## Filter Summary Report: CG,Test,simple,Z2,Z3,ZL

## Generated by MacAnalog-Symbolix

## January 16, 2025

## Contents

1 Examined $H(z)$ for CG Test simple Z2 Z3 ZL: $\frac{Z_2Z_3Z_Lg_m + Z_3Z_L}{Z_2Z_3g_m + Z_2Z_Lg_m + Z_3 + Z_L}$	24
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3 BP 3.1 BP-1 $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	<b>24</b> 
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3.3 BP-3 $Z(s) = \left( \infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)$	
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$3.13 \text{ BP-13 } Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \dots \dots$	
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## **7** AP 328 INVALID-NUMER 328.1 INVALID-NUMER-1 $Z(s) = \left(\infty, R_2, \frac{R_3}{C_2 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ . . . . . 8.2 INVALID-NUMER-2 $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_{2s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots \dots$ 8.3 INVALID-NUMER-3 $Z(s) = \left(\infty, \frac{1}{C_{0s}}, R_3, \infty, \infty, \frac{1}{C_{1s}}\right)$ . . . . . . . . 8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ . 8.5 INVALID-NUMER-5 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, R_L\right)$ . . . . INVALID-NUMER-6 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 8.7 INVALID-NUMER-7 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s+1}, \infty, \infty, R_L\right) \dots$ 8.8 INVALID-NUMER-8 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s+1}, \infty, \infty, \frac{1}{C_L s}\right)$ 8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ . 8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \frac{1}{C_L s}\right) \dots$ 8.11 INVALID-NUMER-11 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, R_L\right) \dots$ 8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$ 8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3}{C_2R_3s+1}, \infty, \infty, R_L\right) \dots$ 8.15 INVALID-NUMER-15 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)$ 8.16 INVALID-NUMER-16 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ . . . . 8.17 INVALID-NUMER-17 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_4 s}\right) \dots$ 8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots$ 8.19 INVALID-NUMER-19 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L\right) \dots$ 8.20 INVALID-NUMER-20 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ . . . . . 8.21 INVALID-NUMER-21 $Z(s) = \left( \infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right) \dots \dots$ 8.22 INVALID-NUMER-22 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$ 8.23 INVALID-NUMER-23 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots$ 9 INVALID-WZ 9.1 INVALID-WZ-1 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots$ 9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right) \dots$ 9.3 INVALID-WZ-3 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ . . . . 9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L\right)$ . . . . 9.5 INVALID-WZ-5 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots$ 9.6 INVALID-WZ-6 $Z(s) = \left(\infty, R_2 + \frac{1}{C_{0s}}, R_3 + \frac{1}{C_{2s}}, \infty, \infty, R_L\right) \dots$ 10 INVALID-ORDER 10.1 INVALID-ORDER-1 $Z(s) = (\infty, R_2, R_3, \infty, \infty, R_L)$ . . . 10.2 INVALID-ORDER-2 $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{1}{C_{L_s}}\right) \dots$ 10.3 INVALID-ORDER-3 $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ . . . 10.4 INVALID-ORDER-4 $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, R_L + \frac{1}{C_{Ls}}\right) \dots$ 10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ . . . 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$

10.9 INVALID-ORDER-9 $Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
$10.10 \text{INVALID-ORDER-10 } Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
10.11INVALID-ORDER-11 $Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.12 \text{INVALID-ORDER-} 12 \ Z(s) = \left( \infty, \ R_2, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $
$10.13\text{INVALID-ORDER-}13\ Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3s},\ \infty,\ \infty,\ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right) \qquad . $
10.14INVALID-ORDER-14 $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3R_3s+1}, \infty, \infty, R_L\right)$
$10.15 \text{INVALID-ORDER-15 } Z(s) = \left( \infty, \ R_2, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) $
$10.16 \text{INVALID-ORDER-16 } Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s+1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s+1}\right) \dots \dots$
10.17INVALID-ORDER-17 $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.18INVALID-ORDER-18 $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.19INVALID-ORDER-19 \ Z(s) = \left(\infty, \ R_2, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right) $
$10.20 \text{INVALID-ORDER-} 20 \ Z(s) = \left( \infty, \ R_2, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ \frac{R_L(C_L L_L s^2+1)}{C_L L_L s^2 + C_L R_L s+1} \right) \ \dots $
10.21INVALID-ORDER-21 $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$
$10.22 \text{INVALID-ORDER-} 22 \ Z(s) = \left(\infty, \ R_2, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) $
$10.23 \text{INVALID-ORDER-} 23 \ Z(s) = \left(\infty, \ R_2, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $
$10.24 \text{INVALID-ORDER-} 24 \ Z(s) = \left(\infty, \ R_2, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $
$10.25 \text{INVALID-ORDER-} 25 \ Z(s) = \left(\infty, \ R_2, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)^2 \dots \dots$
10.26INVALID-ORDER-26 $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.27 \text{INVALID-ORDER-} 27 \ Z(s) = \left(\infty, \ R_2, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $
10.28INVALID-ORDER-28 $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$
10.29INVALID-ORDER-29 $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
$10.30 \text{INVALID-ORDER-30 } Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right) $
$10.31 \text{INVALID-ORDER-31 } Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots$
$10.32 \text{INVALID-ORDER-32 } Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$
$10.33 \text{INVALID-ORDER-33 } Z(s) = \left(\infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $
$10.34 \text{INVALID-ORDER-34 } Z(s) = \left(\infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)' $
$10.35 \text{INVALID-ORDER-35 } Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) $
$10.36 \text{INVALID-ORDER-36 } Z(s) = \left( \infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
$10.37 \text{INVALID-ORDER-} 37 \ Z(s) = \left( \infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $
$10.38 \text{INVALID-ORDER-38 } Z(s) = \left( \infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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-39 } Z(s) = \left( \infty, \ R_2, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) $
10.40INVALID-ORDER-40 $Z(s) = \left(\infty, R_2, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.41INVALID-ORDER-41 $Z(s) = \left(\infty, R_2, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.42INVALID-ORDER-42 $Z(s) = \left(\infty, R_2, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)'$
$10.43 \text{INVALID-ORDER-43 } Z(s) = \left(\infty, \ R_2, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right) $
10.44INVALID-ORDER-44 $Z(s) = \left(\infty, R_2, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{C_LL_RR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$
10.45INVALID-ORDER-45 $Z(s) = \left( \infty, \ R_2, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1} \right)'$
$10.46 \text{INVALID-ORDER-} 46 \ Z(s) = \left( \infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) $
$10.47 \text{INVALID-ORDER-47 } Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) $

$10.48 \text{INVALID-ORDER-48 } Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	46
$10.49 \text{INVALID-ORDER-49 } Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	46
$10.50 \text{INVALID-ORDER-50 } Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	46
$10.51 \text{INVALID-ORDER-51 } Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)  \dots $	46
$10.52 \text{INVALID-ORDER-} 52 \ Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $	46
$10.53 \text{INVALID-ORDER-53 } Z(s) = \left( \infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $	46
$10.54 \text{INVALID-ORDER-} 54 \ Z(s) = \left( \infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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) $	47
$10.55 \text{INVALID-ORDER-} 55 \ Z(s) = \left(\infty, \ R_2, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)  \dots $	47
$10.56 \text{INVALID-ORDER-} 56 \ Z(s) = \left( \infty, \ R_2, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \ \dots $	47
10.57INVALID-ORDER-57 $Z(s) = \left(\infty, \ R_2, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$	47
10.58INVALID-ORDER-58 $Z(s) = \left( \infty, \ R_2, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$	47
$10.59 \text{INVALID-ORDER-59 } Z(s) = \left( \infty, \ R_2, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \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 $	47
10.60INVALID-ORDER-60 $Z(s) = \left( \infty, \ R_2, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{1}{C_Ls} \right)$	47
$10.61 \text{INVALID-ORDER-} 61 \ Z(s) = \left( \infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $	47
$10.62 \text{INVALID-ORDER-} 62 \ Z(s) = \left(\infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) \ \dots $	47
$10.63 \text{INVALID-ORDER-} 63 \ Z(s) = \left(\infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \ \dots $	48
$10.64 \text{INVALID-ORDER-} 64 \ Z(s) = \left( \infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)  \dots $	48
$10.65 \text{INVALID-ORDER-} 65 \ Z(s) = \left(\infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $	48
$10.66 \text{INVALID-ORDER-} 66 \ Z(s) = \left( \infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $	48
$10.67 \text{INVALID-ORDER-} 67 \ Z(s) = \left( \infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	48
$10.68 \text{INVALID-ORDER-} 68 \ Z(s) = \left( \infty, \ R_2, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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
10.69INVALID-ORDER-69 $Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{1}{C_Ls} \right)$	48
10.70INVALID-ORDER-70 $Z(s) = \left( \infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	48
10.71INVALID-ORDER-71 $Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls} \right)$	48
10.72INVALID-ORDER-72 $Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls} \right)$	49
10.73INVALID-ORDER-73 $Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} \right)'$	49
10.74INVALID-ORDER-74 $Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls} \right)$	49
$10.75 \text{INVALID-ORDER-75 } Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	49
$10.76 \text{INVALID-ORDER-} 76 \ Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1} \right) \dots $	49
10.77INVALID-ORDER-77 $Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1} \right)'$	49
10.78INVALID-ORDER-78 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \infty, R_L\right)$	49
10.79INVALID-ORDER-79 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	49
$10.79 \text{INVALID-ORDER-79 } Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right) $ $10.80 \text{INVALID-ORDER-80 } Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) $	49
10.81INVALID-ORDER-81 $Z(s) = \left(\infty, \frac{1}{C_{r,s}}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_{r,s}}\right)$	50
$10.82 \text{INVALID-ORDER-82 } Z(s) = \left( \infty, \frac{1}{C_{C}s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_R R_L s^2 + L_L s + R_L} \right) \dots $	50
$10.83 \text{INVALID-ORDER-83 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) \dots \dots$	50

$10.84 \text{INVALID-ORDER-84} \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3, \ \infty, \ \infty, \ \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 $	50
$10.85 \text{INVALID-ORDER-} 85 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $	50
$10.86 \text{INVALID-ORDER-} 86 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right)  \dots $	50
10.87INVALID-ORDER-87 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	50
$10.88 \text{INVALID-ORDER-88 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $	50
$10.89 \text{INVALID-ORDER-89 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $	50
$10.90 \text{INVALID-ORDER-90 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	50
$10.91\text{INVALID-ORDER-91 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)  \dots $	51
10.92INVALID-ORDER-92 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	51
$10.93 \text{INVALID-ORDER-93 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) \ \dots $	51
$10.94 \text{INVALID-ORDER-} 94 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $	51
$10.95 \text{INVALID-ORDER-95 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2+1}\right)  \dots $	
$10.96 \text{INVALID-ORDER-} 96 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $	51
$10.97 \text{INVALID-ORDER-97 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \dots $	51
$10.98\text{INVALID-ORDER-98} \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \dots $	51
10.99INVALID-ORDER-99 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s+1}, \infty, \infty, \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s+1} \right)$	51
$10.10\text{ @NVALID-ORDER-}100 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $	52
$10.10 \text{INVALID-ORDER-101 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) $	52
$10.10 \text{ 2NVALID-ORDER-} 102 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $	52
$10.10 \text{ \& NVALID-ORDER-103 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right)  \dots $	52
$10.104\text{NVALID-ORDER-}104\ Z(s) = \left(\infty,\ \frac{1}{C_2s},\ R_3 + \frac{1}{C_3s},\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2 + 1}\right) \qquad . \qquad $	52
$10.10 \text{ INVALID-ORDER-} 105 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$	52
$10.10 \text{ 6NVALID-ORDER-} 106 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	52
10.10 <b>T</b> NVALID-ORDER-107 $Z(s) = \left( \infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$	
10.10 INVALID-ORDER-108 $Z(s) = \left( \infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$	
10.10 NVALID-ORDER-109 $Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$	
$10.11 \text{@NVALID-ORDER-}110 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right)  \dots $	
$10.11\text{INVALID-ORDER-111}\ Z(s) = \left( \infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \infty,\ \frac{R_L}{C_L R_L s + 1} \right) $	53
$10.112\text{NVALID-ORDER-}112\ Z(s) = \left(\infty,\ \frac{1}{C_2s},\ L_3s + \frac{1}{C_3s},\ \infty,\ \infty,\ R_L + \frac{1}{C_Ls}\right) \qquad . \qquad $	
10.11\( \mathbb{R}\) VALID-ORDER-113\( Z(s) = \left( \infty, \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \infty, \infty, \infty, \infty, \infty, \infty, \left( L_1 s + \frac{1}{C_L s} \right)   \qquad \qquad       \qu	
10.11\(\text{INVALID-ORDER-114}\(Z(s) = \int(\infty)\), $\frac{1}{C_2s}$ , $L_3s + \frac{1}{C_3s}$ , $\infty$ , $\infty$ , $\frac{L_Ls}{C_LL_Ls^2+1}$ )	
10.11 INVALID-ORDER-115 $Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	
$10.11 \text{ ENVALID-ORDER-116 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $	
$10.11\text{TNVALID-ORDER-117} \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L R_L s^2 + L} \right) $	
10.11&NVALID-ORDER-118 $Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$	
10.11 <b>2</b> NVALID-ORDER-119 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$	54
$10.12 \text{ONVALID-ORDER-} 120 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right)  \dots $	
$10.12 \text{INVALID-ORDER-} 121 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right)  \dots $	54
$10.122 \text{NVALID-ORDER-} 122 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $	54

$10.12 \text{BNVALID-ORDER-} 123 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \ \dots $	54
$10.124\text{NVALID-ORDER-}124\ Z(s) = \left(\infty,\ \frac{1}{C_2s},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2+1}\right)'.$	54
10.12 INVALID-ORDER-125 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	54
$10.12 \text{ 6NVALID-ORDER-} 126 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \ \dots \ $	54
$10.12 \text{TNVALID-ORDER-} 127 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	54
$10.12 \text{NVALID-ORDER-} 128 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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) \right) $	54
$10.12 \text{ @NVALID-ORDER-129 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	55
10.130NVALID-ORDER-130 $Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$	55
$10.13 \text{INVALID-ORDER-} 131 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{\stackrel{\frown}{R_L}}{C_L R_L s + 1} \right) \qquad \dots $	55
10.132NVALID-ORDER-132 $Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	55
$10.13 \text{ ENVALID-ORDER-} 133 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	55
10.134NVALID-ORDER-134 $Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	55
10.13 INVALID-ORDER-135 $Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	55
$10.13 \text{ 6NVALID-ORDER-} 136 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \ \dots $	55
$10.13 \text{INVALID-ORDER-} 137 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	55
10.13\( \text{NVALID-ORDER-138} \( Z(s) = \int(\infty, \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1} \int(\infty)   \qquad	55
10.139NVALID-ORDER-139 $Z(s) = (\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L)$	56
10.140NVALID-ORDER-140 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)$	56
10.14INVALID-ORDER-141 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	56
$10.14 \text{ 2NVALID-ORDER-} 142 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) \ \dots $	56
10.14 INVALID-ORDER-143 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	56
$10.14 \text{INVALID-ORDER-} 144 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)^{-1} $	56
$10.14 \text{INVALID-ORDER-145} \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots $	56
$10.14 \text{ INVALID-ORDER-146 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \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-147 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $	56
$10.14 \text{ INVALID-ORDER-} 147 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	56
$10.14 \$NVALID-ORDER-148 \ Z(s) = \left(\infty, \ \frac{1}{C_2 L_2}, \ \frac{L_3 R_3 s}{C_2 L_2 R_3 s^2 + L_2 s + R_2}, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_2 L_2 R_3 s^2 + L_2 s + R_2}\right) \ \dots $	56
10.149NVALID-ORDER-149 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)$	57
$10.14 \text{ 9NVALID-ORDER-} 149 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ R_L \right) $ $10.15 \text{ 9NVALID-ORDER-} 150 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) $	57
$10.15 \text{INVALID-ORDER-} 151 \ Z(s) = \left(\infty, \ \frac{1}{G_s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{G_s L_{s^2+1}}, \ \infty, \ \infty, \ \frac{R_L}{G_s R_{s+1}}\right) \dots \dots$	57
10.152NVALID-ORDER-152 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	57
$10.152\text{NVALID-ORDER-}152 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $ $10.152\text{NVALID-ORDER-}153 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $ $\ldots$	57
$10.154\text{NVALID-ORDER-}154\ Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1},\ \infty,\ \infty,\ \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	57
$10.154\text{NVALID-ORDER-}154 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$	57
$10.15 \text{ 6NVALID-ORDER-} 156 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \ \dots $	57
$10.15 \text{INVALID-ORDER-} 157 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	57
$10.15 \text{ENVALID-ORDER-} 156 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)$ $10.15 \text{ENVALID-ORDER-} 157 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)$ $10.15 \text{ENVALID-ORDER-} 158 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$	57
$10.15 \text{ @NVALID-ORDER-159 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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, \ R_L \right) $ $10.16 \text{ @NVALID-ORDER-160 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \frac{R_3 \left( C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) $	58
$10.16 \text{ @NVALID-ORDER-160 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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{1}{C_L s} \right) \ \dots $	58

$10.16 \text{INVALID-ORDER-} 161 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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{R_L}{C_L R_L s + 1} \right) $	8
$10.16 2 \text{NVALID-ORDER-} 162 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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, \ R_L + \frac{1}{C_L s} \right) $	8
10.16\( \mathbb{B}\) VALID-ORDER-163 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \frac{R_3\left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$	8
$10.16 \text{4NVALID-ORDER-} 164 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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_L s}{C_L L_L s^2 + 1} \right)^{-1} $	8
$10.16 \text{ INVALID-ORDER-} 165 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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, \ L_L s + R_L + \frac{1}{C_L s} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	8
$10.16 \text{ 6NVALID-ORDER-} 166 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $	8
$10.16 \text{INVALID-ORDER-} 167 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \qquad . $	8
$10.16 \$NVALID-ORDER-168 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \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{R_L\left(C_L L_L s^2+1\right)}{C_L L_L s^2 + C_L R_L s+1} \right)' $	9
10.16 <b>9</b> NVALID-ORDER-169 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, R_3, \infty, \infty, R_L\right)$	9
10.17 <b>0</b> NVALID-ORDER-170 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$	9
10.17INVALID-ORDER-171 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ .	9
$10.172\text{NVALID-ORDER-}172 \ Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \ R_3, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots$	9
$10.17 \text{ ENVALID-ORDER-173 } Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $	9
$10.17 \text{INVALID-ORDER-} 174 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ R_3, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) $ $59$	9
$10.17 \text{5NVALID-ORDER-} 175 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ R_3, \ \infty, \ \infty, \ \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)' $	9
$10.17 \text{ (6) VALID-ORDER-176 } Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s+1}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right) \qquad \qquad$	9
$10.17\text{INVALID-ORDER-}177\ Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{1}{C_2s}, \infty, \infty, R_L + \frac{1}{C_Ls}\right) $	0
$10.17\$\text{NVALID-ORDER-178 } Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right) $	0
$10.179 \text{NVALID-ORDER-} 179 \ Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s+1}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_1 s^2+1}\right)  \dots $	0
$10.18 \text{DNVALID-ORDER-} 180 \ Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) $	0
$10.18INVALID-ORDER-181 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) $	0
$10.18 \text{PNVALID-ORDER-} 182 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_R L_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right) \ \dots $	0
$10.18 \text{ENVALID-ORDER-} 183 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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 $	
10.18\(\text{ANVALID-ORDER-184}\(Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)^{\text{/}}.\( \)	0
$10.18 \text{5NVALID-ORDER-} 185 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	0
$10.186 \text{NVALID-ORDER-} 186 \ Z(s) = \left(\infty, \frac{R_3}{C_2 R_{28} + 1}, \frac{R_3}{C_2 R_{28} + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	
$10.18\text{TNVALID-ORDER-}187 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	
10.18 NVALID-ORDER-188 $Z(s) = \left(\infty, \frac{R_2}{GR_{2-1}}, \frac{R_3}{GR_{2-1}}, \infty, \infty, \frac{L_L R_L s}{GR_{2-1}}\right)$ 6.	1
$10.18 \text{ @NVALID-ORDER-} 189 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L R_2 s^2 + L_L s + R_L} \right) $	1
$10.19\text{@NVALID-ORDER-190 } Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right) $	1
10.19INVALID-ORDER-191 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$	1
$10.192\text{NVALID-ORDER-}192\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls+1}\right) \qquad \qquad$	1
10.19 <b>E</b> NVALID-ORDER-193 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	1
$10.194\text{NVALID-ORDER-}194\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_2s},\ \infty,\ \infty,\ L_Ls + \frac{1}{C_Ls}\right) \qquad \qquad$	1
10.10 ENIVALID OPDED 105 $Z(s) = \begin{pmatrix} c_1 & R_2 & P_1 + 1 & c_2 & c_3 & L_L s \end{pmatrix}$	9
$10.196 \text{NVALID-ORDER-} 2(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L L_L s^2 + 1}\right) \dots $ $10.196 \text{NVALID-ORDER-} 196 \ Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L L_L s^2 + 1}\right) \dots $ $10.196 \text{NVALID-ORDER-} 197 \ Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L L_L s^2 + 1}\right) \dots $	2
$10.19 \text{INVALID-ORDER-} 197 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s+1}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	2
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10.19 NVALID-ORDER-198 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.199NVALID-ORDER-199 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \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-200 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L\right) \dots \dots \dots
10.20INVALID-ORDER-201 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, L_3s + \frac{1}{C_2s}, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots
10.202NVALID-ORDER-202 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, L_3s + \frac{1}{C_2s}, \infty, \infty, \frac{R_L}{C_2R_2s+1}\right)
10.20ENVALID-ORDER-203 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots
10.204NVALID-ORDER-204 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \dots
10.20 INVALID-ORDER-205 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1} \right) \dots
10.20 INVALID-ORDER-206 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) . . . .
10.20TNVALID-ORDER-207 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.20\(\text{NVALID-ORDER-208}\) Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.209NVALID-ORDER-209 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.210NVALID-ORDER-210 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right) \dots
10.21INVALID-ORDER-211 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right) . . . . .
10.212NVALID-ORDER-212 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right) . . .
10.213NVALID-ORDER-213 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.21\(\text{INVALID-ORDER-214}\(Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_{L.s}}\)
10.21 INVALID-ORDER-215 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots
10.216NVALID-ORDER-216 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.21 INVALID-ORDER-217 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.21 NVALID-ORDER-218 Z(s) = \left(\infty, \frac{R_2}{C_2 R_0 s + 1}, \frac{L_3 s}{C_2 L_0 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_1 s^2 + 1}\right)
10.219NVALID-ORDER-219 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \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)
10.22@NVALID-ORDER-220 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right) \dots \dots
10.22INVALID-ORDER-221 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}\right)
10.222NVALID-ORDER-222 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.22BNVALID-ORDER-223 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.224NVALID-ORDER-224 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.22 INVALID-ORDER-225 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right) . . . . . .
10.226NVALID-ORDER-226 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.22 INVALID-ORDER-227 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s}\right)
10.22\text{NVALID-ORDER-228} Z(s) = \left(\infty, \frac{R_2}{C_2 R_0 s + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.229NVALID-ORDER-229 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \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)
10.23@NVALID-ORDER-230 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_2L_2R_2s^2+L_2s+R_2}, \infty, \infty, R_L\right) .....
10.23INVALID-ORDER-231 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.232NVALID-ORDER-232 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.23\( \text{NVALID-ORDER-233} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{R_L}{C_L s} \right) \)
10.234NVALID-ORDER-234 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_2L_2R_2s^2+L_2s+R_2}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
10.23 INVALID-ORDER-235 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots \dots \dots
10.23 \text{ (ENVALID-ORDER-236 } Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_{T.S}}\right)
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$10.23 \text{INVALID-ORDER-} 237 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $	
$10.23 \text{\&NVALID-ORDER-} 238 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $	
10.23 NVALID-ORDER-239 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	
10.24@NVALID-ORDER-240 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, R_L\right)$	
10.24INVALID-ORDER-241 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{1}{C_Ls}\right)$	
$10.24 \text{2NVALID-ORDER-} 242 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $	
$10.24 \text{BNVALID-ORDER-} 243 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	
$10.24 \text{INVALID-ORDER-} 244 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \ \dots $	
$10.24 \text{5NVALID-ORDER-} 245 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	
$10.24 \text{ (INVALID-ORDER-246 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots \ $	
$10.24 \text{INVALID-ORDER-} 247 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $	
$10.24 \text{\&NVALID-ORDER-} 248 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)  \dots $	
$10.24 \text{ PNVALID-ORDER-} 249 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \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 $	
10.25 <b>0</b> NVALID-ORDER-250 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, R_L\right)$	
10.25INVALID-ORDER-251 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}\right)$	
$10.25 \text{ 2NVALID-ORDER-} 252 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \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{R_L}{C_L R_L s + 1} \right)  \dots $	
10.25 NVALID-ORDER-253 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	
$10.25 \text{INVALID-ORDER-} 254 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \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, \ L_L s + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	
$10.25 \text{ INVALID-ORDER-} 255 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \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_L s}{C_L L_L s^2 + 1}\right) \ \dots $	
$10.25 \text{ (INVALID-ORDER-256 } Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \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, \ L_L s + R_L + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	
$10.25 \text{INVALID-ORDER-} 257 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \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_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)  \dots $	
$10.25 \$NVALID-ORDER-258 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right) \ \dots $	
$10.25 \text{ (NVALID-ORDER-259 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \frac{R_3 \left( C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)^{\prime} \dots \dots$	
10.26 INVALID-ORDER-260 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L\right)$	
10.26INVALID-ORDER-261 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	
10.262NVALID-ORDER-262 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	
10.26 INVALID-ORDER-263 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	
10.264NVALID-ORDER-264 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	
10.26 INVALID-ORDER-265 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$	
10.26 INVALID-ORDER-266 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	
$10.26 \text{INVALID-ORDER-} 267 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $	
10.26 NVALID-ORDER-268 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	
10.26 <b>Q</b> NVALID-ORDER-269 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	
10.270NVALID-ORDER-270 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	
10.27INVALID-ORDER-271 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	
10.272NVALID-ORDER-272 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	

