 

**10.691** INVALID-ORDER-691  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$ 

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10.701 INVALID-ORDER-701 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right)
                                             \frac{C_5L_3L_5R_3g_ms^3 + L_3R_3g_ms + s^2\left(C_5L_3R_3R_5g_m - C_5L_3R_3\right)}{R_3g_m + s^4\left(C_3C_5L_3L_5R_3g_m + C_5C_LL_3L_5R_3g_m + S^2\left(C_3L_3R_3R_5g_m + C_5L_3R_3g_m + C_5
10.702 INVALID-ORDER-702 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                                         \frac{C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}s^{3} + L_{3}R_{3}R_{L}g_{m}s + s^{2}\left(C_{5}L_{3}R_{3}R_{5}R_{L}g_{m} - C_{5}L_{3}R_{3}R_{L}\right)}{R_{3}R_{L}g_{m} + s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m} + C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m} + C_{5}L_{3}L_{5}R_{3}R_{L}g_{m} + C_{5}L_{3}L_{5}R_{3}R_{L}g_{m} + C_{5}L_{3}R_{3}R_{L}g_{m} + C_{5}L_{3}R_{
10.703 INVALID-ORDER-703 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C_5C_LL_3L_5R_3R_Lg_ms^4 + L_3R_3g_ms + s^3\left(C_5C_LL_3R_3R_5R_Lg_m - C_5C_LL_3R_3R_L + c^2S_LS_2R_3R_Lg_m\right)
                                           \frac{C_5C_LL_3L_5R_3R_Lg_ms^5 + L_3R_3g_ms + s^4\left(C_5C_LL_3R_3R_5R_Lg_m - C_5C_LL_3R_3R_5R_Lg_m - C_5C_LL_3R_3R_5R_Lg_m - C_5C_LL_3R_3R_5R_Lg_m - C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_3R_5R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_
10.704 INVALID-ORDER-704 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C_5C_LL_3L_5L_LR_3g_ms^5 + L_3R_3g_ms + s^4(C_5C_LL_3L_LR_3R_5g_m - C_5C_LL_3L_LR_3) + s^4(C_5C_LL_3L_2R_3g_ms^5 + L_3R_3g_ms^5 + L_3R_3g_ms^5) + s^4(C_5C_LL_3L_2R_3R_5g_m - C_5C_LL_3L_2R_3) + s^4(C_5C_LL_3L_2R_3R_5g_m - C_5C_LL_3L_2R_3) + s^4(C_5C_LL_3L_2R_3R_5g_m - C_5C_LL_3L_2R_3) + s^4(C_5C_LL_3L_2R_3R_5g_m - C_5C_LL_3L_3R_3g_ms^5) + s^4(C_5C_LL_3L_3R_3R_5g_m - C_5C_LL_3R_3R_5g_m - C_5C_LL_3R_3R_5g_m - C_5C_LL_3R_3R_5g_m - C_5C_LL_3R_3R_5g_m - C_5C_LL_3R_3R_5g_m - C_5C_LL_3R_3R_5g_m - C_5C_LL_3R_5g_m - C_5C_LR_5g_m - C_5C_LR_5g
H(s) = \frac{C_5C_LL_3L_5L_LR_3g_ms + L_3R_3g_ms + S_5C_LL_3L_LR_3g_ms + S_5C_LL_3L_LR_3g_
10.705 INVALID-ORDER-705 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C_5L_3L_5L_LR_3g_ms^3 + L_3L_LR_3g_ms + s^2(C_5L_3L_LR_3R_5g_m - C_5L_3L_LR_3)
                                           \frac{C_5L_3L_5L_LR_3g_ms^3 + L_3L_LR_3g_ms + s^2\left(C_5L_3L_LR_3g_m s + s^2\left(C_5L_3L_LR_3R_5g_m - C_5L_3L_LR_3\right)\right)}{L_3R_3g_m + L_LR_3g_m + s^4\left(C_3C_5L_3L_LR_3g_m + C_5C_LL_3L_LR_3g_m + C_5C_LL_3L_LR_
10.706 INVALID-ORDER-706 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_5g_m + C_3C_5C_LL_3L_LR_3 + C_5C_LL_3L_5L_Lg_m\right) + s^4\left(C_3C_5C_LL_3R_3R_L + C_3C_5L_LR_3R_3R_L + C_3C_5L_LR_3R_3R
10.707 INVALID-ORDER-707 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10.708 INVALID-ORDER-708 Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5R_Lg_m + C_3C_5L_LL_Rg_m + C_3C_5L_Rl_Rg_m + C_3C_
10.709 INVALID-ORDER-709 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                         \overline{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{L}g_{m}s^{6}+R_{3}R_{L}g_{m}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{L}R_{3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124
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 $H(s) = \frac{C_5L_3L_5R_3R_Lg_ms^3 + L_3R_3R_Lg_ms + s^2\left(C_5L_3R_3R_5R_Lg_m - C_5L_3R_3R_L\right)}{C_3C_5L_3L_5R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_5R_Lg_m + C_5L_3L_5R_3g_m + C_5L_3L_5R_2g_m\right) + s^2\left(C_3L_3R_3R_Lg_m + C_5L_3R_3R_Lg_m + C_5L_3$ 

10.700 INVALID-ORDER-700  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$ 

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10.711 INVALID-ORDER-711 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_{Ls}}\right)
                              -C_5L_3L_5R_3R_5s^3 - L_3R_3R_5s + s^2\left(L_3L_5R_3R_5g_m - L_3L_5R_3\right) \\ \overline{R_3R_5 + s^4\left(C_3C_5L_3L_5R_3R_5 + C_5C_LL_3L_5R_3R_5\right) + s^3\left(C_3L_3L_5R_3R_5g_m + C_3L_3L_5R_3 + 2C_5L_3L_5R_3R_5g_m + C_5L_3L_5R_3R_5g_m + C_5L_3L_5R_5g_m + C_5L_3L_5R_5g_m + C_5L_3L_5R_5g_m + C_5L_3L_5R_5g_m + C_5L_5L_5R_5g_m + C_5L
10.712 INVALID-ORDER-712 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C_5L_3L_5R_3R_5R_Ls^3 - L_3R_3R_5R_Ls + s^2(L_3L_5R_3R_5R_Lg_m - L_3L_5R_3R_L)
H(s) = \frac{-C_5L_3L_5R_3R_5R_Ls^3 - L_3R_3R_5R_Ls + s^2\left(L_3L_5R_3R_5R_Lg_m - L_3L_5R_3R_L\right)}{R_3R_5R_L + s^4\left(C_3C_5L_3L_5R_3R_5R_L + C_5C_LL_3L_5R_3R_5R_L\right) + s^3\left(C_3L_3L_5R_3R_5R_Lg_m + C_5L_3L_5R_3R_5R_L + C_5L_3L_5R_3R_5R_L\right) + s^2\left(C_3L_3R_3R_5R_L + C_5L_3R_3R_5R_L\right) + s^2\left(C_3L_3R_3R_5R_L + C_5L_3R_3R_5R_L\right) + s^2\left(C_3L_3R_3R_5R_L + C_5L_3R_3R_5R_L\right) + s^2\left(C_3L_3R_3R_5R_L + C_5L_3R_3R_5R_L\right) + s^2\left(C_3L_3R_3R_5R_L\right) + s^2\left(C_3L_3R_
10.713 INVALID-ORDER-713 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -C_5C_LL_3L_5R_3R_5R_Ls^4 - L_3R_3R_5s + s^3
                              -C_5C_LL_3L_5R_3R_5R_Ls^5 - L_3R_3R_5R_Ls - 
10.714 INVALID-ORDER-714 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -C_5C_LL_3L_5L_LR_3R_5s^5 - L_3R_3R_5s + s^4 (C
H(s) = \frac{-C_5C_LL_3L_5L_LR_3R_5s^6 - L_3R_3R_5s - L_3R_3R_5s - L_3R_3R_5s + s^4(C_3C_5L_3L_5L_LR_3R_5s^6 + R_3R_5 + s^5(C_3C_LL_3L_5L_LR_3R_5g_m + C_3C_LL_3L_5L_LR_3R_5g_m + C_5C_LL_3L_5L_LR_3R_5 + s^4(C_3C_5L_3L_5R_3R_5 + C_5C_LL_3L_5L_RR_3R_5 + C_5C_LL_3L_5L_RR_3R_5s - L_3R_3R_5s + s^4(C_3C_5L_3L_5R_3R_5 + C_5C_LL_3L_5L_RR_3R_5s + C_5C_LL_3L_5L_RR_3R_5s - L_3R_3R_5s + s^4(C_3C_5L_3L_5R_3R_5 + C_5C_LL_3L_5L_RR_3R_5s - L_3R_3R_5s + s^4(C_3C_5L_3L_5L_RR_3R_5s - L_3R_3R_5s + C_5C_LL_3L_5L_RR_3R_5s - L_3R_3R_5s - L_3R_3R
10.715 INVALID-ORDER-715 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
-C_5L_3L_5L_LR_3R_5s^3-L_3L_LR_3R_5s+s^2\left(L_3L_5L_LR_3R_5g_m-L_3L_5L_LR_3\right)
10.716 INVALID-ORDER-716 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)
10.717 INVALID-ORDER-717 Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10.718 INVALID-ORDER-718 Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + R_3R_5R_L + s^5\left(C_3C_5L_3L_5L_LR_3R_5 + C_3C_LL_3L_5L_LR_3R_5R_Lg_m + C_3C_LL_3L_5L_LR_3R_5R_Lg_m + C_5C_LL_3L_5L_LR_3R_5 + C_5C_LL_3L_5L_LR_3R_5R_L + s^4\left(C_3C_5L_3L_5L_LR_3R_5R_L + c_3C_LL_3L_5L_LR_3R_5R_Lg_m + C_3C_LL_3L_5L_LR_3R_5R_Lg_m + C_5C_LL_3L_5L_LR_3R_5 + C_5C_LL_3L_5L_LR_3R_5R_L + s^4\left(C_3C_5L_3L_5L_LR_3R_5R_L + c_3C_LL_3L_5L_LR_3R_5R_Lg_m + C_5C_LL_3L_5L_LR_3R_5R_Lg_m + C_5C_LL_3L_5L_LR_3R_5R_Lg_m + C_5C_LL_3L_5L_RR_3R_5R_Lg_m + C_5C_LL_3L_5L_RR_3R_5R
10.719 INVALID-ORDER-719 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                              \overline{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}s^{6} + R_{3}R_{5}R_{L} + s^{5}\left(C_{3}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{3}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L} + C_{5}C_{L}L_{3}L_{5
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10.710 INVALID-ORDER-710  $Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$ 

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H(s) = \frac{L_3L_5R_3R_Lg_ms^2 + s^3\left(C_5L_3L_5R_3R_5R_Lg_m - C_5L_3L_5R_3R_L\right) + s\left(L_3R_3R_5R_Lg_m - L_3R_3R_L\right)}{R_3R_5R_Lg_m + R_3R_L + s^4\left(C_3C_5L_3L_5R_3R_5R_Lg_m + C_5L_3L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3
10.721 INVALID-ORDER-721 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{1}{C_{LS}}\right)
                                                  \frac{L_{3}L_{5}R_{3}g_{m}s^{2}+s^{3}\left(C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{3}\right)+s\left(L_{3}R_{3}R_{5}g_{m}-L_{3}R_{3}\right)}{R_{3}R_{5}g_{m}+R_{3}+s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{4}L_{5}R_{3}\right)+s^{3}\left(C_{3}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{3}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L_3L_5R_3g_ms^2 + s^3(C_5L_3L_5R_3R_5g_m - C_5L_3L_5R_3) + s(L_3R_3R_5g_m - L_3R_3)
10.722 INVALID-ORDER-722 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           L_3L_5R_3R_Lq_ms^2 + s^3(C_5L_3L_5R_3R_5R_Lq_m - C_5L_3L_5R_3R_L) + s(L_3R_3R_5R_Lq_m - C_5L_3L_5R_3R_Lq_m - C_5L_3L_5R_3R_L) + s(L_3R_3R_5R_Lq_m - C_5L_3L_5R_3R_L) + s(L_3R_3R_5R_Lq_m - C_5L_3L_5R_3R_L) + s(L_3R_3R_5R_Lq_m - C_5L_3L_5R_3R_Lq_m - C_5L_3L_5R_3R_Lq_m - C_5L_5R_3R_Lq_m - C_5L_5R_3R_Lq_m - C_5L_5R_3R_Lq_m - C_5L_5R_3R_Lq_m - C_5L_5R_3R_Lq_m - C_5L_5R_3R_Lq_m - C_5R_3R_Lq_m - C_5R_2R_Lq_m - C_5R_3R_Lq_m - C_5R_3R_Lq_m - C_5R_3R_Lq_m - C_5R_2R_Lq_m - 
                                               \frac{L_{3}L_{5}R_{3}R_{L}g_{m}s^{-} + s^{-}\left(C_{5}L_{3}L_{5}R_{3}R_{L}g_{m} - C_{5}L_{3}L_{5}R_{3}R_{L}g_{m} + C_{5}L_{3}L_{5}R_{3}R_
10.723 INVALID-ORDER-723 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s^4 (C_5 C_L L_3 L_5 R_3 R_5 R_L q_r)
                                                  \frac{s + (C_3C_5L_4L_3L_5R_3R_5R_Lg_m + C_3C_5L_4L_3L_5R_3R_5g_m + C_3C_5L_4L_5R_3R_5g_m + C_3C_5L_4L_5R_3R_5g_m + C_3C_5L_4L_5R_3R_5g_m + C_5C_4L_3L_5R_3R_5g_m + C_5C_4L_3L_5R_5g_m + C_5C_4L_5L_5R_5g_m + C_5C_4L_5L_5R_5g_m + C_5C_4L_5L_5R_5g_m + C_5C_4L_5L_5R_5g_m + C_5C_4L_5L_5R_5g_m + C_5C_4L_5L_5R_5g_m + C_5C_4
10.724 INVALID-ORDER-724 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C_L L_3 L_5 L_L R_3 g_m s^4 + L_3
H(s) = \frac{C_L L_3 L_5 L_L R_3 g_m s - L_5 L_4 R_3 g_m + C_5 C_L L_3 L_5 L_L R_3 g_m + C_5 C_L L_5 L_L R_5 g_m + C_5 C_L
10.725 INVALID-ORDER-725 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L_3L_5L_LR_3g_ms^2 + s^3\left(C_5L_3L_5L_LR_3R_5g_m - C_5L_3L_5L_LR_3\right) + s\left(L_3L_LR_3R_5g_m\right)
                                                 \frac{L_3L_5L_LR_3g_{m0} + L_3R_5L_LR_3g_{m0} + L_3R_
10.726 INVALID-ORDER-726 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{1}{R_3 R_5 g_m + R_3 + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 \right) + s^5 \left( C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 g_m + C_5 C_L L_3 L_5 L_L R_3 g
10.727 INVALID-ORDER-727 Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{-c_{1}}{L_{3}R_{3}R_{5}R_{L}g_{m} + L_{3}R_{3}R_{L} + L_{L}R_{3}R_{5}R_{L}g_{m} + L_{L}R_{3}R_{L} + s^{4}\left(C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m} + C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{L}\right) + s^{3}\left(C_{3}L_{3}L_{5}L_{L}R_{3}R_{L}g_{m} + C_{5}L_{3}L_{5}L_{L}R_{3}R_{L}g_{m} + C_{5}L_{5}L_{L}R_{3}R_{L}g_{m} + C_{5}L_{5}L_{
10.728 INVALID-ORDER-728 Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{1}{R_3 R_5 R_L g_m + R_3 R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L L_2 L_2 R_3 R_5 g_m + C_3 C_5 L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_5 R_5 g_m + C_5 C_L L_3 L_5 L_L R_5 R_5 g_m + C_5 C_L L_3 L_5 L_L R_5 R_5 g_m + C_5 C_L L_3 L_5 L_L R_5 R_5 g_m + C_5 C_L L_5 L_5 R_5 g_m + C_5 C_L L_5 R_5 g_m + C_5
10.729 INVALID-ORDER-729 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                 \overline{R_3 R_5 R_L g_m + R_3 R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L
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10.720 INVALID-ORDER-720  $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, R_L\right)$ 

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10.730 INVALID-ORDER-730 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
10.731 INVALID-ORDER-731 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
H(s) = \frac{-C_5L_3R_3R_5s^2 + s^3\left(C_5L_3L_5R_3R_5g_m - C_5L_3L_5R_3\right) + s\left(L_3R_3R_5g_m - L_3R_3\right)}{R_3R_5g_m + R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m + C_5C_LL_3L_5R_3R_5g_m + C_5C_LL_3L_5R_3\right) + s^3\left(C_3C_5L_3R_3R_5 + C_5C_LL_3R_3R_5 + C_5C_LL_3R_5 + C_5C
10.732 INVALID-ORDER-732 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   H(s) = \frac{-C_5L_3R_3R_5R_Ls^2 + s^3\left(C_5L_3L_5R_3R_5R_Lg_m - C_5L_3L_5R_3R_L\right) + s\left(C_5L_3L_5R_3R_5R_Lg_m + C_5L_3L_5R_3R_5R_Lg_m + C_5L_3L_5R_3R_L\right) + s\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_3R_5R_L + C_5C_LL_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_3R_5R_L\right) + s\left(C_3C_5L_3R_5R_5R_L\right) + s\left(C_5C_5L_3R_5R_5R_L\right) + s\left(C_5C_5L_3R_5R_5R_L\right) + s\left(C_5C_5L_3R_
10.733 INVALID-ORDER-733 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                      \frac{s^{4} \left(C_{5} + C_{5} + C_
10.734 INVALID-ORDER-734 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
10.735 INVALID-ORDER-735 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{-C_5L_3L_LR_3R_5s^2 + s^3\left(C_5L_3L_5L_LR_3R_5g_m - C_5L_3L_5L_LR_3R_5g_m - C_5L_3L_5L_LR_3\right) + s\left(L_3L_5R_3R_5g_m + L_2R_3R_5g_m + L_2R_3R_5g_m + L_2R_3R_5g_m + C_5C_LL_3L_5L_LR_3\right) + s^3\left(C_3C_5L_3L_LR_3R_5 + C_5C_LL_3L_LR_3R_5 + C_5C_LL_3L_2R_5 + C_5C_LL_3L_2R_5 + C_5C_LL_3L_2R_5 + C_5C_LL
10.736 INVALID-ORDER-736 Z(s) = \left(\infty, \infty, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{1}{R_3 R_5 g_m + R_3 + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L + C_3 C_5 C_L L_3 L_5 L_L R_3 g_m + C_5 C_L L_5 L_
\textbf{10.737} \quad \textbf{INVALID-ORDER-737} \ \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
                                      \overline{L_{3}R_{3}R_{5}R_{L}g_{m}+L_{3}R_{3}R_{L}+L_{L}R_{3}R_{5}R_{L}g_{m}+L_{L}R_{3}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_
10.738 INVALID-ORDER-738 Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
H(s) = \frac{1}{R_3 R_5 R_L q_m + R_3 R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L + C_3 C_5 L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_5 L_5 R_5 g_m + C_5 C_L L_5 R_5 g_m +
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10.739 INVALID-ORDER-739 Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
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 $H(s) = \frac{1}{R_3 R_5 R_L g_m + R_3 R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L + C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5$ 

**10.740** INVALID-ORDER-740  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3 R_5 g_m - R_3 + s^2 \left(C_3 L_3 R_3 R_5 g_m - C_3 L_3 R_3\right) + s \left(L_3 R_5 g_m - L_3\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(C_3 C_L L_3 R_3 R_5 g_m + C_3 C_L L_3 R_3\right) + s^2 \left(2 C_3 L_3 R_3 g_m + C_3 L_3 R_5 g_m + C_3 L_3 R_5 g_m + C_L L_3\right) + s \left(C_L R_3 R_5 g_m + C_L R_3 + 2 L_3 g_m\right) + 1}$ 

10.741 INVALID-ORDER-741  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{R_L}{C_LR_Ls + 1}\right)$ 

 $H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3R_3R_L\right) + s\left(L_3R_5R_Lg_m - L_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(C_3C_LL_3R_3R_5R_Lg_m + C_3C_LL_3R_3R_L\right) + s\left(C_3L_3R_3R_5g_m + C_3L_3R_5R_Lg_m + C_3$ 

10.742 INVALID-ORDER-742  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3R_5g_m - R_3 + s^3\left(C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3R_3R_L\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_LL_3R_5R_Lg_m - C_LL_3R_L\right) + s\left(C_LR_3R_5R_Lg_m - C_LR_3R_L + L_3R_5g_m - L_3\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_LL_3R_3R_5g_m + 2C_3C_LL_3R_3 + C_3C_LL_3R_3 + C_3$ 

10.743 INVALID-ORDER-743  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_3C_LL_3L_LR_3R_5g_m - C_3C_LL_3L_LR_3\right) + s^3\left(C_LL_3L_LR_5g_m - C_LL_3L_L\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_LL_LR_3R_5g_m - C_LL_LR_3\right) + s\left(L_3R_5g_m - L_3\right)}{2R_3g_m + R_5g_m + s^4\left(2C_3C_LL_3L_LR_3g_m + C_3C_LL_3L_LR_5g_m + C_3C_LL_3R_3R_5g_m + C_3L_3R_3g_m + C_3L_3R_5g_m + C_4L_3R_5g_m + C_4L_4R_3g_m + C_4R_4R_3g_m +$ 

10.744 INVALID-ORDER-744  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{s^3 \left( C_3 L_3 L_L R_3 R_5 g_m - C_3 L_3 L_L R_3 \right) + s^2 \left( L_3 L_L R_5 g_m - L_3 L_L \right) + s \left( L_L R_3 R_5 g_m - L_L R_3 \right)}{R_3 R_5 g_m + R_3 + s^4 \left( C_3 C_L L_3 L_L R_3 R_5 g_m + C_3 L_4 L_4 R_3 \right) + s^3 \left( 2 C_3 L_3 L_L R_3 g_m + C_3 L_4 L_4 R_5 g_m + C_4 L_3 L_4 \right) + s^2 \left( C_3 L_3 R_3 R_5 g_m + C_4 L_4 R_4 R_5 g_m + C_4 L_4 R_5 g_m + C_4 L$ 

10.745 INVALID-ORDER-745  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_3C_LL_3L_LR_3R_5g_m - C_3C_LL_3L_LR_3\right) + s^3\left(C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3L_LR_5g_m - C_LL_3L_L\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_LL_3R_5R_Lg_m - C_LL_3R_L + C_LL_LR_3R_5R_Lg_m - C_LL_3R_L\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3R_5g_m -$ 

10.746 INVALID-ORDER-746  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

10.747 INVALID-ORDER-747  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^4\left(C_3C_LL_3L_LR_3R_5R_Lg_m - C_3C_LL_3L_LR_3R_5g_m - C_3L_3L_LR_3 + C_LL_3L_LR_5R_Lg_m - C_LL_3L_LR_1\right) + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3L_LR_3R_5g_m - C_3L_3L$ 

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10.748 INVALID-ORDER-748 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10.749 INVALID-ORDER-749 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, R_L\right)
                                                                                                                                                                                 H(s) = \frac{-C_3C_5L_3R_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_3L_3R_3R_Lg_m - C_5L_3R_L\right) + s\left(-C_5R_3R_L + L_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^3\left(2C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3 + C_3C_5L_3R_L\right) + s^2\left(C_3L_3R_3g_m + C_3L_3R_Lg_m + 2C_5L_3R_Lg_m + C_5L_3\right) + s\left(2C_5R_3R_Lg_m + C_5R_3 + C_5R_L + L_3g_m\right)}
10.750 INVALID-ORDER-750 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right)
                                                                                                                                                                                     H(s) = \frac{-C_3C_5L_3R_3s^3 + R_3g_m + s^2\left(C_3L_3R_3g_m - C_5L_3\right) + s\left(-C_5R_3 + L_3g_m\right)}{C_3C_5C_LL_3R_3s^4 + g_m + s^3\left(2C_3C_5L_3R_3g_m + C_3C_5L_3 + C_3C_LL_3R_3g_m + C_5C_LL_3\right) + s^2\left(C_3L_3g_m + C_5C_LR_3 + 2C_5L_3g_m + C_LL_3g_m\right) + s\left(2C_5R_3g_m + C_5C_LR_3g_m\right)}
10.751 INVALID-ORDER-751 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)
H(s) = \frac{-C_3C_5L_3R_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_3L_3R_3R_Lg_m - C_5L_3R_L\right) + s\left(-C_5R_3R_L + L_3R_Lg_m\right)}{C_3C_5C_LL_3R_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(2C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3 + C_3C_5L_3R_3R_Lg_m + C_5C_LL_3R_L\right) + s^2\left(C_3L_3R_3g_m + C_5L_3R_Lg_m + C_5L_3R_
10.752 INVALID-ORDER-752 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{-C_3C_5C_LL_3R_3R_Ls^4 + R_3g_m + s^3\left(-C_3C_5L_3R_3 + C_3C_LL_3R_3R_Lg_m - C_5C_LL_3R_L\right) + s^2\left(C_3L_3R_3g_m - C_5C_LR_3R_L - C_5L_3 + C_LL_3R_Lg_m\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m + L_3g_m\right)}{g_m + s^4\left(2C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3 + C_3C_5C_LL_3R_2g_m + C_5C_LL_3R_Lg_m + C_5C_LR_3R_Lg_m + C_5C
10.753 INVALID-ORDER-753 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_3C_LL_3L_LR_3g_m - C_5C_LL_3L_L\right) + s^3\left(-C_3C_5L_3R_3 - C_5C_LL_LR_3 + C_LL_3L_Lg_m\right) + s^2\left(C_3L_3R_3g_m - C_5L_3 + C_LL_LR_3g_m\right) + s\left(-C_5R_3 + L_3g_m\right)}{g_m + s^5\left(2C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_L\right) + s^4\left(C_3C_5C_LL_3L_Lg_m\right) + s^3\left(2C_3C_5L_3R_3g_m + C_3C_LL_3R_3g_m + C_5C_LL_3 + 2C_5C_LL_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LR_3 + 2C_5C_LR_3R_3g_m + C_5C_LR_3R_3g_m +
10.754 INVALID-ORDER-754 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_LR_3s^4 + L_LR_3g_ms + s^3\left(C_3L_3L_LR_3g_m - C_5L_3L_L\right) + s^2\left(-C_5L_LR_3 + L_3L_Lg_m\right)}{C_3C_5C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(2C_3C_5L_3L_LR_3g_m + C_3C_5L_3L_LR_3g_m + C_5C_LL_3L_L\right) + s^3\left(C_3C_5L_3L_LR_3g_m + C_5L_3L_LR_3g_m + C_5L_LR_3g_m + C_5L_
10.755 INVALID-ORDER-755 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(-C_3C_5C_LL_3R_3R_L + C_3C_LL_3L_LR_3g_m - C_5C_LL_3R_3 + C_3C_LL_3R_3R_Lg_m - C_5C_LL_3R_3 + C_4C_LL_3R_3R_L - C_5C_LL_3R_3 + C_4C_LL_3R_3R_Lg_m - C_5C_LL_3R_3R_Lg_m - C_5C_LL_3R_1R_3g_m - 
10.756 INVALID-ORDER-756 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -C_3C_5L_3L_LR_3R_Ls^4 + L_LR_3R_Lg_ms + s^3\left(C_3L_3L_LR_3R_Lg_m - C_5L_3L_LR_L\right) + s^2\left(-C_5L_LR_3R_L + L_3L_LR_Lg_m\right)
H(s) = \frac{-C_3C_5L_3L_LR_3R_Ls^5 + L_LR_3R_Lg_m + s^4\left(2C_3C_5L_3L_LR_3R_Lg_m + C_5L_3L_LR_3\right) + s^4\left(-C_5L_LR_3R_L + L_3L_LR_Lg_m\right)}{C_3C_5C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(2C_3C_5L_3L_LR_3 + C_3C_5L_3L_LR_3 + C_5C_LL_3L_LR_4\right) + s^3\left(C_3C_5L_3L_LR_3g_m + C_5L_3L_LR_3g_m + C_
10.757 INVALID-ORDER-757 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}s^{5}+R_{3}R_{L}g_{m}+s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{3}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{3}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{L}R_{3}g_{m}-C_{5}C_{L}L_{L}R_{3}R_{L}R_{L}\right)+s^{3}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{m}-C_{5}C_{L}L_{L}R_{3}R_{L}R_{m}\right)+s^{4}\left(-C_{3}C_{5}L_{3}L_{L}R_{3}+C_{3}C_{L}L_{L}R_{3}R_{L}R_{m}-C_{5}C_{L}L_{L}R_{L}R_{L}\right)+s^{4}\left(-C_{3}C_{5}L_{3}R_{L}R_{m}+c_{5}C_{L}L_{L}R_{m}R_{m}+c_{5}C_{L}L_{L}R_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}R_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}L_{m}+c_{5}C_{L}
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10.758 INVALID-ORDER-758 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}s^{5}+R_{3}R_{L}g_{m}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{3}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}-C_{5}C_{L}L_{3}L_{L}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{L}R_{L}-C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{L}-C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{3}C_{5}L_{3}R_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{3}L_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{3}L_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{3}L_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{3}L_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{3}L_{L}+C_{5}C_{L}+C_{5}C_{L}L_{2}R_{L}\right)+s^{2}\left(-C_{5}C_{L}L_{3}L_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{L}+C_{5}C_{
H(s) = \frac{-C_3C_5C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(C_3C_LL_3L_LR_3R_Lg_m - C_5C_LL_3L_LR_L\right) + s^3\left(-C_3C_5L_3R_3R_L - C_5C_LL_3L_RR_2\right)}{R_3g_m + R_Lg_m + s^5\left(2C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + C_3C_5L_3L_LR_3R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_3C_5L_3L_Rg_m + C_3C_5L_3R_Rg_m + C_3C_5L_3L_Rg_m + C_3C_5L_3R_Rg_m + C_3C_5L_3R_Rg
10.759 INVALID-ORDER-759 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)
                                                10.760 INVALID-ORDER-760 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5L_3R_3R_5s^3 + R_3R_5g_m - R_3 + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 - C_5L_3R_5\right) + s\left(-C_5R_3R_5 + L_3R_5g_m - L_3\right)}{C_3C_5C_LL_3R_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(2C_3C_5L_3R_3R_5g_m + C_3C_LL_3R_3 + C_5C_LL_3R_3\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3
10.761 INVALID-ORDER-761 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L}{C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H(s) = \frac{-C_3C_5L_3R_3R_5R_Ls^5 + R_3R_5R_Lg_m - R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3R_3R_L - C_5L_3R_5R_L\right) + s\left(-C_5R_3R_5R_Lg_m - C_3L_3R_3R_5R_Lg_m + C_3L_3R_3R_5R_Lg
10.762 INVALID-ORDER-762 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H(s) = \frac{-C_3C_5C_LL_3R_3R_5R_Ls^4 + R_3R_5g_m - R_3 + s^3\left(-C_3C_5L_3R_3R_5 + C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3R_3R_5R_Lg_m + C_3C_LL_3R_5R_Lg_m + C_3C_L
10.763 INVALID-ORDER-763 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -C_3C_5C_LL_3L_LR_3R_5s^5 + R_3R_5g_m - R_3 + s^4\left(C_3C_LL_3L_LR_3R_5g_m - C_3C_LL_3L_LR_3 - C_5C_LL_3L_LR_5\right) + s^3\left(-C_3C_5L_3R_3R_5 - C_5C_LL_3R_3R_5 + C_4L_3R_5R_5\right) + s^3\left(-C_3C_5L_3R_3R_5 - C_5C_4L_3R_3R_5 + C_4L_3R_5\right) + s^3\left(-C_3C_5L_3R_3R_5 - C_5C_4L_3R_3R_5 - C_5C_4L_3R_3R_5\right) + s^3\left(-C_3C_5L_3R_3R_5 - C_5C_4L_3R_5\right) + s^3\left(-C_3C_5L_3R_3R_5 - C_5C_4L_3R_5\right) + s^3\left(-C_3C_5L_3R_3R_5\right) + s^3\left(-C_3C_5L_3R_5\right) + s^3\left(-C_5C_5L_3R_5\right) + s^3\left(-C_5C_5L_5R_5\right) + s^3\left(-C_5C_5L_5R_5\right) + s^3\left(-C_5C_5L_5R_5\right) + s^3\left(-C_5C_5L_5R_5\right) + s^3\left(-C_5C_
                                                -C_3C_5C_LL_3L_LR_3R_5S^* + R_3R_5g_m - R_3 + s + (C_3C_LL_3L_LR_3R_5g_m - C_3C_LL_3L_LR_3 - C_5C_LL_3L_LR_5) + s + (C_3C_5L_3L_LR_5) + s + (C_3C_5L
10.764 INVALID-ORDER-764 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{-C_3C_5L_3L_LR_3R_5s^5 + s^5 \left(C_3L_3L_LR_3R_5g_m - C_3L_3L_LR_3 - C_5L_3L_LR_3\right) + s^5 \left(-C_5L_LR_3R_5 + L_3L_LR_5g_m - C_3L_3L_LR_3\right) + s^5 \left(-C_5L_LR_3R_5g_m + C_3L_3L_LR_3\right) + s^5 \left(-C_5L_3L_LR_3R_5g_m + C_3L_3L_LR_3\right) + s^5 \left(-C_5L_LR_3R_5g_m + C_3L_3L_LR_3\right) + s^5 \left(-C_5L_LR_3R_5g_m + C_3L_3L_LR_3g_m + C_3L_3L_LR_3\right) + s^5 \left(-C_5L_3L_LR_3R_5g_m + C_3L_3L_LR_3g_m + C_3L_3L_LR_3
10.765 INVALID-ORDER-765 Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_3C_5C_LL_3L_LR_3R_5s^5 + R_3R_5g_m - R_3 + s^4\left(-C_3C_5C_LL_3R_3R_5R_L + C_3C_LL_3L_LR_3R_5g_m - C_3C_LL_3L_LR_3 - C_5C_LL_3L_RR_3R_5g_m - C_3C_LL_3L_RR_3R_5g_m - C_3C_LL_3R_5g_m - C_3C_L
                                                -C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m} + R_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}g_{m} + C_{3}C_{5}C_{L
10.766 INVALID-ORDER-766 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                              \frac{1}{C_{3}C_{5}L_{L}L_{L}R_{3}R_{5}R_{L}s^{5}+R_{3}R_{5}R_{L}g_{m}+R_{3}R_{L}+s^{4}\left(2C_{3}C_{5}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{L}R_{3}R_{5}+C_{3}C_{5}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}+C_{3}C_
10.767 INVALID-ORDER-767 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
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 $\frac{1}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^5(2C_3C_5C_LL_3L_LR_3R_5R_Lg_m + C_3C_5C_LL_3L_LR_3R_5g_m + C_3C_5L_3L_LR_3R_5g_m + C_3C_5L_$ 