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10.27 INVALID-ORDER-273 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.27\(\text{INVALID-ORDER-274}\(Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, \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 INVALID-ORDER-275 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.276NVALID-ORDER-276 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.27 INVALID-ORDER-277 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.27\( \text{NVALID-ORDER-278} \) Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \ .
10.279NVALID-ORDER-279 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.28@NVALID-ORDER-280 Z(s) = (\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_L s^2 + 1})
10.28INVALID-ORDER-281 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \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)
10.282NVALID-ORDER-282 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2}s}, R_3 + \frac{1}{C_{3}s}, \infty, \infty, \frac{1}{C_{L}s}\right).
10.28 INVALID-ORDER-283 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)...
10.284NVALID-ORDER-284 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.28 INVALID-ORDER-285 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, R_3 + \frac{1}{C_{2s}}, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.28 INVALID-ORDER-286 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . .
10.28 INVALID-ORDER-287 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, R_3 + \frac{1}{C_{2s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_{Ls}}\right)
10.28\text{NVALID-ORDER-288} Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.289NVALID-ORDER-289 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, R_3 + \frac{1}{C_{3s}}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.29@NVALID-ORDER-290 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.29INVALID-ORDER-291 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, L_3 s + \frac{1}{C_{2s}}, \infty, \infty, R_L\right).
10.292NVALID-ORDER-292 Z(s) = \left(\infty, R_2 + \frac{1}{C_{0s}}, L_3 s + \frac{1}{C_{0s}}, \infty, \infty, \frac{1}{C_{1s}}\right) . . .
10.29 NVALID-ORDER-293 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.294NVALID-ORDER-294 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.29 INVALID-ORDER-295 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, L_3 s + \frac{1}{C_{2s}}, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.296NVALID-ORDER-296 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, L_3 s + \frac{1}{C_{2s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.29 INVALID-ORDER-297 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.29\( \text{NVALID-ORDER-298} \( Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \)
10.299NVALID-ORDER-299 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.300NVALID-ORDER-300 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.30INVALID-ORDER-301 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right).
10.302NVALID-ORDER-302 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.308NVALID-ORDER-303 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.304NVALID-ORDER-304 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.30 INVALID-ORDER-305 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.30 INVALID-ORDER-306 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right).
10.30TNVALID-ORDER-307 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.30 NVALID-ORDER-308 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s}\right)
10.309NVALID-ORDER-309 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.310NVALID-ORDER-310 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \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)
10.31INVALID-ORDER-311 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
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10.312NVALID-ORDER-312 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.31 NVALID-ORDER-313 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.31 INVALID-ORDER-314 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, L_3 s + R_3 + \frac{1}{C_{2s}}, \infty, \infty, R_L + \frac{1}{C_{Ls}}\right)
10.31 INVALID-ORDER-315 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.316NVALID-ORDER-316 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.31 INVALID-ORDER-317 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.31 NVALID-ORDER-318 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.319NVALID-ORDER-319 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.320NVALID-ORDER-320 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.32INVALID-ORDER-321 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L\right).
10.32PNVALID-ORDER-322 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)
10.32\( \text{NVALID-ORDER-323} \( Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \)
10.324NVALID-ORDER-324 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.32 INVALID-ORDER-325 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.326NVALID-ORDER-326 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.32TNVALID-ORDER-327 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.32\( \text{NVALID-ORDER-328} \) Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.32¶NVALID-ORDER-329 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.33@NVALID-ORDER-330 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + R_3 s^2}\right)
10.33INVALID-ORDER-331 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right) \dots
10.332NVALID-ORDER-332 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
10.33\(\text{NVALID-ORDER-333}\) Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.334NVALID-ORDER-334 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.33 INVALID-ORDER-335 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.336NVALID-ORDER-336 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
10.33 INVALID-ORDER-337 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.33\(\text{NVALID-ORDER-338}\(Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\)
10.339NVALID-ORDER-339 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_T L_T s^2 + 1}\right)
10.340NVALID-ORDER-340 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \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)
10.34INVALID-ORDER-341 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \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, \ R_L\right)
10.342NVALID-ORDER-342 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \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{1}{C_L s}\right)
                                                                        \left(\infty, R_2 + \frac{1}{C_2 s}, \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{R_L}{C_L R_L s + 1}\right)
                                                                        \left(\infty, R_2 + \frac{1}{C_2 s}, \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, R_L + \frac{1}{C_L s}\right)
                                                                        \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \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,\ L_L s + \frac{1}{C_L s}\right)
10.345NVALID-ORDER-345 Z(s) =
                                                                        \left(\infty, R_2 + \frac{1}{C_2 s}, \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_L s}{C_L L_L s^2 + 1}\right)
                                                                       (\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3(C_3 L_3 s^2 + 1)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s})
10.34TNVALID-ORDER-347 Z(s) =
10.34 NVALID-ORDER-348 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \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_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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10.34 \text{ @NVALID-ORDER-349 } Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \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{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.35 \text{ @NVALID-ORDER-350 } Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \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{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right) \right)
10.35INVALID-ORDER-351 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.352NVALID-ORDER-352 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.35 INVALID-ORDER-353 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.354NVALID-ORDER-354 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right).
10.35 INVALID-ORDER-355 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.356NVALID-ORDER-356 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ R_3, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right).
10.35 INVALID-ORDER-357 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.35 NVALID-ORDER-358 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{os}}, R_3, \infty, \infty, \frac{C_L L_R R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.359NVALID-ORDER-359 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.36 NVALID-ORDER-360 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, R_L\right).
10.36INVALID-ORDER-361 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}\right) . . .
10.362NVALID-ORDER-362 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right).
10.363NVALID-ORDER-363 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.364NVALID-ORDER-364 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.36 INVALID-ORDER-365 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.36 INVALID-ORDER-366 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.36TNVALID-ORDER-367 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.36 NVALID-ORDER-368 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.36 INVALID-ORDER-369 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.370NVALID-ORDER-370 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right) \dots
10.37INVALID-ORDER-371 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right).
10.372NVALID-ORDER-372 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.378NVALID-ORDER-373 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.374NVALID-ORDER-374 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.37 INVALID-ORDER-375 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_r L_r s^2 + 1}\right)
10.376NVALID-ORDER-376 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.37¶NVALID-ORDER-377 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.37\( \) NVALID-ORDER-378 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.379NVALID-ORDER-379 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \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)
10.38 INVALID-ORDER-380 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0.8}}, R_3 + \frac{1}{C_{0.8}}, \infty, \infty, R_L\right).
10.38INVALID-ORDER-381 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_4 s}\right)
10.382NVALID-ORDER-382 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.38 INVALID-ORDER-383 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.384NVALID-ORDER-384 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.38 INVALID-ORDER-385 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.386NVALID-ORDER-386 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right).
10.38 INVALID-ORDER-387 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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10.38\( \text{NVALID-ORDER-388} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \)
10.389NVALID-ORDER-389 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.39 INVALID-ORDER-390 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right) . . .
10.39INVALID-ORDER-391 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.392NVALID-ORDER-392 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.39ENVALID-ORDER-393 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.39\(\text{ANVALID-ORDER-394}\) Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, L_3 s + \frac{1}{C_{2s}}, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.39 INVALID-ORDER-395 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.39 INVALID-ORDER-396 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.39TNVALID-ORDER-397 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.39\( \text{NVALID-ORDER-398} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \infty, \infty, \infty, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1} \)
10.399NVALID-ORDER-399 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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)
10.400NVALID-ORDER-400 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right).
10.40INVALID-ORDER-401 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right) . . .
10.402NVALID-ORDER-402 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.40 INVALID-ORDER-403 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.404NVALID-ORDER-404 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.40 INVALID-ORDER-405 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . .
10.40 INVALID-ORDER-406 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.40TNVALID-ORDER-407 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.40 NVALID-ORDER-408 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.409NVALID-ORDER-409 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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)
10.41@NVALID-ORDER-410 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L\right) . . .
10.41INVALID-ORDER-411 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0s}}, L_3 s + R_3 + \frac{1}{C_{0s}}, \infty, \infty, \frac{1}{C_{0s}}\right)
10.412NVALID-ORDER-412 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.412NVALID-ORDER-413 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.41 INVALID-ORDER-414 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, L_3 s + R_3 + \frac{1}{C_{2s}}, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.41 INVALID-ORDER-415 Z(s) = \left( \infty, L_2 s + \frac{1}{C_0 s}, L_3 s + R_3 + \frac{1}{C_0 s}, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1} \right) . . . .
10.416NVALID-ORDER-416 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.41 INVALID-ORDER-417 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L s}\right)
10.41 NVALID-ORDER-418 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.419NVALID-ORDER-419 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \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)
10.420NVALID-ORDER-420 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_2 L_2 R_3 s^2 + L_2 s + R_2}, \infty, \infty, R_L\right).
10.42INVALID-ORDER-421 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_2 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)
10.422NVALID-ORDER-422 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.42\(\text{NVALID-ORDER-423}\) Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)
10.424NVALID-ORDER-424 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_2 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.42 INVALID-ORDER-425 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . .
10.426NVALID-ORDER-426 Z(s) = (\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s})
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10.42TNVALID-ORDER-427 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.42\( \text{NVALID-ORDER-428} \) Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.42 INVALID-ORDER-429 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \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)
10.430NVALID-ORDER-430 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right).
10.43INVALID-ORDER-431 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
10.432NVALID-ORDER-432 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.43 INVALID-ORDER-433 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.43\(\text{INVALID-ORDER-434}\(Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\(\text{T}(s) + \frac{1}{C_L s}\(\text{
10.43 INVALID-ORDER-435 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.436NVALID-ORDER-436 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.43TNVALID-ORDER-437 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.43\(\text{NVALID-ORDER-438}\(Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L s^2}{C_L L_L s^2 + 1}\)
10.43 \text{ } \text{ } \text{ } \text{NVALID-ORDER-439 } Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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) \right) 
10.440NVALID-ORDER-440 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \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, R_L\right)
10.44INVALID-ORDER-441 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \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{1}{C_L s}\right)
10.442NVALID-ORDER-442 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \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{R_L}{C_L R_L s + 1}\right)
10.44BNVALID-ORDER-443 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \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, \ R_L + \frac{1}{C_L s} \right)
10.44\(\text{INVALID-ORDER-444}\) Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \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, \ L_L s + \frac{1}{C_L s} \right)
                                                                                               (\infty, L_2s + \frac{1}{C_2s}, \frac{R_3(C_3L_3s^2 + 1)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1})
                                                                                                \left(\infty, \ L_2s + \frac{1}{C_2s}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)
10.44 6NVALID-ORDER-446 Z(s) =
                                                                                                \left(\infty, \ L_2s + \frac{1}{C_2s}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                 \stackrel{\leftarrow}{\infty}, L_2s + \frac{1}{C_2s}, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}
 10.45 NVALID-ORDER-450 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_4 s}\right).
10.45INVALID-ORDER-451 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.452NVALID-ORDER-452 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)
 10.45 NVALID-ORDER-453 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.454NVALID-ORDER-454 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.45 INVALID-ORDER-455 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.45 NVALID-ORDER-456 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.45 TNVALID-ORDER-457 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{7} s}, R_3, \infty, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.45\( \text{NVALID-ORDER-458} \) Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ R_3, \ \infty, \ \infty, \ \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)
10.459NVALID-ORDER-459 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, R_L\right).
10.460NVALID-ORDER-460 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{2}s}, \frac{1}{C_{3}s}, \infty, \infty, \frac{1}{C_{Ls}}\right)
10.46INVALID-ORDER-461 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.462NVALID-ORDER-462 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
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10.46 INVALID-ORDER-463 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.464NVALID-ORDER-464 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) . . .
10.46 INVALID-ORDER-465 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{0.8}}, \frac{1}{C_{0.8}}, \infty, \infty, L_L s + R_L + \frac{1}{C_{1.8}}\right)
10.46 INVALID-ORDER-466 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.46 INVALID-ORDER-467 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.46\(\text{NVALID-ORDER-468}\) Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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)
10.469NVALID-ORDER-469 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right) . . . . . . . .
10.470NVALID-ORDER-470 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_2 s}\right)
10.47INVALID-ORDER-471 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.472NVALID-ORDER-472 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.473NVALID-ORDER-473 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.474NVALID-ORDER-474 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right)
10.47\ \text{INVALID-ORDER-475}\ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)
10.476NVALID-ORDER-476 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.47 INVALID-ORDER-477 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L s^2 + L_L s^2 + L_
10.47\( \) NVALID-ORDER-478\( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \)
10.479NVALID-ORDER-479 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L\right) . . .
 10.48 INVALID-ORDER-480 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_2 s}\right)...
10.48INVALID-ORDER-481 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.482NVALID-ORDER-482 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.48 INVALID-ORDER-483 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{28}}, R_3 + \frac{1}{C_{28}}, \infty, \infty, L_L s + \frac{1}{C_{L8}}\right)
10.484NVALID-ORDER-484 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.48 INVALID-ORDER-485 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.486NVALID-ORDER-486 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.48 INVALID-ORDER-487 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.48\text{NVALID-ORDER-488} Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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)
10.489NVALID-ORDER-489 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, R_L\right)...
10.49 INVALID-ORDER-490 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_0 s}, L_3 s + \frac{1}{C_0 s}, \infty, \infty, \frac{1}{C_1 s}\right)
10.49INVALID-ORDER-491 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.492NVALID-ORDER-492 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.49 INVALID-ORDER-493 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.49\(\text{INVALID-ORDER-494}\) Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
10.49 INVALID-ORDER-495 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.496NVALID-ORDER-496 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.49 INVALID-ORDER-497 Z(s) = (\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1})
10.49\text{NVALID-ORDER-498} Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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)
10.499NVALID-ORDER-499 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, R_L\right).
10.500NVALID-ORDER-500 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right) . . .
10.50INVALID-ORDER-501 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
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10.502NVALID-ORDER-502 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right).
10.50 NVALID-ORDER-503 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_0 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.504NVALID-ORDER-504 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
10.50 INVALID-ORDER-505 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.506NVALID-ORDER-506 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.50 TNVALID-ORDER-507 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.50\( \text{NVALID-ORDER-508} \( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \)
10.509NVALID-ORDER-509 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L\right)
10.510NVALID-ORDER-510 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_4 s}\right)
10.51INVALID-ORDER-511 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.512NVALID-ORDER-512 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.518NVALID-ORDER-513 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.51\(\text{INVALID-ORDER-514}\(Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\)
10.51 INVALID-ORDER-515 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.516NVALID-ORDER-516 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.51TNVALID-ORDER-517 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.51\( \text{NVALID-ORDER-518} \( Z(s) = \int( \int \int \), \( L_2 s + R_2 + \frac{1}{C_2 s}, \) \( L_3 s + R_3 + \frac{1}{C_3 s}, \) \( \infty, \) \( \int \int, \) \( \frac{R_L (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1} \)
10.51 INVALID-ORDER-519 Z(s) = (\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L).
10.520NVALID-ORDER-520 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right).
10.52INVALID-ORDER-521 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.522NVALID-ORDER-522 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.52\( \text{NVALID-ORDER-523} \( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \infty, \infty, \ L_L s + \frac{1}{C_L s} \right) \)
10.524NVALID-ORDER-524 Z(s) = (\infty, L_2s + R_2 + \frac{1}{C_2s}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1})
10.52 INVALID-ORDER-525 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)
10.526NVALID-ORDER-526 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{2s}}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.52TNVALID-ORDER-527 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_2 s + R_3}, \infty, \infty, \infty, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_1 s^2 + 1}\right)
10.52 \text{\&NVALID-ORDER-528} \ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + R_3} \right)
10.529NVALID-ORDER-529 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
10.530NVALID-ORDER-530 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
10.53INVALID-ORDER-531 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.532NVALID-ORDER-532 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_2 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.53\( \text{2NVALID-ORDER-533} \( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \)
10.534NVALID-ORDER-534 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.53 INVALID-ORDER-535 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)
10.536NVALID-ORDER-536 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
10.53 \text{INVALID-ORDER-} 537 \ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right)
10.53 \text{\&NVALID-ORDER-538} \ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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)
10.539NVALID-ORDER-539 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \ \infty, \ \infty, \ R_L\right)
10.540NVALID-ORDER-540 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \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{1}{C_L s}\right)
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10.54INVALID-ORDER-541 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \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{R_L}{C_L R_L s + 1}\right)
                                                                                  \stackrel{'}{\infty}, L_2s + R_2 + \frac{1}{C_2s}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, R_L + \frac{1}{C_Ls}
                                                                                 \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \frac{R_3(C_3L_3s^2 + 1)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                                 (\infty, L_2s + R_2 + \frac{1}{C_2s}, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1})
                                                                                   (\infty, L_2s + R_2 + \frac{1}{C_2s}, \frac{R_3(C_3L_3s^2 + 1)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}) 
                                                                                  (\infty, L_2s + R_2 + \frac{1}{C_2s}, \frac{R_3(C_3L_3s^2 + 1)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1})
10.54\( \text{NVALID-ORDER-548} \( Z(s) = \int \infty \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \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, \ \infty, \ \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, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, R_3, \infty, \infty, \frac{1}{C_Ls}\right).
10.550NVALID-ORDER-550 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
 10.55INVALID-ORDER-551 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.552NVALID-ORDER-552 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.55 INVALID-ORDER-553 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.554NVALID-ORDER-554 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
 10.55 INVALID-ORDER-555 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                               \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, R_3, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_2L_2s^2+1}\right)
                                                                                  \propto, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, R_3, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}
10.55\( \text{NVALID-ORDER-558} \( Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \infty, \infty, \frac{R_L}{R_L} \right) \\ \tag{1...}
                                                                               \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{1}{C_2s}, \infty, \infty, \frac{1}{C_Ls}\right)
10.56@NVALID-ORDER-560 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.56INVALID-ORDER-561 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.562NVALID-ORDER-562 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_{3s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
 10.56\( \text{NVALID-ORDER-563} \( Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right) \)
 10.564NVALID-ORDER-564 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                               \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{1}{C_3s}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
10.56 \text{ (INVALID-ORDER-566 } Z(s) = \left(\infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.56 \text{INVALID-ORDER-} 567 \ Z(s) = \left(\infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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)
10.56\( \text{NVALID-ORDER-568} \( Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L}{R_L} \right) \)
                                                                                \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}\right)
10.570NVALID-ORDER-570 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)
10.57INVALID-ORDER-571 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
10.57\( \text{NVALID-ORDER-573} \( Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \)
10.574NVALID-ORDER-574 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                 \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \frac{R_3}{C_3R_3s + 1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
 10.57 \text{ (INVALID-ORDER-576 } Z(s) = \left(\infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \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-577 } Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \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) \right)
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\left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, R_3+\frac{1}{C_2s}, \infty, \infty, \frac{1}{C_1s}\right)
 10.58 INVALID-ORDER-580 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
 10.58INVALID-ORDER-581 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.582NVALID-ORDER-582 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.58 INVALID-ORDER-583 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
 10.58 INVALID-ORDER-584 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.58 INVALID-ORDER-585 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.586NVALID-ORDER-586 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.58TNVALID-ORDER-587 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
10.58\( \text{NVALID-ORDER-588} \( Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \infty, \infty, R_L \right) \quad \quad \tau \quad \quad \tau \quad \qq \quad \quad \quad \quad \quad \quad \qq \quad \quad \quad \quad \quad \quad \quad \qua
 10.58 INVALID-ORDER-589 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_4 s}\right) \dots
10.59@NVALID-ORDER-590 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.59INVALID-ORDER-591 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
 10.592NVALID-ORDER-592 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.59 INVALID-ORDER-593 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right).
10.594NVALID-ORDER-594 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_{2s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_{Ls}}\right)
10.59 INVALID-ORDER-595 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_1 L_1 R_1 s^2 + L_1 s + R_L s} \right)
10.596NVALID-ORDER-596 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \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-597} \ Z(s) = \left(\infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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 s^2 + C_L R_L s + C_L 
10.59\( \text{NVALID-ORDER-598} \) Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \infty, R_L \right) ...
10.599NVALID-ORDER-599 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
10.600NVALID-ORDER-600 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.60INVALID-ORDER-601 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right).
10.602NVALID-ORDER-602 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right) .....
10.60 INVALID-ORDER-603 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right)
 10.60 \text{ INVALID-ORDER-} 604 \ Z(s) = \left(\infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                               \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{L_3s}{C_2L_2s^2+1}, \infty, \infty, \frac{L_LR_Ls}{C_1L_1R_1s^2+L_1s+R_1}\right)
10.60 INVALID-ORDER-606 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
10.60 \text{ INVALID-ORDER-} 607 \ Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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 NVALID-ORDER-608 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
 10.609NVALID-ORDER-609 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}\right).
10.61 INVALID-ORDER-610 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_L}{C_1 R_1 s + 1}\right)
10.61INVALID-ORDER-611 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.612NVALID-ORDER-612 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.613NVALID-ORDER-613 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) .....
10.614NVALID-ORDER-614 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_{2s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_{Ls}}\right)
10.61 INVALID-ORDER-615 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                    10.616NVALID-ORDER-616 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_3 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_2 L_3 s^2 + 1}\right)
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10.61 \text{TNVALID-ORDER-} 617 \ Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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) \right)
                                                                  \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1},\right.
                                                                                                           , \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L
                                                                                                            \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \frac{1}{C_Ls}
                                                                   \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \right)
                                                                                                             \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}
10.62 ONVALID-ORDER-620 Z(s) =
10.62INVALID-ORDER-621 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}\right)
                                                                                                             \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}
                                                                                                            \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s
                                                                    \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \right.
                                                                                                           \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}
10.62BNVALID-ORDER-623 Z(s) =
                                                                                                             \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}
10.624NVALID-ORDER-624 Z(s) =
                                                                           \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}
10.625NVALID-ORDER-625 Z(s) = (\infty,
                                                                   \left(\infty,\ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \infty,\ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
10.62 6NVALID-ORDER-626 Z(s) =
                                                                    (\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1})
10.62TNVALID-ORDER-627 Z(s) =
                                                                   \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ R_L\right)
10.628NVALID-ORDER-628 Z(s) =
                                                                   \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls}\right)
10.629NVALID-ORDER-629 Z(s) =
                                                                                                                                              \infty, \infty, \frac{R_L}{C_L R_L s + 1}
                                                                           \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, R_L +
10.63INVALID-ORDER-631 Z(s) =
                                                                           \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1},\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ \infty,\ \infty,\ L_Ls+
10.632NVALID-ORDER-632 Z(s) =
                                                                           \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}
                                                                                                            \frac{C_3L_3R_3s^2+L_3s+R_3}{C_1r_{s^2+1}}, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}
                                                                    \infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_1}
                                                                                                             \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}
                                                                                                             \frac{C_3L_3R_3s^2+L_3s+R_3}{C_LL_Ls^2+C_LR_Ls+1}, \infty, \infty, \frac{C_LL_Ls^2+C_LR_Ls+1}{C_LL_Ls^2+C_LR_Ls+1}
                                                                    \infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1},
10.63TNVALID-ORDER-637 Z(s) =
                                                                                                              \frac{1}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, R_L
10.638NVALID-ORDER-638 Z(s) =
10.63 NVALID-ORDER-639 Z(s) =
                                                                                                              \frac{R_3(C_3L_3s+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}
                                                                                                             \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}
10.640NVALID-ORDER-640 Z(s) =

\propto, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}

                                                                                                                R_3(C_3L_3s^2+1)
10.64INVALID-ORDER-641 Z(s) =
                                                                                                              \frac{R_3(S_3S_3S_1)}{C_3L_3S^2+C_3R_3S+1}, \infty, \infty, R_L + \frac{1}{C_LS}
                                                                                                                R_3(C_3L_3s^2+1)
                                                                                                              \frac{1}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, L_Ls
10.642NVALID-ORDER-642 Z(s) =
                                                                            \tfrac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}
10.64BNVALID-ORDER-643 Z(s) =
                                                                                                              \frac{C_3L_3s^2+C_3R_3s+1}{C_2L_2s^2+1}, \infty, \infty, \frac{L_2L_3s^2}{C_2L_2s^2+1}
                                                                    \infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}
                                                                                                                R_3(C_3L_3s^2+1)
                                                                                                              \frac{R_3(C_3L_3s+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}
10.64INVALID-ORDER-644 Z(s) =
                                                                    \infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1},
                                                                                                              \frac{K_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}
10.645NVALID-ORDER-645 Z(s) =
                                                                                                             \frac{\frac{-c_0(\sim s L_3 s^{-1})}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \, \, \infty, \, \, \infty, \, \, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}
                                                                    \infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}
10.64 6NVALID-ORDER-646 Z(s) =
                                                                                                                R_3(C_3L_3s^2+1)
10.64TNVALID-ORDER-647 Z(s) =
                                                                                                            C_3L_3s^2+C_3R_3s+1, \infty, \infty, C_LL_Ls^2+C_LR_Ls+1
                                                                    \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \frac{1}{C_Ls}\right)
10.648NVALID-ORDER-648 Z(s) =
                                                                    (\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \frac{R_L}{C_LR_Ls+1})
10.649NVALID-ORDER-649 Z(s) =
                                                                     (\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, R_L + \frac{1}{C_Ls}) 
10.65 ONVALID-ORDER-650 Z(s) =
10.65INVALID-ORDER-651 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
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10.65 <b>2</b> NVALID-ORDER-652 $Z(s) = \left(\infty\right)$	$ (0.5, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}) \dots \dots$	110
10.65 <b>B</b> NVALID-ORDER-653 $Z(s) = (\infty)$	$ (0.5, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}) $	110
10.654NVALID-ORDER-654 $Z(s) = (\infty)$	$ \sum_{R_2(C_2L_2s^2+1) \atop C_2L_2s^2+C_2R_2s+1} R_3, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} $	110
10.65 INVALID-ORDER-655 $Z(s) = \left( \infty \right)$	$ (0.5, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}) $	111
10.65 <b>6</b> NVALID-ORDER-656 $Z(s) = \left(\infty\right)$	$ (0.5, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}) $	111
10.65 <b>T</b> NVALID-ORDER-657 $Z(s) = \left(\infty\right)$	$0, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, R_L $	111
10.65\( \mathbb{E}\) NVALID-ORDER-658 $Z(s) = \left( \infty \right)$	), $\frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}$ , $\frac{1}{C_3s}$ , $\infty$ , $\infty$ , $\frac{1}{C_Ls}$ )	ί11
10.65 <b>9</b> NVALID-ORDER-659 $Z(s) = \left(\infty\right)$	$\bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} $	ί11
10.66 <b>0</b> NVALID-ORDER-660 $Z(s) = \left(\infty\right)$	$ \bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} ) \qquad \dots $	ί11
10.66 <b>I</b> NVALID-ORDER-661 $Z(s) = \left(\infty\right)$	$ \bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} ) \qquad . \qquad$	l11
10.66 <b>2</b> NVALID-ORDER-662 $Z(s) = \left(\infty\right)$	$\bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} $	l11
10.66 <b>B</b> NVALID-ORDER-663 $Z(s) = \left(\infty\right)$	$ \bigcirc , \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	111
10.66\(\mathbf{u}\)NVALID-ORDER-664 $Z(s) = \left(\infty\right)$	$\bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} $	l12
10.66 <b>5</b> NVALID-ORDER-665 $Z(s) = \left(\infty\right)$	$\bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1} \right) \qquad \qquad$	112
10.66 <b>6</b> NVALID-ORDER-666 $Z(s) = \left(\infty\right)$	$ \sum_{r} \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1} $	112
<u>\</u>	$C_2L_2s^*+C_2L_2s+1$ $C_3R_3s+1$ $C_3R_3s+1$ $C_3R_3s+1$	112
<u>/</u>	$C_2L_2s^*+C_2h_2s^*+1$ $C_3h_3s^*+1$ $C_2s$	112
<b>\</b>	$C_2L_2s^2+C_2h_2s+1$ $C_3h_3s+1$ $C_4h_4s+1$	112
_	$ \bigcirc, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) \ \ldots \ $	112
	$ \sum_{C_2 L_2 s^2 + C_2 R_2 s + 1}^{R_2 \left( C_2 L_2 s^2 + 1 \right)} \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}                                   $	112
_	$\bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} $	112
\	$ \bigcirc, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) $	113
,	$\bigcirc, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} \bigcirc \dots $	113
· ·	$ \sum_{C_2 L_2 s^2 + C_2 R_2 s + 1}^{R_2 \left( C_2 L_2 s^2 + 1 \right)} \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}                                  $	113
>	$ \sum_{R_2(C_2L_2s^2+1)} \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \sum_{R_3} \frac{R_3}{C_3R_3s+1}, \ \infty, \ \infty, \ \sum_{R_2(C_LL_S^2+1)} \frac{R_2(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1} $	
<u> </u>	$ (2), \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L) $	
	$ \sum_{C_2 L_2 s^2 + C_2 R_2 s + 1}^{R_2 \left( C_2 L_2 s^2 + 1 \right)} R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s}                                   $	
	$ \sum_{C_2 L_2 s^2 + C_2 R_2 s + 1}^{R_2 \left( C_2 L_2 s^2 + 1 \right)} R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}                                 $	113
,	$ >, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} ) $	113
	$ \sum_{C_2 L_2 s^2 + C_2 R_2 s + 1}^{R_2 \left( C_2 L_2 s^2 + 1 \right)} R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}                                   $	113
10.682NVALID-ORDER-682 $Z(s) = \left(\infty\right)$	$ \sum_{C_2, L_2, S^2 + C_2, R_2, S + 1} R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}  $	114

10.68 <b>B</b> NVALID-ORDER-683 $Z(s) = 1$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3+\frac{1}{C_3s}, \ \infty, \ \infty, \ L_Ls+R_L+\frac{1}{C_Ls}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	14
10.68#NVALID-ORDER-684 $Z(s) = 1$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3+\frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ \dots \ $	14
10.68 Б NVALID-ORDER-685 $Z(s) = 1$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3+\frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right) \ \dots \ $	.1
10.68©NVALID-ORDER-686 $Z(s) = 1$	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right) \dots \dots$	.1
10.68 INVALID-ORDER-687 $Z(s) = 1$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+\frac{1}{C_3s}, \ \infty, \ \infty, \ R_L\right) \qquad \ldots \qquad \qquad 1$	.1
10.68\bigselength{R}\bigselength{NVALID-ORDER-688}\ Z(s) = \bigselength{I}	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+\frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right) \ \dots $	.14
10.68 <b>9</b> NVALID-ORDER-689 $Z(s) = 1$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+\frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right) $	.14
		.14
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+\frac{1}{C_3s}, \ \infty, \ \infty, \ L_Ls+\frac{1}{C_Ls}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	.1
	( * C <sub>2</sub> L <sub>2</sub> s + C <sub>2</sub> L <sub>2</sub> s+1 * * C <sub>3</sub> s * * C <sub>L</sub> L <sub>L</sub> s +1 )	.1
10.69 <b>&amp;</b> NVALID-ORDER-693 $Z(s) = 1$		.1
10.69#NVALID-ORDER-694 $Z(s)=\langle$		.1
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right) \dots \dots$	.1
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s+\frac{1}{C_3s}, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right) \dots \dots$	.1
	$\left\langle \begin{array}{cccccccccccccccccccccccccccccccccccc$	.1
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots$	.1
10.69 <b>9</b> NVALID-ORDER-699 $Z(s) = 1$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	.1
10.70 <b>0</b> NVALID-ORDER-700 $Z(s) = 1$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	.10
10.70INVALID-ORDER-701 $Z(s) = 1$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	.10
10.70 <b>2</b> NVALID-ORDER-702 $Z(s) = 1$	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right) \qquad \qquad$	.10
10.70 NVALID-ORDER-703 $Z(s) = 1$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	.10
10.70\PNVALID-ORDER-704 $Z(s) = 1$		.10
10.70 NVALID-ORDER-705 $Z(s) = 1$	$\left( \begin{array}{cccccccccccccccccccccccccccccccccccc$	.10
		.10
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+R_3+\frac{1}{C_3s}, \ \infty, \ \infty, \ R_L\right)$	
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+R_3+\frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s+R_3+\frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right) \qquad $	
	$\left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, L_3s+R_3+\frac{1}{C_3s}, \infty, \infty, R_L+\frac{1}{C_Ls}\right) \dots \dots$	
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s+R_3+\frac{1}{C_3s}, \infty, \infty, L_Ls+\frac{1}{C_Ls}\right)  .  .  .  .  .  .  .  .  .  $	
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s+R_3+\frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots$	
10.71 <b>B</b> NVALID-ORDER-713 $Z(s) = 1$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s+R_3+\frac{1}{C_3s}, \ \infty, \ \infty, \ L_Ls+R_L+\frac{1}{C_Ls}\right) \ \dots \ $	.1′

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R_2(C_2L_2s^2+1)
10.71 INVALID-ORDER-714 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_Ls} \right)
                                                                            R_2(C_2L_2s^2+1)
                                                                  \infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s+R_3+\frac{1}{C_3s}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_Ls}{C_LL_Ls^2+1}
10.715NVALID-ORDER-715 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                                                                                                        R_L(C_L L_L s^2 + 1)
10.716NVALID-ORDER-716 Z(s) =
                                                                  \infty, \frac{R_2(C_2L_2S^2+1)}{C_2L_2S^2+C_2R_2S+1}, L_3S+R_3+\frac{1}{C_3s}, \infty, \infty, \frac{R_2(C_2L_2S^2+1)}{C_LL_LS^2+C_LR_LS+1}
                                                                            R_2(C_2L_2s^2+1)
                                                                 \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, R_L\right)
10.71TNVALID-ORDER-717 Z(s) = 1
                                                                            R_2(C_2L_2s^2+1)
10.71NVALID-ORDER-718 Z(s) =
                                                                  \infty, \frac{R_2(C_2L_2s+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \frac{1}{C_Ls}
                                                                            R_2(C_2L_2s^2+1)
                                                                  \infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}
10.719NVALID-ORDER-719 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                  \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}
10.72 ONVALID-ORDER-720 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
10.72INVALID-ORDER-721 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                            R_2(C_2L_2s^2+1)
                                                                  \infty, \ \frac{L_2 C_2 L_2 s^{s+1}}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}
10.722NVALID-ORDER-722 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
10.72 \text{ INVALID-ORDER-723 } Z(s) = \left( \infty, \ \frac{R_2\left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right)
                                                                            R_2(C_2L_2s^2+1)
                                                                  \infty, \ \frac{R_2(C_2L_2s+1)}{C_2L_2s^2 + C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}
10.724NVALID-ORDER-724 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                  \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
10.725NVALID-ORDER-725 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                                                                                                         R_L(C_LL_Ls^2+1)
                                                                  \left\{\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1} \right\}
10.72 6NVALID-ORDER-726 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                                                       \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, R_L
10.72TNVALID-ORDER-727 Z(s) =
                                                                  \infty, \ \frac{1}{C_2L_2s^2+C_2R_2s+1},
                                                                            R_2(C_2L_2s^2+1)
                                                                                                       \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls}
10.72NVALID-ORDER-728 Z(s) = 1
                                                                  \infty, \ \frac{C_2L_2s^2+C_2R_2s+1}{C_2L_2s^2+C_2R_2s+1},
                                                                  \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)
                                                                            R_2(C_2L_2s^2+1)
10.729NVALID-ORDER-729 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                                                       \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, R_L + \frac{1}{C_Ls}
10.73 ONVALID-ORDER-730 Z(s) =
                                                                 \infty, \ \frac{C_2L_2s^2+C_2R_2s+1}{C_2L_2s^2+C_2R_2s+1},
                                                                 \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ L_Ls+\frac{1}{C_Ls}\right)
                                                                            R_2(C_2L_2s^2+1)
10.73INVALID-ORDER-731 Z(s) =
                                                                            R_2(C_2L_2s^2+1)
                                                                                                       \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}
10.732NVALID-ORDER-732 Z(s) =
                                                                 \infty, \ \frac{1}{C_2L_2s^2+C_2R_2s+1},
                                                                            R_2(C_2L_2s^2+1)
                                                                                                        \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}
10.73 NVALID-ORDER-733 Z(s) =
                                                                  \infty, \ \frac{\overline{C_2L_2s^2+C_2R_2s+1}}{C_2L_2s^2+C_2R_2s+1},
                                                                            R_2(C_2L_2s^2+1)
                                                                                                        \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}
10.734NVALID-ORDER-734 Z(s) =
                                                                  \infty, \ \overline{C_2L_2s^2+C_2R_2s+1},
                                                                            R_2\left(C_2L_2s^2+1\right)
                                                                                                       \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}
10.735NVALID-ORDER-735 Z(s) =
                                                                  \infty, \ \frac{\overline{C_2L_2s^2+C_2R_2s+1}}{C_2L_2s^2+C_2R_2s+1},
                                                                                                                                                         R_L(C_LL_Ls^2+1)
                                                                            R_2(C_2L_2s^2+1)
                                                                                                       \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}
10.73 6NVALID-ORDER-736 Z(s) =
                                                                  \infty, \frac{C_2L_2s^2+C_2R_2s+1}{C_2L_2s^2+C_2R_2s+1},
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.73 NVALID-ORDER-737 Z(s) = 1
                                                                 \left(\infty, \frac{\frac{1}{C_2L_2s^2+L_2s+1}}{C_2L_2s^2+C_2R_2s+1}, \frac{\frac{1}{C_3L_3s^2+C_3R_3s+1}}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, R_L\right)
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.73NVALID-ORDER-738 Z(s) =
                                                                  \infty, \frac{C_2C_2S_2S_3S_3S_1}{C_2L_2S^2+C_2R_2S+1}, \frac{C_3C_3S_3S_2S_1}{C_3L_3S^2+C_3R_3S+1}, \infty, \infty, \frac{1}{C_LS}
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.739NVALID-ORDER-739 Z(s) =
                                                                 \left(\infty, \frac{R_2(C_2L_2s+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3(C_3L_3s+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.740NVALID-ORDER-740 Z(s) =
                                                                  \infty, \frac{R_2(C_2L_2s+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3(C_3L_3s+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, R_L + \frac{1}{C_Ls}
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.74INVALID-ORDER-741 Z(s) =
                                                                 \infty, \frac{1}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, L_Ls+\frac{1}{C_Ls}
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.742NVALID-ORDER-742 Z(s) = 1
                                                                  \infty, \frac{12(323+7)}{C_2L_2s^2+C_2R_2s+1}, \frac{13(333+7)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{LLs}{C_LL_Ls^2+1}
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.74 NVALID-ORDER-743 Z(s) =
                                                                  \infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}
                                                                            R_2(C_2L_2s^2+1)
                                                                                                          R_3(C_3L_3s^2+1)
10.74 \text{INVALID-ORDER-} 744 \ Z(s) = \left( \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L} \right)
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$10.74 \text{INVALID-ORDER-} 745 \ Z(s) = \left( \infty, \ \frac{R_2\left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \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{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1} \right) \ \dots $	12
$10.74 \text{ @NVALID-ORDER-746 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2 + C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2 + C_3R_3s+1}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2 + C_LR_Ls+1} \right)^{\prime}. $	12

1 Examined H(z) for CG Test simple Z2 Z3 ZL:  $\frac{Z_2Z_3Z_Lg_m+Z_3Z_L}{Z_2Z_3g_m+Z_2Z_Lg_m+Z_3+Z_L}$ 

$$H(z) = \frac{Z_2 Z_3 Z_L g_m + Z_3 Z_L}{Z_2 Z_3 g_m + Z_2 Z_L g_m + Z_3 + Z_L}$$

- 2 HP
- 3 BP
- **3.1** BP-1  $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

## Parameters:

Q: 
$$C_L R_3 \sqrt{\frac{1}{C_L L_L}}$$
  
wo:  $\sqrt{\frac{1}{C_L L_L}}$   
bandwidth:  $\frac{1}{C_L R_3}$   
K-LP: 0  
K-HP: 0  
K-BP:  $R_3$   
Qz: 0  
Wz: None

**3.2** BP-2  $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

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

## Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{C_L R_3 R_L \sqrt{\frac{1}{C_L L_L}}}{R_3 + R_L} \\ &\text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ &\text{bandwidth:} \ \frac{R_3 + R_L}{C_L R_3 R_L} \\ &\text{K-LP:} \ 0 \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{R_3 R_L}{R_3 + R_L} \\ &\text{Qz:} \ 0 \\ &\text{Wz:} \ \text{None} \end{aligned}$$

**3.3** BP-3  $Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

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

$$\begin{array}{l} \text{Q: } C_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{wo: } \sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}\\ \text{bandwidth: } \frac{\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}{C_{3}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}+C_{L}R_{L}\sqrt{\frac{1}{C_{3}L_{L}+C_{L}L_{L}}}}\\ \text{K-LP: 0}\\ \text{K-HP: 0}\\ \text{K-BP: } R_{L} \end{array}$$

**3.4 BP-4** 
$$Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

Q: 
$$C_3R_3\sqrt{\frac{1}{C_3L_L+C_LL_L}} + C_LR_3\sqrt{\frac{1}{C_3L_L+C_LL_L}}$$
  
wo:  $\sqrt{\frac{1}{C_3L_L+C_LL_L}}$   
bandwidth:  $\frac{\sqrt{\frac{1}{C_3L_L+C_LL_L}}}{C_3R_3\sqrt{\frac{1}{C_3L_L+C_LL_L}} + C_LR_3\sqrt{\frac{1}{C_3L_L+C_LL_L}}}$   
K-LP: 0  
K-HP: 0  
K-BP:  $R_3$   
Qz: 0  
Wz: None

**3.5** BP-5 
$$Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

### Parameters:

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

**3.6** BP-6 
$$Z(s) = \left(\infty, R_2, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \infty, R_L\right)$$

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

Q: 
$$C_3R_L\sqrt{\frac{1}{C_3L_3}}$$
  
wo:  $\sqrt{\frac{1}{C_3L_3}}$   
bandwidth:  $\frac{1}{C_3R_L}$   
K-LP: 0  
K-HP: 0  
K-BP:  $R_L$   
Qz: 0  
Wz: None

3.7 BP-7 
$$Z(s) = \left(\infty, R_2, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

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

Q: 
$$C_3R_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}$$
 wo:  $\sqrt{\frac{1}{C_3L_3+C_LL_3}}$  bandwidth:  $\frac{\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{C_3R_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}}$  K-LP: 0 K-HP: 0 K-BP:  $R_L$  Qz: 0 Wz: None

3.8 BP-8 
$$Z(s) = \left(\infty, R_2, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_RL_s^2+L_Ls+R_L}\right)$$

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

Parameters:

$$\begin{array}{c} \text{Q: } C_{3}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}}L_{3}L_{L}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} \\ \text{wo: } \sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} \\ \text{bandwidth: } \frac{\sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}}{\frac{C_{3}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}} \\ \text{K-LP: 0} \\ \text{K-HP: 0} \\ \text{K-BP: } \frac{R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{L}+C_{L}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}}{\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}} \\ \text{Qz: 0} \\ \text{Wz: None} \end{array}$$

**3.9** BP-9 
$$Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L\right)$$

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

Parameters:

Q: 
$$\frac{C_3R_3R_L\sqrt{\frac{1}{C_3L_3}}}{R_3+R_L}$$
 wo:  $\sqrt{\frac{1}{C_3L_3}}$  bandwidth:  $\frac{R_3+R_L}{C_3R_3R_L}$  K-LP: 0 K-HP: 0 K-BP:  $\frac{R_3R_L}{R_3+R_L}$  Qz: 0 Wz: None

**3.10** BP-10 
$$Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{s \left( L_3 R_2 R_3 g_m + L_3 R_3 \right)}{R_2 R_3 g_m + R_3 + s^2 \left( C_3 L_3 R_2 R_3 g_m + C_4 L_3 R_3 + C_4 L_3 R_3 g_m + C_4 L_3 R_3 \right) + s \left( L_3 R_2 g_m + L_3 \right)}$$

Q: 
$$C_3R_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}$$
 wo:  $\sqrt{\frac{1}{C_3L_3+C_LL_3}}$  bandwidth:  $\frac{\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{C_3R_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3\sqrt{\frac{1}{C_3L_3+C_LL_3}}}$  K-LP: 0 K-HP: 0 K-BP:  $R_3$  Qz: 0 Wz: None

**3.11** BP-11  $Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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

### Parameters:

Q: 
$$\frac{C_3R_3R_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3R_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{R_3+R_L}$$
 wo: 
$$\sqrt{\frac{1}{C_3L_3+C_LL_3}}$$
 bandwidth: 
$$\frac{(R_3+R_L)\sqrt{\frac{1}{C_3L_3+C_LL_3}}}{C_3R_3R_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}+C_LR_3R_L\sqrt{\frac{1}{C_3L_3+C_LL_3}}}$$
 K-LP: 0 K-HP: 0 K-BP: 
$$\frac{R_3R_L}{R_3+R_L}$$
 Qz: 0 Wz: None

**3.12** BP-12 
$$Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

### Parameters:

Q: 
$$C_3R_3\sqrt{\frac{L_3}{C_3L_3L_L+C_L}L_3L_L} + \frac{L_L}{C_3L_3L_L+C_LL_3L_L} + C_LR_3\sqrt{\frac{L_3}{C_3L_3L_L+C_LL_3L_L}} + \frac{L_L}{C_3L_3L_L+C_LL_3L_L}$$
 wo:  $\sqrt{\frac{L_3+L_L}{C_3L_3L_L+C_LL_3L_L}}$  bandwidth:  $\frac{\sqrt{\frac{L_3+L_L}{C_3L_3L_L+C_LL_3L_L}}}{C_3R_3\sqrt{\frac{L_3}{C_3L_3L_L+C_LL_3L_L}} + \frac{L_L}{C_3L_3L_L+C_LL_3L_L}}$  K-LP: 0 K-HP: 0 K-BP:  $\frac{R_3\sqrt{\frac{L_3}{C_3L_3L_L+C_LL_3L_L}} + \frac{L_L}{C_3L_3L_L+C_LL_3L_L}}{\sqrt{\frac{L_3}{C_3L_3L_L+C_LL_3L_L}} + \frac{L_L}{C_3L_3L_L+C_LL_3L_L}}$  Qz: 0 Wz: None

**3.13** BP-13 
$$Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

$$Q\colon \frac{C_{3}R_{3}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}{R_{3}+R_{L}} + C_{L}R_{3}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}$$
wo: 
$$\sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}}$$
bandwidth: 
$$\frac{\sqrt{\frac{L_{3}+L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}(R_{3}+R_{L})}{C_{3}R_{3}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + C_{L}R_{3}R_{L}\sqrt{\frac{L_{3}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}} + \frac{L_{L}}{C_{3}L_{3}L_{L}+C_{L}L_{3}L_{L}}}$$