 $-C_3C_5C_LL_3L_LR_3R_5R_Ls^5 + R_3R_5R_Lg_m - R_3R_L +$ 

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 \begin{aligned} & \textbf{10.768} \quad \textbf{INVALID-ORDER-768} \ Z(s) = \left( \infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_4s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{R_5}{C_2R_2s + 1}, \ \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_2s^2 + C_LR_2s + 1} \right) \\ & H(s) = \frac{1}{R_3R_5g_m + 2R_3R_Lg_m + R_5 + R_5R_Lg_m + R_L + s^5 \left( 2C_3C_5C_LL_3L_LR_3R_5R_Lg_m + C_3C_5C_LL_3L_LR_3R_5 + C_3C_5C_LL_3L_LR_3R_5R_L + s^4 \left( C_3C_5C_LL_3R_3R_5R_L + C_3C_LL_3L_LR_3R_5g_m + 2C_3C_LL_3L_LR_3R_Lg_m + C_3C_LL_3L_LR_3 + C_3C_LL_3R_3R_Lg_m + C_3C_LL_3R_3R_Lg_m + C_3C_LL_3L_LR_3 + C_3C_LL_3R_3R_Lg_m + C_3C_LL_3R_3R_Lg_m + C_3L_3R_Lg_m + C_3L_
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10.771 INVALID-ORDER-771  $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)$ 

 $H(s) = \frac{R_3 R_L g_m + s^3 \left( C_3 C_5 L_3 R_3 R_5 R_L g_m - C_3 C_5 L_3 R_3 R_L g_m + C_5 L_3 R_5 R_L g_m - C_5 L_3 R_L \right) + s \left( C_5 R_3 R_5 R_L g_m - C_5 L_3 R_5 R_L g_m - C_5 L_3 R_5 R_L g_m + C_5 C_L L_3 R_3 R_L g_m + C_5 C_L L_3 R_L$ 

10.772 INVALID-ORDER-772  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3g_m + s^4 \left( C_3C_5C_LL_3R_3R_5R_Lg_m - C_3C_5C_LL_3R_3R_5g_m - C_3C_5L_3R_3R_Lg_m + C_5C_LL_3R_5R_Lg_m - C_5C_LL_3R_L\right) + s^2 \left( C_3L_3R_3g_m + C_5C_LL_3R_5R_Lg_m - C_5C_LL_3R_5R_Lg_m$ 

10.773 INVALID-ORDER-773  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3 g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_3 R_5 g_m - C_3 C_5 C_L L_3 L_L R_3 g_m + C_5 C_L L_3 L_L R_3 g_m + C_5 C_L L_3 L_L R_3 g_m + C_5 C_L L_3 L_L R_3 g_m - C_3 C_5 L_3 R_3 R_5 g_m - C_3 C_5 L_3 R_3 R_5 g_m - C_5 C_L L_L R_3 R_5 g_m - C_5 C_L L_L R_3 R_5 g_m - C_5 C_L L_2 R_3 R_5 g_m + C_5 C_L L_3 R_5 g_m + C_5$ 

10.774 INVALID-ORDER-774  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$ 

10.775 INVALID-ORDER-775  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_3g_m + s^5 \left( C_3C_5C_LL_3L_LR_3g_m - C_3C_5C_LL_3L_LR_3\right) + s^4 \left( C_3C_5C_LL_3R_3R_5R_Lg_m - C_3C_5C_LL_3R_3R_L + C_3C_LL_3L_LR_3g_m + C_5C_LL_3L_LR_5g_m - C_5C_LL_3L_L\right) + s^3 \left( C_3C_5L_3R_3R_5g_m - C_3$ 

10.776 INVALID-ORDER-776  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

 $) = \frac{L_L R_3 R_L g_m s + s^4 \left( C_3 C_5 L_3 L_L R_3 R_5 R_L g_m + C_3 C_5 L_4 L_L R_3 R_L g_m + s^4 \left( C_3 C_5 L_3 L_L R_3 R_5 g_m + C_3 C_5 L_3 L_L R_3 R_5 g_m + s^4 \left( C_3 C_5 L_3 L_L R_3 R_5 g_m + C_3 C_5 L_3 L_L R_3 R_4 g_m + C_3 C_5 L_3 L_L R_3 R_4 g_m + C_5 C_4 L_3 L_L R_5 R_5 g_m + C_5 C_4 L_5 L_4 R_5 R_5 g_m + C_5 C_5 L_5 L_5 R_5 g_m + C_5 C_5 L_5 L_5 R_5 g_m + C_5 C_5 L_5 L_5 R_5 g$ 

10.777 INVALID-ORDER-777  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, R_5 + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$ 

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 10.778 \quad \text{INVALID-ORDER-778} \ Z(s) = \left( \infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L(C_LL_ss^2 + 1)}{C_LL_ss^2 + C_RL_s + 1} \right) \\  = \frac{R_3R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5g_m + 2C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3R_3g_m + C_3C_5C_LL_3L_3R_3g_m + C_3C_5C_LL_3L_3R_3g_m + C_3C_5C_LR_3R_3g_m + C_3C_5C_LR_3R_3g_m + C_3C_5C_LR_3R_3g_m + C_3C_5C_LR_3R_3g_m + C_3C_5C_LR_3R_3g_m + C_3C_5C_LR_3g_m + C_3C_5C_LR_3g_m
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10.781 INVALID-ORDER-781  $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)$ 

 $H(s) = \frac{C_3C_5L_3L_5R_3R_Lg_m + s^3\left(-C_3C_5L_3R_3R_L + C_5L_3L_5R_Lg_m\right) + s^2\left(C_3L_3R_3R_Lg_m - C_5L_3R_L + C_5L_5R_3R_Lg_m\right) + s^2\left(C_3L_3R_3R_Lg_m + S_5L_3L_5R_2g_m\right) + s^2\left(C_3L_3R_3R_Lg_m + S_5L_3L_5R_3R_Lg_m + S_5L_3L_5R_2g_m\right) + s^2\left(C_3L_3R_3R_Lg_m + S_5L_3L_5R_3R_Lg_m + S_5L_3L_5R_3R_Lg_m\right) + s^2\left(C_3L_3R_3R_Lg_m + S_5L_3R_Lg_m\right) + s^2\left(C_3L_3R_3R_Lg_m\right) + s^2\left(C_3L_3R_3R_Lg_m\right) + s^2\left(C_$ 

10.782 INVALID-ORDER-782  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + R_3g_m + s^4\left(-C_3C_5C_LL_3R_3R_L + C_3C_5L_3L_5R_3g_m + C_5C_LL_3R_3R_Lg_m - C_5C_LL_3R_3R_Lg_m - C_5C_LL_3R_3R_Lg_m + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_2g_m + C_5C_LL_3R_3R_Lg_m + C_5C_LL_3R_2g_m + C_5C_LL_3R_3g_m + C_5$ 

10.783 INVALID-ORDER-783  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5\left(-C_3C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3g_m + s^4\left(C_3C_5L_3L_LR_3g_m + C_3C_LL_3L_LR_3g_m + C_5C_LL_3L_LR_3g_m + s^4\left(C_3C_5L_3L_LR_3g_m + C_5C_LL_3L_LR_3g_m + C_5C_LL_3L_LR_3g_m + s^4\left(C_3C_5L_LR_3L_LR_3g_m + C_5C_LL_3L_LR_3g_m + c_5C_LL_$ 

10.784 INVALID-ORDER-784  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5L_3L_5L_LR_3g_ms^5 + L_LR_3g_ms + s^4\left(-C_3C_5L_3L_LR_3 + C_5L_3L_5L_Lg_m\right) + s^3\left(C_3L_3L_LR_3g_m - C_5L_3L_L + C_5L_5L_LR_3g_m\right) + s^3\left(C_3C_5L_3L_LR_3g_m + s^5\left(C_3C_5L_3L_LR_3g_m + s^5c_5L_3L_LR_3g_m + s^5c_5L_3L_LR$ 

10.785 INVALID-ORDER-785  $Z(s) = \left(\infty, \infty, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3R_Lg_m - C_3C_5C_LL_3L_LR_3 + C_5C_LL_3L_5L_Lg_m\right) + s^4\left(-C_3C_5C_LL_3R_3R_L + C_3C_5L_3L_5R_3g_m + C_3C_LL_3L_LR_3g_m + C_5C_LL_3L_5R_Lg_m - C_5C_LL_3L_LR_3g_m + C_5$ 

10.786 INVALID-ORDER-786  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

 $H(s) = \frac{C_3C_5L_3L_5L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms^6 + R_3R_Lg_ms^6 + R_3R_Lg$ 

10.787 INVALID-ORDER-787  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_Rg_ms^6 + R_3R_Lg_ms^6 + R_3R_Lg_ms^6 + R_3R_Lg_m + s^5\left(-C_3C_5C_LL_3L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + s^4\left(C_3C_5L_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_Rg_m + s^4\left(C_3C_5L_3L_5L_LR_3g_m + C_5C_LL_3L_5L_LR_3g_m + C_5C_LL_3L_5L_Rg_m + s^4\left(C_3C_5L_3L_5L_Rg_m + C_5C_LL_3L_5L_Rg_m + s^4\left(C_3C_5L_3L_5L_Rg_m + C_5C_LL_3L_5L_Rg_m + s^4\left(C_3C_5L_3L_5L_Rg_m + C_5C_LL_3L_5L_Rg_m + s^4\left(C_3C_5L_3L_5L_Rg_m + c_5C_LL_3L_5L_Rg_m + c_5C_LL_3L_5L$ 

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H(s) = \frac{-c_{3} - c_{3} - c_{4} - c_{5} - c_
10.789 INVALID-ORDER-789 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L\right)
H(s) = \frac{-C_3C_5L_3L_5R_3R_Ls^4 - R_3R_L + s^3\left(C_3L_3L_5R_3R_Lg_m - C_5L_3L_5R_L\right) + s^2\left(-C_3L_3R_3R_L - C_5L_5R_3R_L + L_3L_5R_Lg_m\right) + s\left(-L_3R_L + L_5R_3R_Lg_m\right)}{2R_3R_Lg_m + R_3 + R_L + s^4\left(2C_3C_5L_3L_5R_3R_Lg_m + C_3C_5L_3L_5R_3\right) + s^3\left(C_3L_3L_5R_3g_m + C_3L_3L_5R_Lg_m + C_5L_3L_5\right) + s^2\left(2C_3L_3R_3R_Lg_m + C_3L_3R_3R_L + L_3L_5R_Lg_m\right) + s\left(-L_3R_L + L_5R_3R_Lg_m\right) + s\left(-L_3R_L + L_5R_Lg_m\right) + s\left(-L_3R_L + L_5R_Lg_m\right) + s\left(-L_3R_L + L_5R_Lg_m\right) + s\left(-L_3R_L + L_5R_Lg_m\right) + s\left(-L_3R_L + L_5R_Lg_m
10.790 INVALID-ORDER-790 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_{Ls}}\right)
H(s) = \frac{-C_3C_5L_3L_5R_3s^4 - R_3 + s^3\left(C_3L_3L_5R_3g_m - C_5L_3L_5\right) + s^2\left(-C_3L_3R_3 - C_5L_5R_3 + L_3L_5g_m\right) + s\left(-L_3 + L_5R_3g_m\right)}{C_3C_5C_LL_3L_5R_3s^5 + 2R_3g_m + s^4\left(2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_3g_m + C_5C_LL_3L_5\right) + s^3\left(C_3C_LL_3R_3 + C_5L_5R_3 + 2C_5L_5R_3 + 2C_5L_5R_3g_m + C_5L_5R_3g_m\right) + s^2\left(2C_3L_3R_3g_m + C_5L_5R_3g_m + C_5L_5R_3g_m + C_5L_5R_3g_m\right) + s^2\left(2C_3L_3R_3g_m + C_5L_5R_3g_m + C_5L_5R_3g_m + C_5L_5R_3g_m\right) + s^2\left(2C_3L_3R_3g_m + C_5L_5R_3g_m + C_5L_5R_3g_m\right) + 
10.791 INVALID-ORDER-791 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L}{C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -C_3C_5L_3L_5R_3R_Ls^4 - R_3R_L + s^3\left(C_3L_3L_5R_3R_Lg_m - C_5L_3L_5R_L\right) + s^2\left(-C_3L_3R_3R_L - C_5L_5R_3R_L + L_3L_5R_3R_L\right) + s^2\left(-C_3L_3R_3R_L - C_5L_5R_3R_L\right) + s^2\left(-C_3L_3R_3R_L\right) + s^2\left(-C_3L_3R
H(s) = \frac{- \cup_3 \cup_5 L_3 L_5 R_3 R_L s^* - R_3 R_L + s^* \left( \cup_3 L_3 L_5 R_3 R_L g_m - \cup_5 L_3 L_5 R_L \right) + s^* \left( - \cup_3 L_3 R_3 R_L - \cup_5 L_5 R_3 R_L + L_3 L_5 R_3 R_L g_m + C_5 L_4 L_5 R_4 R_L g_m + C_5 L_5 R_4 R_L g_m + C_5 L_5 R_5 R_L g_m + 
10.792 INVALID-ORDER-792 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L + \frac{1}{C_Ls}\right)
10.793 INVALID-ORDER-793 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_Ls}\right)
                                            \frac{-C_3C_5C_LL_3L_5L_LR_3s^6-R_3+s^5\left(C_3C_LL_3L_5L_LR_3g_m-C_5C_LL_3L_5L_L\right)+s^4\left(-C_3C_5L_3L_5R_3-C_3C_LL_3L_LR_3-C_5C_LL_3L_5L_LR_3+C_LL_3L_5L_Lg_m\right)+s^4\left(2C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5L_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3L_5C_LR_3g_m+C_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_
10.794 INVALID-ORDER-794 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10.795 INVALID-ORDER-795 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -C_3C_5C_LL_3L_5L_LR_3s^\circ - R_3 + s^\circ \left( -C_3C_5C_LL_3L_5R_3R_L + C_3C_LL_3L_5L_LR_3g_m - C_5C_LL_3L_5L_L \right) + s^\circ \left( -C_3C_5L_3L_5L_L \right) + s^\circ \left( -C_3C_5C_LL_3L_5L_L \right) + s^\circ \left( -C_3C_5C_
10.796 INVALID-ORDER-796 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                          \frac{-3c_3L_3L_5}{c_3C_5C_LL_3L_5L_LR_3R_Ls^6 + R_3R_L + s^5\left(2C_3C_5L_3L_5L_LR_3R_Lg_m + C_3C_5L_3L_5L_LR_3 + C_3C_5L_3L_5L_LR_3R_Lg_m + C_5C_LL_3L_5L_LR_3R_Lg_m + C_5C_LL_3L_5L_LR_3R_L + c_3C_LL_3L_5L_RR_3R_L + c_3C_LL_3L
10.797 INVALID-ORDER-797 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \frac{1}{2R_3R_Lq_m + R_3 + R_L + s^6\left(2C_3C_5C_LL_3L_5L_LR_3R_Lq_m + C_3C_5C_LL_3L_5L_LR_3 + C_3C_5C_LL_3L_5L_LR_3q_m + C_3C_5L_3L_5L_LR_3q_m + C_3C_5L_3L_5L_RR_3q_m + C_3C_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_5L_5L_5L_5L_5L_5L_5L_5L
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 $C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5(-C_3c_3c_3c_5C_LL_3L_5L_1R_3R_Lg_ms^6)$ 

10.788 INVALID-ORDER-788  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

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10.798 INVALID-ORDER-798 Z(s) = \left( \infty, \infty, \frac{C_3L_3R_4s^2 + L_3s + R_8}{C_3L_3s^2 + 1}, \infty, \frac{L_2s}{C_3L_3s^2 + 1}, \frac{R_6(C_3L_3s^2 + 1)}{C_3L_3s^2 + C_3R_6s + 1} \right)
H(s) = \frac{1}{2R_3R_4g_m + R_3 + R_4 + s^6(2C_3C_3C_4L_3L_3L_2R_3R_4g_m + C_3C_5L_3L_3L_2R_3 + C_3C_5L_3L_3L_2R_3g_m + C_3C_4L_3L_3L_4R_3g_m + C_3C_4L_3L_3L_4R_2g_m + C_3C_4L_3R_3R_4g_m + C_3C_4L_3R_3R_4g_m + C_3C_4L_3R_3R_4g_m + C_3C_4L_3R_3R_4g_m + C_3C_4L_3R_3R_4g_m + C_3C_4R_3R_4g_m + C_3L_3R_3R_4g_m + C_3L_3R_3g_m + C_3L_3R_3R_4g_m + C_3L_3R_3g_m + C_3L_3R_3R_4g_m + C_3L_3R_3g_m + C_3L_3R_3R_4g_m + C_3L_3R_3g_m + C_3L_3R_3g
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10.802 INVALID-ORDER-802  $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_3C_5C_LL_3R_3R_Lg_m - C_3C_5L_LL_3R_3R_Lg_m + C_5C_LL_3L_5R_Lg_m\right) + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3R_Lg_m + C_5C_LL_3R_3R_Lg_m + C_5C$ 

10.803 INVALID-ORDER-803  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_Rg_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5g_m - C_3C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3g_m + C_5C_LL_3L_LR_$ 

10.804 INVALID-ORDER-804  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5L_3L_5L_R_3g_ms^5 + L_LR_3g_ms + s^4\left(C_3C_5L_3L_LR_3R_5g_m - C_3C_5L_3L_LR_3 + C_3C_5L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_3C_5L_3L_LR_3R_5g_m + C_3C_5L_3L_LR_3g_m + S^6\left(C_3C_5L_3L_LR_3g_m + C_3C_5L_3L_LR_3g_m + C_3C_5L_3L_LR$ 

10.805 INVALID-ORDER-805  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_5g_m - C_3C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3 + C_5C_LL_3L_LR_3 + C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3R_Lg_m - C_3C_5C_LL_3R_3R_L + C_3C_5C_LL_3R_L + C_$ 

10.806 INVALID-ORDER-806  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5R_Lg_m + C_3C_5L_3L_LR_3R_L + C_3C_5L_3L_LR_3g_m + C_3C_5L_3L_LR_$ 

10.807 INVALID-ORDER-807  $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5R_Lg_m - C_3C_5C_LL_3L_LR_3R_L + C_3C_5L_3L_LR_3R_Lg_m + s^6\left(C_3C_5C_LL_3L_LR_3R_Lg_m + s^6\left(C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + s^6\left(C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_$ 

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H(s) = \frac{1}{R_3 g_m + R_L g_m + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 g_m + C_3 C_5 C_L L_3 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m
10.809 INVALID-ORDER-809 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, R_L\right)
H(s) = \frac{-C_3C_5L_3L_5R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3R_5R_Ls^4 - R_3L_5R_3R_5R_L - C_5L_3L_5R_5R_L) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_5R_3R_5R_L + L_5R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_5R_3R_5R_L + L_5R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3L_5R_3R_5R_L + L_5R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3L_5R_3R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3R_3R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3L_5R_3R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3L_5R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3L_5R_3R_5R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_3L_5R_5R_L\right) + s^2\left(-C_3L_3R_5R_L - C_5L_3L_5R_5R_L\right) + s^2\left(-C_3L_3R_5R_L 
10.810 INVALID-ORDER-810 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5L_3L_5R_3R_5s^4 - R_3R_5 + s^3\left(C_3L_3L_5R_3R_5g_m - C_3L_3L_5R_3 - C_5L_3L_5R_5\right) + s^2\left(-C_3L_3R_3R_5 - C_5L_5R_3R_5 + L_3L_5R_5g_m - C_3C_5L_3L_5R_3R_5s^5 + 2R_3R_5g_m + R_5 + s^4\left(2C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_3g_m + C_3L_3L_5R_3g_m + C_3L_3L_5R_3g
10.811 INVALID-ORDER-811 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{R_L}{C_LR_Ls + 1}\right)
                                                     - \cup_3 \cup_5 L_3 L_5 R_3 R_5 R_L s^5 + 2 R_3 R_5 R_L g_m + R_3 R_5 + R_5 R_L + s^4 \left(2 C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_5 L_5 R_5 R_L g_m + C_5 C_5 L_5 L_5 R_5 R_L g_m + C_
10.812 INVALID-ORDER-812 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_3C_5C_LL_3L_5R_3R_5R_Ls^5 - R_3R_5 + s^4(-C_3C_5L_3L_5R_3R_5 + C_3C_LL_3L_5R_3R_5 + c_3C_LL_3L_5R_5 + c_3C_LL_5R_5 + c
H(s) = \frac{-C_3C_5C_LL_3L_5R_3R_5R_Ls^5 - R_3R_5 + s^4\left(-C_3C_5L_3L_5R_3R_5 + C_3C_LL_3L_5R_3R_5 + C_3C_LL_3L_5R_5 + C_3
10.813 INVALID-ORDER-813 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_3C_5C_LL_3L_5L_LR_3R_5s^6 - R_3R_5 + s^5(C_3C_LL_3L_5L_LR_3R_5g_m - C_3C_LL_3L_5L_2R_3R_5g_m - C_3C_LL_3L_5L_3R_5g_m - C_3C_LL_3L_5L_5R_5g_m - C_3C_LL_3L_5R_5g_m - C_3C_LL_3R_5g_m -
                                                       -C_3C_5C_LL_3L_5L_LR_3R_5s - R_3R_5 + s + (C_3C_LL_3L_5L_LR_3r_6s - R_3R_5r_6 -
10.814 INVALID-ORDER-814 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
H(s) = \frac{-C_3C_5L_3L_5L_LR_3R_5s^6 + R_3R_5 + s^5(2C_3C_5L_3L_5L_LR_3R_5g_m + C_3C_5L_3L_5L_LR_3R_5g_m + C_3C_5L_3L_5L_RR_3R_5g_m + C_3C_5L_3L_5L_RR_3R_5g
10.815 INVALID-ORDER-815 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, L_Ls + R_L + \frac{1}{C_{I}s}\right)
                                                       \frac{- \cup_{3} \cup_{5} \cup_{L} L_{3} L_{5}}{2R_{3}R_{5}g_{m} + R_{5} + s^{6}\left(2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m} + C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + S^{4}\left(2C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + S^{4}\left(2C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m} + C_{3}C_{L}L_{3}L_{5}L_{L}R_{
10.816 INVALID-ORDER-816 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                     \frac{1}{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}s^{6}+R_{3}R_{5}R_{L}+s^{5}\left(2C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_
10.817 INVALID-ORDER-817 Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{C_LL_RL_s^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                       \overline{2R_3R_5R_Lq_m + R_3R_5 + R_5R_L + s^6\left(2C_3C_5C_LL_3L_5L_LR_3R_5R_Lq_m + C_3C_5C_LL_3L_5L_LR_3R_5 + C_3C_5C_LL_3L_5L_LR_3R_5q_m + C_3C_5L_3L_5L_LR_3R_5q_m + C_3C_5L_3L_5L_RR_3R_5q_m + C_3C_5L_3L_5L_3R_5q_m + C_3C_5L_3L_5L_3R_5q_m + C_3C_5L_3L_5L_3R_5q_m + C_3C_5L_3L_5L_3R_5q_m + C_3C_5L
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10.808 INVALID-ORDER-808  $Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