4 LP

5 BS

**5.1** BS-1 
$$Z(s) = \left(\infty, R_2, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^2 \left( C_L L_L R_2 R_3 g_m + C_L L_L R_3 \right)}{R_2 g_m + s^2 \left( C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_L R_2 R_3 g_m + C_L R_3 \right) + 1}$$

Parameters:

Q: 
$$\frac{L_L\sqrt{\frac{1}{C_LL_L}}}{R_3}$$
 wo: 
$$\sqrt{\frac{1}{C_LL_L}}$$
 bandwidth: 
$$\frac{R_3}{L_L}$$
 K-LP:  $R_3$  K-HP:  $R_3$  K-BP: 0 Qz: None Wz: 
$$\sqrt{\frac{1}{C_LL_L}}$$

**5.2 BS-2** 
$$Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{L_L R_3 \sqrt{\frac{1}{C_L L_L}} + L_L R_L \sqrt{\frac{1}{C_L L_L}}}{R_3 R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ & \text{bandwidth:} \ \frac{R_3 R_L \sqrt{\frac{1}{C_L L_L}}}{L_L R_3 \sqrt{\frac{1}{C_L L_L}} + L_L R_L \sqrt{\frac{1}{C_L L_L}}} \\ & \text{K-LP:} \ \frac{R_3 R_L}{R_3 + R_L} \\ & \text{K-HP:} \ \frac{R_3 R_L}{R_3 + R_L} \\ & \text{K-BP:} \ 0 \\ & \text{Qz:} \ \text{None} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

**5.3** BS-3 
$$Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_2 R_L g_m + R_L + s^2 \left( C_3 L_3 R_2 R_L g_m + C_3 L_3 R_L \right)}{R_2 g_m + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 \right) + s \left( C_3 R_2 R_L g_m + C_3 R_L \right) + 1}$$

Q: 
$$\frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_L}$$
 wo:  $\sqrt{\frac{1}{C_3L_3}}$ 

bandwidth: 
$$\frac{R_L}{L_3}$$
 K-LP:  $R_L$  K-HP:  $R_L$  K-BP: 0 Qz: None Wz:  $\sqrt{\frac{1}{C_3L_3}}$ 

**5.4** BS-4 
$$Z(s) = \left(\infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_3 L_3 R_2 R_3 R_L g_m + C_3 L_3 R_3 R_L\right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_2 R_1 g_m + C_3 L_3 R_3 + C_3 L_3 R_L\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L\right)}$$

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

## 6 GE

**6.1** GE-1 
$$Z(s) = \left(\infty, R_2, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^2 \left( C_L L_L R_2 R_3 g_m + C_L L_L R_3 \right) + s \left( C_L R_2 R_3 R_L g_m + C_L R_3 R_L \right)}{R_2 g_m + s^2 \left( C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_L R_2 R_3 g_m + C_L R_2 R_L g_m + C_L R_3 + C_L R_L \right) + 1}$$

## Parameters:

$$\begin{aligned} &\text{Q: } \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_3 + R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_L L_L}} \\ &\text{bandwidth: } \frac{R_3 + R_L}{L_L} \\ &\text{K-LP: } R_3 \\ &\text{K-HP: } R_3 \\ &\text{K-BP: } \frac{R_3 R_L}{R_3 + R_L} \\ &\text{Qz: } \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L} \\ &\text{Wz: } \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

**6.2** GE-2 
$$Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^2 \left( C_L L_L R_2 R_3 R_L g_m + C_L L_L R_3 R_L \right) + s \left( L_L R_2 R_3 g_m + L_L R_3 \right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^2 \left( C_L L_L R_2 R_3 g_m + C_L L_L R_2 R_L g_m + C_L L_L R_3 + C_L L_L R_1 \right) + s \left( L_L R_2 g_m + L_L \right)}$$

Q: 
$$C_L R_3 \sqrt{\frac{1}{C_L L_L}} + C_L R_L \sqrt{\frac{1}{C_L L_L}}$$
  
wo:  $\sqrt{\frac{1}{C_L L_L}}$   
bandwidth:  $\frac{\sqrt{\frac{1}{C_L L_L}}}{C_L R_3 \sqrt{\frac{1}{C_L L_L}} + C_L R_L \sqrt{\frac{1}{C_L L_L}}}$ 

**6.3** GE-3 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_2 R_L g_m + R_L + s^2 \left( C_3 L_3 R_2 R_L g_m + C_3 L_3 R_L \right) + s \left( C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L \right)}{R_2 g_m + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 \right) + s \left( C_3 R_2 R_3 g_m + C_3 R_2 R_L g_m + C_3 R_3 + C_3 R_L \right) + 1}$$

$$\begin{array}{l} \text{Q:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_3+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{L_3} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ R_L \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_3} \\ \text{Wz:} \ \sqrt{\frac{1}{C_3L_3}} \end{array}$$

**6.4** GE-4 
$$Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_2R_3R_Lg_m + R_3R_L + s^2\left(C_3L_3R_2R_3R_Lg_m + C_3L_3R_3R_L\right) + s\left(L_3R_2R_Lg_m + L_3R_L\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^2\left(C_3L_3R_2R_3g_m + C_3L_3R_2R_Lg_m + C_3L_3R_3 + C_3L_3R_3 + C_3L_3R_L\right) + s\left(L_3R_2g_m + L_3R_2g_m + L_3R_2g_m + L_3R_2g_m + R_3R_2g_m + R_3R_2g_m$$

## Parameters:

Q: 
$$C_3R_3\sqrt{\frac{1}{C_3L_3}} + C_3R_L\sqrt{\frac{1}{C_3L_3}}$$
  
wo:  $\sqrt{\frac{1}{C_3L_3}}$   
bandwidth:  $\frac{\sqrt{\frac{1}{C_3L_3}}}{C_3R_3\sqrt{\frac{1}{C_3L_3}} + C_3R_L\sqrt{\frac{1}{C_3L_3}}}$   
K-LP:  $\frac{R_3R_L}{R_3+R_L}$   
K-HP:  $\frac{R_3R_L}{R_3+R_L}$   
K-BP:  $R_L$   
Qz:  $C_3R_3\sqrt{\frac{1}{C_3L_3}}$   
Wz:  $\sqrt{\frac{1}{C_3L_3}}$ 

**6.5** GE-5 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L\right)$$

# $H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + C_2R_3R_Ls + R_3R_Lg_m}{R_3g_m + R_Lg_m + s^2\left(C_2L_2R_3g_m + C_2L_2R_Lg_m\right) + s\left(C_2R_3 + C_2R_L\right)}$

Q: 
$$L_2 g_m \sqrt{\frac{1}{C_2 L_2}}$$
  
wo:  $\sqrt{\frac{1}{C_2 L_2}}$   
bandwidth:  $\frac{1}{L_2 g_m}$   
K-LP:  $\frac{R_3 R_L}{R_3 + R_L}$   
K-HP:  $\frac{R_3 R_L}{R_3 + R_L}$   
K-BP:  $\frac{R_3 R_L}{R_3 + R_L}$   
Qz:  $L_2 g_m \sqrt{\frac{1}{C_2 L_2}}$ 

Wz: 
$$\sqrt{\frac{1}{C_2L_2}}$$

**6.6** GE-6 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L\right)}{R_3g_m + R_Lg_m + s^2\left(C_2L_2R_3g_m + C_2L_2R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2R_2R_Lg_m + C_2R_3 + C_2R_L\right)}$$

$$Q: \frac{L_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}}}{R_{2}g_{m}+1}$$
wo:  $\sqrt{\frac{1}{C_{2}L_{2}}}$ 
bandwidth:  $\frac{R_{2}g_{m}+1}{L_{2}g_{m}}$ 
K-LP:  $\frac{R_{3}R_{L}}{R_{3}+R_{L}}$ 
K-HP:  $\frac{R_{3}R_{L}}{R_{3}+R_{L}}$ 
K-BP:  $\frac{R_{3}R_{L}}{R_{3}+R_{L}}$ 
Qz:  $\frac{L_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}}}{R_{2}g_{m}+1}$ 
Wz:  $\sqrt{\frac{1}{C_{2}L_{2}}}$ 

**6.7** GE-7 
$$Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_2 R_3 R_L g_m s + R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_2 L_2 R_2 R_3 R_L g_m + C_2 L_2 R_3 R_L\right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^2 \left(C_2 L_2 R_2 R_3 g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_3 + C_2 L_2 R_L\right) + s \left(L_2 R_3 g_m + L_2 R_L g_m\right)}$$

## Parameters:

$$Q: \frac{C_{2}R_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}} + C_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}{g_{m}}$$
wo: 
$$\sqrt{\frac{1}{C_{2}L_{2}}}$$
bandwidth: 
$$\frac{g_{m}\sqrt{\frac{1}{C_{2}L_{2}}}}{C_{2}R_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}} + C_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}$$
K-LP: 
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
K-HP: 
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
K-BP: 
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
Qz: 
$$\frac{C_{2}R_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}} + C_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}{g_{m}}$$
Wz: 
$$\sqrt{\frac{1}{C_{2}L_{2}}}$$

**6.8 GE-8** 
$$Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, R_L\right)$$

$$H(s) = \frac{{{C_2}{R_2}{R_3}{R_L}s + {R_2}{R_3}{R_L}{g_m} + {R_3}{R_L} + {s^2}\left( {{C_2}{L_2}{R_2}{R_3}{R_L}{g_m} + {C_2}{L_2}{R_3}{R_L}} \right)}}{{{R_2}{R_3}{g_m} + {R_2}{R_L}{g_m} + {R_3} + {R_L} + {s^2}\left( {{C_2}{L_2}{R_2}{R_3}{g_m} + {C_2}{L_2}{R_2}{R_L}{g_m} + {C_2}{L_2}{R_3} + {C_2}{L_2}{R_L}} \right) + s\left( {{C_2}{R_2}{R_3} + {C_2}{R_2}{R_L}} \right)}$$

Q: 
$$\frac{L_{2}R_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}}+L_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}{R_{2}}$$
wo: 
$$\sqrt{\frac{1}{C_{2}L_{2}}}$$
bandwidth: 
$$\frac{R_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}{L_{2}R_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}}+L_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}$$
K-LP: 
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
K-HP: 
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
K-BP: 
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
Qz: 
$$\frac{L_{2}R_{2}g_{m}\sqrt{\frac{1}{C_{2}L_{2}}}+L_{2}\sqrt{\frac{1}{C_{2}L_{2}}}}{R_{2}}$$
Wz: 
$$\sqrt{\frac{1}{C_{L}}}$$

## 7 AP

## 8 INVALID-NUMER

8.1 INVALID-NUMER-1  $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L\right)}{R_2 g_m + s^2 \left(C_3 C_L R_2 R_3 R_L g_m + C_3 C_L R_3 R_L\right) + s \left(C_3 R_2 R_3 g_m + C_3 R_3 + C_L R_2 R_3 g_m + C_L R_2 R_L g_m + C_L R_3 + C_L R_1\right) + 1}$$

## Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_LR_3R_L\sqrt{\frac{1}{C_3C_LR_3R_L}}}{C_3R_3+C_LR_3+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3C_LR_3R_L}} \\ \text{bandwidth:} \ \frac{C_3R_3+C_LR_3+C_LR_L}{C_3C_LR_3R_L} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_LR_3R_L}{C_3R_3+C_LR_3+C_LR_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.2 INVALID-NUMER-2  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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

## Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_LR_3R_L\sqrt{\frac{1}{C_3C_LR_3R_L}}}{C_3R_3+C_3R_L+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3C_LR_3R_L}} \\ \text{bandwidth:} \ \frac{C_3R_3+C_3R_L+C_LR_L}{C_3C_LR_3R_L} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_3R_3R_L}{C_3R_3+C_3R_L+C_LR_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.3 INVALID-NUMER-3  $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 R_3 s + R_3 g_m}{C_2 C_L R_3 s^2 + g_m + s \left(C_2 + C_L R_3 g_m\right)}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_2C_LR_3\sqrt{\frac{g_m}{C_2C_LR_3}}}{C_2+C_LR_3g_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_2C_LR_3}} \\ \text{bandwidth:} \ \frac{C_2+C_LR_3g_m}{C_2C_LR_3} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_3}{C_2+C_LR_3g_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

## 8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{C_2 R_3 R_L s + R_3 R_L g_m}{C_2 C_L R_3 R_L s^2 + R_3 g_m + R_L g_m + s \left( C_2 R_3 + C_2 R_L + C_L R_3 R_L g_m \right)}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_2C_LR_3R_L\sqrt{\frac{g_m}{C_2C_LR_L} + \frac{g_m}{C_2C_LR_3}}}{C_2R_3 + C_2R_L + C_LR_3R_Lg_m} \\ \text{wo:} \ \sqrt{\frac{R_3g_m + R_Lg_m}{C_2C_LR_3R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_3g_m + R_Lg_m}{C_2C_LR_3R_L}}(C_2R_3 + C_2R_L + C_LR_3R_Lg_m)}{C_2C_LR_3R_L\sqrt{\frac{g_m}{C_2C_LR_L} + \frac{g_m}{C_2C_LR_3}}} \\ \text{K-LP:} \ \frac{R_3R_L}{R_3 + R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_3R_L}{C_2R_3 + C_2R_L + C_LR_3R_Lg_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.5 INVALID-NUMER-5  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{C_2 R_L s + R_L g_m}{C_2 C_3 R_L s^2 + g_m + s (C_2 + C_3 R_L g_m)}$$

Parameters:

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

8.6 INVALID-NUMER-6  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_2 R_L s + R_L g_m}{g_m + s^2 \left( C_2 C_3 R_L + C_2 C_L R_L \right) + s \left( C_2 + C_3 R_L g_m + C_L R_L g_m \right)}$ 

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_2C_3R_L\sqrt{\frac{g_m}{C_2C_3R_L+C_2C_LR_L}} + C_2C_LR_L\sqrt{\frac{g_m}{C_2C_3R_L+C_2C_LR_L}}}{C_2+C_3R_Lg_m + C_LR_Lg_m} \\ & \text{wo:} \ \sqrt{\frac{g_m}{C_2C_3R_L+C_2C_LR_L}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_2C_3R_L+C_2C_LR_L}} + (C_2+C_3R_Lg_m + C_LR_Lg_m)}{C_2C_3R_L\sqrt{\frac{g_m}{C_2C_3R_L+C_2C_LR_L}} + C_2C_LR_L\sqrt{\frac{g_m}{C_2C_3R_L+C_2C_LR_L}}} \\ & \text{K-LP:} \ R_L \\ & \text{K-HP:} \ 0 \\ & \text{K-BP:} \ \frac{C_2R_L}{C_2+C_3R_Lg_m + C_LR_Lg_m} \\ & \text{Qz:} \ 0 \\ & \text{Wz:} \ \text{None} \end{aligned}$$

8.7 INVALID-NUMER-7  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s+1}, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{C_2 R_3 R_L s + R_3 R_L g_m}{C_2 C_3 R_3 R_L s^2 + R_3 g_m + R_L g_m + s \left( C_2 R_3 + C_2 R_L + C_3 R_3 R_L g_m \right)}$ 

$$\begin{array}{l} \text{Q:} \ \frac{C_2C_3R_3R_L\sqrt{\frac{g_m}{C_2C_3R_L}+\frac{g_m}{C_2C_3R_3}}}{C_2R_3+C_2R_L+C_3R_3R_Lg_m} \\ \text{wo:} \ \sqrt{\frac{R_3g_m+R_Lg_m}{C_2C_3R_3R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_3g_m+R_Lg_m}{C_2C_3R_3R_L}}(C_2R_3+C_2R_L+C_3R_3R_Lg_m)}{C_2C_3R_3R_L\sqrt{\frac{g_m}{C_2C_3R_L}+\frac{g_m}{C_2C_3R_3}}} \\ \text{K-LP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_3R_L}{C_2R_3+C_2R_L+C_3R_3R_Lg_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

## 8.8 INVALID-NUMER-8 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s+1}, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2 R_3 s + R_3 g_m}{g_m + s^2 \left( C_2 C_3 R_3 + C_2 C_L R_3 \right) + s \left( C_2 + C_3 R_3 g_m + C_L R_3 g_m \right)}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_2C_3R_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_LR_3}} + C_2C_LR_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_LR_3}}}{C_2+C_3R_3g_m+C_LR_3g_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_2C_3R_3+C_2C_LR_3}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_LR_3}} (C_2+C_3R_3g_m+C_LR_3g_m)}{C_2C_3R_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_LR_3}} + C_2C_LR_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_LR_3}}} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_3}{C_2+C_3R_3g_m+C_LR_3g_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

## 8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{C_2 R_3 R_L s + R_3 R_L g_m}{R_3 g_m + R_L g_m + s^2 \left( C_2 C_3 R_3 R_L + C_2 C_L R_3 R_L \right) + s \left( C_2 R_3 + C_2 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m \right)}$$

## Parameters:

$$\begin{array}{c} \text{Q:} & \frac{C_2C_3R_3R_L\sqrt{\frac{R_3g_m}{C_2C_3R_3R_L+C_2C_LR_3R_L} + C_2C_LR_3R_L\sqrt{\frac{R_3g_m}{C_2S_3R_3R_L+C_2C_LR_3R_L}} + C_2C_LR_3R_L\sqrt{\frac{R_3g_m}{C_2S_3R_3R_L+C_2C_LR_3R_L}} \\ \text{Wo:} & \frac{R_3g_m+R_Lg_m}{C_2C_3R_3R_L+C_2C_LR_3R_L} \\ \text{bandwidth:} & \frac{\sqrt{\frac{R_3g_m+R_Lg_m}{C_2C_3R_3R_L+C_2C_LR_3R_L}} + C_2C_RR_3R_LG_m + C_2C_RR_3R_LG_m} {C_2C_3R_3R_L+C_2C_LR_3R_L} \\ \text{bandwidth:} & \frac{\sqrt{\frac{R_3g_m+R_Lg_m}{C_2C_3R_3R_L+C_2C_LR_3R_L}} + C_2C_RR_3R_LG_m + C_2R_3R_LG_m} {C_2C_3R_3R_L+C_2C_LR_3R_L} + C_2C_RR_3R_L+C_2C_RR_3R_L + C_2C_RR_3R_L+C_2C_RR_3R_L} \\ \text{K-LP:} & \frac{R_3g_m}{R_3+R_L} \\ \text{K-HP:} & 0 & \frac{C_2R_3R_L\sqrt{\frac{2g_m}{C_2S_3R_3R_L+C_2C_LR_3R_L}} + C_2C_RR_3R_L+C_2C_RR_3R_L}{C_2C_3R_3R_L+C_2C_LR_3R_L} + C_2C_RR_3R_L+C_2C_RR_3R_L + C_2C_3R_3R_L+C_2C_LR_3} \\ \text{K-BP:} & \frac{C_2R_3\sqrt{\frac{2g_m}{C_2S_3R_3R_L+C_2C_LR_3R_L}} + C_2R_L\sqrt{\frac{R_3g_m}{C_2C_3R_3R_L+C_2C_LR_3R_L}} + C_2R_L\sqrt{\frac{R_3g_m}{C_2C_3R_3R_L+C_2C_LR_3R_L}} + C_2R_3R_LC_2C_RR_3R_L} + C_2C_RR_3R_L+C_2C_RR_3R_L} \\ \text{Qz:} & 0 & \frac{R_3g_m}{C_2C_3R_3R_L+C_2C_LR_3R_L} + C_2C_3R_3R_L+C_2C_LR_3R_L} + C_2C_3R_3R$$

# 8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, R_3, \infty, \infty, \frac{1}{C_Ls}\right)$

$$H(s) = \frac{C_2 R_2 R_3 s + R_2 R_3 g_m + R_3}{C_2 C_L R_2 R_3 s^2 + R_2 g_m + s \left(C_2 R_2 + C_L R_2 R_3 g_m + C_L R_3\right) + 1}$$

$$\begin{aligned} &\mathbf{Q} \colon \frac{C_2 C_L R_2 R_3 \sqrt{\frac{g_{m}}{C_2 C_L R_3} + \frac{1}{C_2 C_L R_2 R_3}}}{C_2 R_2 + C_L R_2 R_3 g_m + C_L R_3} \\ &\mathbf{wo:} \ \sqrt{\frac{R_2 g_m + 1}{C_2 C_L R_2 R_3}} \end{aligned}$$

bandwidth: 
$$\frac{\sqrt{\frac{R_2gm+1}{C_2C_LR_2R_3}}(C_2R_2+C_LR_2R_3g_m+C_LR_3)}{C_2C_LR_2R_3\sqrt{\frac{gm}{C_2C_LR_3}+\frac{1}{C_2C_LR_2R_3}}}$$
 K-LP:  $R_3$  K-HP: 0 
K-BP: 
$$\frac{C_2R_2R_3}{C_2R_2+C_LR_2R_3g_m+C_LR_3}$$
 Qz: 0 
Wz: None

## 8.11 INVALID-NUMER-11 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, R_3, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$

$$H(s) = \frac{C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L}{C_2C_LR_2R_3R_Ls^2 + R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s\left(C_2R_2R_3 + C_2R_2R_L + C_LR_2R_3R_Lg_m + C_LR_3R_L\right)}$$

## Parameters:

$$\begin{array}{l} \text{Q:} & \frac{C_2C_LR_2R_3R_L\sqrt{\frac{g_m}{C_2C_LR_L}} + \frac{g_m}{C_2C_LR_3} + \frac{1}{C_2C_LR_2R_L} + \frac{1}{C_2C_LR_2R_3}}{C_2R_2R_3 + C_2R_2R_L + C_LR_2R_3R_Lg_m + C_LR_3R_L} \\ \text{wo:} & \sqrt{\frac{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L}{C_2C_LR_2R_3R_L}} \\ \text{bandwidth:} & \frac{\sqrt{\frac{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L}{C_2C_LR_2R_3R_L}}(C_2R_2R_3 + C_2R_2R_L + C_LR_2R_3R_Lg_m + C_LR_3R_L)}{C_2C_LR_2R_3R_L\sqrt{\frac{g_m}{C_2C_LR_2}} + \frac{g_m}{C_2C_LR_3} + \frac{1}{C_2C_LR_2R_3}} \\ \text{K-LP:} & \frac{R_3R_L}{R_3 + R_L} \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{C_2R_2R_3R_L}{C_2R_2R_3 + C_2R_2R_L + C_LR_2R_3R_Lg_m + C_LR_3R_L}} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

## 8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, R_L\right)$

$$H(s) = \frac{C_2 R_2 R_L s + R_2 R_L g_m + R_L}{C_2 C_3 R_2 R_L s^2 + R_2 g_m + s \left(C_2 R_2 + C_3 R_2 R_L g_m + C_3 R_L\right) + 1}$$

### Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{C_2C_3R_2R_L\sqrt{\frac{g_m}{C_2C_3R_L}} + \frac{1}{C_2C_3R_2R_L}}{C_2R_2 + C_3R_2R_Lg_m + C_3R_L} \\ &\text{wo:} \ \sqrt{\frac{R_2g_m + 1}{C_2C_3R_2R_L}} \\ &\text{bandwidth:} \ \frac{\sqrt{\frac{R_2g_m + 1}{C_2C_3R_2R_L}}(C_2R_2 + C_3R_2R_Lg_m + C_3R_L)}{C_2C_3R_2R_L\sqrt{\frac{g_m}{C_2C_3R_L}} + \frac{1}{C_2C_3R_2R_L}} \\ &\text{K-LP:} \ R_L \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{C_2R_2R_L}{C_2R_2 + C_3R_2R_Lg_m + C_3R_L} \\ &\text{Qz:} \ 0 \\ &\text{Wz:} \ \text{None} \end{aligned}$$

## 8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$

 $\text{Q:} \ \frac{ \sum_{C_2 C_3 R_2 R_L \sqrt{\frac{R_2 g_m}{C_2 C_3 R_2 R_L + C_2 C_L R_2 R_L}} + \frac{1}{C_2 C_3 R_2 R_L + C_2 C_L R_2 R_L}}{C_2 R_2 C_L R_2 R_L + C_2 C_L R_2 R_L} + \frac{1}{C_2 C_3 R_2 R_L + C_2 C_L R_2 R_L}}{C_2 R_2 R_2 R_L + C_2 C_L R_2 R_L} + \frac{1}{C_2 C_3 R_2 R_L + C_2 C_L R_2 R_L}}$ 

$$H(s) = \frac{C_2 R_2 R_L s + R_2 R_L g_m + R_L}{R_2 g_m + s^2 \left( C_2 C_3 R_2 R_L + C_2 C_L R_2 R_L \right) + s \left( C_2 R_2 + C_3 R_2 R_L g_m + C_3 R_L + C_L R_2 R_L g_m + C_L R_L \right) + 1}$$

$$\text{Wo: } \sqrt{\frac{R_{2}g_{m}+1}{C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}}}} \\ \text{bandwidth: } \frac{\sqrt{\frac{R_{2}g_{m}+1}{C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}}}} (C_{2}R_{2}+C_{3}R_{2}R_{L}+C_{L}R_{2}R_{L}g_{m}}+C_{L}R_{L})}{C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{L}R_{2}R_{L}} \sqrt{\frac{R_{2}g_{m}}{C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}}} + C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{L}R_{2}R_{L} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} \\ \text{K-HP: 0} \\ K-\text{BP: } \frac{C_{2}R_{2}R_{L}\sqrt{\frac{g_{m}}{C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}R_{2}R_{L} + C_{2}C_{1}R_{2}R_{L}}{C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L}} + C_{2}C_{3}R_{2}R_{L}+C_{2}C_{L}R_{2}R_{L} + C_{2}C_{2}R_{2}R_{L} + C_{2}C_{2}R_{2}R_{L} + C_{2}C_{2}R_{2}R_{L} + C_{2}C_{2}R_{2}R_{L} + C_{2}$$

Qz: 0 Wz: None

## **8.14** INVALID-NUMER-14 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, R_L\right)$

$$H(s) = \frac{C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L}{C_2C_3R_2R_3R_Ls^2 + R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s\left(C_2R_2R_3 + C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}$$

#### Parameters:

 $\begin{aligned} &\text{Q:} \ \frac{C_2C_3R_2R_3R_L\sqrt{\frac{g_m}{C_2C_3R_L}+\frac{g_m}{C_2C_3R_3}+\frac{1}{C_2C_3R_2R_L}+\frac{1}{C_2C_3R_2R_3}}}{C_2R_2R_3+C_2R_2R_L+C_3R_2R_3R_Lg_m+C_3R_3R_L} \\ &\text{wo:} \ \sqrt{\frac{R_2R_3g_m+R_2R_Lg_m+R_3+R_L}{C_2C_3R_2R_3R_L}} \\ &\text{bandwidth:} \ \frac{\sqrt{\frac{R_2R_3g_m+R_2R_Lg_m+R_3+R_L}{C_2C_3R_2R_3R_L}}(C_2R_2R_3+C_2R_2R_L+C_3R_2R_3R_Lg_m+C_3R_3R_L)}}{C_2C_3R_2R_3R_L\sqrt{\frac{g_m}{C_2C_3R_L}+\frac{g_m}{C_2C_3R_3}+\frac{1}{C_2C_3R_2R_L}+\frac{1}{C_2C_3R_2R_3}}} \\ &\text{K-LP:} \ \frac{R_3R_L}{R_3+R_L} \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{C_2R_2R_3+C_2R_2R_L+C_3R_2R_3R_L}{C_2R_2R_2+C_3R_2R_3R_L}g_m+C_3R_3R_L} \\ &\text{Qz:} \ 0 \\ &\text{Wz:} \ \text{None} \end{aligned}$ 

# **8.15** INVALID-NUMER-15 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2R_2R_3s + R_2R_3g_m + R_3}{R_2g_m + s^2\left(C_2C_3R_2R_3 + C_2C_LR_2R_3\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3 + C_LR_2R_3g_m + C_LR_3\right) + 1}$$

#### Parameters:

 $Q: \frac{C_2C_3R_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3}{C_2R_2C_3R_2R_3+C_2C_LR_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3}{C_2R_2C_2C_2R_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_LR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_RR_2R_3\sqrt{\sum_{C_2C_3R_2}R_3+C_2C_L}R_2R_3} + C_2C_RR_2R_3+C_2C_RR_2R_3} + C_2C_RR_2R_3+C_2C_$ 

# **8.16** INVALID-NUMER-16 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^2\left(C_2C_3R_2R_3R_L + C_2C_LR_2R_3R_L\right) + s\left(C_2R_2R_3 + C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L + C_LR_2R_3R_Lg_m + C_LR_3R_L\right)}$$

### Parameters:

 $\begin{array}{c} C_2C_3R_2R_3R_L\sqrt{\frac{R_2R_3g_m}{C_2C_3R_2R_3R_L+C_2C_LR_2R_3R_L}+\frac{R_2R_Lg_m}{C_2C_3R_2R_3R_L+C_2C_LR_2R_3R_$ 

## **8.17** INVALID-NUMER-17 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 g_m + s \left(C_2 R_2 R_3 g_m + C_2 R_3\right)}{g_m + s^2 \left(C_2 C_L R_2 R_3 g_m + C_2 C_L R_3\right) + s \left(C_2 R_2 g_m + C_2 + C_L R_3 g_m\right)}$$

### Parameters:

$$\begin{array}{l} \text{Q:} & \frac{C_2C_LR_2R_3g_m\sqrt{\frac{g_m}{C_2C_LR_2R_3g_m+C_2C_LR_3}} + C_2C_LR_3\sqrt{\frac{g_m}{C_2C_LR_2R_3g_m+C_2C_LR_3}}}{C_2R_2g_m+C_2+C_LR_3g_m} \\ \text{wo:} & \sqrt{\frac{g_m}{C_2C_LR_2R_3g_m+C_2C_LR_3}} \\ \text{bandwidth:} & \frac{\sqrt{\frac{g_m}{C_2C_LR_2R_3g_m+C_2C_LR_3}} (C_2R_2g_m+C_2+C_LR_3g_m)}{C_2C_LR_2R_3g_m\sqrt{\frac{g_m}{C_2C_LR_2R_3g_m+C_2C_LR_3}} + C_2C_LR_3\sqrt{\frac{g_m}{C_2C_LR_2R_3g_m+C_2C_LR_3}}} \\ \text{K-LP:} & R_3 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{C_2R_2R_3g_m+C_2R_3}{C_2R_2g_m+C_2+C_LR_3g_m}}{C_2R_2g_m+C_2+C_LR_3g_m} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

## 8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L g_m + s \left(C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_2 C_L R_2 R_3 R_L g_m + C_2 C_L R_3 R_L\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_2 R_L g_m + C_2 R_3 + C_2 R_L + C_L R_3 R_L g_m\right)}$$

### Parameters:

$$Q: \frac{C_2C_LR_2R_3R_Lg_m\sqrt{\frac{R_3g_m}{C_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L}} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L}} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L}} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L}} + \frac{R_Lg_m}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_3R_L}}{c_2C_LR_2R_3R_Lg_m+c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_3R_L}}{c_2C_LR_3R_L} + \frac{R_Lg_m}{c_2C_LR_3R_L} + \frac{R_Lg_m$$

## 8.19 INVALID-NUMER-19 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_L g_m + s \left( C_2 R_2 R_L g_m + C_2 R_L \right)}{g_m + s^2 \left( C_2 C_3 R_2 R_L g_m + C_2 C_3 R_L \right) + s \left( C_2 R_2 g_m + C_2 + C_3 R_L g_m \right)}$$

### Parameters:

$$\begin{array}{c} \text{Q:} \ \frac{C_2C_3R_2R_Lg_m\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_3R_L}} + C_2C_3R_L\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_3R_L}}}{C_2R_2g_m+C_2+C_3R_Lg_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_3R_L}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_3R_L}} (C_2R_2g_m+C_2+C_3R_Lg_m)}{C_2C_3R_2R_Lg_m\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_3R_L}} + C_2C_3R_L\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_3R_L}}} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_2R_Lg_m+C_2R_L}{C_2R_2g_m+C_2+C_3R_Lg_m}}{Q_{Z:} \ 0} \\ \text{Wz:} \ \text{None} \end{array}$$

## **8.20** INVALID-NUMER-20 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L g_m + s \left( C_2 R_2 R_L g_m + C_2 R_L \right)}{g_m + s^2 \left( C_2 C_3 R_2 R_L g_m + C_2 C_3 R_L + C_2 C_L R_2 R_L g_m + C_2 C_L R_L \right) + s \left( C_2 R_2 g_m + C_2 + C_3 R_L g_m + C_L R_L g_m \right)}$$

### Parameters:

 $Q: \frac{C_2C_3R_2R_Lg_m\sqrt{C_2C_3R_2R_Lg_m+C_2C_3R_L}+C_2C_LR_2R_Lg_m+C_2C_LR_L}{C_2R_2R_Lg_m+C_2C_LR_L}+C_2C_LR_2R_Lg_m\sqrt{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_2R_Lg_m\sqrt{C_2C_3R_2R_Lg_m+C_2C_LR_L}}{C_2R_2g_m+C_2C_3R_Lg_m+C_2C_LR_L}+C_2C_LR_2R_Lg_m\sqrt{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_L\sqrt{C_2C_3R_2R_Lg_m+C_2C_LR_L}}\\ wo: \sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_2R_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_2R_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_2R_Lg_m+C_2C_LR_L}}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_2R_Lg_m+C_2C_LR_L}}{C_2R_2g_m+C_2C_LR_L}}+C_2C_LR_Lg_m}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2R_2g_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2C_3R_2R_Lg_m+C_2C_3R_L}+C_2C_LR_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2C_3R_2R_Lg_m+C_2C_3R_L}+C_2C_LR_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2C_3R_2R_Lg_m+C_2C_3R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2C_3R_2R_Lg_m+C_2C_3R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2C_2R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}}{C_2C_2R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_Lg_m+C_2C_LR_L}}+C_2C_LR_Lg_m+C_2C_LR_L}\\ &\sqrt{\frac{g_m}{C_2C_3R_2R_L$ 

## **8.21** INVALID-NUMER-21 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_3 R_L g_m + s \left(C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 R_3 R_L\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_2 R_L g_m + C_2 R_3 + C_2 R_L + C_3 R_3 R_L g_m\right)}$$

### Parameters:

 $Q: \frac{C_{2}C_{3}R_{2}R_{3}R_{L}g_{m}\sqrt{\frac{R_{3}g_{m}}{C_{2}C_{3}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}R_{3}R_{L}}} + \frac{R_{L}g_{m}}{C_{2}C_{3}R_{3}R_{L}g_{m}+C_{2}C_{3}R_{3}R_{L}} + C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}} + C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}} + C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}} + C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L}} + C_{2}C_{3}R_{3}R_{L}f_{sm}+C_{2}C_{3}R_{3}R_{L$ 

## 8.22 INVALID-NUMER-22 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 g_m + s \left(C_2 R_2 R_3 g_m + C_2 R_3\right)}{g_m + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_3 + C_2 C_L R_2 R_3 g_m + C_2 C_L R_3\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_L R_3 g_m\right)}$$

### Parameters:

 $Q: \frac{c_2c_3R_2R_3g_m\sqrt{c_2c_3R_2R_3g_m+c_2c_3R_3^2+c_2c_LR_2R_3g_m+c_2c_LR_3}}{c_2R_2g_m+c_2c_LR_3} + c_2c_LR_2R_3g_m\sqrt{c_2c_3R_2R_3g_m+c_2c_LR_3}} + c_2c_LR_2R_3g_m\sqrt{c_2c_3R_2R_3g_m+c_2c_LR_3} + c_2c_LR_3\sqrt{c_2c_3R_2R_3g_m+c_2c_LR_3}} + c_2c_LR_3\sqrt{c_2c_3R_2R_3g_m+c_2c_LR_3}} \\ wo: \sqrt{\frac{g_m}{c_2c_3R_2R_3g_m+c_2c_3R_3^2+c_2c_LR_2R_3g_m+c_2c_LR_3}}} \\ bandwidth: \frac{g_m}{c_2c_3R_2R_3g_m\sqrt{c_2c_3R_2R_3g_m+c_2c_LR_3}} + c_2c_LR_2R_3g_m+c_2c_LR_3} \\ \sqrt{\frac{g_m}{c_2c_3R_2R_3g_m+c_2c_LR_3}}} \\ (c_2R_2g_m+c_2+c_3R_3g_m+c_2c_LR_3}) \\ (c_2R_2g_m+c_2+c_2R_3g_m+c_2c_LR_3}) \\ (c_2R_2g_m+c_2+c_2R_3g_m+c_2c_LR_3}) \\ (c_2R_2g_m+c_2+c_2R_3g_m+c_2c_LR_3}) \\ (c_2R_2g_m+c_2+c_2R_3g_m+c_2C_LR_3}) \\ ($ 