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10.818 INVALID-ORDER-818 Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
H(s) = \frac{1}{2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^6\left(2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_m + C_3C_5C_LL_3L_5L_LR_3R_5 + C_3C_5C_LL_3L_5L_LR_3R_5R_L + C_3C_LL_3L_5L_LR_3R_5g_m + 2C_3C_LL_3L_5L_LR_3R_Lg_m + C_3C_LL_3L_5L_LR_3R_5R_L + C_3C_LL_3L_5L_2R_5R_L + C_3C_LL_3L_5L_
10.819 INVALID-ORDER-819 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, R_L\right)
                                                          \frac{R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{3}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_{5}L_{5}L_{5}R_{L}g_{m}-C_
10.820 INVALID-ORDER-820 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R_{3}R_{5}g_{m}-R_{3}+s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}\right)+s^{3}\left(C_{3}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}g_{m}-C_{3}L_{3}R_{3}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-C_{5}L_{5}R_{5}g_{m}-
                                                         \frac{R_{3}R_{5}g_{m}-R_{3}+s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{3}g_{m}+C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}-C_{5}L_{3}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5}g_{m}+C_{5}C_{L}L_{5}R_{5
10.821 INVALID-ORDER-821 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{R_L}{C_LR_Ls + 1}\right)
                                                         \frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^5\left(C_3C_5C_LL_3L_5R_3R_5R_Lg_m + C_3C_5L_3L_5R_3R_Lg_m + C_3C_5L_3L_5R_
10.822 INVALID-ORDER-822 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R_{3}R_{5}g_{m}-R_{3}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}\right)+s^{4}\left(C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{5}R_{5}g_{m}
                                                         R_{3}R_{5}g_{m}-R_{3}+s^{3}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}L_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}-C_{3}C_{5}L_{L}L_{3}L_{5}R_{3}R_{5}g_{m}-C_{3}C_{5}L_{L}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}+C_{3}C
10.823 INVALID-ORDER-823 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R_{3}R_{5}g_{m}-R_{3}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}\right)+s^{5}\left(C_{3}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}\right)+s^{6}\left(C_{3}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{5}L_{L}R_{5}g_{m}-C_{5}C_{L}L_{5}L_{5}L_{L}R_{5}g_{m}-C
                                                         \frac{R_3R_5g_m - R_3 + s \left( C_3C_5C_LL_3L_5L_LR_3g_m - C_3C_5C_LL_3L_5L_LR_3
10.824 INVALID-ORDER-824 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                                                          \frac{1}{R_3R_5g_m + R_3 + s^6\left(C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5L_3L_5L_LR_3g_m + C_3C_5L_3L_5L_RR_3g_m + C_3C_5L_3L_5L_RR_3g_m
10.825 INVALID-ORDER-825 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R_{3}R_{5}g_{m}-R_{3}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}\right)+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}+C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}+C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}+C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}+C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}+C_{3}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g
                                                         \frac{163 C_{3} C_{m}}{2 R_{3} g_{m} + R_{5} g_{m} + s^{6} \left(2 C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{3} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L} R_{5} g_{m} + C_{3} C_{5} C_{L} L_{3} L_{5} L_{L}
10.826 INVALID-ORDER-826 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
```

 $H(s) = \frac{1}{R_3 R_5 R_L g_m + R_3 R_L + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_L L_2 L_2 L_2 L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_5 C_L L_5 L_L R_3 R_L g_m + C_5 C_L L_5 L_L R_3 R_L g_m + C_5 C_L L_5 L_L R_5 R_L g_m$ 

10.827 INVALID-ORDER-827  $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$ 

 $H(s) = \frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^6\left(C_3C_5C_LL_3L_5L_LR_3R_5g_m + 2C_3C_5C_LL_3L_5L_LR_3 + C_3C_5C_LL_3L_5L_LR_3 + C_3C_5$ 

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10.828 INVALID-ORDER-828 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
```

 $H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_$ 

10.829 INVALID-ORDER-829 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, R_L\right)$$

 $H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^4\left(C_3C_5L_3L_5R_3R_5R_Lg_m - C_3C_5L_3L_5R_3R_L\right) + s^3\left(-C_3C_5L_3R_3R_5R_L + C_5L_3L_5R_5R_Lg_m - C_5L_3L_5R_L\right) + s^2\left(-C_3C_5L_3R_3R_5R_L + C_5L_3L_5R_5R_Lg_m - C_5L_3L_5R_L\right) + s^2\left(-C_3C_5L_3R_3R_5R_L + C_5L_3L_5R_5R_Lg_m - C_5L_3L_5R_Lg_m + C_5L_3L_5R_Lg_$ 

10.830 INVALID-ORDER-830 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^3\left(-C_3C_5L_3R_3R_5 + C_5L_3L_5R_5g_m - C_5L_3L_5\right) + s^2\left(c_3C_5L_3L_5R_3g_m + c_3C_5L_3L_5R_3g_m + c_3C_5L_3L_5R_3g_$ 

10.831 INVALID-ORDER-831 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{R_L}{C_LR_Ls + 1}\right)$$

 $\overline{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L}+s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}R_{3}R_{5}R_{L}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{5}g_{m}+2C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{5}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{5$ 

10.832 INVALID-ORDER-832 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3 R_5 g_m - R_3 + s^5 \left(C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m - C_3 C_5 C_L L_3 L_5 R_3 R_L g_m - C_3 C_5 C_L L_3 L_5 R_3 R_L g_m - C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + s^4 \left(C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_L g_m + C_3 C_5 C_L L_5 R_L g_m + C_3 C_5 C_L L_5 R_L g_m + C_5 C$  $R_3R_5g_m - R_3 + s^5\left(C_3C_5C_LL_3L_5R_3R_5R_Lg_m - C_3C_5C_LL_3L_5R_3R_L\right) + s^4\left(-C_3C_5C_LL_3L_5R_3R_L\right) + s^4\left(-C_5C_5C_LL_3L_5R_3R_L\right) + s^4\left(-C_5C_5C_LL_3L_5R_2R_L\right) + s^4\left(-C_5C_5C_LL_5R_2R_2R_L\right) + s^4\left(-C_5C_5C_LL_5R_2R_L\right) + s^4\left($ 

10.833 INVALID-ORDER-833 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, L_Ls + \frac{1}{C_Ls}\right)$$

 $\frac{R_{3}R_{5}g_{m}-R_{3}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}\right)+s^{5}\left(-C_{5}C_{2}R_{3}g_{m}+R_{5}g_{m}+s^{6}\left(2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g$ 

10.834 INVALID-ORDER-834 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

 $H(s) = \frac{H(s)}{R_3 R_5 g_m + R_3 + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 L_L L_3 L_5 L_L R_3 g_m + C_3 C_5 L_3 L_5 L_L R_3 g_m + C_3 C_5 L_3 L_5 L_L R_5 g_m + C_3 C_5 L_3 L_5 L_L R_5 g_m + C_5 C_L L_5 L_L R_5 g_m + C_5 C_L L_5 L_L R_5 g_m + C_5 C_L L_5 L_L R_5$ 

10.835 INVALID-ORDER-835 
$$Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $R_3R_5g_m - R_3 + s^6 (C_3C_5C_LL_3L_5L_LR_3R_5)$ 

 $\frac{1131159m - 113 + 5 + (\sqrt{3}\sqrt{5}\sqrt{L}L_3L_5L_R)}{2R_3g_m + R_5g_m + s^6\left(2C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5R_3R_5g_m + 2C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_LR_3g_m + C_3C_5C_LL_3L_5R_3g_m + C_3C_$ 

10.836 INVALID-ORDER-836 
$$Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$$

 $\overline{R_{3}R_{5}R_{L}g_{m}+R_{3}R_{L}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}$ 

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10.837 INVALID-ORDER-837 Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
10.838 INVALID-ORDER-838 Z(s) = \left(\infty, \infty, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                                   \overline{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3
10.839 INVALID-ORDER-839 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                 H(s) = \frac{R_3 R_5 g_m - R_3 + s^2 \left(C_3 L_3 R_3 R_5 g_m - C_3 L_3 R_3\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(C_3 C_L L_3 R_3 R_5 g_m + C_3 C_L L_3 R_3\right) + s^2 \left(2 C_3 L_3 R_3 g_m + C_3 L_3 R_5 g_m + C_3 L_3\right) + s \left(C_3 R_3 R_5 g_m + C_3 R_3 + C_L R_3 R_5 g_m + C_L R_3\right) + 1}
10.840 INVALID-ORDER-840 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)
                                                  H(s) = \frac{R_3R_5R_Lg_m - R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3R_3R_L\right)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(C_3C_LL_3R_3R_5R_Lg_m + C_3C_LL_3R_3R_5\right) + s^2\left(C_3L_3R_3R_5g_m + 2C_3L_3R_3R_Lg_m + C_3L_3R_5R_Lg_m + C_3L_3R_5\right) + s^2\left(C_3L_3R_3R_5R_Lg_m + C_3L_3R_3R_Lg_m + C_3L_3R_5R_Lg_m + C_3L_3R
10.841 INVALID-ORDER-841 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_3R_5g_m - R_3 + s^3\left(C_3C_LL_3R_3R_5R_Lg_m - C_3C_LL_3R_3R_L\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right) + s\left(C_LR_3R_5R_Lg_m - C_LR_3R_L\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_LL_3R_3R_5g_m + 2C_3C_LL_3R_3R_Lg_m + C_3C_LL_3R_3 + C_3C_LL_3R_3R_Lg_m + C_3C_LL_3R_Lg_m + C_3C_L
10.842 INVALID-ORDER-842 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)
                                   \frac{R_{3}R_{5}g_{m}-R_{3}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{L}L_{3}L_{L}R_{3}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}g_{m}-C_{3}L_{3}R_{3}+C_{L}L_{L}R_{3}R_{5}g_{m}-C_{L}L_{L}R_{3}\right)}{2R_{3}g_{m}+R_{5}g_{m}+s^{4}\left(2C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}+C_{3}C_{L}L_{3}L_{L}\right)+s^{3}\left(C_{3}C_{L}L_{3}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{3}R_{5}g_{m}+C_{3}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{5}g_{m}+C_{L}L_{L}\right)+s\left(C_{3}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{3}R_{5}g_{m}+C_{3}L_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{5}g_{m}+C_{L}L_{L}\right)+s\left(C_{3}R_{3}R_{5}g_{m}+C_{3}C_{L}L_{L}R_{3}R_{5}g_{m}+C_{3}L_{L}L_{R}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C_{L}L_{L}R_{3}g_{m}+C
10.843 INVALID-ORDER-843 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                             10.844 INVALID-ORDER-844 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                   \frac{R_{3}R_{5}g_{m}-R_{3}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{L}L_{3}L_{L}R_{3}\right)+s^{3}\left(C_{3}C_{L}L_{3}R_{3}R_{5}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}L_{
10.845 INVALID-ORDER-845 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            s^{3}\left(C_{3}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}L_{L}R_{3}R_{L}\right)+s\left(L_{L}R_{3}R_{5}R_{L}g_{m}-L_{L}R_{3}R_{L}\right)
                                   \frac{s \cdot (\cup_3 L_3 L_L R_3 R_5 R_L g_m - \cup_3 L_2 L_L R_3 R_5 L_L g_m - \cup_4 L_2 R_3 R_5 L_L g_m - \cup_4 L_4 R_3 R_5 L_4 R_3 R_5 R_L g_m + C_3 L_4 L_4 R_5 R_L g_m +
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10.846 INVALID-ORDER-846 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
10.847 INVALID-ORDER-847 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5, \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{5}R_{L}g_{
                                     \frac{R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}
10.848 INVALID-ORDER-848 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, R_L\right)
                                                                                                                                                                                                               H(s) = \frac{-C_3C_5L_3R_3R_Ls^3 + C_3L_3R_3R_Lg_ms^2 - C_5R_3R_Ls + R_3R_Lg_m}{R_3g_m + R_Lg_m + s^3\left(2C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3 + C_3C_5L_3R_L\right) + s^2\left(C_3C_5R_3R_L + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_3R_3R_Lg_m + 2C_5R_3R_Lg_m + C_5R_3 + C_5R_L\right)}
10.849 INVALID-ORDER-849 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                        H(s) = \frac{-C_3C_5L_3R_3s^3 + C_3L_3R_3g_ms^2 - C_5R_3s + R_3g_m}{C_3C_5C_LL_3R_3s^4 + g_m + s^3\left(2C_3C_5L_3R_3g_m + C_3C_5L_3 + C_3C_LL_3R_3g_m\right) + s^2\left(C_3C_5R_3 + C_3L_3g_m + C_5C_LR_3\right) + s\left(C_3R_3g_m + 2C_5R_3g_m + C_5 + C_LR_3g_m\right)}
10.850 INVALID-ORDER-850 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
                                      H(s) = \frac{-C_3C_5L_3R_3R_Ls^3 + C_3L_3R_3R_Lg_ms^2 - C_5R_3R_Ls + R_3R_Lg_m}{C_3C_5C_LL_3R_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(2C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3 + C_3C_5L_3R_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_L + C_3L_3R_3g_m + C_5C_LR_3R_L\right) + s\left(C_3R_3R_Lg_m + 2C_5R_3R_Lg_m + C_5R_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_L + C_3L_3R_3g_m + C_3L_3R_3g_m + C_5C_LR_3R_L\right) + s\left(C_3R_3R_Lg_m + C_5R_3R_Lg_m + C_5R_3R_Lg_m\right) + s\left(C_3R_3R_Lg_m + C_5R_3R_Lg_m\right
10.851 INVALID-ORDER-851 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5C_LL_3R_3R_Ls^4 + R_3g_m + s^3\left(-C_3C_5L_3R_3 + C_3C_LL_3R_3R_Lg_m\right) + s^2\left(C_3L_3R_3g_m - C_5C_LR_3R_L\right) + s\left(-C_5R_3 + C_LR_3R_Lg_m\right)}{g_m + s^4\left(2C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3 + C_3C_5C_LL_3R_3\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_5C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_5C_LR_3R_Lg_m + C_5C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_5C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_5C_LR_3R_Lg_m + C_3C_5C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_5C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_5C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_LR_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_Lg_m + C_3C_LR_3R_Lg_m\right
10.852 INVALID-ORDER-852 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5C_LL_3L_LR_3s^5 + C_3C_LL_3L_LR_3g_ms^4 - C_5R_3s + R_3g_m + s^3\left(-C_3C_5L_LR_3\right) + s^2\left(C_3L_3R_3g_m + C_LL_LR_3g_m\right)}{g_m + s^5\left(2C_3C_5C_LL_3L_L\right) + s^4\left(C_3C_5C_LL_3R_3 + C_3C_LL_3R_3g_m + C_3C_LL_3R_3g_m + C_3C_LL_LR_3g_m +
10.853 INVALID-ORDER-853 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                  H(s) = \frac{-C_3C_5L_3L_LR_3s^4 + C_3L_3L_LR_3g_ms^3 - C_5L_LR_3s^2 + L_LR_3g_ms}{C_3C_5L_LL_2L_R_3s^5 + R_3g_m + s^4\left(2C_3C_5L_3L_LR_3g_m + C_3C_5L_3L_LR_3g_m\right) + s^3\left(C_3C_5L_3R_3 + C_3C_5L_LR_3 + C_5L_LR_3\right) + s^2\left(C_3L_3R_3g_m + C_3L_LR_3g_m + C_5L_LR_3g_m\right) + s\left(C_5R_3 + L_Lg_m\right)}
10.854 INVALID-ORDER-854 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(-C_3C_5C_LL_3R_3R_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(-C_3C_5L_3R_3 + C_3C_LL_3R_3R_Lg_m - C_5C_LL_LR_3\right) + s^2\left(C_3L_3R_3g_m - C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3g_m + C_3C_5C_LL_3R_3g_m
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H(s) = \frac{-C_3C_5L_3L_LR_3R_LS^5 + C_3L_3L_LR_3R_Lg_ms^5 - C_5L_LR_3R_Lg_ms^5 - C_5L_LR_3R_Lg_ms^5 - C_5L_LR_3R_Lg_ms^5 - C_5L_LR_3R_Lg_ms^6 - C_5L_LR_3R_L
10.856 INVALID-ORDER-856 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}s^{s} + R_{3}R_{L}g_{m} + s^{s} \cdot (-C_{3}C_{5}L_{3}L_{L}R_{3} + C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}R_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}R_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}L_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}R_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}L_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}L_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}R_{L}R_{3}R_{L}g_{m}) + s^{s} \cdot (-C_{3}C_{5}L_{3}R_{L}R_{3}R_{L}g_{
10.857 INVALID-ORDER-857 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_LL_3L_LR_3R_Lg_ms^4 - C_5R_3R_Ls + R_3R_Lg_m + s^3\left(-C_3C_5L_3R_3R_L - C_5C_5L_3R_3R_L\right) + c_3C_5C_LL_3L_LR_3R_Ls^5 + c_3C_LL_3L_LR_3R_Lg_ms^4 - c_5R_3R_Ls + c_5R_2R_Ls + c_5R_2R_Ls + c_5R_2R_Ls + c_5R_2R_Ls + c_5R_2R_Ls + c_5R_2R_Ls + c_5R_2R
H(s) = \frac{-C_3C_5C_LL_3L_LR_3R_LS^s + C_3C_LL_3L_LR_3R_Lg_m + s^s (-C_3C_5L_3L_LR_3R_Lg_m + s^s (-C_3C_5L_3R_3R_L - C_5C_2L_3R_3R_L - C_5C_3C_5L_3L_RR_3R_Lg_m + s^s (-C_3C_5L_3L_RR_3R_Lg_m + s^s (-C_3C_5L_3L_RR_3R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3R_Lg_m
10.858 INVALID-ORDER-858 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right)
                                                    \frac{-C_{3}C_{5}L_{3}R_{3}R_{5}R_{L}s^{3}-C_{5}R_{3}R_{5}R_{L}s+R_{3}R_{5}R_{L}g_{m}-R_{3}R_{L}+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}L_{3}R_{3}R_{L}\right)}{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{4}+s^{3}\left(2C_{3}C_{5}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}L_{3}R_{3}R_{5}R_{L}\right)+s^{2}\left(C_{3}C_{5}R_{3}R_{5}R_{L}+C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{m}+C_{3}L_{3}R_{5}R_{L}g_{
10.859 INVALID-ORDER-859 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right)
H(s) = \frac{-C_3C_5L_3R_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right)}{C_3C_5C_LL_3R_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(2C_3C_5L_3R_3R_5g_m + C_3C_LL_3R_3\right) + s^2\left(C_3C_5R_3R_5 + 2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3R_5g_m + C_3R_3R_5g_m + C_3R_3R_
10.860 INVALID-ORDER-860 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{-C_3C_5L_3R_3R_5R_Ls^3 - C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^2\left(C_3L_3R_3R_5R_Lg_m - C_3L_3R_3R_5\right)}{C_3C_5C_LL_3R_3R_5R_Ls^4 + R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L + s^3\left(2C_3C_5L_3R_3R_5R_Lg_m + C_3C_5L_3R_3R_5R_Lg_m + C_3C_5L_3R_5R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_5R_Lg_m + C
10.861 INVALID-ORDER-861 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}R_{L}s^{4}+R_{3}R_{5}g_{m}-R_{3}+s^{3}\left(-C_{3}C_{5}L_{3}R_{3}R_{5}+C_{3}C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{L}g_{m}-C_{3}C_{L}L_{3}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{L}g_{m}-C_{2}C_{L}L_{2}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{L}g_{m}-C_{2}C_{L}L_{2}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{L}g_{m}-C_{2}C_{L}L_{2}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{3}R_{L}g_{m}-C_{2}C_{L}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{2}R_{L}g_{m}-C_{2}C_{L}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{2}R_{L}g_{m}-C_{2}R_{L}g_{m}\right)+s^{2}\left(C_{3}L_{2}R_{L}g_{m}-C_{2}R_{L
H(s) = \frac{-C_3C_5C_LL_3R_3R_5R_Ls^2 + R_3R_5g_m - R_3 + s^2\left(-C_3C_5L_3R_3R_5 + C_3C_LL_3R_3R_5 + C_3
10.862 INVALID-ORDER-862 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}s^{*}-C_{5}R_{3}K_{5}s+R_{3}R_{5}g_{m}-R_{3}+s^{*}\left(C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}-C_{3}C_{L}L_{3}L_{L}R_{3}\right)+s^{*}\left(-C_{3}C_{5}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{L}L_{3}L_{L}R_{3
10.863 INVALID-ORDER-863 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C_3C_5L_3L_LR_3R_5s^4 - C_5L_LR_3R_5s^2 + s^3\left(C_3L_3L_LR_3R_5g_m - C_3L_3L_LR_3\right) + s\left(L_LR_3R_5g_m - L_LR_3\right)
H(s) = \frac{-C_3C_5L_3L_LR_3R_5s^5 + s \cdot (C_3L_3L_LR_3R_5s^6 + s \cdot (C_3L_3L_LR_3R_5g_m + C_3L_3L_LR_3) + s \cdot (L_3L_3R_5g_m - C_3L_3L_LR_3) + s \cdot (L_3L_3R_5g_m - C_3L_3L_LR_3) + s \cdot (L_3L_3R_5g_m - C_3L_3L_LR_3) + s \cdot (C_3L_3L_LR_3R_5g_m + C_3L_3L_LR_3R_5g_m + C_3L_3L_LR_3) + s \cdot (C_3L_3L_LR_3R_5g_m + C_3L_3L_LR_3R_5g_m + C_
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 $-C_3C_5L_3L_LR_3R_Ls^4 + C_3L_3L_LR_3R_Lg_ms^3 - C_5L_LR_3R_Ls^2 + L_LR_3R_Lg_ms^3$ 