## **8.23** INVALID-NUMER-23 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L g_m + s \left(C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_1 R_3 R_L g_m + C_2 C_L R_3 R_L\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_2 R_L g_m + C_2 R_3 + C_2 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m\right)}$$

### Parameters:

$$Q: \frac{C_2C_3R_2R_3R_Lg_m\sqrt{\frac{R_1g_m}{C_2C_3R_2R_3R_Lg_m+C_2C_LR_3R_L}+C_2C_LR_2R_3R_Lg_m+C_2C_LR_3R_L}+C_2C_RR_3R_Lg_m\sqrt{\frac{R_1g_m}{C_2C_3R_2R_3R_Lg_m+C_2C_LR_3R_L}+C_2C_LR_2R_3R_Lg_m+C_2C_LR_3R_L}+C_2C_RR_3R_Lg_m\sqrt{\frac{R_2g_m}{C_2C_3R_2R_3R_Lg_m+C_2C_LR_3R_L}+C_2C_LR_2R_3R_Lg_m+C_2C_LR_3R_L}+C_2C_RR_3R_Lg_m+C_2C_LR_3R_L}+C_2C_RR_3R_Lg_m$$

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

Qz: 0 Wz: None

### INVALID-WZ

## **9.1** INVALID-WZ-1 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2 C_L R_3 R_L s^2 + R_3 g_m + s \left(C_2 R_3 + C_L R_3 R_L g_m\right)}{g_m + s^2 \left(C_2 C_L R_3 + C_2 C_L R_L\right) + s \left(C_2 + C_L R_3 g_m + C_L R_L g_m\right)}$$

### Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_2C_LR_3\sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}} + C_2C_LR_L\sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}}}{C_2+C_LR_3g_m + C_LR_Lg_m} \\ & \text{wo:} \ \sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}} (C_2+C_LR_3g_m + C_LR_Lg_m)}{C_2C_LR_3\sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}}} + C_2C_LR_L\sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}}} \\ & \text{K-LP:} \ R_3 \\ & \text{K-HP:} \ \frac{R_3R_L}{R_3+R_L} \\ & \text{K-BP:} \ \frac{C_2R_3+C_LR_3R_Lg_m}{C_2+C_LR_3g_m + C_LR_Lg_m} \\ & \text{Qz:} \ \frac{C_2C_LR_1\sqrt{\frac{g_m}{C_2C_LR_3+C_2C_LR_L}}}{C_2+C_LR_Lg_m} \\ & \text{Wz:} \ \sqrt{\frac{g_m}{C_2C_LR_L}} \end{aligned}$$

## **9.2** INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$

# $H(s) = \frac{C_2C_3R_3R_Ls^2 + R_Lg_m + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{g_m + s^2\left(C_2C_3R_3 + C_2C_3R_L\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m\right)}$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \, \frac{C_2C_3R_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}} + C_2C_3R_L\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}}}{C_2+C_3R_3g_m+C_3R_Lg_m} \\ \text{wo:} \ \, \sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}} \\ \text{bandwidth:} \ \, \frac{\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}} (C_2+C_3R_3g_m+C_3R_Lg_m)}{C_2C_3R_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}}} + C_2C_3R_L\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}} \\ \text{K-LP:} \ \, R_L \\ \text{K-HP:} \ \, \frac{R_3R_L}{R_3+R_L} \\ \text{K-BP:} \ \, \frac{C_2R_L+C_3R_3R_Lg_m}{C_2+C_3R_3g_m+C_3R_Lg_m} \\ \text{Qz:} \ \, \frac{C_2C_3R_3\sqrt{\frac{g_m}{C_2C_3R_3+C_2C_3R_L}}}{C_2+C_3R_3g_m} \\ \text{Wz:} \ \, \sqrt{\frac{g_m}{C_2C_3R_3}} \end{array}$$

## **9.3** INVALID-WZ-3 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2C_LR_2R_3R_Ls^2 + R_2R_3g_m + R_3 + s\left(C_2R_2R_3 + C_LR_2R_3R_Lg_m + C_LR_3R_L\right)}{R_2g_m + s^2\left(C_2C_LR_2R_3 + C_2C_LR_2R_L\right) + s\left(C_2R_2 + C_LR_2R_3g_m + C_LR_2R_Lg_m + C_LR_3 + C_LR_L\right) + 1}$$

### Parameters:

 $Q_{:} \frac{C_{2}C_{L}R_{2}R_{3}\sqrt{c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{4}}+c_{2}C_{L}R_{2}R_{4}\sqrt{c_{2}C_{L}R_{3}R_{3}+c_{2}C_{L}R_{2}R_{4}}}{C_{2}R_{2}+C_{L}R_{2}R_{3}R_{3}+C_{2}C_{L}R_{3}R_{3}+c_{2}C_{L}R_{2}R_{4}} + C_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{3}}+c_{2}C_{L}R_{2}R_{2}+c_{2}C_{L}R_{2}R_{3}+c_{2}C_{L}R_{2}R_{2}}+c_{2}C_{L}R_{2}R_{2}+c_{2}C_{L}R_{2}$ 

## **9.4** INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L\right)$

$$H(s) = \frac{C_2C_3R_2R_3R_Ls^2 + R_2R_Lg_m + R_L + s\left(C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}{R_2g_m + s^2\left(C_2C_3R_2R_3 + C_2C_3R_2R_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_2R_Lg_m + C_3R_3 + C_3R_L\right) + 1}$$

### Parameters:

$$Q_{:} \frac{C_{2}C_{3}R_{3}R_{3}\sqrt{C_{2}C_{3}R_{3}R_{3}+C_{2}C_{3}R_{2}R_{1}} + C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{3}+C_{2}C_{3}R_{2}R_{1}}}{C_{2}R_{3}+C_{2}C_{3}R_{2}R_{3}+C_{2}C_{3}R_{2}R_{1}} + C_{2}C_{3}R_{2}R_{3}+C_{2}C_{3}R_{2}R_{1}} + C_{2}C_{3}R_{2}R_{3}+C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{3}+C_{2}C_{3}R_{2}R_{1}} + C_{2}C_{3}R_{2}R_{3}+C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{2}R_{2} + C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{2}R_{2} + C_{2}C_{3}R_{2}R_{1} + C_{2}C_{3}R_{2}R_{2} +$$

## **9.5** INVALID-WZ-5 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 g_m + s^2 \left(C_2 C_L R_2 R_3 R_L g_m + C_2 C_L R_3 R_L\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 + C_L R_3 R_L g_m\right)}{g_m + s^2 \left(C_2 C_L R_2 R_3 g_m + C_2 C_L R_2 R_L g_m + C_2 C_L R_3 + C_2 C_L R_L\right) + s \left(C_2 R_2 g_m + C_2 + C_L R_3 g_m + C_L R_L g_m\right)}$$

### Parameters:

**9.6** INVALID-WZ-6  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_L g_m + s^2 \left( C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 R_3 R_L \right) + s \left( C_2 R_2 R_L g_m + C_2 R_L + C_3 R_3 R_L g_m \right)}{g_m + s^2 \left( C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_2 R_L g_m + C_2 C_3 R_3 + C_2 C_3 R_L \right) + s \left( C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_3 R_L g_m \right)}$$

Parameters:

K-LP:  $R_L$ K-HP:  $\frac{R_3R_L}{R_3+R_L}$ K-BP:  $\frac{C_2R_2R_Lg_m+C_2R_L+C_3R_3R_Lg_m}{C_2R_2g_m+C_2+C_3R_3g_m+C_3R_Lg_m}$ O7:  $\frac{C_2C_3R_2R_3g_m\sqrt{\frac{g_m}{C_2C_3R_2R_3g_m+C_2C_3R_2R_Lg_m+C_2C_3R_3+C_2C_3R_L}}{C_2R_2g_m+C_2+C_3R_3g_m}+C_2C_3R_2R_2g_m+C_2C_3R_3+C_2C_3R_L}$ 

### INVALID-ORDER

10.1 INVALID-ORDER-1  $Z(s) = (\infty, R_2, R_3, \infty, \infty, R_L)$ 

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L}$$

10.2 INVALID-ORDER-2  $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{1}{C_{Ls}}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3}{R_2 g_m + s \left(C_L R_2 R_3 g_m + C_L R_3\right) + 1}$$

10.3 INVALID-ORDER-3  $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L\right)}$$

10.4 INVALID-ORDER-4  $Z(s) = \left(\infty, R_2, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s \left( C_L R_2 R_3 R_L g_m + C_L R_3 R_L \right)}{R_2 g_m + s \left( C_L R_2 R_3 g_m + C_L R_2 R_L g_m + C_L R_3 + C_L R_L \right) + 1}$$

10.5 INVALID-ORDER-5  $Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_2 R_L g_m + R_L}{R_2 g_m + s \left( C_3 R_2 R_L g_m + C_3 R_L \right) + 1}$$

10.6 INVALID-ORDER-6  $Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + 1}{s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.7 INVALID-ORDER-7 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_2 R_L g_m + R_L}{R_2 g_m + s \left( C_3 R_2 R_L g_m + C_3 R_L + C_L R_2 R_L g_m + C_L R_L \right) + 1}$$

10.8 INVALID-ORDER-8 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s \left( C_L R_2 R_L g_m + C_L R_L \right) + 1}{s^2 \left( C_3 C_L R_2 R_L g_m + C_3 C_L R_L \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.9 INVALID-ORDER-9 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s^2 \left( C_L L_L R_2 g_m + C_L L_L \right) + 1}{s^3 \left( C_3 C_L L_L R_2 g_m + C_3 C_L L_L \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.10 INVALID-ORDER-10 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{s \left( L_L R_2 g_m + L_L \right)}{R_2 g_m + s^2 \left( C_3 L_L R_2 g_m + C_3 L_L + C_L L_L R_2 g_m + C_L L_L \right) + 1}$$

10.11 INVALID-ORDER-11 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s^2 \left( C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_L R_2 R_L g_m + C_L R_L \right) + 1}{s^3 \left( C_3 C_L L_L R_2 g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_2 R_L g_m + C_3 C_L R_L \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.12 INVALID-ORDER-12 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

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

10.13 INVALID-ORDER-13 
$$Z(s) = \left(\infty, R_2, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

10.14 INVALID-ORDER-14  $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s \left( C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L \right)}$$

10.15 INVALID-ORDER-15  $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3}{R_2 g_m + s \left(C_3 R_2 R_3 g_m + C_3 R_3 + C_L R_2 R_3 g_m + C_L R_3\right) + 1}$$

10.16 INVALID-ORDER-16  $Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s \left( C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L + C_L R_2 R_3 R_L g_m + C_L R_3 R_L \right)}$$

**10.17** INVALID-ORDER-17 
$$Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^2 \left( C_L L_L R_2 R_3 g_m + C_L L_L R_3 \right)}{R_2 g_m + s^3 \left( C_3 C_L L_L R_2 R_3 g_m + C_3 C_L L_L R_3 \right) + s^2 \left( C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_3 R_2 R_3 g_m + C_3 R_3 + C_L R_2 R_3 g_m + C_L R_3 \right) + 1}$$

**10.18** INVALID-ORDER-18 
$$Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.19 INVALID-ORDER-19 
$$Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

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

10.20 INVALID-ORDER-20 
$$Z(s) = \left(\infty, R_2, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

10.21 INVALID-ORDER-21  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_2 R_L g_m + R_L + s \left( C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L \right)}{R_2 g_m + s \left( C_3 R_2 R_3 g_m + C_3 R_2 R_L g_m + C_3 R_3 + C_3 R_L \right) + 1}$$

**10.22** INVALID-ORDER-22  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s \left( C_3 R_2 R_3 g_m + C_3 R_3 \right) + 1}{s^2 \left( C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

**10.23** INVALID-ORDER-23  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s^2 \left( C_3 C_L R_2 R_3 R_L g_m + C_3 C_L R_3 R_L \right) + s \left( C_3 R_2 R_3 g_m + C_3 R_3 + C_L R_2 R_L g_m + C_L R_L \right) + 1}{s^2 \left( C_3 C_L R_2 R_3 g_m + C_3 C_L R_2 R_L g_m + C_3 C_L R_3 + C_3 C_L R_L \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L R_L \right) + 1}$$

**10.24** INVALID-ORDER-24  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s^3 \left( C_3 C_L L_L R_2 R_3 g_m + C_3 C_L L_L R_3 \right) + s^2 \left( C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_3 R_2 R_3 g_m + C_3 R_3 \right) + 1}{s^3 \left( C_3 C_L L_L R_2 g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.25 INVALID-ORDER-25  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{{{s^2}\left( {{C_3}{L_L}{R_2}{R_3}{g_m} + {C_3}{L_L}{R_3}} \right) + s\left( {{L_L}{R_2}{g_m} + {L_L}} \right)}}{{{R_2}{g_m} + {s^3}\left( {{C_3}{C_L}{L_L}{R_2}{R_3}{g_m} + {C_3}{C_L}{L_L}{R_3}} \right) + s^2\left( {{C_3}{L_L}{R_2}{g_m} + {C_3}{L_L} + {C_L}{L_L}{R_2}{g_m} + {C_L}{L_L}} \right) + s\left( {{C_3}{R_2}{R_3}{g_m} + {C_3}{R_3}} \right) + 1}}$$

**10.26** INVALID-ORDER-26  $Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

10.27 INVALID-ORDER-27 
$$Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

10.28 INVALID-ORDER-28 
$$Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_R L_S^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

10.29 INVALID-ORDER-29 
$$Z(s) = \left(\infty, R_2, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

10.30 INVALID-ORDER-30  $Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 \right) + 1}{s^3 \left( C_3 C_L L_3 R_2 g_m + C_3 C_L L_3 \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.31 INVALID-ORDER-31  $Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_2 R_L g_m + R_L + s^2 \left( C_3 L_3 R_2 R_L g_m + C_3 L_3 R_L \right)}{R_2 g_m + s^3 \left( C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_3 R_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 \right) + s \left( C_3 R_2 R_L g_m + C_3 R_L + C_L R_2 R_L g_m + C_L R_L \right) + 1}$$

**10.32** INVALID-ORDER-32  $Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s^3 \left( C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_3 R_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 \right) + s \left( C_L R_2 R_L g_m + C_L R_L \right) + 1}{s^3 \left( C_3 C_L L_3 R_2 g_m + C_3 C_L L_3 \right) + s^2 \left( C_3 C_L R_2 R_L g_m + C_3 C_L R_L \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L R_L \right)}$$

**10.33** INVALID-ORDER-33  $Z(s) = \left(\infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s^4 \left( C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_L R_2 g_m + C_L L_L \right) + 1}{s^3 \left( C_3 C_L L_3 R_2 g_m + C_3 C_L L_3 + C_3 C_L L_L R_2 g_m + C_3 C_L L_L \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

**10.34** INVALID-ORDER-34  $Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{s^3 \left( C_3 L_3 L_L R_2 g_m + C_3 L_3 L_L \right) + s \left( L_L R_2 g_m + L_L \right)}{R_2 g_m + s^4 \left( C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_3 L_L R_2 g_m + C_3 L_L + C_L L_L R_2 g_m + C_L L_L \right) + 1}$$

**10.35** INVALID-ORDER-35  $Z(s) = \left(\infty, \ R_2, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_2 g_m + s^4 \left(C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L\right) + s^3 \left(C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_3 R_L\right) + s^2 \left(C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_L R_2 g_m + C_L L_L\right) + s \left(C_L R_2 R_L g_m + C_L R_L\right) + 1}{s^3 \left(C_3 C_L L_3 R_2 g_m + C_3 C_L L_1 + C_3 C_L L_L R_2 g_m + C_3 C_L L_L\right) + s^2 \left(C_3 C_L R_2 R_L g_m + C_3 C_L R_L\right) + s \left(C_3 R_2 g_m + C_3 R_L\right) + s \left(C_$$

**10.36** INVALID-ORDER-36 
$$Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_{3s}}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

10.37 INVALID-ORDER-37 
$$Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_2 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_2 R_L g_m + C_3 C_L L_3 L_L R_L \right) + s^3 \left( C_3 L_3 L_L R_2 g_m + C_3 L_3 L_L \right) + s^2 \left( C_3 L_3 R_2 R_L g_m + C_3 L_3 R_L + C_L L_L R_2 R_L g_m + C_L L_L R_L \right) + s \left( L_L R_2 g_m + L_L \right)}{R_2 g_m + s^4 \left( C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L \right) + s^3 \left( C_3 C_L L_L R_2 R_L g_m + C_3 C_L L_L R_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_3 L_L R_2 g_m + C_3 L_L + C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_3 R_2 R_L g_m + C_3 R_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_1 R_2 g_m + C_3 L_1 R_2 g_m + C_2 L_1 R_2 R_2 g_m + C_3 L_1 R$$

10.38 INVALID-ORDER-38 
$$Z(s) = \left(\infty, R_2, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

**10.39** INVALID-ORDER-39  $Z(s) = \left(\infty, \ R_2, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{1}{C_{I.s}}\right)$ 

$$H(s) = \frac{s \left( L_3 R_2 g_m + L_3 \right)}{R_2 g_m + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_3 R_2 g_m + C_L L_3 \right) + 1}$$

**10.40** INVALID-ORDER-40  $Z(s) = \left(\infty, \ R_2, \ \frac{L_{3s}}{C_3L_3s^2+1}, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{s^2 \left( C_L L_3 R_2 R_L g_m + C_L L_3 R_L \right) + s \left( L_3 R_2 g_m + L_3 \right)}{R_2 g_m + s^3 \left( C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_3 R_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_3 R_2 g_m + C_L L_3 \right) + s \left( C_L R_2 R_L g_m + C_L R_L \right) + 1}$$

**10.41** INVALID-ORDER-41  $Z(s) = \left(\infty, \ R_2, \ \frac{L_{3s}}{C_3L_3s^2+1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{s^3 \left( C_L L_3 L_L R_2 g_m + C_L L_3 L_L \right) + s \left( L_3 R_2 g_m + L_3 \right)}{R_2 g_m + s^4 \left( C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_3 R_2 g_m + C_L L_3 + C_L L_1 R_2 g_m + C_L L_1 \right) + 1}$$

**10.42** INVALID-ORDER-42  $Z(s) = \left(\infty, \ R_2, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$ 

$$H(s) = \frac{s \left( L_3 L_L R_2 g_m + L_3 L_L \right)}{L_3 R_2 g_m + L_3 + L_L R_2 g_m + L_L + s^2 \left( C_3 L_3 L_L R_2 g_m + C_3 L_3 L_L + C_L L_3 L_L R_2 g_m + C_L L_3 L_L \right)}$$

**10.43** INVALID-ORDER-43  $Z(s) = \left(\infty, R_2, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

**10.44** INVALID-ORDER-44  $Z(s) = \left(\infty, R_2, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{s^3 \left( C_L L_3 L_L R_2 R_L g_m + C_L L_3 L_L R_L \right) + s^2 \left( L_3 L_L R_2 g_m + L_3 L_L \right) + s \left( L_3 R_2 R_L g_m + L_3 R_L \right)}{R_2 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_2 R_L g_m + C_3 C_L L_3 L_L R_2 g_m + C_3 L_3 L_L R_2 g_m + C_L L_3 L_L \right) + s^2 \left( C_3 L_3 R_2 R_L g_m + C_3 L_3 R_L R_2 R_L g_m + C_L L_L R_2 R_L g_m + C_L R_2$$

**10.46** INVALID-ORDER-46 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 \right) + s \left( C_3 R_2 R_3 g_m + C_3 R_3 \right) + 1}{s^3 \left( C_3 C_L L_3 R_2 g_m + C_3 C_L L_3 \right) + s^2 \left( C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

**10.47** INVALID-ORDER-47 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

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

**10.48** INVALID-ORDER-48 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s^3 \left(C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_3 R_L\right) + s^2 \left(C_3 C_L R_2 R_3 R_L g_m + C_3 C_L R_3 R_L + C_3 L_3 R_2 g_m + C_3 L_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 R_3 + C_L R_2 R_L g_m + C_L R_L\right) + 1}{s^3 \left(C_3 C_L L_3 R_2 g_m + C_3 C_L L_3\right) + s^2 \left(C_3 C_L R_2 R_3 g_m + C_3 C_L R_2 R_L g_m + C_3 C_L R_3 + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 R_2 R_L g_m + C_L R_L\right) + 1}{s^3 \left(C_3 C_L L_3 R_2 g_m + C_3 C_L L_3\right) + s^2 \left(C_3 C_L R_2 R_3 g_m + C_3 C_L R_2 R_L g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 R_L g_m + C_L R_L\right) + 1}{s^3 \left(C_3 C_L L_3 R_2 g_m + C_3 C_L L_3\right) + s^2 \left(C_3 C_L R_2 R_3 g_m + C_3 C_L R_2 R_L g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 R_L g_m + C_L R_L\right) + 1}{s^3 \left(C_3 C_L L_3 R_2 g_m + C_3 C_L L_3\right) + s^2 \left(C_3 C_L R_2 R_3 g_m + C_3 C_L R_2 R_L g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 R_3 g_m + C_3 C_L R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3\right) + s \left(C_3 R_3 R_3 g_m + C_3 R_3 g_m +$$

**10.49** INVALID-ORDER-49 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s^4 \left( C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L \right) + s^3 \left( C_3 C_L L_L R_2 R_3 g_m + C_3 C_L L_L R_3 \right) + s^2 \left( C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_L R_2 g_m + C_L L_L \right) + s \left( C_3 R_2 R_3 g_m + C_3 R_3 \right) + 1}{s^3 \left( C_3 C_L L_3 R_2 g_m + C_3 C_L L_3 + C_3 C_L L_L R_2 g_m + C_3 C_L L_L \right) + s^2 \left( C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 \right) + s \left( C_3 R_2 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 \right) + s \left( C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 g_m \right) + s \left( C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 g_m + C_3 R_3 g_m \right) + s \left( C_3 R_3 g_m + C_3 R_3 g_m \right) + s \left( C_3 R_3 g_m + C_3 R_3 g_m$$

**10.50** INVALID-ORDER-50 
$$Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.51 INVALID-ORDER-51 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + s^4 \left( C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L \right) + s^3 \left( C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_2 R_3 g_m + C_3 C_L R_3 R_L + C_3 C_L R_3 R_L + C_3 C_L R_2 R_3 g_m + C_3 L_2 R_2 g_m + C_3 C_L R_3 R_L + C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 R_L + C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 R_L + C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 R_L + C_3 C_L R_3 R_L$$

10.52 INVALID-ORDER-52 
$$Z(s) = \left(\infty, \ R_2, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{s^3 \left( C_3 L_3 L_L R_2 R_L g_m + C_3 L_3 L_L R_L \right) + s^2 \left( C_3 L_L R_2 R_3 R_L g_m + C_3 L_L R_3 R_L \right) + s \left( L_L R_2 R_L g_m + L_L R_L \right)}{R_2 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_2 R_L g_m + C_3 C_L L_L R_3 R_L g_m + C_3 L_L R_2 R_3 R_L g_m + C_3 L_L R_2 R_3 g_m + C_3 L_L R_2 R_3 g_m + C_3 L_L R_2 R_L g_m + C_3 L_L R_2 R_2 g_m + C_3 L_L R_3 R_3 g_m + C$$

10.53 INVALID-ORDER-53 
$$Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_2 R_L g_m + R_L + s^4 \left( C_3 C_L L_3 L_L R_2 R_L g_m + C_3 C_L L_3 L_L R_2 \right) + s^3 \left( C_3 C_L L_L R_2 R_3 R_L g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 g_m + C_3 L_3 L_L R_2 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 R_L + C_3 L_L R_3 R_$$

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10.54 INVALID-ORDER-54 Z(s) = \left(\infty, R_2, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \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-55 Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                H(s) = \frac{s^2 \left( C_L L_3 R_2 R_3 R_L g_m + C_L L_3 R_3 R_L \right) + s \left( L_3 R_2 R_3 g_m + L_3 R_3 \right)}{R_2 R_3 g_m + R_3 + s^3 \left( C_3 C_L L_3 R_2 R_3 R_L g_m + C_3 C_L L_3 R_3 R_L \right) + s^2 \left( C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_3 R_L + L_3 R_2 R_3 g_m + C_L L_3 R_2 R_2 g_m + C_L L_3 R_3 R_L \right) + s \left( C_L R_2 R_3 R_L g_m + C_L R_3 R_L + L_3 R_2 g_m + L_3 R_3 R_L \right)}
10.56 INVALID-ORDER-56 Z(s) = \left(\infty, R_2, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                             10.57 INVALID-ORDER-57 Z(s) = \left(\infty, R_2, \frac{L_3 R_{3s}}{C_3 L_3 R_{3s}^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_{Ls}}\right)
H(s) = \frac{s^3 \left( C_L L_3 L_L R_2 R_3 g_m + C_L L_3 L_L R_3 \right) + s^2 \left( C_L L_3 R_2 R_3 R_L g_m + C_L L_3 R_3 R_L \right) + s \left( L_3 R_2 R_3 g_m + L_3 R_3 \right)}{R_2 R_3 g_m + R_3 + s^4 \left( C_3 C_L L_3 L_L R_2 R_3 g_m + C_3 C_L L_3 R_2 R_3 R_L g_m + C_L L_3 L_L R_2 g_m + C_L L_3 L_L R_2 g_m + C_L L_3 R_2 R_3 g_m + C_L L_3 R_3 R_3 g_m + C
10.58 INVALID-ORDER-58 Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                   \frac{s^{3}\left(C_{L}L_{3}L_{L}R_{2}R_{3}R_{L}g_{m}+C_{L}L_{3}L_{L}R_{3}R_{L}\right)+s^{2}\left(L_{3}L_{L}R_{2}R_{3}g_{m}+L_{3}L_{L}R_{3}\right)+s\left(L_{3}R_{2}R_{3}R_{L}g_{m}+L_{3}R_{L}R_{3}R_{L}\right)}{R_{2}R_{3}R_{L}g_{m}+R_{3}R_{L}+s^{4}\left(C_{3}C_{L}L_{3}L_{L}R_{2}R_{3}g_{m}+C_{3}L_{L}L_{L}R_{3}R_{L}\right)+s^{3}\left(C_{3}L_{3}L_{L}R_{3}R_{L}\right)+s^{3}\left(C_{3}L_{3}L_{L}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}L_{L}R_{3}R_{L}+C_{L}L_{L}L_{L}R_{3}R_{L}\right)+s^{2}\left(C_{3}L_{3}R_{L}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{L}+C_{L}L_{L}R_{2}R_{L}+C_{L}L_{L}R_{
10.59 INVALID-ORDER-59 Z(s) = \left(\infty, R_2, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \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-60 Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{1}{C_Ls}\right)
10.61 INVALID-ORDER-61 Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)
                                            H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_3 L_3 R_2 R_3 R_L g_m + C_3 L_3 R_3 R_L\right) + s \left(L_3 R_2 R_L g_m + L_3 R_L\right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^3 \left(C_3 C_L L_3 R_2 R_3 R_L g_m + C_3 L_3 R_3 R_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_2 R_L g_m + C_3 L_3 R_2 R_L g_m + C_L L_3 R_L\right) + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L + L_3 R_2 g_m + L_3\right)}
10.62 INVALID-ORDER-62 Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
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 $H(s) = \frac{R_2 R_3 g_m + R_3 + s^3 \left(C_3 C_L L_3 R_2 R_3 R_L g_m + C_3 C_L L_3 R_3 R_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_3 + C_L L_3 R_2 R_L g_m + C_L L_3 R_L\right) + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L + L_3 R_2 g_m + L_3\right)}{R_2 g_m + s^3 \left(C_3 C_L L_3 R_2 R_3 g_m + C_3 C_L L_3 R_3 R_L + C_3 C_L L_3 R_3 R_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_L L_3 R_2 g_m + C_L L_3\right) + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L + L_3 R_2 g_m + L_3\right)}$ 

**10.63** INVALID-ORDER-63  $Z(s) = \left(\infty, \ R_2, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_3 C_L L_3 L_L R_2 R_3 g_m + C_3 C_L L_3 L_L R_3\right) + s^3 \left(C_L L_3 L_L R_2 g_m + C_L L_3 L_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_3 + C_L L_L R_2 R_3 g_m + C_L L_L R_3\right) + s \left(L_3 R_2 g_m + L_3\right)}{R_2 g_m + s^4 \left(C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L\right) + s^3 \left(C_3 C_L L_3 R_2 R_3 g_m + C_3 C_L L_3 R_3\right) + s^2 \left(C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_3 R_2 g_m + C_L L_3 + C_L L_2 R_3 g_m + C_L L_L\right) + s \left(C_L R_2 R_3 g_m + C_L R_3\right) + 1}$$

**10.64** INVALID-ORDER-64  $Z(s) = \left(\infty, \ R_2, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$ 

**10.65** INVALID-ORDER-65  $Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_3 C_L L_3 L_L R_2 R_3 g_m + C_3 C_L L_3 L_L R_3\right) + s^3 \left(C_3 C_L L_3 R_2 R_3 R_L g_m + C_3 L_L R_3 R_L + C_L L_3 L_L R_2 g_m + C_L L_3 L_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_L L_3 R_L + C_L L_L R_2 R_3 g_m + C_L L_L R_3\right) + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L + C_L L_2 R_2 R_2 R_L + C_L L_2 R_2 R_L + C_L$$

**10.66** INVALID-ORDER-66  $Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

$$H(s) = \frac{s^3 \left( C_3 L_3 L_L R_2 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( L_3 L_L R_2 R_L g_m + L_3 L_L R_L \right) + s \left( L_L R_2 R_3 R_L g_m + L_L R_3 R_L \right)}{R_2 R_3 R_L g_m + R_3 R_L + s^4 \left( C_3 C_L L_3 L_L R_2 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^3 \left( C_3 L_3 L_L R_2 R_3 g_m + C_3 L_3 L_L R_3 R_L + C_L L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_2 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_2 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 L_L R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 R_2 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 L_L R_3 R_L \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_3 R_L g_m + C_3 L_3 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_2 R_L g_m + C_3 L_3 R_L g_m \right) + s^2 \left( C_3 L_3 R_2 R$$

10.67 INVALID-ORDER-67  $Z(s) = \left(\infty, \ R_2, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_1s^2 + 1}\right)$ 

10.68 INVALID-ORDER-68  $Z(s) = \left(\infty, R_2, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

**10.69** INVALID-ORDER-69  $Z(s) = \left(\infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_3\right)}{R_2 g_m + s^3 \left(C_3 C_L L_3 R_2 R_3 g_m + C_3 C_L L_3 R_3\right) + s^2 \left(C_3 L_3 R_2 g_m + C_3 L_3\right) + s \left(C_3 R_2 R_3 g_m + C_3 R_3 + C_L R_2 R_3 g_m + C_L R_3\right) + 1}$$

10.70 INVALID-ORDER-70  $Z(s) = \left(\infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$ 

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_3 L_3 R_2 R_3 R_L g_m + C_3 L_3 R_3 R_L\right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^3 \left(C_3 C_L L_3 R_2 R_3 R_L g_m + C_3 C_L L_3 R_3 R_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_3 R_2 R_1 g_m + C_3 L_3 R_L\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L + C_L R_2 R_3 R_L g_m + C_L R_3 R_L\right)}$$

10.71 INVALID-ORDER-71  $Z(s) = \left(\infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_2R_3g_m + R_3 + s^3\left(C_3C_LL_3R_2R_3R_Lg_m + C_3C_LL_3R_3R_L\right) + s^2\left(C_3L_3R_2R_3g_m + C_3L_3R_3\right) + s\left(C_LR_2R_3R_Lg_m + C_LR_3R_L\right)}{R_2g_m + s^3\left(C_3C_LL_3R_2R_3g_m + C_3C_LL_3R_2R_2g_m + C_3C_LL_3R_2R_2g_m + C_3C_LL_3R_2R_2g_m + C_3L_3R_2g_m + C_3L_3R_3\right) + s\left(C_3R_2R_3g_m + C_3R_3R_Lg_m + C_4R_3R_L\right)}$$

$$10.72 \quad \text{INVALID-ORDER-72} \ Z(s) = \left( \infty, \ R_2, \ \frac{R_3\left( C_3L_3s^2 + 1 \right)}{C_3L_3s^2 + C_3R_3s + 1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls} \right) \\ H(s) = \frac{R_2R_3g_m + R_3 + s^4\left( C_3C_LL_3L_LR_2R_3g_m + C_3C_LL_3L_LR_3 \right) + s^2\left( C_3L_3R_2R_3g_m + C_3L_3R_3 + C_LL_LR_2R_3g_m + C_LL_LR_3 \right)}{R_2g_m + s^4\left( C_3C_LL_3L_LR_2g_m + C_3C_LL_3L_L \right) + s^3\left( C_3C_LL_3R_2R_3g_m + C_3C_LL_2R_3 \right) + s^2\left( C_3L_3R_2g_m + C_3L_3R_3 + C_LL_LR_2g_m + C_LL_L \right) + s\left( C_3R_2R_3g_m + C_3R_3 + C_LR_2R_3g_m + C_LR_3 \right) + 1} \\ H(s) = \frac{R_2R_3g_m + R_3 + s^4\left( C_3C_LL_3L_LR_2R_3g_m + C_3C_LL_3L_LR_3 \right) + s^2\left( C_3L_3R_2R_3g_m + C_3L_3R_3 + C_LL_2R_3g_m + C_LL_LR_3 \right)}{R_2R_3g_m + C_3C_LL_3L_L \right) + s^3\left( C_3C_LL_3R_2R_3g_m + C_3C_LL_3R_3 + C_3C_LL_2R_3 \right) + s^2\left( C_3L_3R_2R_3g_m + C_3L_3R_3 + C_LL_2R_3g_m + C_3L_3R_3 + C_LL_2R_3g_m + C_3L_3R_3 \right) + s^2\left( C_3L_3R_2R_3g_m + C_3L_3R_3 + C_3L_3R_3 + C_3L_3R_3 \right) + s^2\left( C_3L_3R_3R_3R_3 + C_3L_3R_3R_3 + C_3L_3R_3R_3 + C_3L_3R_3R_3 + C_3L_3R_3R_3 + C_3L_3R_3R_3 + C_3L_3R_3R_3 + C_3R_3R_3R_3 + C_3R_3R_3R_3R_3 + C_3R_3R_3R_3 + C_3R_3R_3R_3 + C_3R_3R_3R_3 + C_3R_3R_3R_$$

10.74 INVALID-ORDER-74 
$$Z(s) = \left(\infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_3 C_L L_3 L_L R_2 R_3 g_m + C_3 C_L L_3 L_L R_3\right) + s^3 \left(C_3 C_L L_3 R_2 R_3 R_L g_m + C_3 L_L R_3 R_3 R_L\right) + s^2 \left(C_3 L_3 R_2 R_3 g_m + C_3 L_L R_2 R_3 g_m + C_L L_L R_3\right) + s \left(C_L R_2 R_3 R_L g_m + C_L L_R R_3 R_L R_3$ 

10.75 INVALID-ORDER-75 
$$Z(s) = \left(\infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

10.76 INVALID-ORDER-76 
$$Z(s) = \left(\infty, R_2, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

10.77 INVALID-ORDER-77 
$$Z(s) = \left(\infty, \ R_2, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

10.78 INVALID-ORDER-78 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2 R_3 R_L s + R_3 R_L g_m}{R_3 g_m + R_L g_m + s \left(C_2 R_3 + C_2 R_L\right)}$$

10.79 INVALID-ORDER-79 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2 C_L L_L R_3 s^3 + C_2 R_3 s + C_L L_L R_3 g_m s^2 + R_3 g_m}{C_2 C_L L_L s^3 + g_m + s^2 \left( C_2 C_L R_3 + C_L L_L g_m \right) + s \left( C_2 + C_L R_3 g_m \right)}$$

10.80 INVALID-ORDER-80 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2 L_L R_3 s^2 + L_L R_3 g_m s}{C_2 C_L L_L R_3 s^3 + R_3 g_m + s^2 \left( C_2 L_L + C_L L_L R_3 g_m \right) + s \left( C_2 R_3 + L_L g_m \right)}$$

10.81 INVALID-ORDER-81 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2 C_L L_L R_3 s^3 + R_3 g_m + s^2 \left( C_2 C_L R_3 R_L + C_L L_L R_3 g_m \right) + s \left( C_2 R_3 + C_L R_3 R_L g_m \right)}{C_2 C_L L_L s^3 + g_m + s^2 \left( C_2 C_L R_3 + C_2 C_L R_L + C_L L_L g_m \right) + s \left( C_2 + C_L R_3 g_m + C_L R_L g_m \right)}$$

10.82 INVALID-ORDER-82 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2 L_L R_3 R_L s^2 + L_L R_3 R_L g_m s}{C_2 C_L L_L R_3 R_L s^3 + R_3 R_L g_m + s^2 \left( C_2 L_L R_3 + C_2 L_L R_L + C_L L_L R_3 R_L g_m \right) + s \left( C_2 R_3 R_L + L_L R_3 g_m + L_L R_L g_m \right)}$$

10.83 INVALID-ORDER-83 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_2L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(C_2R_3R_L + L_LR_3g_m\right)}{R_3g_m + R_Lg_m + s^3\left(C_2C_LL_LR_3 + C_2C_LL_LR_L\right) + s^2\left(C_2L_L + C_LL_LR_3g_m + C_LL_LR_Lg_m\right) + s\left(C_2R_3 + C_2R_L + L_Lg_m\right)}$$

10.84 INVALID-ORDER-84 
$$Z(s) = \left( \infty, \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1} \right)$$

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

10.85 INVALID-ORDER-85  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 s + g_m}{s^2 (C_2 C_3 + C_2 C_L) + s (C_3 g_m + C_L g_m)}$$

10.86 INVALID-ORDER-86  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 C_L R_L s^2 + g_m + s \left( C_2 + C_L R_L g_m \right)}{C_2 C_3 C_L R_L s^3 + s^2 \left( C_2 C_3 + C_2 C_L + C_3 C_L R_L g_m \right) + s \left( C_3 g_m + C_L g_m \right)}$$

10.87 INVALID-ORDER-87  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 C_L L_L s^3 + C_2 s + C_L L_L g_m s^2 + g_m}{C_2 C_3 C_L L_L s^4 + C_3 C_L L_L g_m s^3 + s^2 (C_2 C_3 + C_2 C_L) + s (C_3 g_m + C_L g_m)}$$

10.88 INVALID-ORDER-88  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2 L_L s^2 + L_L g_m s}{C_2 s + q_m + s^3 \left( C_2 C_3 L_L + C_2 C_L L_L \right) + s^2 \left( C_3 L_L q_m + C_L L_L q_m \right)}$$

**10.89** INVALID-ORDER-89  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

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

10.90 INVALID-ORDER-90  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

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

10.91 INVALID-ORDER-91 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_Ls^3 + R_Lg_m + s^2\left(C_2L_L + C_LL_LR_Lg_m\right) + s\left(C_2R_L + L_Lg_m\right)}{C_2C_3C_LL_LR_Ls^4 + g_m + s^3\left(C_2C_3L_L + C_2C_LL_L + C_3C_LL_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_3L_Lg_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_Lg_m\right)}$$

10.92 INVALID-ORDER-92 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_Ls^3 + C_2R_Ls + C_LL_LR_Lg_ms^2 + R_Lg_m}{C_2C_3C_LL_LR_Ls^4 + g_m + s^3\left(C_2C_LL_L + C_3C_LL_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_LL_Lg_m\right) + s\left(C_2 + C_3R_Lg_m + C_LR_Lg_m\right)}$$

**10.93** INVALID-ORDER-93 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LR_3R_Ls^2 + R_3g_m + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_3C_LR_3R_Ls^3 + g_m + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_2C_LR_L + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_3g_m + C_LR_Lg_m\right)}$$

**10.94** INVALID-ORDER-94 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_3s^3 + C_2R_3s + C_LL_LR_3g_ms^2 + R_3g_m}{C_2C_3C_LL_LR_3s^4 + g_m + s^3\left(C_2C_LL_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_3g_m\right)}$$

**10.95** INVALID-ORDER-95 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2 L_L R_3 s^2 + L_L R_3 g_m s}{R_3 g_m + s^3 \left( C_2 C_3 L_L R_3 + C_2 C_L L_L R_3 \right) + s^2 \left( C_2 L_L + C_3 L_L R_3 g_m + C_L L_L R_3 g_m \right) + s \left( C_2 R_3 + L_L g_m \right)}$$

**10.96** INVALID-ORDER-96 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_3s^3 + R_3g_m + s^2\left(C_2C_LR_3R_L + C_LL_LR_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_3C_LL_LR_3s^4 + g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_LL_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_2C_LR_L + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_2R_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_2R_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_2R_3g_m\right) + s\left(C_2 + C_3R_3g_m\right) + s\left(C_2 + C_3R_3g_m\right)$$

10.97 INVALID-ORDER-97 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2 L_L R_3 R_L s^2 + L_L R_3 R_L g_m s}{R_3 R_L g_m + s^3 \left( C_2 C_3 L_L R_3 R_L + C_2 C_L L_L R_3 R_L \right) + s^2 \left( C_2 L_L R_3 + C_2 L_L R_L + C_3 L_L R_3 R_L g_m + C_L L_L R_3 R_L g_m \right) + s \left( C_2 R_3 R_L + L_L R_3 g_m + L_L R_L g_m \right)}$$

**10.98** INVALID-ORDER-98 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_2L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(C_2R_3R_L + L_LR_3g_m\right)}{C_2C_3C_LL_LR_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(C_2C_3L_LR_3 + C_2C_LL_LR_4 + C_3C_LL_LR_3R_Lg_m\right) + s\left(C_2R_3R_L + L_LR_3g_m + C_LL_LR_3g_m + C_LLR_3g_m +$$

10.99 INVALID-ORDER-99 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

**10.100** INVALID-ORDER-100 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3R_3s^2 + g_m + s\left(C_2 + C_3R_3g_m\right)}{C_2C_3C_LR_3s^3 + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.101** INVALID-ORDER-101 
$$Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3R_3R_Ls^2 + R_Lg_m + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3C_LR_3R_Ls^3 + g_m + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_2C_LR_L + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m + C_LR_Lg_m\right)}$$

**10.102** INVALID-ORDER-102 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LR_3R_Ls^3 + g_m + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_Lg_m\right)}{s^3\left(C_2C_3C_LR_3 + C_2C_3C_LR_L\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m + C_3C_LR_Lg_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.103** INVALID-ORDER-103 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_LR_3s^4 + g_m + s^3\left(C_2C_LL_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_Ls^4 + s^3\left(C_2C_3C_LR_3 + C_3C_LL_Lg_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

10.104 INVALID-ORDER-104 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3L_LR_3s^3 + L_Lg_ms + s^2\left(C_2L_L + C_3L_LR_3g_m\right)}{C_2C_3C_LL_LR_3s^4 + g_m + s^3\left(C_2C_3L_L + C_2C_LL_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_3L_Lg_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m\right)}$$

**10.105** INVALID-ORDER-105 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

**10.106** INVALID-ORDER-106 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2C_3L_LR_3R_Ls^3 + L_LR_Lg_ms + s^2\left(C_2L_LR_L + C_3L_LR_3R_Lg_m\right)}{C_2C_3C_LL_LR_3R_Ls^4 + R_Lg_m + s^3\left(C_2C_3L_LR_3 + C_2C_3L_LR_L + C_3C_LL_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_L + C_3L_LR_3g_m + C_3L_LR_Lg_m + C_LL_LR_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m + L_Lg_m\right)}$$

10.107 INVALID-ORDER-107 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_LR_3R_Ls^4 + R_Lg_m + s^3\left(C_2C_3L_LR_3 + C_2C_LL_LR_L + C_3C_LL_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_L + C_3L_LR_3g_m + C_LL_LR_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m + L_Lg_m\right)}{g_m + s^4\left(C_2C_3C_LL_LR_3 + C_2C_3C_LL_LR_L\right) + s^3\left(C_2C_3L_L + C_3C_LL_LR_3g_m + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_L + C_3L_LR_3g_m + C_LL_LR_2g_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m + L_Lg_m\right)}$$

10.108 INVALID-ORDER-108 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_LR_3R_Ls^4 + R_Lg_m + s^3\left(C_2C_LL_LR_L + C_3C_LL_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_LL_LR_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{g_m + s^4\left(C_2C_3C_LL_LR_3 + C_2C_3C_LL_LR_1\right) + s^3\left(C_2C_3C_LR_3R_L + C_2C_LL_L + C_3C_LL_LR_3g_m + C_3C_LL_LR_2g_m\right) + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_2C_LR_L + C_3C_LR_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right) + s\left(C_2R_L + C_3R_2R_Lg_m\right) +$$

**10.109** INVALID-ORDER-109 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2C_3L_3R_Ls^3 + C_2R_Ls + C_3L_3R_Lg_ms^2 + R_Lg_m}{C_2C_3L_3s^3 + q_m + s^2\left(C_2C_3R_L + C_3L_3q_m\right) + s\left(C_2 + C_3R_Lq_m\right)}$$

**10.110** INVALID-ORDER-110 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3L_3s^3 + C_2s + C_3L_3g_ms^2 + g_m}{C_2C_3C_LL_3s^4 + C_3C_LL_3g_ms^3 + s^2\left(C_2C_3 + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.111** INVALID-ORDER-111 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3L_3R_Ls^3 + C_2R_Ls + C_3L_3R_Lg_ms^2 + R_Lg_m}{C_2C_3C_LL_3R_Ls^4 + g_m + s^3\left(C_2C_3L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_3L_3g_m\right) + s\left(C_2 + C_3R_Lg_m + C_LR_Lg_m\right)}$$

**10.112** INVALID-ORDER-112 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3R_Ls^4 + g_m + s^3\left(C_2C_3L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_L + C_3L_3g_m\right) + s\left(C_2 + C_LR_Lg_m\right)}{C_2C_3C_LL_3s^4 + s^3\left(C_2C_3C_LR_L + C_3C_LL_3g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_Lg_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.113** INVALID-ORDER-113 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_Ls^5 + C_2s + C_3C_LL_3L_Lg_ms^4 + g_m + s^3\left(C_2C_3L_3 + C_2C_LL_L\right) + s^2\left(C_3L_3g_m + C_LL_Lg_m\right)}{s^4\left(C_2C_3C_LL_3 + C_2C_3C_LL_L\right) + s^3\left(C_3C_LL_3g_m + C_3C_LL_Lg_m\right) + s^2\left(C_2C_3 + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.114** INVALID-ORDER-114 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3L_3L_Ls^4 + C_2L_Ls^2 + C_3L_3L_Lg_ms^3 + L_Lg_ms}{C_2C_3C_LL_3L_Ls^5 + C_2s + C_3C_LL_3L_Lg_ms^4 + g_m + s^3\left(C_2C_3L_3 + C_2C_3L_L + C_2C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_Lg_m + C_LL_Lg_m\right)}$$

**10.115** INVALID-ORDER-115 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

**10.116** INVALID-ORDER-116 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{{C_2{C_3}{L_3}{L_L}{R_L}{s^4} + C_2{L_L}{R_L}{s^2} + C_3{L_3}{L_L}{R_L}{g_m}{s^3} + {L_L}{R_L}{g_m}{s}}}{{C_2{C_3}{C_L}{L_3}{L_L}{R_L}{s^5} + {R_L}{g_m} + {s^4}\left( {{C_2}{C_3}{L_3}{L_L} + {C_3}{C_L}{L_3}{L_L}{R_L}{g_m}} \right) + {s^3}\left( {{C_2}{C_3}{L_3}{R_L} + {C_2}{C_3}{L_L}{R_L} + {C_2}{C_L}{L_L}{R_L} + {C_3}{L_3}{L_L}{R_L}{g_m}} \right) + {s^2}\left( {{C_2}{L_L} + {C_3}{L_3}{R_L}{g_m} + {C_2}{L_L}{R_L}{g_m}} \right) + {s^2}\left( {{C_2}{L_L} + {C_3}{L_3}{L_L}{R_L}{g_m}} \right) + {s^2}\left( {{C_2}{L_L} + {C_3}{L_3}{L_L}{R_L}{g_m}} \right) + {s^2}\left( {{C_2}{L_L} + {C_3}{L_L}{R_L}{g_m}} \right) + {s$$

10.117 INVALID-ORDER-117 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_2C_3L_3L_L + C_3C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3R_L + C_2C_LL_LR_L + C_3L_3L_Lg_m\right) + s^2\left(C_2L_L + C_3L_3R_Lg_m + C_LL_LR_Lg_m\right) + s\left(C_2R_L + L_Lg_m\right)}{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3C_LL_LR_L + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_3L_L + C_3C_LL_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_3L_3R_Lg_m + C_LL_LR_Lg_m\right) + s\left(C_2R_L + L_Lg_m\right)}$$

10.118 INVALID-ORDER-118 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_Ls^5 + C_2R_Ls + C_3C_LL_3L_LR_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_3R_L + C_2C_LL_LR_L\right) + s^2\left(C_3L_3R_Lg_m + C_LL_LR_Lg_m\right)}{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3C_LL_3R_L + C_2C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_L + C_3C_LL_3R_Lg_m + C_3C_LL_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_3L_3g_m + C_LL_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_3C_LL_3R_Lg_m + C_2C_LR_L + C_3C_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_2C_LR$$

**10.119** INVALID-ORDER-119 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2 L_3 R_L s^2 + L_3 R_L g_m s}{C_2 C_3 L_3 R_L s^3 + R_L g_m + s^2 (C_2 L_3 + C_3 L_3 R_L g_m) + s (C_2 R_L + L_3 g_m)}$$

**10.120** INVALID-ORDER-120 
$$Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2 L_3 s^2 + L_3 g_m s}{C_2 s + g_m + s^3 \left( C_2 C_3 L_3 + C_2 C_L L_3 \right) + s^2 \left( C_3 L_3 g_m + C_L L_3 g_m \right)}$$

10.121 INVALID-ORDER-121 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

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

**10.122** INVALID-ORDER-122 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_3R_Ls^3 + L_3g_ms + s^2\left(C_2L_3 + C_LL_3R_Lg_m\right)}{C_2C_3C_LL_3R_Ls^4 + g_m + s^3\left(C_2C_3L_3 + C_2C_LL_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_L + C_3L_3g_m + C_LL_3g_m\right) + s\left(C_2 + C_LR_Lg_m\right)}$$

**10.123** INVALID-ORDER-123 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_3L_Ls^4 + C_2L_3s^2 + C_LL_3L_Lg_ms^3 + L_3g_ms}{C_2C_3C_LL_3L_Ls^5 + C_2s + C_3C_LL_3L_Lg_ms^4 + g_m + s^3\left(C_2C_3L_3 + C_2C_LL_3 + C_2C_LL_1\right) + s^2\left(C_3L_3g_m + C_LL_3g_m + C_LL_2g_m\right)}$$

**10.124** INVALID-ORDER-124  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

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

**10.125** INVALID-ORDER-125  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{{C_2 {C_L}{L_3}{L_L}{s^4} + L_3 {g_m}s + s^3 \left( {{C_2}{C_L}{L_3}{R_L} + {C_L}{L_3}{L_L}{g_m}} \right) + s^2 \left( {{C_2}{L_3} + {C_L}{L_3}{R_L}{g_m}} \right)}}{{{C_2}{C_3}{C_L}{L_3}{L_L}{s^5} + {g_m} + s^4 \left( {{C_2}{C_3}{C_L}{L_3}{L_L}{g_m}} \right) + s^3 \left( {{C_2}{C_3}{L_3} + {C_2}{C_L}{L_3} + {C_2}{C_L}{L_4} + {C_3}{C_L}{L_3}{R_L}{g_m}} \right) + s^2 \left( {{C_2}{C_L}{R_L} + {C_3}{L_3}{g_m} + {C_L}{L_3}{g_m} + {C_L}{L_3}{g_m} + {C_L}{L_3}{g_m} \right) + s\left( {{C_2}{C_2}{L_3}{L_2}{g_m}} \right) + s\left( {{C_2}{C_2}{L_3}{L_2}{L_2}{g_m}} \right) + s\left( {{C_2}{C_2}{L_3}{L_2}{L_2}{g_m}} \right) + s\left( {{C_2}{C_2}{L_3}{L_2}{g_m}} \right) + s\left( {{C_2}{C_2}{L_2}{R_L} + {C_2}{L_2}{g_m}} \right) + s\left( {{C_2}{C_2}{L_2}{R_L} + {C_2}{L_2}{R_L}{g_m}} \right) + s\left( {{C_2}{C_2}{R_L}$$

**10.126** INVALID-ORDER-126  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_2L_3L_LR_Ls^2 + L_3L_LR_Lg_ms}{L_3R_Lg_m + L_LR_Lg_m + s^3\left(C_2C_3L_3L_LR_L + C_2C_LL_3L_LR_L\right) + s^2\left(C_2L_3L_L + C_3L_3L_LR_Lg_m + C_LL_3L_LR_Lg_m\right) + s\left(C_2L_3R_L + C_2L_LR_L + L_3L_Lg_m\right)}$$

10.127 INVALID-ORDER-127  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2C_LL_3L_LR_Ls^4 + L_3R_Lg_ms + s^3\left(C_2L_3L_L + C_LL_3L_LR_Lg_m\right) + s^2\left(C_2L_3R_L + L_3L_Lg_m\right)}{C_2C_3C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_2C_3L_3L_L + C_2C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3R_L + C_2L_LR_L + C_3L_3L_Lg_m\right) + s^2\left(C_2L_3R_L + L_3L_Lg_m\right) + s^2\left(C_2L_3$$

10.128 INVALID-ORDER-128  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2C_LL_3L_LR_Ls^4 + C_2L_3R_Ls^2 + C_LL_3L_LR_Lg_ms^3 + L_3R_Lg_ms}{C_2C_3C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_2C_LL_3L_L + C_3C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3R_L + C_2C_LL_3R_L + C_2C_LL_3L_LR_L + C_LL_3L_Lg_m\right) + s^2\left(C_2L_3 + C_3L_3R_Lg_m + C_LL_3R_Lg_m + C_LL_3R_Lg_m\right) + s\left(C_2R_L + L_3g_m\right)}$$

**10.129** INVALID-ORDER-129 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2C_3L_3R_Ls^3 + R_Lg_m + s^2\left(C_2C_3R_3R_L + C_3L_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3L_3s^3 + g_m + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m\right)}$$

**10.130** INVALID-ORDER-130 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3L_3s^3 + g_m + s^2\left(C_2C_3R_3 + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_3s^4 + s^3\left(C_2C_3C_LR_3 + C_3C_LL_3g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

10.131 INVALID-ORDER-131 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3L_3R_Ls^3 + R_Lg_m + s^2\left(C_2C_3R_3R_L + C_3L_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3C_LL_3R_Ls^4 + g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_2C_LR_L + C_3C_LR_3R_Lg_m + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m + C_2R_Lg_m\right)}$$

**10.132** INVALID-ORDER-132 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3R_Ls^4 + g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_3 + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_3C_LR_3R_Lg_m + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_Lg_m\right)}{C_2C_3C_LL_3s^4 + s^3\left(C_2C_3C_LR_3 + C_2C_3C_LR_L + C_3C_LL_3g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m + C_3C_LR_Lg_m\right) + s\left(C_3G_m + C_LR_Lg_m\right)}$$

**10.133** INVALID-ORDER-133 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3C_LL_LR_3 + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_3L_3g_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m\right)}{s^4\left(C_2C_3C_LL_3 + C_2C_3C_LL_L\right) + s^3\left(C_2C_3C_LR_3 + C_3C_LL_3g_m + C_3C_LL_Lg_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m\right) + s\left(C_3G_m + C_LL_2g_m\right) + s\left(C_3G_m + C_LL_2g_m\right)}$$

**10.134** INVALID-ORDER-134 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3L_3L_Ls^4 + L_Lg_ms + s^3\left(C_2C_3L_LR_3 + C_3L_3L_Lg_m\right) + s^2\left(C_2L_L + C_3L_LR_3g_m\right)}{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3C_LL_LR_3 + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_3L_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_3L_3g_m + C_3L_Lg_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m\right)}$$

10.135 INVALID-ORDER-135 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3C_LL_3R_L + C_2C_3C_LL_2R_3 + C_3C_LL_3L_2g_m\right) + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_3 + C_2C_LL_L + C_3C_LL_3R_Lg_m + C_3C_LL_2R_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_3C_LR_3R_Lg_m + C_3L_2g_m\right) + s\left(C_2C_3R_3 + C_2C_LR_L + C_3C_LR_3R_Lg_m + C_3C_LR_3R_Lg_m + C_3C_LR_3g_m + C_LR_Lg_m\right) + s\left(C_2C_3C_LL_3 + C_2C_3C_LL_1\right) + s^3\left(C_2C_3C_LL_3 + C_2C_3C_LL_1\right) + s^3\left(C_2C_3C_LR_3 + C_2C_LL_1 + C_3C_LL_3g_m + C_3C_LL_2g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_1 + C_3C_LR_3g_m + C_2C_LR_1\right) + s^2\left(C_2C_3C_LR_3 + C_2C_LR_1 + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_1 + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m\right) + s^2\left(C_2C_3C_LR_3 + C_2C_3C_LR_3 + C_2C_3C_LR_3 + C_2C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m + C_3C_LR_3g_m\right) + s^2\left(C_2C_3C_LR_3 + C_2C_3C_LR_3 + C_2C_3C_LR_3 + C_3C_LR_3g_m + C_3C_LR_3g$$

10.136 INVALID-ORDER-136 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2C_3L_3L_LR_Ls^4 + L_LR_Lg_ms + s^3\left(C_2C_3L_LR_3R_L + C_3L_3L_LR_Lg_m\right) + s^2\left(C_2L_LR_L + C_3L_LR_3R_Lg_m\right)}{C_2C_3C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_2C_3C_LL_LR_3R_L + C_2C_3L_LR_L + C_3C_LL_LR_3 + C_2C_3L_LR_L + C_3C_LL_LR_3R_Lg_m\right) + s^3\left(C_2C_3L_LR_3R_L + C_2C_3L_LR_3 + C_2C_3L_LR_3 + C_2C_3L_LR_3 + C_2C_3L_LR_3 + C_2C_3L_LR_3 + C_3L_LR_3 + C_3L_$$

10.137 INVALID-ORDER-137 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_Ls^5 + R_Lg_m + s^4\left(C_2C_3C_LL_LR_3R_L + C_2C_3L_3L_L + C_3C_LL_2R_2g_m\right) + s^3\left(C_2C_3L_3R_L + C_2C_LL_LR_3 + C$$

10.138 INVALID-ORDER-138 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2^5 + R_Lg_m + s^4\left(C_2C_3C_LL_RR_3R_L + C_3C_LL_RR_3R_L + C_3C_LL_RR_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_L + C_3C_LL_RR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_3L_3R_Lg_m + C_LL_RR_2g_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right) + s^2\left(C_2R_3R_2R_L + C_3R_3R_Lg_m\right) + s^2\left(C_2R_3R_3R_L + C_3R_3R_Lg_m\right) + s^2\left(C_2R_3R_3R$$

 $H(s) = \frac{C_2 L_3 R_3 R_L s^2 + L_3 R_3 R_L g_m s}{C_2 C_3 L_3 R_3 R_L s^3 + R_3 R_L g_m + s^2 \left( C_2 L_3 R_3 + C_2 L_3 R_L + C_3 L_3 R_3 R_L g_m \right) + s \left( C_2 R_3 R_L + L_3 R_3 g_m + L_3 R_L g_m \right)}$ **10.140** INVALID-ORDER-140  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{C_2L_3R_3s^2 + L_3R_3g_ms}{R_3g_m + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3\right) + s^2\left(C_2L_3 + C_3L_3R_3g_m + C_LL_3R_3g_m\right) + s\left(C_2R_3 + L_3g_m\right)}$ 10.141 INVALID-ORDER-141  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{C_2L_3R_3R_Ls^2 + L_3R_3R_Lg_ms}{R_3R_Lg_m + s^3\left(C_2C_3L_3R_3R_L + C_2C_LL_3R_3R_L\right) + s^2\left(C_2L_3R_3 + C_2L_3R_L + C_3L_3R_3R_Lg_m + C_LL_3R_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_3g_m + L_3R_Lg_m\right)}$ **10.142** INVALID-ORDER-142  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 10.143 INVALID-ORDER-143  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{C_2C_LL_3L_LR_3s^4 + C_2L_3R_3s^2 + C_LL_3L_LR_3g_ms^3 + L_3R_3g_ms}{C_2C_3C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_2C_LL_3L_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3 + C_LL_3L_Lg_m\right) + s^2\left(C_2L_3 + C_3L_3R_3g_m + C_LL_3R_3g_m + C_LL_3R_3g_m\right) + s^2\left(C_2R_3 + L_3R_3g_m + C_LL_3R_3g_m + C_LL_3R_3g_m\right) + s^2\left(C_2R_3 + L_3R_3g_m + C_LL_3R_3g_m + C_LL_3R_3g_m\right) + s^2\left(C_2R_3 + C_2R_3R_3g_m + C_LL_3R_3g_m\right) + s^2\left(C_2R_3 + C_2R_3R_3g_m + C_2R_3R_3g_m\right) + s^2\left(C_2R_3 + C_2R_3R_3g_m + C_2R_3R_3g_m\right) + s^2\left(C_2R_3 + C_2R_3R_3g_m\right) + s^2\left(C_2R_3 + C_3R_3g_m\right) + s^2\left(C_2R_3 + C_3R_3g$ **10.144** INVALID-ORDER-144  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{C_2L_3L_LR_3s^2 + L_3L_LR_3g_ms}{L_3R_3g_m + L_LR_3g_m + s^3\left(C_2C_3L_3L_LR_3 + C_2C_LL_3L_LR_3\right) + s^2\left(C_2L_3L_L + C_3L_3L_LR_3g_m + C_LL_3L_LR_3g_m\right) + s\left(C_2L_3R_3 + C_2L_LR_3 + L_3L_Lg_m\right)}$ 10.145 INVALID-ORDER-145  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{C_2C_LL_3L_LR_3s^4 + L_3R_3g_ms + s^3\left(C_2C_LL_3R_3R_L + C_LL_3L_LR_3g_m\right) + s^2\left(C_2L_3R_3 + C_LL_3R_3R_Lg_m\right)}{C_2C_3C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3R_L + C_2C_LL_3R_$ **10.146** INVALID-ORDER-146  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{C_2L_3L_LR_3R_Ls^2 + L_3L_LR_3R_Lg_ms}{L_3R_3R_Lg_m + L_LR_3R_Lg_m + s^3\left(C_2C_3L_3L_LR_3R_L + C_2C_LL_3L_LR_3R_L\right) + s^2\left(C_2L_3L_LR_3 + C_2L_3L_LR_3 + C_2L_3L_LR_3R_Lg_m + C_LL_3L_LR_3R_Lg_m\right) + s\left(C_2L_3R_3R_L + C_2L_LR_3R_L + L_3L_LR_3g_m + L_3L_LR_3g_m\right)}$ 10.147 INVALID-ORDER-147  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{C_2C_LL_3L_LR_3R_Ls^4 + L_3R_3R_Lg_ms + s^3\left(C_2L_3L_LR_3 + C_LL_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_3R_3R_L + L_3L_LR_3g_m\right)}{C_2C_3C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(C_2C_3L_3L_LR_3 + C_2C_LL_3L_LR_3 + C_2C_LL_3L_LR_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2L_3L_LR_3R_L + C_2L_3L_LR_3g_m + C_LL_3L_LR_3g_m\right) + s^2\left(C_2L_3R_3R_L + C_2L_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_3R_3R_L + C_2L_3R_LR_3R_Lg_m\right) + s^2\left(C_2L_3$ 10.148 INVALID-ORDER-148  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $\frac{C_{2}C_{L}L_{3}L_{L}R_{3}R_{L}s^{4}+C_{2}L_{3}R_{L}R_{3}R_{L}s^{2}+C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}s^{3}+L_{3}R_{3}R_{L}g_{m}s}{C_{2}C_{3}C_{L}L_{3}L_{L}R_{3}+C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{3}R_{L}g_{m}+c_{L}L_{3}R_{2}R_{L}g_{m}+c_{L}$ 

**10.139** INVALID-ORDER-139  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L\right)$ 

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10.149 INVALID-ORDER-149 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{C_2C_3L_3R_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_2L_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^3\left(C_2C_3L_3R_3 + C_2C_3L_3R_L\right) + s^2\left(C_2L_3 + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_2R_3 + C_2R_L + L_3g_m\right)}
 10.150 INVALID-ORDER-150 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                          H(s) = \frac{C_2C_3L_3R_3s^3 + R_3g_m + s^2\left(C_2L_3 + C_3L_3R_3g_m\right) + s\left(C_2R_3 + L_3g_m\right)}{C_2C_3C_LL_3R_3s^4 + q_m + s^3\left(C_2C_3L_3 + C_2C_LL_3 + C_3C_LL_3R_3g_m\right) + s^2\left(C_2C_LR_3 + C_3L_3g_m + C_LL_3g_m\right) + s\left(C_2 + C_LR_3g_m\right)}
 10.151 INVALID-ORDER-151 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                          H(s) = \frac{C_2C_3L_3R_3R_Ls^3 + R_3R_Lg_m + s^2\left(C_2L_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_Lg_m\right)}{C_2C_3C_LL_3R_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(C_2C_3L_3R_3 + C_2C_4L_3R_L + C_3C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_3L_3R_3g_m + C_4L_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_Lg_m\right) + s\left(C_2R_3R_L + L
 10.152 INVALID-ORDER-152 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                       H(s) = \frac{C_2C_3C_LL_3R_3R_Ls^4 + R_3g_m + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_L + C_3C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_2L_3 + C_3L_3R_3g_m + C_LL_3R_Lg_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m + L_3g_m\right)}{g_m + s^4\left(C_2C_3C_LL_3R_3 + C_2C_3C_LL_3R_L\right) + s^3\left(C_2C_3L_3 + C_2C_LL_3 + C_3C_LL_3R_3g_m + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_3 + C_2C_LR_4 + C_3L_3R_3g_m + C_LL_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m + L_3g_m\right)}
 10.153 INVALID-ORDER-153 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                     H(s) = \frac{C_2C_3C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_2C_LL_3L_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_LR_3 + C_LL_3L_Lg_m\right) + s^2\left(C_2L_3 + C_3L_3R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_3 + L_3g_m\right)}{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3L_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_3 + C_2C_LL_L + C_3C_LL_3R_3g_m\right) + s^2\left(C_2C_LR_3 + C_3L_3R_3g_m + C_LL_3g_m\right) + s\left(C_2R_3 + L_3g_m\right)} + s\left(C_2R_3 + L_3g_m\right) + s\left(C_2R_3 + L_3g_m\right)
10.154 INVALID-ORDER-154 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                    H(s) = \frac{C_2C_3L_3L_LR_3s^4 + L_LR_3g_ms + s^3\left(C_2L_3L_L + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3 + L_3L_Lg_m\right)}{C_2C_3C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_2C_3L_3L_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_LR_3 + C_3L_3L_Lg_m\right) + s^2\left(C_2L_3 + C_2L_L + C_3L_3R_3g_m + C_LL_LR_3g_m\right) + s^2\left(C_2L_3L_L + C_3L_3L_Lg_m\right) + s^2\left(C_2L_L + C_3L_2g_m\right) + s^2\left(C_2L_L + C_3L_3L_Lg_m\right) + s^2\left(C_2L_L + C_3L_2g_m\right) + s^2\left(C_2L_L + C_3L
 10.155 INVALID-ORDER-155 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_{L,s}}\right)
 H(s) = \frac{C_2C_3C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_LL_3L_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_L 
 10.156 INVALID-ORDER-156 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
 H(s) = \frac{C_2C_3L_3L_LR_3R_Ls^4 + L_LR_3R_Lg_ms + s^3\left(C_2L_3L_LR_L + C_3L_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_LR_3R_L + L_3L_LR_Lg_m\right)}{C_2C_3C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(C_2C_3L_3L_LR_3 + C_2C_3L_3L_LR_1 + C_3C_3L_3L_LR_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2L_LR_3R_L + C_3L_3L_LR_3g_m + C_3L_3L_LR_3g_m + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3R_L + C_3L_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_LR_3R_L + C_3L_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_LR_3R_L + C_3L_3L_LR_3g_m + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3R_L + C_3L_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_3R_3R_L + C_3L_3L_Rg_m\right) + s^2\left(C_2L_3R_3R_L + C_3L_3L_Rg_m\right) + s^2\left(C_3L_3R_3R_L + C_3L_3L_Rg_m\right) + s^2\left(C_3L_3R_3R_L + C_3L_3L_Rg_m\right) + s^2\left(C_3L_3R_3R_L + C_3L_3R_3R_L + C_3L_3R_3R_L\right) + s^2\left(C_3L_3R_3R_L + C_3L_3R_3R_L\right) + s^2\left(C_3L_3R_3R_L\right) + s^2\left
 10.157 INVALID-ORDER-157 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \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_2C_3C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(C_2C_3L_3L_LR_3 + C_2C_LL_3L_LR_1 + C_3C_LL_3L_LR_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2L_LL_R_3R_L + C_3L_3L_LR_3g_m + C_LL_3L_LR_2g_m\right) + s^2\left(C_2L_3R_L + C_2L_LR_3 + C_3L_3R_3R_Lg_m + C_LL_RR_3R_L + C_2L_LR_3R_L + C_2L
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 $\frac{C_{2}C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}s^{5} + R_{3}R_{L}g_{m} + s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}\right) + s^{3}\left(C_{2}C_{3}L_{3}R_{3}R_{L} + C_{2}C_{L}L_{L}R_{3}R_{L} + C_{L}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + C_{3}L_{3}R_{3}R_{L}g_{m} + C_{2}R_{2}R_{L}R_{2}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + C_{2}L_{L}R_{3}R_{L} + C_{2}L_{L}R_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + C_{2}L_{L}R_{3}R_{L} + C_{2}L_{L}R_{2}R_{L} +$ 