10.855 INVALID-ORDER-855  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

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10.864 INVALID-ORDER-864 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
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 $-C_3C_5C_LL_3L_LR_3R_5s^5 + R_3R_5g_m - R_3 + s^4(-C_3C_5c_5)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_LR_3R_5g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3R_3R_5R_Lg_m + C_3C_5C_LL_3R_3R_5R_Lg_m + C_3C_5C_LL_3R_3R_5R_L + C_3C_5C_LL_3R_5R_L + C_3C_5C_LL_3R_5R_L$ 

10.865 INVALID-ORDER-865 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $-C_3C_5L_3L_LR_3R_5R_Ls^4 - C_5L_LR_3R_5R_Ls^2$ 

 $H(s) = \frac{C_3C_5L_3L_LR_3R_5R_Ls^5 + R_3R_5R_Lg_m + R_3R_L + s^4\left(2C_3C_5L_3L_LR_3R_5R_Lg_m + C_3C_5L_3L_LR_3R_5R_Lg_m + C_3C_5L_3L_LR_3R_5R_Lg_m + C_3C_5L_3L_LR_3R_5R_Lg_m + C_3C_5L_3L_LR_3R_5R_L + C_3C_5L_3L_LR_3R_5R_LR_3R_5R_L + C_3C_5L_3L_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R_LR_3R_5R$ 

10.866 INVALID-ORDER-866 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

10.867 INVALID-ORDER-867 
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

 $\overline{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L}+s^{5}\left(2C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+2C_{3}C_{L}L_{3}L_{L}R_{3$ 

10.868 INVALID-ORDER-868 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$$

 $H(s) = \frac{C_3L_3R_3R_Lg_ms^2 + R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_5R_Lg_m - C_3C_5L_3R_3R_L\right) + s\left(C_5R_3R_5R_Lg_m - C_5R_3R_L\right)}{R_3g_m + R_Lg_m + s^3\left(C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3 + C_3C_5L_3R_5R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_3C_5R_3R_Lg_m + C_5R_3R_Lg_m + C_$ 

10.869 INVALID-ORDER-869 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_3L_3R_3g_ms^2 + R_3g_m + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^4\left(C_3C_5L_LR_3R_5g_m + C_3C_5L_LR_3R_5g_m + C_3C_5L_RR_3g_m + C_5C_LR_3R_5g_m + C_5C_LR_3\right) + s\left(C_3R_3g_m + C_5R_3g_m + C_5R_3g$ 

10.870 INVALID-ORDER-870 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

 $C_{3}L_{3}R_{3}R_{L}g_{m}s^{2}+R_{3}R_{L}g_{m}+s^{3}\left(C_{3}C_{5}L_{3}R_{3}R_{5}R_{L}g_{m}-C_{3}C_{5}L_{3}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{3}R_{L}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{3}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}g_{m}-C_{5}R_{5}R_{L}g_{m}\right)+s\left(C_{5}R_{5}R_{5}R_{L}$  $H(s) = \frac{C_3L_3R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_5R_Lg_m - C_3C_5L_3R_3R_L\right) + s\left(C_5R_3R_5R_Lg_m - C_5R_3R_L\right)}{R_3g_m + R_Lg_m + s^4\left(C_3C_5L_1R_3R_5R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3R_Lg_m$ 

10.871 INVALID-ORDER-871 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

 $R_{3}g_{m} + s^{4}\left(C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}\right) + s^{3}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3} + C_{3}C_{L}L_{3}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{3}g_{m} + C_{5}C_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m} + C_{5}C_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m} + C_{5}C_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}$  $R_{3}g_{m} + s^{4} \left( C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3}R_{L}g_{m} \right) + s^{2} \left( C_{3}L_{3}R_{3}R_{L}g_{m} + s^{2} \left( C_{3}L_{3}R_{3}R_{L}g_{m} + C_{3}C_{5}L_{L}R_{3}R_{L}g_{m} + C_{3}C_{5}L_{L}R_{L}g_{m} + C_{3}C_{5}L_{L}R_{L}g_$ 

10.872 INVALID-ORDER-872 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

 $C_{3}C_{L}L_{3}L_{L}R_{3}g_{m}s^{4} + R_{3}g_{m} + s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{L}L_{L}R_{3}\right) + s^{3}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3} + C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3} + C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3} + C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{3}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{3}C_{5}L_{1}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}\right) + s^{2}\left(C_{5}C_{L}L_{1}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{3}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{5}R_{5}g_{m}\right) + s^{2}\left(C_{5}C_{L}L_{1}R_{5}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{5}R_{5}g_{m} - C_{5}C_{L}L_{L}R_{5}R_{5}g_{m}\right) + s^{2}\left(C_{5}C_{L}L_{1}R_{5}R_{5}g_{m} - C_{5}C_{L}L_{1}R_{5}R_{5}g_{m}\right) + s^{2}\left(C_{5}C_{L}L_{1}R_{5}R_{5}R_{5}g_{m}\right) + s^{2}\left(C_{5}C_{L}L_{1}R_{5}R_{5}R_{5}R_{5}R_{5}g_{m}\right) + s^{2}\left(C_{5}C_{L}L_{1}R_{5}R_{5}R_{5}R_{5}R_{5}R_{5}R_{5}$  $\frac{C_3C_LL_3L_LR_3g_ms^2 + R_3g_m + s^*(C_3C_5C_LL_3L_LR_3) + s^*(C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_3) + s^*(C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_3) + s^*(C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_3) + s^*(C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_3) + s^*(C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_3g_m + C_3C_5C_LL_3R_3g_m$ 