10.158 INVALID-ORDER-158  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

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10.159 INVALID-ORDER-159 Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3(C_3 L_3 s^2 + 1)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                     H(s) = \frac{C_2C_3L_3R_3R_Ls^3 + C_2R_3R_Ls + C_3L_3R_3R_Lg_ms^2 + R_3R_Lg_m}{R_3g_m + R_Lg_m + s^3\left(C_2C_3L_3R_3 + C_2C_3L_3R_L\right) + s^2\left(C_2C_3R_3R_L + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_2R_3 + C_2R_L + C_3R_3R_Lg_m\right)}
10.160 INVALID-ORDER-160 Z(s) = \left(\infty, \frac{1}{C_2 s}, \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{1}{C_L s}\right)
                                                                                                                                                                                                                                                            H(s) = \frac{C_2C_3L_3R_3s^3 + C_2R_3s + C_3L_3R_3g_ms^2 + R_3g_m}{C_2C_3C_LL_3R_3s^4 + g_m + s^3\left(C_2C_3L_3 + C_3C_LL_3R_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_3g_m\right)}
10.161 INVALID-ORDER-161 Z(s) = \left(\infty, \frac{1}{C_2 s}, \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, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                       H(s) = \frac{C_2C_3L_3R_3R_Ls^3 + C_2R_3R_Ls + C_3L_3R_3R_Lg_ms^2 + R_3R_Lg_m}{C_2C_3C_LL_3R_3R_Ls^4 + R_3g_m + R_Lg_m + s^3\left(C_2C_3L_3R_3 + C_2C_3L_3R_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_LR_3R_L + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_2R_3 + C_2R_L + C_3R_3R_Lg_m + C_LR_3R_Lg_m\right)}
10.162 INVALID-ORDER-162 Z(s) = \left(\infty, \frac{1}{C_2 s}, \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, R_L + \frac{1}{C_L s}\right)
                                                                  H(s) = \frac{C_2C_3C_LL_3R_3R_Ls^4 + R_3g_m + s^3\left(C_2C_3L_3R_3 + C_3C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_3L_3R_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{g_m + s^4\left(C_2C_3C_LL_3R_3 + C_2C_3C_LL_3R_L\right) + s^3\left(C_2C_3C_LR_3R_L + C_3C_LL_3R_3g_m + C_3C_LL_3R_2g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_2C_LR_3 + C_3C_LR_3R_Lg_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right) + s\left(C_2R_3 + 
10.163 INVALID-ORDER-163 Z(s) = \left(\infty, \frac{1}{C_2 s}, \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, L_L s + \frac{1}{C_L s}\right)
                                                                H(s) = \frac{C_2C_3C_LL_3L_LR_3s^5 + C_2R_3s + C_3C_LL_3L_LR_3g_ms^4 + R_3g_m + s^3\left(C_2C_3L_3R_3 + C_2C_LL_LR_3\right) + s^2\left(C_3L_3R_3g_m + C_LL_LR_3g_m\right)}{C_2C_3C_LL_3L_Ls^5 + g_m + s^4\left(C_2C_3C_LL_3R_3 + C_2C_LL_LR_3 + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_L + C_3C_LL_3R_3g_m + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_3L_3g_m + C_LL_Lg_m\right) + s\left(C_2C_3R_3 + C_2C_LL_LR_3g_m\right) + s^2\left(C_3C_3R_3 + C_2C_LR_3 + C_3C_LL_Rg_m\right) + s^2\left(C_3C_3R_3 + C_3C_LL_Rg_m\right) + s^2\left(C_3C
10.164 INVALID-ORDER-164 Z(s) = \left(\infty, \frac{1}{C_2 s}, \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_L s}{C_L L_L s^2 + 1}\right)
                                                                                                  H(s) = \frac{C_2C_3L_3L_LR_3s^4 + C_2L_LR_3s^2 + C_3L_3L_LR_3g_ms^3 + L_LR_3g_ms}{C_2C_3C_LL_3L_LR_3s^5 + R_3g_m + s^4\left(C_2C_3L_3L_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_3L_LR_3 + C_2C_LL_LR_3 + C_3L_LR_3g_m\right) + s^2\left(C_2L_L + C_3L_3R_3g_m + C_3L_LR_3g_m\right) + s\left(C_2R_3 + L_Lg_m\right)}
10.165 INVALID-ORDER-165 Z(s) = \left(\infty, \frac{1}{C_2 s}, \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, L_L s + R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{C_2C_3C_LL_3L_LS^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_3S_L + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_LR_3 + C_3C_LL_3R_3R_L + C_3C_LL_3R_3g_m\right) + s^2\left(C_2C_LR_3R_L + C_3L_3R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_3C_LL_3L_LS^5 + g_m + s^4\left(C_2C_3C_LL_3R_3 + C_2C_LL_LR_3 + C_3C_LL_3R_3g_m + C_3C_LL_3R_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3R_L + C_3C_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_3C_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_$ 

10.166 INVALID-ORDER-166 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

 $H(s) = \frac{C_2C_3L_3L_LR_3R_Ls^4 + C_2L_LR_3R_Ls^2 + C_3L_3L_LR_3R_Lg_ms^3 + L_LR_3R_Lg_ms}{C_2C_3C_LL_3L_LR_3R_Lg_m + s^4\left(C_2C_3L_3L_LR_3 + C_2C_3L_3L_LR_3 + C_2C_3L_3L_RR_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2C_3L_LR_3R_L + C_3L_3L_LR_3R_Lg_m\right) + s^2\left(C_2L_LR_3 + C_2L_LR_3 + C_2$ 

10.167 INVALID-ORDER-167 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3(C_3 L_3 s^2 + 1)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{C_2C_3C_LL_3L_LR_3R_Ls^5 + R_3R_Lg_m + s^4\left(C_2C_3L_3L_LR_3 + C_3C_LL_3L_LR_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2C_LL_LR_3R_L + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3 + C_3L_3R_3R_L + C_2C_LL_LR_3R_L + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3 + C_3L_3R_3R_L + C_2C_LL_LR_3R_L + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3 + C_3L_3L_LR_3g_m + C_3L_3L_LR_3g_m\right) + s^2\left(C_3L_3L_LR_3 + C_3$ 

10.168 INVALID-ORDER-168 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_3R_Ls^5 + C_2R_3R_Ls + C_3C_LL_3L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_3R_L + C_2C_LL_LR_3R_L\right) + s^2\left(C_3L_3R_3R_Lg_m + C_LL_LR_3R_L\right) + s^2\left(C_3L_3R_3R_L + C_2C_LL_LR_3R_L\right) + s^2\left(C_3L_3R_3R_L + C_2C_LL_LR_3R_L\right) + s^2\left(C_3L_3R_3R_L + C_3C_LL_3R_3R_L + C_3C_LL_3$$

**10.169** INVALID-ORDER-169  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{C_2 R_2 R_3 R_L s + R_2 R_3 R_L g_m + R_3 R_L}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s \left(C_2 R_2 R_3 + C_2 R_2 R_L\right)}$$

10.170 INVALID-ORDER-170 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2R_3s^3 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^2\left(C_LL_LR_2R_3g_m + C_LL_LR_3\right)}{C_2C_LL_LR_2s^3 + R_2q_m + s^2\left(C_2C_LR_2R_3 + C_LL_LR_2q_m + C_LL_L\right) + s\left(C_2R_2 + C_LR_2R_3q_m + C_LR_3\right) + 1}$$

10.171 INVALID-ORDER-171 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2 L_L R_2 R_3 s^2 + s \left( L_L R_2 R_3 g_m + L_L R_3 \right)}{C_2 C_L L_L R_2 R_3 s^3 + R_2 R_3 g_m + R_3 + s^2 \left( C_2 L_L R_2 + C_L L_L R_2 R_3 g_m + C_L L_L R_3 \right) + s \left( C_2 R_2 R_3 + L_L R_2 g_m + L_L \right)}$$

10.172 INVALID-ORDER-172 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2R_3s^3 + R_2R_3g_m + R_3 + s^2\left(C_2C_LR_2R_3R_L + C_LL_LR_2R_3g_m + C_LL_LR_3\right) + s\left(C_2R_2R_3 + C_LR_2R_3R_Lg_m + C_LR_3R_L\right)}{C_2C_LL_LR_2s^3 + R_2g_m + s^2\left(C_2C_LR_2R_3 + C_2C_LR_2R_L + C_LL_LR_2g_m + C_LL_L\right) + s\left(C_2R_2 + C_LR_2R_3g_m + C_LR_2R_Lg_m + C_LR_3 + C_LR_2\right) + 1}$$

10.173 INVALID-ORDER-173 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2 L_L R_2 R_3 R_L s^2 + s \left(L_L R_2 R_3 R_L g_m + L_L R_3 R_L\right)}{C_2 C_L L_L R_2 R_3 R_L s^3 + R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_2 L_L R_2 R_3 + C_2 L_L R_2 R_L + C_L L_L R_2 R_3 R_L g_m + C_L L_L R_3 R_L\right) + s \left(C_2 R_2 R_3 R_L + L_L R_2 R_3 g_m + L_L R_2 R_L g_m + L_L R_3 + L_L R_L\right)}$$

10.174 INVALID-ORDER-174 
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ R_3, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_LL_R2R_3R_Ls^3 + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_2L_LR_2R_3 + C_LL_LR_2R_3R_Lg_m + C_LL_LR_3R_L\right) + s\left(C_2R_2R_3R_L + L_LR_2R_3g_m + L_LR_3\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^3\left(C_2C_LL_R2R_3 + C_2C_LL_R2R_L\right) + s^2\left(C_2L_LR_2 + C_LL_R2R_3g_m + C_LL_LR_2R_Lg_m + C_LL_LR_3 + C_LL_LR_1\right) + s\left(C_2R_2R_3 + C_LR_2R_2 + C_LL_R2R_1\right) + s\left(C_2R_2R_3R_L + L_LR_2R_3g_m + L_LR_3\right)}$$

10.175 INVALID-ORDER-175 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2R_3R_Ls^3 + C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_LL_LR_2R_3R_Lg_m + C_LL_LR_3R_L\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^3\left(C_2C_LL_LR_2R_3 + C_2C_LL_LR_2R_L\right) + s^2\left(C_2C_LR_2R_3R_L + C_LL_LR_2R_3g_m + C_LL_LR_2R_Lg_m + C_LL_LR_3 + C_L$$

**10.176** INVALID-ORDER-176 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_1 s}\right)$$

$$H(s) = \frac{C_2 R_2 s + R_2 g_m + 1}{s^2 \left( C_2 C_3 R_2 + C_2 C_L R_2 \right) + s \left( C_3 R_2 g_m + C_3 + C_L R_2 g_m + C_L \right)}$$

10.177 INVALID-ORDER-177 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LR_2R_Ls^2 + R_2g_m + s\left(C_2R_2 + C_LR_2R_Lg_m + C_LR_L\right) + 1}{C_2C_3C_LR_2R_Ls^3 + s^2\left(C_2C_3R_2 + C_2C_LR_2 + C_3C_LR_2R_Lg_m + C_3C_LR_L\right) + s\left(C_3R_2g_m + C_3 + C_LR_2g_m + C_L\right)}$$

10.178 INVALID-ORDER-178 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2s^3 + C_2R_2s + R_2g_m + s^2\left(C_LL_LR_2g_m + C_LL_L\right) + 1}{C_2C_3C_LL_LR_2s^4 + s^3\left(C_3C_LL_LR_2g_m + C_3C_LL_L\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2\right) + s\left(C_3R_2g_m + C_3 + C_LR_2g_m + C_L\right)}$$

10.179 INVALID-ORDER-179 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2 L_L R_2 s^2 + s \left(L_L R_2 g_m + L_L\right)}{C_2 R_2 s + R_2 g_m + s^3 \left(C_2 C_3 L_L R_2 + C_2 C_L L_L R_2\right) + s^2 \left(C_3 L_L R_2 g_m + C_3 L_L + C_L L_L R_2 g_m + C_L L_L\right) + 1}$$

**10.180** INVALID-ORDER-180 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2s^3 + R_2g_m + s^2\left(C_2C_LR_2R_L + C_LL_LR_2g_m + C_LL_L\right) + s\left(C_2R_2 + C_LR_2R_Lg_m + C_LR_L\right) + 1}{C_2C_3C_LL_LR_2s^4 + s^3\left(C_2C_3C_LR_2R_L + C_3C_LL_LR_2g_m + C_3C_LL_L\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2 + C_3C_LR_2R_Lg_m + C_3C_LR_L\right) + s\left(C_3R_2g_m + C_3 + C_LR_2g_m + C_3C_LR_L\right) + s\left(C_3R_2g_m + C_3R_L\right) + s\left(C_3R_2g_m +$$

10.181 INVALID-ORDER-181 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2 L_L R_2 R_L s^2 + s \left( L_L R_2 R_L g_m + L_L R_L \right)}{R_2 R_L g_m + R_L + s^3 \left( C_2 C_3 L_L R_2 R_L + C_2 C_L L_L R_2 R_L \right) + s^2 \left( C_2 L_L R_2 + C_3 L_L R_2 R_L g_m + C_3 L_L R_L + C_L L_L R_2 R_L g_m + C_L L_L R_L \right) + s \left( C_2 R_2 R_L + L_L R_2 g_m + L_L \right)}$$

10.182 INVALID-ORDER-182 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2R_Ls^3 + R_2R_Lg_m + R_L + s^2\left(C_2L_LR_2 + C_LL_LR_2R_Lg_m + C_LL_LR_L\right) + s\left(C_2R_2R_L + L_LR_2g_m + L_L\right)}{C_2C_3C_LL_LR_2R_Ls^4 + R_2g_m + s^3\left(C_2C_3L_LR_2 + C_3C_LL_LR_2 + C_3C_LL_LR_2R_Lg_m + C_3C_LL_LR_L\right) + s^2\left(C_2C_3R_2R_L + C_3L_LR_2g_m + C_3L_L + C_LL_LR_2g_m + C_LL_L\right) + s\left(C_2R_2 + C_3R_2R_Lg_m + C_3R_L\right) + 1}$$

10.183 INVALID-ORDER-183 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2R_Ls^3 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^2\left(C_LL_LR_2R_Lg_m + C_LL_LR_L\right)}{C_2C_3C_LL_LR_2R_Ls^4 + R_2g_m + s^3\left(C_2C_LL_LR_2 + C_3C_LL_LR_2R_Lg_m + C_3C_LL_LR_L\right) + s^2\left(C_2C_3R_2R_L + C_2C_LR_2R_L + C_LL_LR_2g_m + C_LL_L\right) + s\left(C_2R_2 + C_3R_2R_Lg_m + C_3R_L + C_LR_2R_Lg_m + C_LR_L\right) + 1}$$

**10.184** INVALID-ORDER-184  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LR_2R_3R_Ls^2 + R_2R_3g_m + R_3 + s\left(C_2R_2R_3 + C_LR_2R_3R_Lg_m + C_LR_3R_L\right)}{C_2C_3C_LR_2R_3R_Ls^3 + R_2g_m + s^2\left(C_2C_3R_2R_3 + C_2C_LR_2R_3 + C_2C_LR_2R_L + C_3C_LR_2R_3R_Lg_m + C_3C_LR_3R_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3 + C_LR_2R_3g_m + C_LR_2R_2g_m + C_LR_2R_2R_3R_Lg_m + C_LR_2R_3g_m + C_$$

10.185 INVALID-ORDER-185 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_LL_LR_2R_3s^3 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^2\left(C_LL_LR_2R_3g_m + C_LL_LR_3\right)}{C_2C_3C_LL_LR_2R_3s^4 + R_2g_m + s^3\left(C_2C_LL_LR_2 + C_3C_LL_LR_2R_3g_m + C_3C_LL_LR_3\right) + s^2\left(C_2C_3R_2R_3 + C_2C_LR_2R_3 + C_LL_LR_2g_m + C_LL_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3 + C_LR_2R_3g_m + C_LR_3\right) + 1}$$

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10.186 INVALID-ORDER-186 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                        H(s) = \frac{C_2 L_L R_2 R_3 s^2 + s \left(L_L R_2 R_3 g_m + L_L R_3\right)}{R_2 R_3 g_m + R_3 + s^3 \left(C_2 C_3 L_L R_2 R_3 + C_2 C_L L_L R_2 R_3\right) + s^2 \left(C_2 L_L R_2 + C_3 L_L R_2 R_3 g_m + C_3 L_L R_3 + C_L L_L R_2 R_3 g_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 + L_L R_2 g_m + L_L R_3\right)}
10.187 INVALID-ORDER-187 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
10.188 INVALID-ORDER-188 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                  H(s) = \frac{C_2L_LR_2R_3R_Ls^2 + s\left(L_LR_2R_3R_Lg_m + L_LR_3R_L\right)}{R_2R_3R_Lg_m + R_3R_L + s^3\left(C_2C_3L_LR_2R_3R_L + C_2C_LL_LR_2R_3R_L\right) + s^2\left(C_2L_LR_2R_3 + C_2L_LR_2R_3 + C_2L_LR_2R_3R_Lg_m + C_2L_LR_3R_L\right) + s\left(C_2R_2R_3R_L + L_LR_2R_3g_m + L_LR_2R_2g_m + L_LR_3 + L_LR_L\right)}
10.189 INVALID-ORDER-189 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
10.190 INVALID-ORDER-190 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \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_{2}C_{L}L_{L}R_{2}R_{3}R_{L}s^{3}+C_{2}R_{2}R_{3}R_{L}s+R_{2}R_{3}R_{L}g_{m}+R_{3}R_{L}+s^{2}\left(C_{L}L_{L}R_{2}R_{3}R_{L}g_{m}+C_{L}L_{L}R_{3}R_{L}\right)}{C_{2}C_{3}C_{L}L_{L}R_{2}R_{3}R_{L}s^{4}+R_{2}R_{3}g_{m}+R_{3}R_{L}+s^{3}\left(C_{2}C_{L}L_{L}R_{2}R_{3}+C_{2}C_{L}L_{L}R_{2}R_{L}+C_{3}C_{L}L_{L}R_{3}R_{L}\right)+s^{2}\left(C_{2}C_{3}R_{2}R_{3}R_{L}+C_{L}L_{L}R_{2}R_{3}g_{m}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_{3}+C_{L}L_{L}R_
10.191 INVALID-ORDER-191 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                     H(s) = \frac{C_2C_3R_2R_3s^2 + R_2g_m + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3\right) + 1}{C_2C_3C_LR_2R_3s^3 + s^2\left(C_2C_3R_2 + C_2C_LR_2 + C_3C_LR_2R_3g_m + C_3C_LR_3\right) + s\left(C_3R_2g_m + C_3 + C_LR_2g_m + C_L\right)}
10.192 INVALID-ORDER-192 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                     H(s) = \frac{C_2C_3R_2R_3R_Ls^2 + R_2R_Lg_m + R_L + s\left(C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}{C_2C_3C_LR_2R_3R_Ls^3 + R_2g_m + s^2\left(C_2C_3R_2R_3 + C_2C_3R_2R_L + C_2C_LR_2R_L + C_3C_LR_3R_Lg_m + C_3C_LR_3R_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_2R_Lg_m + C_3R_3 + C_3R_L + C_LR_2R_Lg_m + C_LR_L\right) + 1}
10.193 INVALID-ORDER-193 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
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$$H(s) = \frac{C_2C_3C_LR_2R_3R_Ls^3 + R_2g_m + s^2\left(C_2C_3R_2R_3 + C_2C_LR_2R_L + C_3C_LR_2R_3R_Lg_m + C_3C_LR_3R_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3 + C_LR_2R_Lg_m + C_LR_L\right) + 1}{s^3\left(C_2C_3C_LR_2R_3 + C_2C_3C_LR_2R_L\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2 + C_3C_LR_2R_3g_m + C_3C_LR_2R_Lg_m + C_3C_LR_3 + C_3C_LR_L\right) + s\left(C_3R_2g_m + C_3R_2R_Lg_m + C_3R_Lg_m + C_3R_Lg_$$

10.194 INVALID-ORDER-194 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_LR_2R_3s^4 + R_2g_m + s^3\left(C_2C_LL_LR_2 + C_3C_LL_LR_2R_3g_m + C_3C_LL_LR_3\right) + s^2\left(C_2C_3R_2R_3 + C_LL_LR_2g_m + C_LL_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3\right) + 1}{C_2C_3C_LL_LR_2s^4 + s^3\left(C_2C_3C_LR_2R_3 + C_3C_LL_LR_2g_m + C_3C_LL_L\right) + s^2\left(C_2C_3R_2 + C_3C_LR_2R_3g_m + C_3C_LR_3\right) + s\left(C_3R_2g_m + C_3C_LR_3\right) + s\left(C_3R_2g_m + C_3C_LR_3\right) + s\left(C_3R_2g_m + C_3C_LR_3\right) + s\left(C_3R_2g_m + C_3C_LR_3\right) + s\left(C_3R_3g_m + C_3C_L$$

10.195 INVALID-ORDER-195  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{C_2C_3L_LR_2R_3s^3 + s^2\left(C_2L_LR_2 + C_3L_LR_2R_3g_m + C_3L_LR_3\right) + s\left(L_LR_2g_m + L_L\right)}{C_2C_3C_LL_LR_2R_3s^4 + R_2g_m + s^3\left(C_2C_3L_LR_2 + C_3C_LL_LR_2 + C_3C_LL_LR_3\right) + s^2\left(C_2C_3R_2R_3 + C_3L_LR_2g_m + C_3L_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3\right) + 1}$ **10.196** INVALID-ORDER-196  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 10.197 INVALID-ORDER-197  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $C_{2}C_{3}L_{L}R_{2}R_{3}R_{L}s^{3} + s^{2}\left(C_{2}L_{L}R_{2}R_{L} + C_{3}L_{L}R_{2}R_{3}R_{L}g_{m} + C_{3}L_{L}R_{3}R_{L}\right) + s\left(L_{L}R_{2}R_{L}g_{m} + L_{L}R_{L}\right)$ 10.198 INVALID-ORDER-198  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$  $H(s) = \frac{C_2C_3C_LL_LR_2R_3R_Ls^4 + R_2R_Lg_m + R_L + s^3\left(C_2C_3L_LR_2R_3 + C_2C_LL_LR_2R_L + C_3C_LL_LR_2R_3R_Lg_m + C_3L_LR_3R_L\right) + s^2\left(C_2C_3R_2R_3R_L + C_2L_LR_2 + C_3L_LR_2R_3g_m + C_3L_LR_3 + C_LL_LR_2R_Lg_m + C_LL_LR_L\right) + s\left(C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_LR_2R_2R_2R_2 + C_3R_2R_2R_2 + C_3R_2R_2R_2 + C_3R_2R_2R_2 + C_3R_2R_2R_2R_2 + C_3R_2R_2R_2 + C_3R_2R_2 + C_3R_2R_$ 10.199 INVALID-ORDER-199  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 10.200 INVALID-ORDER-200  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$  $H(s) = \frac{C_2C_3L_3R_2R_Ls^3 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^2\left(C_3L_3R_2R_Lg_m + C_3L_3R_L\right)}{C_2C_3L_3R_2s^3 + R_2g_m + s^2\left(C_2C_3R_2R_L + C_3L_3R_2g_m + C_3L_3\right) + s\left(C_2R_2 + C_3R_2R_Lg_m + C_3R_L\right) + 1}$ **10.201** INVALID-ORDER-201  $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$  $H(s) = \frac{C_2C_3L_3R_2s^3 + C_2R_2s + R_2g_m + s^2\left(C_3L_3R_2g_m + C_3L_3\right) + 1}{C_2C_3C_LL_3R_2s^4 + s^3\left(C_3C_LL_3R_2g_m + C_3C_LL_3\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2\right) + s\left(C_3R_2g_m + C_3 + C_LR_2g_m + C_L\right)}$ 10.202 INVALID-ORDER-202  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2C_3L_3R_2R_Ls^3 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^2\left(C_3L_3R_2R_Lg_m + C_3L_3R_L\right)}{C_2C_3C_LL_3R_2R_Ls^4 + R_2g_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_3C_LL_3R_2\right) + s^2\left(C_2C_3R_2R_L + C_2C_LR_2R_L + C_3L_3R_2g_m + C_3L_3\right) + s\left(C_2R_2 + C_3R_2R_Lg_m + C_3R_Lg_m + C_LR_L\right) + 1}$$

$$\begin{aligned} \textbf{10.203} \quad \textbf{INVALID-ORDER-203} \ \ Z(s) &= \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) \\ & H(s) &= \frac{C_2 C_3 C_L L_3 R_2 R_L s^4 + R_2 g_m + s^3 \left( C_2 C_3 L_3 R_2 + C_3 C_L L_3 R_2 R_L g_m + C_3 C_L L_3 R_L \right) + s^2 \left( C_2 C_L R_2 R_L + C_3 L_3 R_2 g_m + C_3 L_3 \right) + s \left( C_2 R_2 + C_L R_2 R_L g_m + C_L R_L \right) + 1}{C_2 C_3 C_L L_3 R_2 s^4 + s^3 \left( C_2 C_3 C_L R_2 R_L + C_3 C_L L_3 R_2 g_m + C_3 C_L L_3 \right) + s^2 \left( C_2 C_3 R_2 + C_2 C_L R_2 R_L g_m + C_3 C_L R_2 R_L g_m + C$$

10.205 INVALID-ORDER-205  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2C_3L_3L_LR_2s^4 + C_2L_LR_2s^2 + s^3\left(C_3L_3L_LR_2g_m + C_3L_3L_L\right) + s\left(L_LR_2g_m + L_L\right)}{C_2C_3C_LL_3L_LR_2s^5 + C_2R_2s + R_2g_m + s^4\left(C_3C_LL_3L_LR_2g_m + C_3C_LL_3L_L\right) + s^3\left(C_2C_3L_3R_2 + C_2C_3L_LR_2 + C_2C_LL_LR_2\right) + s^2\left(C_3L_3R_2g_m + C_3L_3 + C_3L_LR_2g_m + C_3L_L + C_LL_LR_2g_m + C_LL_L\right) + 1}$$

**10.206** INVALID-ORDER-206  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2s^5 + R_2g_m + s^4\left(C_2C_3C_LL_3R_2R_L + C_3C_LL_3L_LR_2g_m + C_3C_LL_3L_L\right) + s^3\left(C_2C_3L_3R_2 + C_2C_LL_RR_2 + C_3C_LL_3R_2\right) + s^3\left(C_2C_3L_3R_2 + C_2C_LL_RR_2 + C_3C_LL_3R_2\right) + s^2\left(C_2C_LR_2R_L + C_3L_3R_2g_m + C_3L_LR_2g_m + C_3L_LR_2g_m + C_3L_LR_2\right) + s^2\left(C_2C_LR_2R_L + C_3L_3R_2g_m + C_3L_LR_2g_m + C_3L_LR_2\right) + s^2\left(C_2C_LR_2R_L + C_3L_3R_2g_m + C_3L_LR_2g_m + C_3L_LR_2\right) + s^2\left(C_2C_3R_2R_L + C_3C_LR_2R_L + C_3C_LR_2R_L + C_3C_LR_2R_L\right) + s^2\left(C_2C_3R_2R_L + C_3C_LR_2R_L\right) + s^2\left(C_2C_3R_2R_L\right) + s^2\left(C_2C_3R_L\right) + s^2\left(C_2$$

10.207 INVALID-ORDER-207  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_2C_3L_3L_LR_2R_Ls^4 + C_2L_LR_2R_Ls^2 + s^3\left(C_3L_3L_LR_2R_Lg_m + C_3L_3L_LR_L\right) + s\left(L_LR_2R_Lg_m + L_LR_L\right)}{C_2C_3C_LL_3L_LR_2R_Ls^5 + R_2R_Lg_m + R_L + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_3C_LL_3L_LR_2\right) + s^3\left(C_2C_3L_3R_2R_L + C_2C_LL_LR_2R_L + C_3L_3L_LR_2\right) + s^2\left(C_2L_LR_2R_Lg_m + C_3L_2R_Lg_m + C_3L_2R_Lg_m\right) + s^2\left(C_2L_LR_2R_Lg_m + C_3L_2R_Lg_m$$

10.208 INVALID-ORDER-208  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2R_Ls^5 + R_2R_Lg_m + R_L + s^4\left(C_2C_3L_3L_LR_2 + C_3C_LL_3L_LR_2R_Lg_m + C_3L_LL_RL_L\right) + s^3\left(C_2C_3L_3R_2R_L + C_2C_LL_LR_2R_L + C_3L_3L_LR_2g_m + C_3L_3L_L\right) + s^2\left(C_2L_LR_2 + C_3L_3R_2R_Lg_m + C_3L_3R_LR_2 + C_3L_3R_2R_L + C_3L_4R_2R_Lg_m + C_3L_4R_L\right) + s^2\left(C_2L_LR_2 + C_3L_3R_2R_L + C_3L_3R_2R_L + C_3L_4R_2R_Lg_m + C_3L_4R_L\right) + s^2\left(C_2L_LR_2 + C_3L_3R_2R_L + C_3L_4R_2R_Lg_m + C_3L_4R_L\right) + s^2\left(C_2C_3R_2R_L + C_3L_4R_2R_Lg_m + C_3L_4R_L\right) + s^2\left(C_2C_3R_2R_L + C_3L_3R_2R_L + C_3L_4R_L\right) + s^2\left(C_2C_3R_2R_L + C_3L_4R_2R_Lg_m + C_3L_4R_L\right) + s^2\left(C_2C_3R_2R_L + C_3L_4R_L\right) + s^2\left(C_2C_3R_2R_L\right) +$$

10.209 INVALID-ORDER-209  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2R_Ls^5 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^4\left(C_3C_LL_3L_LR_2R_Lg_m + C_3C_LL_3L_LR_L\right) + s^3\left(C_2C_3L_3R_2R_L + C_2C_LL_Rg_R\right) + s^2\left(C_3L_3R_2R_Lg_m + C_3L_3R_Lg_m + C_3L_LR_2R_Lg_m\right)}{C_2C_3C_LL_3L_LR_2s^5 + R_2g_m + s^4\left(C_2C_3C_LL_3R_2R_L + C_2C_LL_Rg_L\right) + s^3\left(C_2C_3L_3R_2R_L + C_2C_LL_Rg_R\right) + s^3\left(C_2C_3R_2R_L + C_2C_LL_Rg_R\right) + s^3\left(C_2C_3R_2R_L + C_2C_LL_Rg_R\right) + s^3\left(C_2C_3R_2R_L + C_2C_LL_Rg_R\right) + s^3\left(C_2C_3R_2R_L + C_2C_LRg_R\right) + s^3\left(C_2C_3R_2$$

**10.210** INVALID-ORDER-210  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{C_2L_3R_2R_Ls^2 + s\left(L_3R_2R_Lg_m + L_3R_L\right)}{C_2C_3L_3R_2R_Ls^3 + R_2R_Lg_m + R_L + s^2\left(C_2L_3R_2 + C_3L_3R_2R_Lg_m + C_3L_3R_L\right) + s\left(C_2R_2R_L + L_3R_2g_m + L_3\right)}$$

10.211 INVALID-ORDER-211  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_{Ls}}\right)$ 

$$H(s) = \frac{C_2 L_3 R_2 s^2 + s \left(L_3 R_2 g_m + L_3\right)}{C_2 R_2 s + R_2 g_m + s^3 \left(C_2 C_3 L_3 R_2 + C_2 C_L L_3 R_2\right) + s^2 \left(C_3 L_3 R_2 g_m + C_3 L_3 + C_L L_3 R_2 g_m + C_L L_3\right) + 1}$$

**10.212** INVALID-ORDER-212  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2L_3R_2R_Ls^2 + s\left(L_3R_2R_Lg_m + L_3R_L\right)}{R_2R_Lg_m + R_L + s^3\left(C_2C_3L_3R_2R_L + C_2C_LL_3R_2R_L\right) + s^2\left(C_2L_3R_2 + C_3L_3R_2R_Lg_m + C_3L_3R_L + C_LL_3R_2R_Lg_m + C_LL_3R_L\right) + s\left(C_2R_2R_L + L_3R_2g_m + L_3R_L\right)}$$

10.213 INVALID-ORDER-213 
$$Z(s) = \left( \infty, \frac{R_{1}}{C_{1}R_{2}+1}, \frac{L_{2}}{C_{2}L_{2}R_{1}}, \frac{L_{2}}{C_{2}L_{2}R_{1}}, \frac{L_{2}}{C_{2}L_{2}R_{1}}R_{2}L_{2}^{2}L_{2}^{2}(C_{2}L_{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}C_{2}L_{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}(C_{2}L_{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}^{2}L_{2}^{2}L_{2}^{2}R_{2}R_{2}L_{2}^{2}L_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}R_{2}^{2}L_{2}^{2}R_{2}^{2}R_{2}^{2}R_{2}^{2}L_{2}^{2}R_{$$

10.220 INVALID-ORDER-220 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2C_3L_3R_2R_Ls^3 + R_2R_Lg_m + R_L + s^2\left(C_2C_3R_2R_3R_L + C_3L_3R_2R_Lg_m + C_3L_3R_L\right) + s\left(C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}{C_2C_3L_3R_2s^3 + R_2g_m + s^2\left(C_2C_3R_2R_3 + C_2C_3R_2R_L + C_3L_3R_2g_m + C_3L_3\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_2R_Lg_m + C_3R_3R_L\right) + s\left(C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}$$

**10.224** INVALID-ORDER-224 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2s^5 + R_2g_m + s^4\left(C_2C_3C_LL_LR_2R_3 + C_3C_LL_3L_LR_2g_m + C_3C_LL_3L_L\right) + s^3\left(C_2C_3L_3R_2 + C_2C_LL_LR_2 + C_3C_LL_LR_2\right) + s^3\left(C_2C_3R_2R_3 + C_3L_LR_2g_m + C_3L_LR_3\right) + s^2\left(C_2C_3R_2R_3 + C_3L_3R_2g_m + C_3L_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3L_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3L_L\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3L_L\right) + s\left(C_2R_3R_2R_3 + C_3L_LR_2g_m + C_3L_L\right) + s\left(C_2R_3R_3R_2 + C_3L_LR_2g_m + C_3L_LR_2g$$

10.225 INVALID-ORDER-225 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3L_3L_LR_2s^4 + s^3\left(C_2C_3L_LR_2R_3 + C_3L_3L_LR_2g_m + C_3L_LR_2\right) + s^2\left(C_2L_LR_2 + C_3L_LR_2g_m + C_3L_LR_3\right) + s\left(L_LR_2g_m + L_L\right)}{C_2C_3C_LL_3L_LR_2s^5 + R_2g_m + s^4\left(C_2C_3C_LL_LR_2R_3 + C_3C_LL_3L_L\right) + s^3\left(C_2C_3L_3R_2 + C_2C_3L_LR_2 + C_3C_LL_RR_2\right) + s^2\left(C_2C_3R_2R_3 + C_3L_LR_3\right) + s^2\left(C_2C_3R_2R_3 + C_3L_LR_2g_m +$$

10.226 INVALID-ORDER-226 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2s^5 + R_2g_m + s^4\left(C_2C_3C_LL_3R_2R_L + C_2C_3C_LL_2R_2R_3 + C_3C_LL_3L_L\right) + s^3\left(C_2C_3C_LR_2R_3R_L + C_2C_3L_3R_2 + C_2C_LL_R2 + C_3C_LL_3R_2R_L + C_3C_LL_3R_2$$

10.227 INVALID-ORDER-227 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

10.228 INVALID-ORDER-228 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2R_Ls^5 + R_2R_Lg_m + R_L + s^4\left(C_2C_3C_LL_LR_2R_3R_L + C_2C_3L_3L_LR_2 + C_3C_LL_3L_LR_2\right) + s^3\left(C_2C_3L_3R_2R_L + C_2C_3L_LR_2R_3 + C_2C_LL_LR_2R_L + C_3C_LL_LR_2R_3R_Lg_m + C_3C_LL_LR_3R_L + C_3L_LL_Rg_m + C_3L_LR_2\right) + s^2\left(C_2C_3L_3R_2R_L + C_2C_3L_LR_2R_3 + C_2C_LL_Rg_R + C_3C_LL_Rg_R + C_3C_LL_Rg_R$$

10.229 INVALID-ORDER-229 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_3L_LR_2R_Ls^5 + R_2R_Lg_m + R_L + s^4\left(C_2C_3C_LL_LR_2R_3R_L + C_3C_LL_3L_LR_2\right) + s^3\left(C_2C_3L_3R_2R_L + C_2C_LL_LR_2R_L + C_3C_LL_LR_2R_3R_Lg_m + C_3C_LL_3L_Rg_m + C_3C_LL_3L_Rg_m + C_3C_LL_3L_Rg_m + C_3C_LL_3R_2R_L + C_3C$$

10.230 INVALID-ORDER-230 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2 L_3 R_2 R_3 R_L s^2 + s \left(L_3 R_2 R_3 R_L g_m + L_3 R_3 R_L\right)}{C_2 C_2 L_2 R_2 R_2 R_1 s^3 + R_2 R_2 R_1 g_m + R_2 R_1 + s^2 \left(C_2 L_2 R_2 R_2 + C_2 L_2 R_2 R_1 + C_2 L_2 R_2 R_1 g_m + C_2 L_2 R_2 R_1\right) + s \left(C_2 R_2 R_2 R_1 + L_2 R_2 R_2 g_m + L_2 R_2 R_1 g_m + L_2 R_2 R_1 g_m + L_2 R_2 R_2 g_m + L_2 R_2 g_$$