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10.873 INVALID-ORDER-873 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C_3L_3L_LR_3g_ms^3 + L_LR_3g_ms + s^4(C_3C_5L_3L_LR_3R_5g_m - C_3C_5L_3L_LR_3) + s^2(C_5L_LR_3R_5g_m - C_5L_LR_3)
H(s) = \frac{C_3L_3L_LR_3g_ms^3 + L_LR_3g_ms + s^4\left(C_3C_5L_3L_LR_3\right) + s^2\left(C_5L_LR_3R_5g_m - C_5L_LR_3\right)}{R_3g_m + s^5\left(C_3C_5L_LL_3L_LR_3g_m + C_3C_5L_LL_3L_LR_3g_m + C_3C_5L_LL_3L_LR_3g_m + C_3C_5L_LR_3R_5g_m + C_3C_5
10.874 INVALID-ORDER-874 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{R_3 g_m + s^5 \left(C_3 C_5 C_L L_3 L_L R_3 R_5 g_m - C_3 C_5 C_L L_3 L_L R_3\right) + s^4 \left(C_3 C_5 C_L L_3 R_3 R_5 R_L g_m - C_3 C_5 C_L L_3 R_3 R_L g_m - C_3 C_5 C_L L_3 R_3 R_L g_m - C_3 C_5 C_L L_3 R_3 R_L g_m + C_3 C_5 C_L L_3 R_4 R_5 g_m + C_3 C_5 C_L L_3 R_4 R_5 g_m + C_3 C_5 C_L L_3 R_4 R_5 g_m + C_3 C_5 C_L L_4 R_3 R_5 g_m + C_3 C_5 C_L L_4 R_3 R_5 g_m + C_3 C_5 C_L L_4 R_3 R_5 g_m + C_3 C_5 C_L L_4 R_4 R_5 g_m + C_3 C_5 C_L L_4 R_5 g_m + C_3 C_5 C_L L_5 R_5 g_m + C_5 C_L
10.875 INVALID-ORDER-875 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C_3L_3L_LR_3R_Lg_ms^3 + L_LR_3R_Lg_ms + s^4(C_3C_5L_3L_1)
                                            \frac{C_3L_3L_LR_3R_Lg_ms^s + L_LR_3R_Lg_ms + s^s (C_3C_5L_3L_LR_3R_Lg_m + s^s (C_3C_5L_3L_LR_3R_Lg_m + c_3C_5L_3L_LR_3R_Lg_m + s^s (C_3C_5L_3L_LR_3R_Lg_m + c_3C_5L_3L_LR_3R_Lg_m + c_3C_5L_3L_LR_3R_Lg
10.876 INVALID-ORDER-876 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \frac{r_{13}r_{L}g_{m}+s-(\bigcirc 3\bigcirc 5\bigcirc LL_{3}L_{L}r_{3}r_{5}r_{L}g_{m}-\bigcirc 3\bigcirc C_{5}C_{L}L_{3}L_{L}r_{3}r_{5}r_{L}g_{m}-\bigcirc 3\bigcirc C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+S_{5}\left(C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_
10.877 INVALID-ORDER-877 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C_3C_LL_3L_LR_3R_Lg_ms^4
H(s) = \frac{C_3 C_1 L_3 L_1 R_3 R_5 g_m + C_3 C_5 C_L L_3 L_1 R_3 R_5 g_m + C_3 C_5 C_L L_3 L_1 R_3 R_1 g_m + C_3 C_5 C_L L_3 L_2 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_5 R_L g_m + C_5 C_5 R_L g_m + C
10.878 INVALID-ORDER-878 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, R_L\right)
H(s) = \frac{C_3C_5L_3L_5R_3R_Lg_ms^4 - C_3C_5L_3R_3R_Ls^3 - C_5R_3R_Ls + R_3R_Lg_m + s^2\left(C_3L_3R_3R_Lg_m + C_5L_5R_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_Lg_m\right) + s^3\left(2C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_5L_5R_3R_Lg_m\right) + s^2\left(C_3C_5R_3R_L + C_3C_5L_3R_3R_Lg_m + C_5L_5R_3g_m + C_5L
10.879 INVALID-ORDER-879 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)
                               H(s) = \frac{C_3C_5L_3L_5R_3g_ms^4 - C_3C_5L_3R_3s^3 - C_5R_3s + R_3g_m + s^2\left(C_3L_3R_3g_m + C_5L_5R_3g_m\right)}{C_3C_5C_LL_3L_5R_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_3 + C_3C_5L_3R_3g_m + C_3C_5L_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LR_3 + C_5C
10.880 INVALID-ORDER-880 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}s^{4} - C_{3}C_{5}L_{3}R_{3}R_{L}s^{3} - C_{5}R_{3}R_{L}s + R_{3}R_{L}g_{m} + s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m} + C_{5}L_{5}R_{3}R_{L}g_{m}\right)
                                              \frac{C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}g_{m}s^{4}-C_{3}C_{5}L_{3}R_{3}R_{L}s^{3}-C_{5}R_{3}R_{L}s+R_{3}R_{L}g_{m}+s^{2}\left(C_{3}L_{3}R_{3}R_{L}g_{m}+C_{5}L_{5}R_{3}R_{L}g_{m}\right)}{C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}+S^{4}\left(C_{3}C_{5}L_{L}L_{3}R_{3}R_{L}+C_{3}C_{5}L_{3}L_{5}R_{3}g_{m}+C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}+C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+S^{2}\left(C_{3}C_{5}R_{3}R_{L}+C_{3}C_{5}L_{3}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C_{5}C_{L}L_{5}R_{5}R_{L}g_{m}+C
10.881 INVALID-ORDER-881 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}s^{5} + R_{3}g_{m} + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{3}R_{L} + C_{3}C_{5}L_{3}L_{5}R_{3}g_{m}\right) + s^{3}\left(-C_{3}C_{5}L_{3}R_{3} + C_{3}C_{L}L_{3}R_{3}R_{L}g_{m} + C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{3}R_{3}R_{L}g_{m} + C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{3}R_{L}g_{m} + C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(-C_{3}C_{5}L_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(-C_{5}C_{5}L_{5}R_{5}R_{L}g_{m}\right) + s^{2}\left(-C_{5}C_{5}L_{5}
H(s) = \frac{C_3 C_5 C_L L_3 L_5 R_3 R_L g_m s^s + R_3 g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L + C_3 C_5 L_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* \left(-C_3 C_5 C_L L_3 R_3 R_L g_m + s^* c_3 C_5 C_L L_3 R_3 R_L g_m + s^* c_3 C_5 C_L L_3 R_3 g_m
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10.882 INVALID-ORDER-882 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3g_ms^6 - C_3C_5C_LL_3L_LR_3s^5 - C_5R_3s + R_3g_m + s^4\left(C_3C_5L_3L_5R_3g_m + C_3C_LL_3L_LR_3g_m + C_5C_LL_5L_LR_3g_m\right) + s^3\left(-C_3C_5L_3L_5R_3g_m + s^4\left(C_3C_5L_3L_5R_3g_m + S_5C_LL_3L_5R_3g_m + S_5C_LL_3L_4R_3g_m + S_5C_LL_3L_4
10.883 INVALID-ORDER-883 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C_3C_5L_3L_5L_LR_3g_ms^5 - C_3C_5L_3L_LR_3s^4 - C_5L_LR_3s^2 + L_LR_3g_ms + s^3(C_3L_3L_LR_3g_m + C_5L_5L_LR_3g_m)
10.884 INVALID-ORDER-884 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}s^{6} + R_{3}g_{m} + s^{5}\left(C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{3}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m} - C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}\right) + s^{4}\left(-C_{3}C_{5}C_{L}L_{3}R_{L}g_
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3R_Lg_m - C_3C_5C_LL_3L_LR_3\right) + s^4\left(-C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3L_5R_3g_m + s^5\left(C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3R_3R_5G_m + S^5\left(C_3C_5C_LL_3R_3R_5G_m + S^5\left(C_3C_5C_LL_3R_3R_5G_m + S^5\left(C_3C_5C_LL_3R_3R_5G_m + S^5\left(C_3C_5C_LL_3R_3R_5G_m + S^5\left(C_3C_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5C_3C_LL_3L_5R_3g_m + S^5\left(C_3C_5C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3L_5C_3C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_
10.885 INVALID-ORDER-885 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C_3C_5L_3L_5L_LR_3R_Lg_ms^5 - C_3C_5L_3L_LR_3R_Ls^4 - C_5
                                               \frac{ \cup_{3} \cup_{5} \bot_{1} \bot
10.886 INVALID-ORDER-886 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5(-C_3)
H(s) = \frac{C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_LR_3R_Lg_m + C_3C_5C_LL
10.887 INVALID-ORDER-887 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                              \frac{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{L}}{R_{3}g_{m}+R_{L}g_{m}+s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}+C_{3}C_{5}C_{L
10.888 INVALID-ORDER-888 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)
H(s) = \frac{-C_3C_5L_3L_5R_3R_Ls^4 + C_3L_3L_5R_3R_Lg_ms^3 + L_5R_3R_Lg_ms - R_3R_L + s^2\left(-C_3L_3R_3R_L - C_5L_5R_3R_L\right)}{2R_3R_Lg_m + R_3 + R_L + s^4\left(2C_3C_5L_3L_5R_3R_Lg_m + C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_3R_Lg_m + C_3L_3L_5R_3g_m + C_3L_3L_5R_3g_m + C_3L_3L_5R_3g_m + C_3L_3R_3R_Lg_m + C_3L_3R_3R_Lg_m + C_3L_5R_3R_Lg_m + C_3L_5R_3
10.889 INVALID-ORDER-889 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)
                                            -C_{3}C_{5}L_{3}L_{5}R_{3}s^{4} + C_{3}L_{3}L_{5}R_{3}g_{m}s^{3} + L_{5}R_{3}g_{m}s - R_{3} + s^{2}\left(-C_{3}L_{3}R_{3} - C_{5}L_{5}R_{3}\right) \\ -C_{3}C_{5}L_{L}L_{3}L_{5}R_{3}s^{5} + 2R_{3}g_{m} + s^{4}\left(2C_{3}C_{5}L_{3}L_{5}R_{3}g_{m} + C_{3}C_{5}L_{3}L_{5}R_{3}g_{m}\right) + s^{3}\left(C_{3}C_{5}L_{5}R_{3} + C_{3}L_{4}L_{5}R_{3}g_{m} + C_{5}L_{5}L_{5}R_{3}g_{m} + C_{5}L_{5}R_{3}g_{m} + C_{5}L_{5}R_{5}g_{m} + C_{5}L_{5}
10.890 INVALID-ORDER-890 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_3C_5L_3L_5R_3R_Ls^4 + C_3L_3L_5R_3R_Lg_ms^3 + L_5R_3R_Lg_ms - R_3R_L + s^2\left(-C_3L_3R_3R_L - C_5L_5R_3R_L\right)
H(s) = \frac{- \cup_{3} \cup_{5} L_{3} L_{5} R_{3} R_{L} s^{-} + \cup_{3} L_{3} L_{5} R_{3} R_{L} s^{-} + U_{5} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{3} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{3} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{3} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{5} L_{3} L_{1} L_{2} m^{5} - L_{5} L_{5} L_{3} L_{5} L_{2} L_{3} L_{5} R_{3} L_{2} m^{5} - L_{5} L_{5} L_{3} L_{5} L_{3} L_{5} R_{3} L_{2} m^{5} - L_{5} L_{5} L_{3} L_{5} L_{3} L_{5} L_{3} L_{5} L_{3} L_{5} L_{3} L_{5} L_{3} L_{5} L
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10.891 INVALID-ORDER-891 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}s^{5}-R_{3}+s^{4}\left(-C_{3}C_{5}L_{3}L_{5}R_{3}+C_{3}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}\right)+s^{3}\left(-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}g_{m}-C_{3}C_{L}L_{3}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{3}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{5}R_{5}R_{L}+C_{3}L_{
H(s) = \frac{-C_3C_5L_LL_3L_5R_3R_Ls^3 - R_3 + s^4\left(-C_3C_5L_LL_3L_5R_3R_Lg_m\right) + s^3\left(-C_3C_LL_3R_3R_L + C_3L_3L_5R_3g_m - C_3C_LL_3L_5R_3R_Lg_m\right) + s^3\left(-C_3C_LL_3L_5R_3R_Lg_m\right) + s^3\left(-C_3C_LL_3R_3R_Lg_m\right) + s^3\left(-C_3C_LL
10.892 INVALID-ORDER-892 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_LL_3L_5L_LR_3g_ms^5 + L_5R_3g_ms - R_3 + s^4\left(-C_3C_5L_3L_5R_3 - C_3C_LL_3L_LR_3 - C_5C_LL_3L_5R_3 - C_5C_LL_5R_3 - C_5C_LL_5R_5R_3 - C_5C_LL_5R_5R_5 - C_5C_LL_5R_5 - C_5C_LL_5R_
H(s) = \frac{-C_3C_5C_LL_3L_5L_LR_3g_ms^5 + L_5R_3g_ms - R_3 + s^4\left(-C_3C_5L_3L_5R_3 - C_3C_LL_3L_LR_3 - C_5C_LL_3L_5R_3 - C_3C_LL_3L_5R_3 - C_3C_LL_3L_5R_3 - C_3C_LL_3L_5R_3 - C_3C_LL_3L_5R_3g_m + S^6\left(2C_3C_5C_LL_3L_5L_R_3g_m + C_3C_LL_3L_5R_3g_m + C_3C_LL_3L_5
10.893 INVALID-ORDER-893 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_3C_5L_3L_5L_LR_3s^5 + C_3L_3L_5L_LR_3g_ms^4 + L_5L_LR_3g_ms^2 - L_LR_3s + s^3\left(-C_3L_3L_LR_3 - C_5L_5L_LR_3\right)
H(s) = \frac{-C_3C_5L_3L_5L_LR_3s^3 + C_3L_3L_5L_LR_3g_ms^4 + L_5L_LR_3g_ms^2 - L_LR_3s + s^3\left(-C_3L_3L_LR_3 - C_5L_5L_LR_3\right)}{C_3C_5C_LL_3L_5L_LR_3s^6 + R_3 + s^5\left(2C_3C_5L_3L_5L_LR_3g_m + C_3C_5L_3L_5L_LR_3g_m + s^4\left(C_3C_5L_3L_5L_R_3 + C_3C_5L_5L_LR_3\right) + s^4\left(C_3C_5L_3L_5L_R_3g_m + C_3C_5L_5L_R_3\right) + s^3\left(C_3L_3L_5L_R_3g_m + C_3L_3L_LR_3g_m + C_3L_5L_LR_3g_m + C_3L_5L
10.894 INVALID-ORDER-894 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -C_3C_5C_LL_3L_5L_LR_3s^6 - R_3 + s^5\left(-C_3C_5C_LL_3L_5R_3R_L - C_3C_5C_LL_3L_5R_3R_L\right)
                                                \frac{-C_3C_5C_LL_3L_5L_LR_3s^* - R_3 + s^* (-C_3C_5C_LL_3L_5R_3R_L - C_3C_5C_LL_3L_5R_3R_L - C_3C_5C_LL_3L_5R_3R_L + C_3C_5C_LL
10.895 INVALID-ORDER-895 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -C_3C_5L_3L_5L_LR_3R_Ls^5 + C_3L_3L_5L_LR_3R_Ls^5
H(s) = \frac{- \cup_3 \cup_5 L_2 R_3 R_L s^6 + R_3 R_L + s^5 \left(2 C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_5 L_L R_3 R_L + C_5 C_5 L_5 L_L R_5 R_L + C_5 C_5
10.896 INVALID-ORDER-896 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
```

10.897 INVALID-ORDER-897 
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

10.898 INVALID-ORDER-898 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s+R_5+\frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{C_3C_5L_3L_5R_3R_Lg_m s^4 + R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_3R_Lg_m + C_5L_5R_3R_Lg_m + S_4\left(C_3C_5L_3R_3R_Lg_m + C_5L_5R_3R_Lg_m + C_5L_5R_3R_Lg_m + S_4\left(C_3C_5L_3L_5R_3g_m + C_3C_5L_3R_3R_Lg_m + C_3C_5L_3R_Lg_m + C_3C_5L_3R_L$$

10.899 INVALID-ORDER-899 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_3C_5L_3L_5R_3g_ms^4 + R_3g_m + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3\right) + s^2\left(C_3L_3R_3g_m + C_5L_5R_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{C_3C_5C_LL_3L_5R_3g_ms^5 + g_m + s^4\left(C_3C_5C_LL_3R_3R_5g_m + C_3C_5L_3R_3g_m + C_3C_5L_3R_3g_m + C_5C_LL_3R_3g_m + C_5C_LL_3R_3g_$$