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10.231 INVALID-ORDER-231 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                               H(s) = \frac{C_2L_3R_2R_3s^2 + s\left(L_3R_2R_3g_m + L_3R_3\right)}{R_2R_3g_m + R_3 + s^3\left(C_2C_3L_3R_2R_3 + C_2C_LL_3R_2R_3\right) + s^2\left(C_2L_3R_2 + C_3L_3R_2R_3g_m + C_3L_3R_3 + C_LL_3R_2R_3g_m + C_LL_3R_3\right) + s\left(C_2R_2R_3 + L_3R_2g_m + L_3\right)}
10.232 INVALID-ORDER-232 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                                                      H(s) = \frac{C_2L_3R_2R_3R_Ls^2 + s\left(L_3R_2R_3R_Lg_m + L_3R_3R_L\right)}{R_2R_3R_Lg_m + R_3R_L + s^3\left(C_2C_3L_3R_2R_3R_L + C_2C_LL_3R_2R_3R_L\right) + s^2\left(C_2L_3R_2R_3 + C_2L_3R_2R_3R_Lg_m + C_3L_3R_2R_3R_Lg_m + C_4L_3R_3R_L\right) + s\left(C_2R_2R_3R_L + L_3R_2R_3g_m + L_3R_3R_3g_m + L_3R_3g_m + L_3R_3R_3g_m + L_3R_3R_3g_m + L_3R_3g_m + L
10.233 INVALID-ORDER-233 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_LL_3R_2R_3R_Ls^3 + s^2\left(C_2L_3R_2R_3 + C_LL_3R_2R_3R_Lg_m + C_LL_3R_3R_L\right) + s\left(L_3R_2R_3g_m + L_3R_3\right)}{C_2C_3C_LL_3R_2R_3R_Ls^4 + R_2R_3g_m + R_3 + s^3\left(C_2C_3L_3R_2R_3 + C_2C_LL_3R_2R_3 + C_2C_LL_3R_2R_3R_Lg_m + C_3C_LL_3R_3R_L\right) + s^2\left(C_2C_LR_2R_3R_L + C_3L_3R_2R_3g_m + C_3L_3R_3R_Lg_m + C_3L_3R_
10.234 INVALID-ORDER-234 Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_LL_3L_LR_2R_3s^4 + C_2L_3R_2R_3s^2 + s^3\left(C_LL_3L_LR_2R_3g_m + C_LL_3L_LR_3\right) + s\left(L_3R_2R_3g_m + L_3R_3\right)}{C_2C_3C_LL_3L_LR_2R_3s^5 + R_2R_3g_m + R_3 + s^4\left(C_2C_LL_3L_LR_2 + C_3C_LL_3L_LR_2\right) + s^3\left(C_2C_3L_3R_2R_3 + C_2C_LL_3R_2R_3 + C_2C_LL_3R_
10.235 INVALID-ORDER-235 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                              H(s) = \frac{C_2L_3L_LR_2R_3s^2 + s\left(L_3L_LR_2R_3g_m + L_3L_LR_3\right)}{L_3R_2R_3g_m + L_3R_3 + L_LR_2R_3g_m + L_LR_3 + s^3\left(C_2C_3L_3L_LR_2R_3 + C_2C_LL_3L_LR_2R_3\right) + s^2\left(C_2L_3L_LR_2 + C_3L_3L_LR_2R_3g_m + C_3L_3L_LR_3 + C_LL_3L_LR_3\right) + s\left(C_2L_3R_2R_3 + C_2L_LR_2R_3 + C_2L_LR_2R_3 + C_3L_LR_2R_3g_m + C_3L_3L_LR_3\right) + s\left(C_3L_3L_LR_2R_3 + C_3L_LR_2R_3 + C_3L_LR_3R_3 + C_3L_LR_3R_
10.236 INVALID-ORDER-236 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C_{2}C_{L}L_{3}L_{L}R_{2}R_{3}s^{4} + s^{3}\left(C_{2}C_{L}L_{3}R_{2}R_{3}R_{L} + C_{L}L_{3}L_{L}R_{2}R_{3}g_{m} + C_{L}L_{3}L_{L}R_{3}\right) + s^{2}\left(C_{2}L_{3}R_{2}R_{3} + C_{L}L_{3}L_{L}R_{3}R_{3}R_{2}R_{3} + C_{L}L_{3}L_{L}R_{3}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}
H(s) = \frac{C_2C_LL_3L_LR_2R_3s^4 + s^3\left(C_2C_LL_3R_2R_3R_L + C_LL_3L_LR_2R_3g_m + C_LL_3L_LR_3\right) + s^2\left(C_2L_3R_2R_3 + C_LL_3L_LR_2R_3g_m + C_LL_3L_LR_2R_3g_m + C_LL_3L_LR_3\right) + s^2\left(C_2L_3R_2R_3 + C_2C_LL_3R_2R_3 + C_2C_LL_3R_2
10.237 INVALID-ORDER-237 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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10.238 INVALID-ORDER-238  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

 $H(s) = \frac{C_2C_LL_3L_LR_2R_3R_Ls^4 + s^3\left(C_2L_3L_LR_2R_3 + C_LL_3L_LR_2R_3 + C_LL_$ 

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

10.239 INVALID-ORDER-239  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $H(s) = \frac{C_2C_LL_3L_LR_2R_3R_Ls^4 + C_2L_3R_2R_3R_Ls^2 + s^3\left(C_LL_3L_LR_2R_3R_Lg_m + C_LL_3L_LR_3R_Lg_m + C_LL_$ 

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10.240 INVALID-ORDER-240 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, R_L\right)
                                                                                                                                     H(s) = \frac{C_2C_3L_3R_2R_3R_Ls^3 + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_2L_3R_2R_L + C_3L_3R_2R_3R_Lg_m + C_3L_3R_3R_L\right) + s\left(C_2R_2R_3R_L + L_3R_2R_Lg_m + L_3R_L\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^3\left(C_2C_3L_3R_2R_3 + C_2C_3L_3R_2R_L\right) + s^2\left(C_2L_3R_2 + C_3L_3R_2R_3g_m + C_3L_3R_2R_Lg_m + C_3L_3R_3 + C_3L_3R_L\right) + s\left(C_2R_2R_3R_L + L_3R_2R_Lg_m + L_3R_L\right)}
10.241 INVALID-ORDER-241 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_{Ls}}\right)
                                                                                                             H(s) = \frac{C_2C_3L_3R_2R_3s^3 + R_2R_3g_m + R_3 + s^2\left(C_2L_3R_2 + C_3L_3R_2R_3g_m + C_3L_3R_3\right) + s\left(C_2R_2R_3 + L_3R_2g_m + L_3\right)}{C_2C_3C_LL_3R_2R_3s^4 + R_2g_m + s^3\left(C_2C_3L_3R_2 + C_3C_LL_3R_2 + C_3C_LL_3R_2\right) + s\left(C_2C_LR_3R_3 + C_3L_3R_2g_m + C_3L_3R_2\right) + s\left(C_2R_2R_3 + L_3R_2g_m + L_3\right)}
10.242 INVALID-ORDER-242 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_2C_3L_3R_2R_3R_Ls^3 + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_2L_3R_2R_L + C_3L_3R_2R_3R_Lg_m + C_3L_3R_3R_L\right) + s\left(C_2R_2R_3R_L + L_3R_2R_Lg_m + L_3R_L\right)}{C_2C_3C_LL_3R_2R_3R_Ls^4 + R_2R_3g_m + R_3R_L + s^3\left(C_2C_3L_3R_2R_3 + C_2C_3L_3R_2R_L + C_3C_LL_3R_2R_L + C_3C_LL_3R_3R_L\right) + s^2\left(C_2C_LR_2R_3R_L + C_3L_3R_2R_3g_m + C_3L_3R_2R_2R_2 + C_3L_3R_2R_2 + C_3L_3R_2 + C_3L_3R_
10.243 INVALID-ORDER-243 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_3C_LL_3R_2R_3R_Ls^4 + R_2R_3g_m + R_3 + s^3\left(C_2C_3L_3R_2R_3 + C_2C_LL_3R_2R_L + C_3C_LL_3R_2R_Lg_m + C_3L_3R_2R_3 + C_2L_3R_2R_3R_L + C_3L_3R_2R_3g_m + C_3L_3R_2R_3g_m + C_3L_3R_2R_2g_m + C_LL_3R_L\right) + s\left(C_2R_2R_3 + C_LL_3R_2R_Lg_m + C_LL_3R_2R_L
10.244 INVALID-ORDER-244 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
10.245 INVALID-ORDER-245 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                \frac{C_{2}C_{3}L_{1}L_{R}_{2}R_{3}s^{4}+s^{3}\left(C_{2}L_{3}L_{L}R_{2}+C_{3}L_{3}L_{L}R_{2}R_{3}g_{m}+C_{3}L_{3}L_{L}R_{2}g_{m}+L_{3}L_{L}\right)+s\left(L_{L}R_{2}R_{3}g_{m}+L_{L}R_{3}\right)}{C_{2}C_{3}C_{L}L_{3}L_{L}R_{2}R_{3}s^{5}+R_{2}R_{3}g_{m}+R_{3}+s^{4}\left(C_{2}C_{3}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{3}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}L_{2}+C_{2}C_{L}L_{2}
10.246 INVALID-ORDER-246 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_3C_LL_3L_LR_2R_3s^5 + R_2R_3g_m + R_3 + s^4\left(C_2C_3C_LL_3R_2R_3R_L + C_2C_LL_3L_LR_2 + C_3C_LL_3L_LR_2 + C_3C_LL_3L_LR_3\right) + s^3\left(C_2C_3L_3R_2R_3 + C_2C_LL_3R_2R_L + C_2C_LL_3R_2R_3 + C_3C_LL_3R_2R_3 + C_3C_LL_3R_3R_3 + C_3C_LL_3R
10.247 INVALID-ORDER-247 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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10.248 INVALID-ORDER-248  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \infty, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$ 

10.249 INVALID-ORDER-249  $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

 $H(s) = \frac{C_2C_3C_LL_3L_LR_2R_3R_Ls^5 + R_2R_3R_Lg_m + R_3R_L + s^4\left(C_2C_LL_3L_LR_2R_L + C_3C_LL_3L_LR_2R_3R_Lg_m + C_3C_LL_3L_LR_3R_Lg_m + C_3C_LL_3L_LR_2R_2R_Lg_m + R_3R_L + s^4\left(C_2C_LL_3L_LR_2R_L + C_3C_LL_3L_LR_2R_Lg_m + C_3C_LL_3L_LR_2R_Lg_m + R_3R_L + s^4\left(C_2C_LL_3L_LR_2R_L + C_3C_LL_3L_LR_2R_Lg_m + C_3C_LL_3L_Rg_m + C_3C_LL$ 

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10.250 INVALID-ORDER-250 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \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, R_L\right)
                                                                                                H(s) = \frac{C_2C_3L_3R_2R_3R_Ls^3 + C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_3L_3R_2R_3R_Lg_m + C_3L_3R_3R_L\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^3\left(C_2C_3L_3R_2R_3 + C_2C_3L_3R_2R_L\right) + s^2\left(C_2C_3R_2R_3R_L + C_3L_3R_2R_3g_m + C_3L_3R_2R_2g_m + C_3L_3R_3 + C_3L_3R_L\right) + s\left(C_2R_2R_3 + C_2R_2R_2 + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}
10.251 INVALID-ORDER-251 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                             H(s) = \frac{C_2C_3L_3R_2R_3s^3 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^2\left(C_3L_3R_2R_3g_m + C_3L_3R_3\right)}{C_2C_3C_LL_3R_2R_3s^4 + R_2g_m + s^3\left(C_2C_3L_3R_2 + C_3C_LL_3R_3g_m + C_3C_LL_3R_3\right) + s^2\left(C_2C_3R_2R_3 + C_2C_LR_2R_3 + C_3L_3R_2g_m + C_3L_3\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3 + C_LR_2R_3g_m + C_LR_3\right) + 1}
10.252 INVALID-ORDER-252 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \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{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_2C_3L_3R_2R_3R_Ls^3 + C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_3L_3R_2R_3R_Lg_m + C_3L_3R_3R_L\right)}{C_2C_3C_LL_3R_2R_3R_Ls^4 + R_2R_3g_m + R_3R_L + s^3\left(C_2C_3L_3R_2R_3 + C_2C_3L_3R_2R_3 + C_2C_3L_3R_2R_3R_L\right) + s^2\left(C_2C_3R_2R_3R_L + C_3L_3R_2R_3R_L + C_3L_3R_3R_L + C_3L_3
10.253 INVALID-ORDER-253 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \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, R_L + \frac{1}{C_L s}\right)
                             \frac{C_{2}C_{3}C_{L}L_{3}R_{2}R_{3}L_{L}s^{4}+R_{2}R_{3}g_{m}+R_{3}+s^{3}\left(C_{2}C_{3}L_{3}R_{2}R_{3}+C_{3}C_{L}L_{3}R_{2}R_{3}R_{L}g_{m}+C_{3}C_{L}L_{3}R_{2}R_{3}R_{L}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{3}R_{L}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{3}R_{L}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}R_{3}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m}+C_{3}L_{3}R_{2}g_{m
10.254 INVALID-ORDER-254 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \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, L_L s + \frac{1}{C_L s}\right)
10.255 INVALID-ORDER-255 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \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_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2C_3L_3L_LR_2R_3s^4 + C_2L_LR_2R_3s^2 + s^3\left(C_3L_3L_LR_2R_3g_m + C_3L_3L_LR_3\right) + s\left(L_LR_2R_3g_m + L_LR_3\right)}{C_2C_3C_LL_3L_LR_2R_3s^5 + R_2R_3g_m + R_3 + s^4\left(C_2C_3L_3L_LR_2R_3g_m + C_3C_LL_3L_LR_3\right) + s^3\left(C_2C_3L_3R_2R_3 + C_2C_LL_LR_2R_3 + C_2C_LL_LR_2R_3 + C_3L_3L_LR_3\right) + s^2\left(C_2L_LR_2 + C_3L_3R_2R_3g_m + C_3L_3R_3 + C_3L_LR_3\right) + s^2\left(C_2L_LR_2 + C_3L_3L_LR_3\right) + s^2\left(C_2L_LR_3 + C_3L_3L_LR_3\right) + s^2\left(C_2L_LR_3 + C_3L_3L_LR_3\right) + s^2\left(C_3L_3L_LR_3 
10.256 INVALID-ORDER-256 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \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, L_L s + R_L + \frac{1}{C_L s}\right)
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10.257 INVALID-ORDER-257  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $C_2C_3L_3L_LR_2R_3R_Ls^4 + C_2L_LR_2R_3R_Ls^2 + s^3(C_3L_3L_LR_2R_3R_Lg_m + C_3L_3L_LR_3R_Lg_m)$ 

10.258 INVALID-ORDER-258  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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

10.259 INVALID-ORDER-259 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

**10.260** INVALID-ORDER-260  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_3 R_L g_m + s \left( C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L \right)}{R_3 g_m + R_L g_m + s \left( C_2 R_2 R_3 g_m + C_2 R_2 R_L g_m + C_2 R_3 + C_2 R_L \right)}$$

**10.261** INVALID-ORDER-261  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_L L_L R_3 g_m s^2 + R_3 g_m + s^3 \left(C_2 C_L L_L R_2 R_3 g_m + C_2 C_L L_L R_3\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3\right)}{g_m + s^3 \left(C_2 C_L L_L R_2 g_m + C_2 C_L L_L\right) + s^2 \left(C_2 C_L R_2 R_3 g_m + C_2 C_L R_3 + C_L L_L g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_L R_3 g_m\right)}$$

**10.262** INVALID-ORDER-262  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L R_3 g_m s + s^2 \left( C_2 L_L R_2 R_3 g_m + C_2 L_L R_3 \right)}{R_3 g_m + s^3 \left( C_2 C_L L_L R_2 R_3 g_m + C_2 C_L L_L R_3 \right) + s^2 \left( C_2 L_L R_2 g_m + C_2 L_L + C_L L_L R_3 g_m \right) + s \left( C_2 R_2 R_3 g_m + C_2 R_3 + L_L g_m \right)}$$

**10.263** INVALID-ORDER-263  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_3 g_m + s^3 \left(C_2 C_L L_L R_2 R_3 g_m + C_2 C_L L_L R_3\right) + s^2 \left(C_2 C_L R_2 R_3 R_L g_m + C_2 C_L R_3 R_L + C_L L_L R_3 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 + C_L R_3 R_L g_m\right)}{g_m + s^3 \left(C_2 C_L L_L R_2 g_m + C_2 C_L L_L\right) + s^2 \left(C_2 C_L R_2 R_3 g_m + C_2 C_L R_2 R_L g_m + C_2 C_L R_3 R_L + C_L L_L R_3 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 R_L g_m + C_2 C_L R_3 R_L g_m\right)}$$

**10.264** INVALID-ORDER-264  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_L R_3 R_L g_m s + s^2 \left( C_2 L_L R_2 R_3 R_L g_m + C_2 L_L R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_2 C_L L_L R_2 R_3 R_L g_m + C_2 L_L R_3 R_L \right) + s^2 \left( C_2 L_L R_2 R_3 g_m + C_2 L_L R_2 R_L g_m + C_2 L_L R_3 + C_2 L_L R_3 R_L g_m \right) + s \left( C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L + L_L R_3 g_m + L_L R_L g_m \right)}$$

10.265 INVALID-ORDER-265  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{R_3 R_L g_m + s^3 \left(C_2 C_L L_L R_2 R_3 R_L g_m + C_2 C_L L_L R_3 R_L\right) + s^2 \left(C_2 L_L R_2 R_3 g_m + C_2 L_L R_3 + C_L L_L R_3 R_L g_m\right) + s \left(C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L + L_L R_3 g_m\right)}{R_3 g_m + R_L g_m + s^3 \left(C_2 C_L L_L R_2 R_3 g_m + C_2 C_L L_L R_3 + C_2 C_L L_L R_3 + C_2 C_L L_L R_1\right) + s^2 \left(C_2 L_L R_2 g_m + C_2 L_L + C_L L_L R_3 g_m + C_L L_L R_2 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_2 R_2 g_m\right)}$$

10.266 INVALID-ORDER-266  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_L L_L R_3 R_L g_m s^2 + R_3 R_L g_m + s^3 \left(C_2 C_L L_L R_2 R_3 R_L g_m + C_2 C_L L_L R_3 R_L\right) + s \left(C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L\right)}{R_3 g_m + R_L g_m + s^3 \left(C_2 C_L L_L R_2 R_3 g_m + C_2 C_L L_L R_3 + C_2 C_L L_L R_3 + C_2 C_L L_L R_2\right) + s^2 \left(C_2 C_L R_2 R_3 R_L g_m + C_2 C_L R_3 R_L + C_L L_L R_3 g_m + C_L L_L R_2 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_2 R_2 g_m + C_2 R_3 R_L g_m + C_2 R_3 R_L g_m\right)}$$

**10.267** INVALID-ORDER-267  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_4 s}\right)$ 

$$H(s) = \frac{g_m + s \left( C_2 R_2 g_m + C_2 \right)}{s^2 \left( C_2 C_3 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L \right) + s \left( C_3 g_m + C_L g_m \right)}$$

**10.268** INVALID-ORDER-268 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^2 \left( C_2 C_L R_2 R_L g_m + C_2 C_L R_L \right) + s \left( C_2 R_2 g_m + C_2 + C_L R_L g_m \right)}{s^3 \left( C_2 C_3 C_L R_2 R_L g_m + C_2 C_3 C_L R_L \right) + s^2 \left( C_2 C_3 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L + C_3 C_L R_L g_m \right) + s \left( C_3 g_m + C_L g_m \right)}$$

**10.269** INVALID-ORDER-269 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_L L_L g_m s^2 + g_m + s^3 \left( C_2 C_L L_L R_2 g_m + C_2 C_L L_L \right) + s \left( C_2 R_2 g_m + C_2 \right)}{C_3 C_L L_L g_m s^3 + s^4 \left( C_2 C_3 C_L L_L R_2 g_m + C_2 C_3 C_L L_L \right) + s^2 \left( C_2 C_3 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L \right) + s \left( C_3 g_m + C_L g_m \right)}$$

10.270 INVALID-ORDER-270 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.271 INVALID-ORDER-271 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.272 INVALID-ORDER-272 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L g_m s + s^2 \left( C_2 L_L R_2 R_L g_m + C_2 L_L R_L \right)}{R_L g_m + s^3 \left( C_2 C_3 L_L R_2 R_L g_m + C_2 C_4 L_L R_2 R_L g_m + C_2 C_4 L_L R_2 \right) + s^2 \left( C_2 L_L R_2 g_m + C_2 L_L + C_3 L_L R_L g_m + C_4 L_L R_L g_m \right) + s \left( C_2 R_2 R_L g_m + C_2 R_L + L_L g_m \right)}$$

10.273 INVALID-ORDER-273 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_L g_m + s^3 \left( C_2 C_L L_L R_2 R_L g_m + C_2 C_L L_L R_L \right) + s^2 \left( C_2 L_L R_2 g_m + C_2 L_L + C_L L_L R_L g_m \right) + s \left( C_2 R_2 R_L g_m + C_2 R_L + L_L g_m \right)}{g_m + s^4 \left( C_2 C_3 C_L L_L R_2 R_L g_m + C_2 C_3 C_L L_L R_2 g_m + C_2 C_2 L_L R_2 g_m + C_2 C_L L_L R_2 g_m + C_2 C_L L_L R_L g_m \right) + s^2 \left( C_2 C_3 R_2 R_L g_m + C_2 C_3 R_L + C_3 L_L g_m + C_2 C_2 R_L g_m + C_2 C_3 R_L R_L g_m \right) + s^2 \left( C_2 C_3 R_2 R_L g_m + C_2 C_3 R_L + C_3 L_L g_m + C_2 C_3 R_L R_L g_m \right) + s \left( C_2 R_2 R_L g_m + C_2 C_3 R_L R_L g_m + C_2 R_L R_L g_m + C_2 R_L R_L g_m \right) + s \left( C_2 R_2 R_L g_m + C_2 R_L R_L g_m \right) + s \left( C_2 R_2 R_L g_m + C_2 R_L R_L g$$

10.274 INVALID-ORDER-274 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_L L_L R_L g_m s^2 + R_L g_m + s^3 \left(C_2 C_L L_L R_2 R_L g_m + C_2 C_L L_L R_L\right) + s \left(C_2 R_2 R_L g_m + C_2 R_L\right)}{g_m + s^4 \left(C_2 C_3 C_L L_L R_2 R_L g_m + C_2 C_3 C_L L_L R_L\right) + s^3 \left(C_2 C_L L_L R_2 g_m + C_2 C_L L_L + C_3 C_L L_L R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_L g_m + C_2 C_L R_L + C_L L_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L L_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L L_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L L_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L L_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 C_L R_L + C_L R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L R_L g_m + C_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_2 R_L$$

10.275 INVALID-ORDER-275 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 g_m + s^2 \left(C_2 C_L R_2 R_3 R_L g_m + C_2 C_L R_3 R_L\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 + C_L R_3 R_L g_m\right)}{g_m + s^3 \left(C_2 C_3 C_L R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_L R_2 R_3 g_m + C_2 C_L R_3 + C_2 C_L R_3 R_L g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_L R_3 g_m + C_L R_2 g_m\right)}$$

10.276 INVALID-ORDER-276 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_L L_L R_3 g_m s^2 + R_3 g_m + s^3 \left(C_2 C_L L_L R_2 R_3 g_m + C_2 C_L L_L R_3\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3\right)}{g_m + s^4 \left(C_2 C_3 C_L L_L R_2 R_3 g_m + C_2 C_3 C_L L_L R_3\right) + s^3 \left(C_2 C_L L_L R_2 g_m + C_2 C_L L_L R_3 g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_L R_3 + C_L L_L g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_L R_3 g_m\right)}$$

10.277 INVALID-ORDER-277  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_L R_3 g_m s + s^2 \left(C_2 L_L R_2 R_3 g_m + C_2 L_L R_3\right)}{R_3 g_m + s^3 \left(C_2 C_3 L_L R_2 R_3 g_m + C_2 C_3 L_L R_3 + C_2 C_L L_L R_2 R_3 g_m + C_2 L_L L_R R_3\right) + s^2 \left(C_2 L_L R_2 g_m + C_2 L_L + C_3 L_L R_3 g_m + C_L L_L R_3 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 + L_L g_m\right)}$ 10.278 INVALID-ORDER-278  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_3 g_m + s^3 \left(C_2 C_L L_L R_3 g_m + C_2 C_L L_L R_3 \right) + s^2 \left(C_2 C_L R_2 R_3 R_L g_m + C_2 C_L R_3 R_L + C_L L_L R_3 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 + C_L R_3 R_L g_m\right)}{g_m + s^4 \left(C_2 C_3 C_L L_L R_3 g_m + C_2 C_3 C_L L_L R_3 g_m + C_2 C_L L_L + C_3 C_L L_L R_3 g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_L R_3 R_L + C_L L_L R_3 g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_L R_3 R_L + C_2$ 10.279 INVALID-ORDER-279  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_L R_3 R_L g_m s + s^2 \left( C_2 L_L R_2 R_3 R_L g_m + C_2 L_L R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_2 C_3 L_L R_2 R_3 R_L g_m + C_2 C_4 L_L R_2 R_3 R_L g_m + C_2 L_L R_3$ 10.280 INVALID-ORDER-280  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{R_3 R_L g_m + s^3 \left(C_2 C_L L_L R_2 R_3 R_L g_m + C_2 C_L L_L R_3 R_L\right) + s^2 \left(C_2 L_L R_3 R_L g_m + C_2 L_L R_3 + C_L L_L R_3 R_L g_m\right) + s \left(C_2 R_2 R_3 R_L g_m + C_2 R_3 R_L + L_L R_3 g_m\right)}{R_3 g_m + R_L g_m + s^4 \left(C_2 C_3 C_L L_L R_3 R_L g_m + C_2 C_3 L_L R_3 R_L g_m + C_2 C_L L_L R_3 R_L g_m + C_2 C_L L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 L_L R_3 R_L g_m + C_2 C_L L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_2 R_3 R_L g_m\right) + s^2 \left(C_2 R_3 R_L g_m + C_$ 10.281 INVALID-ORDER-281  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $\frac{C_{L}L_{L}R_{3}R_{L}g_{m}s^{2}+R_{3}R_{L}g_{m}+s^{3}\left(C_{2}C_{L}L_{L}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{L}L_{L}R_{3}R_{L}\right)+s\left(C_{2}R_{2}R_{3}R_{L}g_{m}+C_{2}$ 10.282 INVALID-ORDER-282  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{g_m + s^2 \left( C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_3 \right) + s \left( C_2 R_2 g_m + C_2 + C_3 R_3 g_m \right)}{s^3 \left( C_2 C_3 C_L R_2 R_3 g_m + C_2 C_3 C_L R_3 \right) + s^2 \left( C_2 C_3 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L + C_3 C_L R_3 g_m \right) + s \left( C_3 g_m + C_L g_m \right)}$ **10.283** INVALID-ORDER-283  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{R_L g_m + s^2 \left( C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 R_3 R_L \right) + s \left( C_2 R_2 R_L g_m + C_2 R_L + C_3 R_3 R_L g_m \right)}{g_m + s^3 \left( C_2 C_3 C_L R_2 R_3 R_L g_m + C_2 C_3 C_L R_3 R_L \right) + s^2 \left( C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_L g_m + C_2 C_3 R_L + C_2 C_L R_L g_m + C_2 C_L R_L + C_3 C_L R_3 R_L g_m \right) + s \left( C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_3 R_L g_m + C_2 R_L g_m \right)}$ 

10.284 INVALID-ORDER-284 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^3 \left(C_2 C_3 C_L R_2 R_3 R_L g_m + C_2 C_3 C_L R_3 R_L\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_3 + C_2 C_L R_2 R_L g_m + C_2 C_L R_L + C_3 C_L R_3 R_L g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_L R_L g_m\right)}{s^3 \left(C_2 C_3 C_L R_2 R_3 g_m + C_2 C_3 C_L R_2 R_L g_m + C_2 C_3 C_L R_3 + C_2 C_2 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L + C_3 C_L R_3 g_m + C_2 C_L R_2 g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 C_L R_2 R_L g_m + C_2 C_3 C_L R_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m + C_3 R_L g_m\right) + s \left(C_3 R_3 R_L g_m\right) + s \left(C_3 R_2 R_L g_m\right) + s \left(C_3 R_$$

**10.285** INVALID-ORDER-285 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^4 \left(C_2 C_3 C_L L_L R_2 R_3 g_m + C_2 C_3 C_L L_L R_3\right) + s^3 \left(C_2 C_L L_L R_2 g_m + C_2 C_L L_L + C_3 C_L L_L R_3 g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_3 + C_L L_L g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m\right)}{s^4 \left(C_2 C_3 C_L L_L R_2 g_m + C_2 C_3 C_L L_L\right) + s^3 \left(C_2 C_3 C_L R_2 R_3 g_m + C_2 C_3 C_L R_3 + C_2 C_L R_2 g_m\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_2 R_3 g_m + C_2 C_L R_2 g_m\right) + s \left(C_2 R_2 g_m + C_2 R_2 g_m\right) + s \left(C_2 R_2 g_m + C_2$$

10.286 INVALID-ORDER-286  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

10.287 INVALID-ORDER-287  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{g_m + s^4 \left( C_2 C_3 C_L L_L R_2 R_3 g_m + C_2 C_3 C_L L_L R_3 \right) + s^3 \left( C_2 C_3 C_L R_2 R_3 R_L g_m + C_2 C_3 C_L R_3 R_L + C_2 C_L L_L R_2 g_m + C_2 C_L L_L R_3 g_m \right) + s^2 \left( C_2 C_3 R_2 R_3 g_m + C_2 C_L R_2 R_L g_m + C_2 C_$ 

10.288 INVALID-ORDER-288  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{L_L R_L g_m s + s^3 \left( C_2 C_3 L_L R_2 R_3 R_L g_m + C_2 C_3 L_L R_3 R_L \right) + s^2 \left( C_2 L_L R_2 R_L g_m + C_2 L_L R_L + C_3 L_L R_3 R_L g_m \right)}{R_L g_m + s^4 \left( C_2 C_3 C_L L_L R_3 R_L g_m + C_2 C_3 L_L R_3 R_L g_m$ 

10.289 INVALID-ORDER-289  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{R_L g_m + s^4 \left(C_2 C_3 C_L L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_L R_3 R_L \right) + s^3 \left(C_2 C_3 L_L R_3 R_L g_m + C_2 C_L L_L R_2 R_L g_m + C_2 C_L L_L R_2 R_L g_m + C_2 C_L L_L R_3 R_L g_m \right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 L_L R_2 g_m + C_2 L_L R_2$ 

10.290 INVALID-ORDER-290  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L g_m + s^4 \left( C_2 C_3 C_L L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_L R_3 R_L g_m + C_2 C_L L_L R_3 R_L g_m + s^2 \left( C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 R_3 R_L + C_L L_L R_L g_m \right) + s^2 \left( C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 R_3 R_L + C_L L_L R_L g_m \right) + s \left( C_2 R_2 R_3 R_L g_m + C_2 C_3 C_L L_L R_2 R_2 g_m + C_2 C_3 C_L L_L R_3 g_m + C_2 C_3 C_L L_L R_3 g_m + C_2 C_3 C_L L_L R_3 g_m + C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_3 R_2 g_m +$ 

**10.291** INVALID-ORDER-291  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{C_3L_3R_Lg_ms^2 + R_Lg_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_L\right) + s\left(C_2R_2R_Lg_m + C_2R_L\right)}{g_m + s^3\left(C_2C_3L_3R_2g_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_3R_L + C_3L_3g_m\right) + s\left(C_2R_2g_m + C_2 + C_3R_Lg_m\right)}$ 

10.292 INVALID-ORDER-292  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{C_3L_3g_ms^2 + g_m + s^3\left(C_2C_3L_3R_2g_m + C_2C_3L_3\right) + s\left(C_2R_2g_m + C_2\right)}{C_3C_LL_3g_ms^3 + s^4\left(C_2C_3C_LL_3R_2g_m + C_2C_3C_LL_3\right) + s^2\left(C_2C_3R_2g_m + C_2C_3 + C_2C_LR_2g_m + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}$ 

10.293 INVALID-ORDER-293  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_3L_3R_Lg_ms^2 + R_Lg_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_L\right) + s\left(C_2R_2R_Lg_m + C_2R_L\right)}{g_m + s^4\left(C_2C_3C_LL_3R_2R_Lg_m + C_2C_3L_4R_L\right) + s^3\left(C_2C_3L_3R_2g_m + C_2C_3L_3R_Lg_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_L + C_3L_3g_m\right) + s\left(C_2R_2g_m + C_2C_LR_L + C_3$ 

**10.294** INVALID-ORDER-294  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{g_m + s^4 \left(C_2 C_3 C_L L_3 R_2 R_L g_m + C_2 C_3 C_L L_3 R_L\right) + s^3 \left(C_2 C_3 L_3 R_2 g_m + C_2 C_3 L_3 + C_3 C_L L_3 R_L g_m\right) + s^2 \left(C_2 C_L R_2 R_L g_m + C_2 C_L R_L + C_3 L_3 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_L R_L g_m\right)}{s^4 \left(C_2 C_3 C_L L_3 R_2 g_m + C_2 C_3 C_L L_3\right) + s^3 \left(C_2 C_3 C_L R_2 R_L g_m + C_2 C_3 C_L R_2 R_L g_m\right) + s^2 \left(C_2 C_3 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L R_2 g_m\right) + s \left(C_3 R_2 g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 C_L R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_L g_m + C_2 R_L g_m\right) + s \left(C_3 R_L g_m + C_2 R_L g_m\right) + s \left(C_3$ 

$$\begin{aligned} \textbf{10.295} \quad \textbf{INVALID-ORDER-295} \ \ Z(s) &= \left( \infty, \ \ R_2 + \frac{1}{C_2 s}, \ \ L_3 s + \frac{1}{C_3 s}, \ \ \infty, \ \ \infty, \ \ L_L s + \frac{1}{C_L s} \right) \\ H(s) &= \frac{C_3 C_L L_3 L_L g_m s^4 + g_m + s^5 \left( C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 C_L L_3 L_L \right) + s^3 \left( C_2 C_3 L_3 R_2 g_m + C_2 C_3 L_3 R_2 g_m + C_2 C_L L_L R_2 g_m + C_2 C_L L_L \right) + s^2 \left( C_3 L_3 g_m + C_L L_L g_m \right) + s \left( C_2 R_2 g_m + C_2 C_2 C_L L_1 R_2 g_m + C_2 C_3 C_L R_2 g_m + C_2 C_2 R_2 g_m + C_2 C_3 C_L R_2 g_m + C_2 C_2 R_2 g_m$$

**10.296** INVALID-ORDER-296 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_3L_3L_Lg_ms^3 + L_Lg_ms + s^4\left(C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_L\right) + s^2\left(C_2L_LR_2g_m + C_2L_L\right)}{C_3C_LL_3L_Lg_ms^4 + g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_Lg_m + C_2L_Lg_m\right) + s\left(C_2R_2g_m + C_2C_3L_LR_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_Lg_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_3L_3g_m + C_3L_2g_m + C_3L_Lg_m\right) + s\left(C_3R_3g_m + C_3L_Lg_m\right) + s\left(C_3R_3g_m + C_3L_Lg_m\right) + s\left(C_3R_3g_m + C_3R_3g_m + C_3R_3g_m\right) + s\left(C_3R_3g_m + C_3R_3g_m\right) + s\left$$

10.297 INVALID-ORDER-297 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 C_L L_3 L_L \right) + s^4 \left(C_2 C_3 C_L L_3 R_2 R_L g_m + C_2 C_3 C_L L_3 R_L g_m + C_2 C_3 L_4 R_2 g_m + C_2 C_3 L_4 R_2 g_m + C_2 C_4 L_L R_2 g_m + C_4 C_4$$

10.298 INVALID-ORDER-298 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_3L_3L_LR_Lg_ms^3 + L_LR_Lg_ms + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_3L_LR_L\right) + s^2\left(C_2L_LR_2R_Lg_m + C_2L_LR_L\right)}{R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + C_2C_3L_LL_RL_L\right) + s^4\left(C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_LR_L\right) + s^4\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_2R_LR_2R_Lg_m + C_2C_3L_LR_L\right) + s^4\left(C_2C_3L_2R_LR_2$$

**10.299** INVALID-ORDER-299 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

10.300 INVALID-ORDER-300 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_3C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_3L_LL_RL_2\right) + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2C_LL_LR_2R_Lg_m + C_2C_LL_LR_2\right) + s^2\left(C_3L_3R_Lg_m + C_LL_LR_2g_m + C_LL_L$$

**10.301** INVALID-ORDER-301 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ R_L\right)$$

$$H(s) = \frac{L_3 R_L g_m s + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 L_3 R_L\right)}{R_L g_m + s^3 \left(C_2 C_3 L_3 R_2 R_L g_m + C_2 C_3 L_3 R_L\right) + s^2 \left(C_2 L_3 R_2 g_m + C_2 L_3 + C_3 L_3 R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 R_L + L_3 g_m\right)}$$