```
10.900 INVALID-ORDER-900 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
```

 $C_3C_5L_3L_5R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_3C_5L_3R_3R_5R_Lg_m - C_3C_5L_3R_3R_L\right) + s^2$ 

 $H(s) = \frac{C_3C_5L_3L_5R_3R_Lg_ms + R_3R_Lg_m + s^*(C_3C_5L_3R_3R_5R_Lg_m - C_3C_5L_3R_3R_5R_Lg_m - C_3C_5L_3R_3R_5R_Lg_m + s^*(C_3C_5L_3R_3R_5R_Lg_m + C_3C_5L_3R_3R_5R_Lg_m + S^*(C_3C_5L_3R_3R_5R_Lg_m + C_3C_5L_3R_3R_5R_Lg_m + S^*(C_3C_5L_3R_3R_5R_Lg_m + S^*(C_3C_5L_3R_3R_5R_Lg_m$ 

10.901 INVALID-ORDER-901 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_3C_5C_LL_3L_5R_3R_Lg_ms^3 + R_3g_m + s^4\left(C_3C_5C_LL_3R_3R_5R_Lg_m - C_3C_5C_LL_3R_3R_L + C_3C_5L_LS_Rg_m\right) + s^3\left(C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3R_Lg_m + C_3C_5C_LL_3R_3R_Lg_m$ 

10.902 INVALID-ORDER-902  $Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_3C_5C_LL_3L_5L_R3g_ms^6 + R_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5g_m - C_3C_5C_LL_3L_LR_3\right) + s^4\left(C_3C_5L_3L_5R_3g_m + C_3C_5C_LL_3L_LR_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3g_m + s^5\left(C_3C_5C_LL_3L_LR_3g_m + c_3C_5C_LL_3L_LR_3g_m + c$ 

10.903 INVALID-ORDER-903  $Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$ 

 $C_3C_5L_3L_5L_LR_3g_ms^5 + L_LR_3g_ms + s^4(C_3C_5L_3L_LR_3R_5g_m - C_3C_5L_3L_LR_3) + s^3(C_3C_5L_3L_2R_3g_ms^5 + L_LR_3g_ms^5 + L_LR_3g_m$  $\frac{C_{3}C_{5}L_{1}R_{3}g_{m}s^{5} + L_{L}R_{3}g_{m}s + s^{5}\left(C_{3}C_{5}L_{3}L_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}L_{L}R_{3}R_{5}g_{m} - C_{3}C_{5}L_{3}L_{L}R_{3}g_{m}s + s^{5}\left(C_{3}C_{5}L_{3}L_{L}R_{3}g_{m}s + s^{5}\left(C_{3}C_{5}L_{L}L_{L}R_{3}g_{m}s + s^{5}C_{L}L_{L}L_{L}R_{3}g_{m}s + s^{5}\left(C_{3}C_{5}L_{L}L_{L}R_{3}g_{m}s + s^{5}C_{L}L_{L}L_{L}R_{3}g_{m}s + s^{5}C_{L}L_{L}L_{L}R_{3}g_{m}s + s^{5}C_{L}L_{L}L_{L}R_{3}g_{m}s + s^{5}C_{L}L_{L}$ 

10.904 INVALID-ORDER-904  $Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $C_3C_5C_LL_3L_5L_LR_3g_ms^6 + R_3g_m + s^5(C_3C_5C_LL_3L_5R_3R_Lg_m)$  $H(s) = \frac{C_3C_5C_LL_3L_5L_Lg_ms^6 + g_m + s^5\left(C_3C_5C_LL_3L_5R_3g_m + C_3C_5C_LL_3L_5R_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3L_LR_3g_m + C_3C_5C_LL_3R_3R_5g_m + C_3C_5C_LL_3R_5R_5g_m + C_3C_5C_LL_3R_5g_m + C_$ 

10.905 INVALID-ORDER-905  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_m + s^5\left(C_3C_5C_LL_3L_LR_3R_5R_Lg_m + C_3C_5L_3L_LR_3g_m + C_3C_5L_3L_LR_$ 

10.906 INVALID-ORDER-906  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

 $H(s) = \frac{1}{R_3 g_m + R_L g_m + s^6 \left( C_3 C_5 C_L L_3 L_5 L_L R_3 g_m + C_3 C_5 C_L L_3 L_L R_1 g_m \right) + s^5 \left( C_3 C_5 C_L L_3 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_L R_3 R$ 

10.907 INVALID-ORDER-907  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $\overline{R_{3}g_{m} + R_{L}g_{m} + s^{6}\left(C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R$ 

10.908 INVALID-ORDER-908  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, R_L\right)$ 

 $-C_3C_5L_3L_5R_3R_5R_Ls^4 - R_3R_5R_L + s^3\left(C_3L_3L_5R_3R_5R_Lg_m - C_3L_3L_5R_3R_L\right) + s^2\left(-C_3L_3R_3R_5R_L - C_5L_5R_3R_5R_L\right) + s^2\left(-C_3L_3R_5R_L\right) + s^2\left(-C_3L_$  $H(s) = \frac{-C_3C_5L_3L_5R_3R_5R_Lg_m + C_3L_5L_5R_3R_5R_Lg_m + C_3L_3L_5R_3R_5R_Lg_m + C_3L_3R_5R_Lg_m + C_3L_3L_5R_3R_5R_Lg_m + C_3L_3L_5R_3R_5R_Lg_m$ 

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10.909 INVALID-ORDER-909 Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{1}{C_Ls}\right)
```

 $H(s) = \frac{-C_3C_5L_3L_5R_3R_5s^4 - R_3R_5 + s^3\left(C_3L_3L_5R_3R_5g_m - C_3L_3L_5R_3\right) + s^2\left(-C_3L_3R_3R_5 - C_5L_5R_3R_5\right) + s\left(L_5R_3R_5g_m - L_5R_3\right)}{C_3C_5C_LL_3L_5R_3R_5s^5 + 2R_3R_5g_m + R_5 + s^4\left(2C_3C_5L_3L_5R_3R_5g_m + C_3C_LL_3L_5R_3R_5g_m + C_3L_3L_5R_3g_m + C_3L_3L_5R$ 

10.910 INVALID-ORDER-910  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{R_L}{C_LR_Ls+1}\right)$ 

 $H(s) = \frac{-C_3C_5L_3L_5R_3R_5R_Ls^5 - R_3R_5R_Ls^5 - R_3R_5R_Ls^5$ 

10.911 INVALID-ORDER-911  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{-C_3C_5C_LL_3L_5R_3R_5R_Ls^5 - R_3S_Ls^5 -$ 

10.912 INVALID-ORDER-912  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + \frac{1}{C_Ls}\right)$ 

10.913 INVALID-ORDER-913  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$ 

 $H(s) = \frac{- \cup_3 \cup_5 L_3 L_5 L_L R_3 R_5 s^6 + R_3 R_5 + s^5 \left(2 C_3 C_5 L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 L_3 L_5 L_L R_3 R_5 g_m + C_3 C_5 L_3 L_5 L_L R_3 R_5 + s^4 \left(C_3 C_5 L_3 L_5 L_L R_3 R_5 + C_3 C_5 L_3 L_5 L_L R_3 R_5 + C_3 C_5 L_5 L_L R_3 R_5 + C_5 C_5 L_5 L_L R_5 R_5 + C_5 C_5 L_5 L_L$ 

10.914 INVALID-ORDER-914  $Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{1}{2R_3R_5g_m + R_5 + s^6\left(2C_3C_5C_LL_3L_5L_LR_3R_5g_m + C_3C_5C_LL_3L_5L_LR_5\right) + s^5\left(2C_3C_5C_LL_3L_5R_3R_5R_Lg_m + C_3C_5C_LL_3L_5R_3R_5 + C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_LL_3L_5L_LR_3g_m + C_3C_LL_3L_3L_3L_3L_3L_3L_3L_3L_3L_3L_3L$ 

10.915 INVALID-ORDER-915  $Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

10.916 INVALID-ORDER-916  $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

 $\overline{2R_{3}R_{5}R_{L}g_{m}+R_{3}R_{5}+R_{5}R_{L}+s^{6}\left(2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}g_{m}+C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}R_{5}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}R_{L}+2C_{3}C_{5}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}g_{m}+C_{3}C_{5}L_{L}L_{3}L_{5}L_{L}R_{3}R_{5}L_{L}R_{5}h_{L}L_{5}L_$ 

10.917 INVALID-ORDER-917  $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $H(s) = \frac{1}{2R_3R_5R_Lg_m + R_3R_5 + R_5R_L + s^6\left(2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_m + C_3C_5C_LL_3L_5L_LR_3R_5 + C_3C_5C_LL_3L_5L_LR_3R_5R_L + C_3C_5C_LL_3L_5L_RR_3R_5R_L + C_3C_5C_LL_3$ 

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10.918 INVALID-ORDER-918 Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L\right)
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 $H(s) = \frac{C_3L_3L_5R_3R_Lg_ms^3 + L_5R_3R_Lg_ms + R_3R_5R_Lg_m - R_3R_L + s^4\left(C_3C_5L_3L_5R_3R_5R_Lg_m - C_3C_5L_3L_5R_3R_L\right) + s^2\left(C_3L_3R_3R_5R_Lg_m + R_3R_5R_Lg_m + R_3R_5R_Lg_m + R_4R_5R_Lg_m +$ 

10.919 INVALID-ORDER-919 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_3L_3L_5R_3g_ms^3 + L_5R_3g_ms + R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3R_5g_m - C_3L_3R_3R_5g_m - C_3L_3R_3R_5g_m - C_3L_3R_3R_5g_m + C_3C_5L_3L_5R_3g_m\right) + s^3\left(C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3g_m + C_3C_5L_5R_3g_m + C_3C_5L_$ 

10.920 INVALID-ORDER-920 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

 $H(s) = \frac{C_3L_3L_5R_3R_Lg_ms^3 + L_3R_5g_m + R_3 + R_5R_Lg_m + R_4 + s^5\left(C_3C_5C_LL_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3R_Lg_m +$ 

10.921 INVALID-ORDER-921 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3 R_5 g_m - R_3 + s^5 \left(C_3 C_5 C_L L_3 L_5 R_3 R_5 g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_5 R_3 R_L g_m + C_3 C_5 C_L L_5 R_3 R_L g_m + C_3 C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L$ 

10.922 INVALID-ORDER-922 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_3C_LL_3L_5L_LR_3g_ms^5 + L_5R_3g_ms + R_3R_5g_m}{2R_3g_m + R_5g_m + s^6\left(2C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_RR_3g_m + C_3C_5C_LL_3L_5$ 

10.923 INVALID-ORDER-923 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{C_3L_3L_5L_LR_3g_ms^2 + L_5}{R_3R_5g_m + R_3 + s^6\left(C_3C_5L_LL_3L_5L_LR_3R_5g_m + C_3C_5L_3L_5L_LR_3g_m + C_3C_5L_3L_5L_LR_3g_m + C_3C_5L_3L_5L_LR_3g_m + C_3C_5L_3L_5L_RR_3g_m + C_3C_5L_3$ 

10.924 INVALID-ORDER-924 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{1}{2R_3g_m + R_5g_m + s^6\left(2C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_LR_5g_m + C_3C_5C_LL_3L_5R_3R_5g_m + 2C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_Lg_m + C_3C_5C_$ 

10.925 INVALID-ORDER-925 
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{1}{R_3 R_5 R_L g_m + R_3 R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 R_L g_m + C_3 C_5 L_4 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_3 R_L g_m + C_5 C_5 L_5 L_5 L_L R_5 R_L g_m + C_5 C_5 L_5 L_5 L_5 L_L R_5 R_L g_m + C_5 C_5 L_5 L_5 L_L R_5 R_L g_m + C_5 C_5 L_5 L_5 L_L R_5 R_L g_m + C_5 C_5 L_5 L_5 L_5 R_5 R_L g_m + C_5 C_5 L_5 L_5 L_5 R_5 R_L g_m + C_5 C_5 L_5 L_5 L_5 R_L g_m + C_5 C_5 L_5 L_5 L_5 L_5 R_L g_m + C_5 C_5 L_5 L_5 L_5$ 

10.926 INVALID-ORDER-926 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_5 L_L R_5 R_L g_m + C_5 C_L L_5 L_L R_5$ 

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10.927 INVALID-ORDER-927 Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)
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 $H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_$ 

10.928 INVALID-ORDER-928 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, R_L\right)$$

 $H(s) = \frac{-C_3C_5L_3R_3R_5R_Ls - C_5R_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^4\left(C_3C_5L_3L_5R_3R_5R_Lg_m - C_3C_5L_3L_5R_3\right) - C_3C_5L_3R_5R_Ls + R_3R_5R_Lg_m - R_3R_L + s^4\left(C_3C_5L_3L_5R_3R_5R_Lg_m - C_3C_5L_3L_5R_3\right) - C_3C_5L_3R_5R_Lg_m + C_3C_5L_3R_5R_Lg_m$ 

10.929 INVALID-ORDER-929 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{-C_3C_5L_3R_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^2\left(C_3L_3R_3R_5g_m + C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3R_3R_5g_m + C_3C_5L_$ 

10.930 INVALID-ORDER-930 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

 $H(s) = \frac{-c}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^5 \left(C_3 C_5 C_L L_3 L_5 R_3 R_5 R_L g_m + C_3 C_5 L_4 L_5 R_3 R_5 R_L + C_3 C_5 L_3 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_3 L_5 R_3 R_L g_m + C_3 C_5 L_5 L_5 R_3 R_L g_m + C_3 C_5 L_5 L_5 R_5 R_L g_m + C_5 C_5 L$ 

10.931 INVALID-ORDER-931 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{n_3 n_5 g}{2 R_3 g_m + R_5 g_m + s^5 \left( C_3 C_5 C_L L_3 L_5 R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m + C_3 C_5 C_L L_3 R_3 R_5 R_L g_m + C_3 C_5 C_L L_3 R_5 R_L g_m + C_3 C_5 C_L L_5 R_5 R_L g_m + C_5 C_L L_5$ 

10.932 INVALID-ORDER-932 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$$

10.933 INVALID-ORDER-933 
$$Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.934 INVALID-ORDER-934 
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{1}{2R_3g_m + R_5g_m + s^6\left(2C_3C_5C_LL_3L_5L_LR_3g_m + C_3C_5C_LL_3L_5L_LR_5g_m + C_3C_5C_LL_3L_5R_3R_5g_m + 2C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_3R_Lg_m + C_3C_5C_LL_3L_5R_Lg_m + C_3C_5C_LL_3L_5R_Lg_$ 

10.935 INVALID-ORDER-935 
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

10.936 INVALID-ORDER-936  $Z(s) = \left(\infty, \infty, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

 $H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_5 C_L L_3 L_5 L_L R_5 R_5 g_m + 2 C_5 C_L L_5 L_5 L_5 R_5 g_m + 2 C_5 C_L L_5 L_5 L_5 R_5 g_m + 2 C_5 C_L L_5 L_5 L_5 R_5 g_m + 2 C_5 C_L L_5 L_5 L_5 R_5 g_m + 2 C_5 C_L L_5 L_5 L_5 R_5 g_m + 2 C_5 C_L L_$ 

10.937 INVALID-ORDER-937 
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

 $H(s) = \frac{1}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L + s^6 \left(C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m + C_3 C_5 C_L L_3 L_5 L_L R_3 R_$ 

## 11 PolynomialError