10.302 INVALID-ORDER-302 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 g_m s + s^2 \left(C_2 L_3 R_2 g_m + C_2 L_3\right)}{g_m + s^3 \left(C_2 C_3 L_3 R_2 g_m + C_2 C_3 L_3 + C_2 C_L L_3 R_2 g_m + C_2 C_L L_3\right) + s^2 \left(C_3 L_3 g_m + C_L L_3 g_m\right) + s \left(C_2 R_2 g_m + C_2\right)}$$

**10.303** INVALID-ORDER-303 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_L g_m s + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 L_3 R_L\right)}{R_L g_m + s^3 \left(C_2 C_3 L_3 R_2 R_L g_m + C_2 C_3 L_3 R_L + C_2 C_L L_3 R_2 R_L g_m + C_2 C_L L_3 R_L\right) + s^2 \left(C_2 L_3 R_2 g_m + C_2 L_3 + C_3 L_3 R_L g_m + C_L L_3 R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 R_L + L_3 g_m\right)}$$

10.304 INVALID-ORDER-304  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{L_{3}g_{m}s + s^{3}\left(C_{2}C_{L}L_{3}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{3}R_{L}\right) + s^{2}\left(C_{2}L_{3}R_{2}g_{m} + C_{2}L_{3} + C_{L}L_{3}R_{L}g_{m}\right)}{g_{m} + s^{4}\left(C_{2}C_{3}C_{L}L_{3}R_{2}R_{L}g_{m} + C_{2}C_{3}L_{3}R_{2}g_{m} + C_{2}C_{3}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}R_{2} + C_{2}L_{3}g_{m}\right) + s\left(C_{2}R_{2}g_{m} + C_{2}C_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}R_{2}R_{L}g_{m}\right) + s\left(C_{2}R_{2}g_{m} + C_{2}C_{L}R_{2}R_{L}g_{m}\right) + s\left(C_{2}R_{2}R_{L}g_{m} + C_{2}C_{L}R_{L}g_{m}\right) + s\left(C_{2}R_{2}R_{L}g_{m} + C_{2}C_{L}R_{L}g_{m}\right) + s\left(C_{2}R_{2}R_{L}g_{m} + C_{2}C_{L}R_{L}g_{m}\right) + s\left(C_$ 10.305 INVALID-ORDER-305  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{C_L L_3 L_L g_m s^3 + L_3 g_m s + s^4 \left(C_2 C_L L_3 L_L R_2 g_m + C_2 C_L L_3 L_L\right) + s^2 \left(C_2 L_3 R_2 g_m + C_2 L_3\right)}{C_3 C_L L_3 L_L g_m s^4 + g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 L_3 L_L\right) + s^3 \left(C_2 C_3 L_3 R_2 g_m + C_2 C_L L_3 R_2 g_m + C_2 C_L L_3 + C_2 C_L L_1 R_2 g_m + C_2 C_L L_1\right) + s^2 \left(C_3 L_3 g_m + C_L L_3 g_m + C_L L_2 g_m\right) + s \left(C_2 R_2 g_m + C_2 C_L L_3 R_2 g_m + C_2 C_L L_3 R_2 g_m + C_2 C_L L_1\right) + s^2 \left(C_3 L_3 g_m + C_L L_3 g_m + C_L L_2 g_m\right) + s \left(C_3 R_2 g_m + C_2 C_L L_3 R_2 g_m + C_2 C_L L_3 R_2 g_m + C_2 C_L L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_3 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_1 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_1 R_2 g_m + C_2 L_1\right) + s^2 \left(C_3 L_1 R_2 g_$ 10.306 INVALID-ORDER-306  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_3L_Lg_ms + s^2\left(C_2L_3L_LR_2g_m + C_2L_3L_L\right)}{L_3g_m + L_Lg_m + s^3\left(C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_L + C_2C_LL_3L_LR_2g_m + C_2L_LL_3L_L\right) + s^2\left(C_3L_3L_Lg_m + C_LL_3L_Lg_m\right) + s\left(C_2L_3R_2g_m + C_2L_3 + C_2L_LR_2g_m + C_2L_L\right)}$ 10.307 INVALID-ORDER-307  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_1 s + R_1 + \frac{1}{C_1 s}\right)$  $H(s) = \frac{L_3g_ms + s^4\left(C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_L\right) + s^3\left(C_2C_LL_3R_2R_Lg_m + C_2C_LL_3R_L + C_LL_3L_Lg_m\right) + s^2\left(C_2L_3R_2g_m + C_2L_3 + C_LL_3R_Lg_m\right) + s^2\left(C_2L_3R_2g_m + C_2L_3R_2g_m + C_2L_3R_2g_m + C_2L_3R_2g_m + C_2L_3R_2g_m\right) + s^2\left(C_2L_3R_2g_m + C_2L_3R_2g_m + C_2L_3$ 10.308 INVALID-ORDER-308  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_3L_LR_Lg_ms + s^2\left(C_2L_3L_LR_2g_m + C_2L_3L_LR_L\right)}{L_3R_Lg_m + L_LR_Lg_m + s^3\left(C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_3L_LR_2R_Lg_m + C_2L_3L_LR_L\right) + s^2\left(C_2L_3L_LR_2g_m + C_2L_3L_LR_Lg_m + C_2L_3L_LR_Lg_m + C_2L_3R_LR_Lg_m + C_2R_LR_Lg_m +$ 10.309 INVALID-ORDER-309  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 10.310 INVALID-ORDER-310  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

10.310 INVALID-ORDER-310 
$$Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$$

$$C_L L_3 L_L R_L g_m s^3 + L_3 R_L g_m s + s^4 \left( C_2 C_L L_3 L_L R_2 R_L g_m + C_2 C_L L_3 L_L R_L \right) + s^2 \left( C_2 L_3 R_2 R_L g_m + C_2 L_3 R_L \right)$$

$$H(s) = \frac{C_L L_3 L_L R_L g_m s^3 + L_3 R_L g_m s + s^4 \left(C_2 C_L L_3 L_L R_2 R_L g_m + C_2 C_L L_3 L_L R_L\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 L_3 R_L\right)}{R_L g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_L g_m + C_2 C_L L_3 L_L R_L\right) + s^4 \left(C_2 C_L L_3 L_L R_2 g_m + C_2 C_L L_3 L_L R_L g_m\right) + s^3 \left(C_2 C_3 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_2 R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L L_3 R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L R_L R_L g_m\right) + s^2 \left(C_2 L_3 R_L R_L g_m + C_2 C_L R_L R_L g_m\right) + s^$$

10.311 INVALID-ORDER-311 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L g_m + s^3 \left(C_2 C_3 L_3 R_2 R_L g_m + C_2 C_3 L_3 R_L\right) + s^2 \left(C_2 C_3 R_2 R_3 R_L g_m + C_2 C_3 R_3 R_L + C_3 L_3 R_L g_m\right) + s \left(C_2 R_2 R_L g_m + C_2 R_L + C_3 R_3 R_L g_m\right)}{g_m + s^3 \left(C_2 C_3 L_3 R_2 g_m + C_2 C_3 L_3\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_2 R_L g_m + C_2 C_3 R_3 + C_2 C_3 R_L + C_3 L_3 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m + C_3 R_L g_m\right)}$$

**10.312** INVALID-ORDER-312 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{g_m + s^3 \left(C_2 C_3 L_3 R_2 g_m + C_2 C_3 L_3\right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 R_3 + C_3 L_3 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_3 g_m\right)}{s^4 \left(C_2 C_3 C_L L_3 R_2 g_m + C_2 C_3 C_L L_3\right) + s^3 \left(C_2 C_3 C_L R_2 R_3 g_m + C_2 C_3 C_L L_3 g_m\right) + s^2 \left(C_2 C_3 R_2 g_m + C_2 C_3 + C_2 C_L R_2 g_m + C_2 C_L + C_3 C_L R_3 g_m\right) + s \left(C_3 g_m + C_L g_m\right)}$$

**10.315** INVALID-ORDER-315 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

**10.316** INVALID-ORDER-316 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L g_m s + s^4 \left(C_2 C_3 L_1 L_R 2 g_m + C_2 C_3 L_L R_3 g_m + C_2 C_3 L_L R_3 + C_3 L_L R_3 g_m + C_2 C_3 L_L R_3 + C_3 L_L R_3 g_m \right)}{g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 L_L R_3 g_m + C_2 C_3 L_L R_2 g_m + C_2 C_3 L_L R_2 g_m + C_2 C_3 L_L R_3 g_m \right) + s^2 \left(C_2 C_3 R_2 R_3 g_m + C_2 C_3 L_L R_3 g_m + C_2 C_3 L_L R_3 g_m + C_2 C_3 L_L R_2 g_m + C_2 C_3 L_L R_2 g_m + C_2 C_3 L_L R_3 g_m + C_2 C_3 L_L R_3 g_m + C_2 C_3 L_L R_3 g_m \right)}$ 

10.317 INVALID-ORDER-317 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 C_L L_3 L_L \right) + s^4 \left(C_2 C_3 C_L L_3 R_2 R_L g_m + C_2 C_3 C_L L_L R_2 R_3 g_m + C_2 C_3 C_L L_L R_3 + C_3 C_L L_L R_3 + C_3 C_L L_L R_3 R_L g_m + C_2 C_3 C_L R_3 R_L + C_2 C_3 L_1 R_2 R_2 g_m + C_2 C_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_L R_2 g_m + C_2 C_3 C_L R_3 R_L + C_2 C_2 C_L R_3 R_L + C_2 C_2 C_L R_3 R_L + C_2 C_2 C_L R_3 R_L$ 

10.318 INVALID-ORDER-318 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

10.319 INVALID-ORDER-319 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{R_L g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_L g_m + C_2 C_3 C_L L_3 L_L R_2\right) + s^4 \left(C_2 C_3 C_L L_L R_2 R_3 R_L g_m + C_2 C_3 L_L L_R R_3 R_L + C_2 C_3 L_L L_R R_2 g_m + C_2 C_3 L_L L_R R_2 g_m + C_2 C_3 L_L R_2 R_2 g_m + C_2 C_3 L_L R_2 R_3 g_m + C_2 C_3 L_L R_2 R_2 g_m + C_2 C_3 L_L R_2 R_2$ 

10.320 INVALID-ORDER-320 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{R_L g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_L g_m + C_2 C_3 C_L L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_L R_3 R_L + C_3 C_L L_L R_2 R_3 R_L g_m + S^3 \left(C_2 C_3 L_3 L_L R_2 R_2 R_L g_m + C_2 C_3 C_L L_L R_2 R$ 

10.321 INVALID-ORDER-321 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ R_L\right)$$

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

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10.322 INVALID-ORDER-322 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                      H(s) = \frac{L_3 R_3 g_m s + s^2 \left(C_2 L_3 R_2 R_3 g_m + C_2 L_3 R_3\right)}{R_3 g_m + s^3 \left(C_2 C_3 L_3 R_2 R_3 g_m + C_2 C_3 L_3 R_3 + C_2 C_L L_3 R_2 R_3 g_m + C_2 C_L L_3 R_3\right) + s^2 \left(C_2 L_3 R_2 g_m + C_2 L_3 + C_3 L_3 R_3 g_m + C_L L_3 R_3 g_m\right) + s \left(C_2 R_2 R_3 g_m + C_2 R_3 + L_3 g_m\right)}
10.323 INVALID-ORDER-323 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \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_2 L_3 R_2 R_3 R_L g_m + C_2 L_3 R_3 R_L \right)}{R_3 R_L g_m + s^3 \left( C_2 C_3 L_3 R_2 R_3 R_L g_m + C_2 C_3 L_3 R_3 R_L + C_2 C_L L_3 R_2 R_3 R_L g_m + C_2 L_3 R_2 R_L g_m + C_2 L_3 R_2
10.324 INVALID-ORDER-324 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_3R_3g_ms + s^3\left(C_2C_LL_3R_2R_3R_Lg_m + C_2C_LL_3R_3R_L\right) + s^2\left(C_2L_3R_2R_3g_m + C_2L_3R_3 + C_LL_3R_3R_Lg_m\right)}{R_3g_m + s^4\left(C_2C_3C_LL_3R_2R_3R_Lg_m + C_2C_LL_3R_2R_3g_m + C_2C_LL_3R_2R_2g_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m + C_2C_LR_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_2R_Lg_m\right) + s^2\left(C_2C_LR_3R_2R_Lg_m\right) + s^2\left(C_2C_LR_3R_2R_Lg_m\right) + s^2\left(C_2C_LR_3R_2R_Lg_m\right) + s^2\left(C_2C_LR_3R_2R_Lg_m\right
10.325 INVALID-ORDER-325 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.326 INVALID-ORDER-326 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_2 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                               H(s) = \frac{L_3 L_L R_3 g_m s + s^2 \left(C_2 L_3 L_L R_2 R_3 g_m + C_2 L_3 L_L R_3\right)}{L_3 R_3 g_m + L_L R_3 g_m + s^3 \left(C_2 C_3 L_3 L_L R_2 R_3 g_m + C_2 C_L L_3 L_L R_3 g_m + C_2 L_2 R_3 g_m + C_2 L_2 R_3 g_m + C_2 L_3 L_L R_3 g_m + C_2 L_3 L_L R_3 g_m + C_2 L_2 R_3 g_
10.327 INVALID-ORDER-327 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        L_{3}R_{3}g_{m}s + s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{2}R_{3}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{3}\right) + s^{3}\left(C_{2}C_{L}L_{3}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{3}R_{2}R_{3}R_{L}g_{m}\right) + c_{2}C_{L}L_{3}R_{2}R_{3}R_{L}g_{m} + c_{3}C_{L}L_{3}R_{2}R_{3}R_{L}g_{m} + c_{4}C_{L}L_{3}R_{2}R_{3}R_{L}g_{m} + c_{4}C_{L}L_{3}R_{2}R_{3}R_{2}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_{3}R_{2}R_
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10.328 INVALID-ORDER-328  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $L_3L_LR_3R_Lg_ms + s^2(C_2L_3L_LR_2R_3R_Lg_m + C_2L_3L_LR_3R_L)$  $\frac{L_3L_LR_3R_Lg_ms + s \cdot (c_2L_3L_LR_2R_3R_Lg_m + c_2L_3L_LR_3R_L)}{L_3R_3R_Lg_m + L_LR_3R_Lg_m + s^3 \cdot (c_2C_3L_3L_LR_2R_3R_Lg_m + c_2C_3L_3L_LR_3R_Lg_m + c_2L_3L_LR_3R_Lg_m + c_2L_3L_LR_3R_Lg_m$ 

10.329 INVALID-ORDER-329  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L_{3}L_{3}L_{1}L_{9}m^{3} + s^{3} \left(C_{2}C_{3}L_{1}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}R_{1}g_{m} + C_{2}C_{1}L_{3}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{1}L_{3}L_{$ 

10.330 INVALID-ORDER-330  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_L L_3 L_L R_3 R_L g_m s^\circ + L_3 R_3 R_L g_m s^\circ + L_3 R_3 R_L g_m s + s^\circ \cdot (C_2 C_L L_3 L_L R_3 R_L g_m s + s^\circ \cdot (C_2 C_$ 

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10.331 INVALID-ORDER-331 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
                                                                                            H(s) = \frac{R_3R_Lg_m + s^3\left(C_2C_3L_3R_2R_3R_Lg_m + C_2C_3L_3R_3R_L\right) + s^2\left(C_2L_3R_2R_Lg_m + C_2L_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L + L_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2\right) + s^2\left(C_2L_3R_2g_m + C_2L_3 + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L + L_3R_Lg_m\right)}
10.332 INVALID-ORDER-332 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                      H(s) = \frac{R_3g_m + s^3\left(C_2C_3L_3R_2R_3g_m + C_2C_3L_3R_3\right) + s^2\left(C_2L_3R_2g_m + C_2L_3 + C_3L_3R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3 + L_3g_m\right)}{g_m + s^4\left(C_2C_3C_LL_3R_2g_m + C_2C_3L_4R_3g_m + C_2C_3L_3R_2g_m + C_2C_LL_3R_2g_m + C_2C_LL_3R_3g_m\right) + s^2\left(C_2C_LR_2R_3g_m + C_2C_LR_3 + C_3L_3g_m\right) + s^2\left(C_2C_LR_3R_3g_m + C_2C_LR_3R_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C_LR_3R_3g_m + C_2C_LR_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C_LR_3R_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C
10.333 INVALID-ORDER-333 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_3R_Lg_m + s^3\left(C_2C_3L_3R_2R_1g_m + C_2C_3L_3R_3R_L\right) + s^2\left(C_2L_3R_2R_Lg_m + C_2L_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L + L_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_2C_3C_LL_3R_2R_1g_m + C_2C_3L_3R_2R_1g_m + C_2C_3L_3R_2R_Lg_m + C_
10.334 INVALID-ORDER-334 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.335 INVALID-ORDER-335 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.336 INVALID-ORDER-336 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                            10.337 INVALID-ORDER-337 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{R_3 g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_3 L_L R_3\right) + s^4 \left(C_2 C_3 C_L L_3 R_2 R_3 R_L g_m + C_2 C_3 L_L L_3 L_L R_2 g_m + C_2 C_L L_3 L_L R_3 g_m\right) + s^3 \left(C_2 C_3 L_3 R_2 R_3 g_m + C_2 C_3 L_3 R_3 R_4 + C_2 C_L L_3 R_2 R_2 g_m + C_2 C_L L_3 R_2 R_3 g_m + C_2 C_2 L_4 R_2 R_3 g_m + C_2 C_2 L_4
10.338 INVALID-ORDER-338 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{\frac{D_L 1 v_3 1 v_L g_m v_{\perp} v_{\perp}}{R_3 R_L g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_3 R_L g_m + C_2 C_3 L_3 L_L R_3 R_L g_m + C_2 C_3 L_2 L_L R_3 R_L g_m + C_2 C_3 L_2 L_L R_3 R_L g_m + C_2 C_3 L_2 L_L R_3 R_
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 $S = \frac{1}{R_3 g_m + R_L g_m + s^5 \left( C_2 C_3 C_L L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_3 L_L R_2 R_2 g_m + C_2 C_3 C_L L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_3 L_L R_3 + C_2 C_3 C_L L_3 L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 C_L L_3 L_L R_2 g_m + C_3 C_L L_3 L_L R_3 g_m + C_3 C_L L_3 L_$ 

 $H(s) = \frac{R_3 R_L g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_3 R_L g_m + C_2 C_3 L_L L_L R_3 R_L \right) + s^4 \left(C_2 C_3 L_3 L_L R_3 R_L g_m + C_2 C_3 L_3 L_L R_3 R_L g_m + C_2 C_L L_3 L_L R_2 R_L g_m + C_2 C_L L_3 L_L R_2 R_L g_m + C_2 C_L L_3 L_L R_3 R_L g_m + S^2 \left(C_2 C_3 L_3 L_L R_2 R_2 R_3 R_L g_m + C_2 C_3 L_3 L_L R_2 R_L g_m + C_3 C_L L_3 L_L R_2 R_L g_m + C_3 C_L$ 

10.339 INVALID-ORDER-339  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{C_L L_R L_s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

10.340 INVALID-ORDER-340  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

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10.341 INVALID-ORDER-341 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3(C_3 L_3 s^2 + 1)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, R_L\right)
                                                                                                 H(s) = \frac{C_3L_3R_3R_Lg_ms^2 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_2R_3R_Lg_m + C_2C_3L_3R_3R_L\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L\right)}{R_3g_m + R_Lg_m + s^3\left(C_2C_3L_3R_2R_3g_m + C_2C_3L_3R_2R_2g_m + C_2C_3L_3R_L\right) + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_3R_3R_L + C_3L_3R_2g_m + C_2R_3R_Lg_m + C_2R_3R_Lg_
10.342 INVALID-ORDER-342 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \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{1}{C_L s}\right)
                                                                                                                H(s) = \frac{C_3L_3R_3g_ms^2 + R_3g_m + s^3\left(C_2C_3L_3R_2g_m + C_2C_3L_3R_3\right) + s\left(C_2R_2R_3g_m + C_2R_3\right)}{g_m + s^4\left(C_2C_3C_LL_3R_2g_m + C_2C_3L_Lg_Rg_m + C_2C_3L_3R_2g_m + C_2C_3L_3R_3g_m + C_2C_3R_3g_m + C_2C_4R_3g_m + C_2C_4R_3
10.343 INVALID-ORDER-343 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \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{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_3L_3R_3R_Lg_ms^2 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_2R_3R_Lg_m + C_2C_3L_3R_3R_L\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L\right)}{R_3g_m + R_Lg_m + s^4\left(C_2C_3C_LL_3R_2R_3R_Lg_m + C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_2g_m + C_2C_3L_3R_3R_Lg_m + C_2
10.344 INVALID-ORDER-344 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \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, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{R_3g_m + s^4 \left( C_2C_3C_LL_3R_2R_3R_Lg_m + C_2C_3L_LR_3R_2R_3g_m + C_2C_3L_3R_3R_Lg_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_L + C_3L_3R_3g_m \right) + s \left( C_2R_2R_3R_Lg_m + C_2C_LR_3R_L + C_3L_3R_3g_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_L + C_3L_3R_3g_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + s^2 \left( C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + c_2C_LR_2R_Lg_m + c_2C_LR_2R_Lg_m
10.345 INVALID-ORDER-345 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \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, \ L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_3C_LL_3L_LR_3g_ms^4 + R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3g_m + C_2C_3L_LR_2R_3g_m + C_2C_3L_LR_2R_3g_m + C_2C_LL_LR_2R_3g_m + C_2C_LL_LR_3g_m +
10.346 INVALID-ORDER-346 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \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_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_3L_3L_LR_3g_ms^3 + L_LR_3g_ms + s^4\left(C_2C_3L_3L_LR_2R_3g_m + C_2C_3L_3L_LR_3\right) + s^2\left(C_2L_LR_2R_3g_m + C_2L_LR_3\right)}{R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_3L_3L_LR_3\right) + s^4\left(C_2C_3L_3L_LR_3g_m + C_2C_3L_3L_RR_3g_m + C_2C_3L_RR_3g_m + C_2C_3L_RR_
10.347 INVALID-ORDER-347 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \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, L_L s + R_L + \frac{1}{C_L s}\right)
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10.348 INVALID-ORDER-348 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_3L_3L_LR_3R_Lg_ms^3 + L_LR_3R_Lg_ms + s^4\left(C_2C_3L_3L_LR_2R_3R_Lg_m + C_2C_3L_3L_LR_2R_3R_Lg_m + C_2C_3L_3L_LR_3R_Lg_m + C_2C_3L_3L_LR_3R_Lg_m + S^4\left(C_2C_3L_3L_LR_3R_Lg_m + C_2C_3L_3L_LR_3R_Lg_m + C_2C_3L_3L_$$

10.349 INVALID-ORDER-349 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{R_3 R_L g_m + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L\right) + s^4 \left(C_2 C_3 L_3 L_L R_2 R_3 g_m + C_2 C_3 L_3 L_L R_3 R_L R_3 R$$

10.350 INVALID-ORDER-350 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{C_3C_LL_3L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_2R_Lg_m + s^5\left(C_2C_2C_LL_3L_LR_2R_2R_Lg_m + s^5\left(C_2C_2C_LL_3L_LR_2R_2R_Lg_m + s^5\left(C_2C_2C_LL_3L_LR_2R_2R_Lg_m + s^5\left(C_2C_2C_LL_3L_LR_2R_2R_Lg_m + s^5\left(C_2C_2C_LL_3L_LR_$ 

**10.351** INVALID-ORDER-351  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 L_2 R_3 g_m s^2 + C_2 R_3 s + R_3 g_m}{C_2 C_L L_2 R_3 g_m s^3 + g_m + s^2 \left( C_2 C_L R_3 + C_2 L_2 g_m \right) + s \left( C_2 + C_L R_3 g_m \right)}$$

**10.352** INVALID-ORDER-352  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + C_2R_3R_Ls + R_3R_Lg_m}{C_2C_LL_2R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m + C_2L_2R_Lg_m\right) + s\left(C_2R_3 + C_2R_L + C_LR_3R_Lg_m\right)}$$

**10.353** INVALID-ORDER-353  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2R_3R_Lg_ms^3 + R_3g_m + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{g_m + s^3\left(C_2C_LL_2R_3g_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_LR_3 + C_2C_LR_L + C_2L_2g_m\right) + s\left(C_2 + C_LR_3g_m + C_LR_Lg_m\right)}$$

**10.354** INVALID-ORDER-354  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_LR_3g_ms^4 + C_2C_LL_LR_3s^3 + C_2R_3s + R_3g_m + s^2\left(C_2L_2R_3g_m + C_LL_LR_3g_m\right)}{C_2C_LL_2L_Lg_ms^4 + g_m + s^3\left(C_2C_LL_2R_3g_m + C_2C_LL_L\right) + s^2\left(C_2C_LR_3 + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2 + C_LR_3g_m\right)}$$

10.355 INVALID-ORDER-355  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2 L_2 L_L R_3 g_m s^3 + C_2 L_L R_3 s^2 + L_L R_3 g_m s}{C_2 C_L L_2 L_L R_3 q_m s^4 + R_3 q_m + s^3 \left( C_2 C_L L_L R_3 + C_2 L_L L_L q_m \right) + s^2 \left( C_2 L_2 R_3 q_m + C_2 L_L + C_L L_L R_3 q_m \right) + s \left( C_2 R_3 + L_L q_m \right)}$$

**10.356** INVALID-ORDER-356  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_LR_3g_ms^4 + R_3g_m + s^3\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_3\right) + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_LL_2L_Lg_ms^4 + g_m + s^3\left(C_2C_LL_2R_3g_m + C_2C_LL_2R_Lg_m + C_2C_LL_L\right) + s^2\left(C_2C_LR_3 + C_2C_LR_1 + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2 + C_LR_3g_m + C_LR_Lg_m\right)}$$

10.357 INVALID-ORDER-357  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

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

10.358 INVALID-ORDER-358  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_LL_LR_3R_L + C_2L_2L_LR_3g_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(C_2R_3R_L + L_LR_3g_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_2C_LL_2L_LR_3g_m + C_2C_LL_LR_Lg_m\right) + s^3\left(C_2C_LL_LR_3 + C_2C_LL_LR_L + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_LR_3 + C_LL_LR_3g_m\right) + s\left(C_2R_3R_L + L_LR_3g_m\right) + s\left(C_2R_3R_L + L_LR_3g_$$

10.359 INVALID-ORDER-359 
$$Z(s) = \left(\infty, \ L_2s + \frac{1}{C_2s}, \ R_3, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

$$H(s) = \frac{C_2C_LL_2L_LR_3R_Lg_ms^4 + C_2C_LL_LR_3R_Ls^3 + C_2R_3R_Ls + R_3R_Lg_m + s^2\left(C_2L_2R_3R_Lg_m + C_LL_LR_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_2C_LL_2L_LR_3g_m + C_2C_LL_LR_3g_m + C_2C_LL_LR_3 + C_2C_LL_LR_$$

10.360 INVALID-ORDER-360  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{C_2 L_2 R_L g_m s^2 + C_2 R_L s + R_L g_m}{C_2 C_3 L_2 R_L g_m s^3 + g_m + s^2 \left( C_2 C_3 R_L + C_2 L_2 g_m \right) + s \left( C_2 + C_3 R_L g_m \right)}$$

**10.361** INVALID-ORDER-361  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 L_2 g_m s^2 + C_2 s + g_m}{s^3 \left( C_2 C_3 L_2 g_m + C_2 C_L L_2 g_m \right) + s^2 \left( C_2 C_3 + C_2 C_L \right) + s \left( C_3 g_m + C_L g_m \right)}$$

**10.362** INVALID-ORDER-362  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2L_2R_Lg_ms^2 + C_2R_Ls + R_Lg_m}{g_m + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_2L_2g_m\right) + s\left(C_2 + C_3R_Lg_m + C_LR_Lg_m\right)}$$

**10.363** INVALID-ORDER-363  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2R_Lg_ms^3 + g_m + s^2\left(C_2C_LR_L + C_2L_2g_m\right) + s\left(C_2 + C_LR_Lg_m\right)}{C_2C_3C_LL_2R_Lg_ms^4 + s^3\left(C_2C_3C_LR_L + C_2C_3L_2g_m + C_2C_LL_2g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_Lg_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.364** INVALID-ORDER-364  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_Lg_ms^4 + C_2C_LL_Ls^3 + C_2s + g_m + s^2\left(C_2L_2g_m + C_LL_Lg_m\right)}{C_2C_3C_LL_2L_Lg_ms^5 + C_2C_3C_LL_Ls^4 + s^3\left(C_2C_3L_2g_m + C_2C_LL_2g_m + C_3C_LL_Lg_m\right) + s^2\left(C_2C_3 + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}$$

10.365 INVALID-ORDER-365  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2L_2L_Lg_ms^3 + C_2L_Ls^2 + L_Lg_ms}{C_2s + g_m + s^4\left(C_2C_3L_2L_Lg_m + C_2C_LL_2L_Lg_m\right) + s^3\left(C_2C_3L_L + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_Lg_m + C_LL_Lg_m\right)}$$

**10.366** INVALID-ORDER-366  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_Lg_ms^4 + g_m + s^3\left(C_2C_LL_2R_Lg_m + C_2C_LL_L\right) + s^2\left(C_2C_LR_L + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2 + C_LR_Lg_m\right)}{C_2C_3C_LL_2L_Lg_ms^5 + s^4\left(C_2C_3C_LL_2R_Lg_m + C_2C_3C_LL_L\right) + s^3\left(C_2C_3C_LR_L + C_2C_3L_2g_m + C_3C_LL_Lg_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_Lg_m\right) + s\left(C_3g_m + C_Lg_m\right)}$$

10.367 INVALID-ORDER-367  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_2L_2L_LR_Lg_ms^3 + C_2L_LR_Ls^2 + L_LR_Lg_ms}{R_Lg_m + s^4\left(C_2C_3L_2L_LR_Lg_m + C_2C_LL_2L_LR_Lg_m\right) + s^3\left(C_2C_3L_LR_L + C_2C_LL_LR_L + C_2L_LR_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_L + C_3L_LR_Lg_m + C_LL_LR_Lg_m\right) + s\left(C_2R_L + L_Lg_m\right)}$$

10.368 INVALID-ORDER-368  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_LR_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_LL_LR_L + C_2L_2L_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_L + C_LL_LR_Lg_m\right) + s\left(C_2R_L + L_Lg_m\right)}{C_2C_3C_LL_2L_LR_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_L + C_2C_LL_2L_Lg_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_L + C_3C_LL_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2L_2g_m + C_3L_Lg_m\right) + s^2\left(C_2C_3R_L + C_2L_2R_Lg_m\right) + s^2\left(C_2C_3R_L + C_2L_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2R_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2R_L$$

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10.369 INVALID-ORDER-369 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \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_2C_LL_2L_LR_Lg_ms^4 + C_2C_LL_LR_Ls^3 + C_2R_Ls + R_Lg_m + s^2\left(C_2L_2R_Lg_m + C_LL_LR_Lg_m\right)}{C_2C_3C_LL_2L_LR_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_L + C_2C_LL_LR_Lg_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_LR_Lg_m + C_2C_LL_LR_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_2C_LR_
10.370 INVALID-ORDER-370 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                            H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + C_2R_3R_Ls + R_3R_Lg_m}{C_2C_3L_2R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_2C_3R_3R_L + C_2L_2R_3g_m + C_2L_2R_Lg_m\right) + s\left(C_2R_3 + C_2R_L + C_3R_3R_Lg_m\right)}
10.371 INVALID-ORDER-371 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                               H(s) = \frac{C_2L_2R_3g_ms^2 + C_2R_3s + R_3g_m}{g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_LL_2R_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_2L_2g_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_3g_m\right)}
10.372 INVALID-ORDER-372 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                            H(s) = \frac{C_{2}L_{2}R_{3}R_{L}g_{m}s^{2} + C_{2}R_{3}R_{L}s + R_{3}R_{L}g_{m}}{R_{3}q_{m} + R_{L}q_{m} + s^{3}\left(C_{2}C_{3}L_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{2}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}R_{3}R_{L} + C_{2}C_{L}R_{3}R_{L} + C_{2}L_{2}R_{3}g_{m} + C_{2}L_{2}R_{L}g_{m}\right) + s\left(C_{2}R_{3} + C_{2}R_{L} + C_{3}R_{3}R_{L}g_{m} + C_{L}R_{3}R_{L}g_{m}\right)}
10.373 INVALID-ORDER-373 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                      H(s) = \frac{C_2C_LL_2R_3R_Lg_ms^3 + R_3g_m + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_3C_LL_2R_3R_Lg_ms^4 + g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_LL_2R_3g_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_2C_LR_3 + C_2C_LR_3 + C_2C_LR_3R_Lg_m\right) + s\left(C_2C_3C_LR_3R_Lg_m\right) + s\left(C_2C_2C_LR_3R_Lg_m\right) + s\left(C_2C_2C_LR_2G_Lg_m\right) + s\left
10.374 INVALID-ORDER-374 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                              H(s) = \frac{C_2C_LL_2L_LR_3g_ms^4 + C_2C_LL_LR_3s^3 + C_2R_3s + R_3g_m + s^2\left(C_2L_2R_3g_m + C_LL_LR_3g_m\right)}{C_2C_3C_LL_2L_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_3 + C_2C_LL_LR_3g_m + C_2C_LL_LR_3g_m + C_2C_LL_LR_3g_m + s^2\left(C_2C_3R_3 + C_2C_LR_3 + C_2C_LR_3 + C_2C_LR_3 + C_2C_LR_3 + C_2C_LR_3g_m + C_2C_LR_
10.375 INVALID-ORDER-375 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                      H(s) = \frac{C_2L_2L_LR_3g_ms^3 + C_2L_LR_3s^2 + L_LR_3g_ms}{R_3g_m + s^4\left(C_2C_3L_2L_LR_3g_m + C_2C_LL_2L_LR_3g_m\right) + s^3\left(C_2C_3L_LR_3 + C_2C_LL_LR_3 + C_2L_LL_Rg_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_L + C_3L_LR_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_3 + L_Lg_m\right)}
10.376 INVALID-ORDER-376 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                       \frac{C_2C_LL_2L_R_3g_ms^4 + R_3g_m + s^3\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_3\right) + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_3C_LL_2L_R_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_3C_LL_2R_3R_Lg_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_2R_3R_L + C_2C_2R_3R_L + C_2C_LR_3R_Lg_m + C_2C_LL_2R_3g_m + C_2C_LR_3R_2R_3g_m + C_2C_LR_3R_2R_3g_m + C_2C_LR_3R_3R_3R_3g_m + C_2C_LR_3R_3R_3R_3g_m + C_2C_LR_3R_3R_3g_m + C_2C_LR_3R_3R_3R_3g_m + C_2C_LR_3R_3R_3R_3g_m + C_2C_LR_3R_3R_3g_m + 
10.377 INVALID-ORDER-377 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
      H(s) = \frac{C_2L_2L_R_3R_Lg_ms^3 + C_2L_LR_3R_Lg_ms}{R_3R_Lg_m + s^4\left(C_2C_3L_2L_LR_3R_Lg_m + C_2C_LL_LR_3R_Lg_m\right) + s^3\left(C_2C_3L_LR_3R_L + C_2C_LL_LR_3R_L + C_2L_LR_3g_m + C_2L_LR_3g_m + C_2L_LR_3 + C_2L_LR_3R_Lg_m + C_2L_LR_3R_
10.378 INVALID-ORDER-378 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                        \frac{C_2C_LL_2L_R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_LL_LR_3R_L + C_2L_2L_R_3g_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3 + C_LL_LR_3R_Lg_m\right) + s\left(C_2R_3R_L + L_LR_3g_m\right)}{C_2C_3C_LL_2L_LR_3R_Lg_ms^5 + R_3g_m + R_Lg_m + s^4\left(C_2C_3C_LL_LR_3R_L + C_2C_LL_LR_3g_m\right) + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_LL_LR_3 + C_2C
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10.379 INVALID-ORDER-379 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \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_2C_LL_2L_R_3R_Lg_ms^4 + C_2C_LL_LR_3R_Lg_m + s^2\left(C_2L_2R_3R_Lg_m + S^2\left(C_2L_2R_3R_Lg_m + C_LL_LR_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + S^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m + S^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + S^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m + S^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m + S^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + C_
10.380 INVALID-ORDER-380 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                       H(s) = \frac{C_2C_3L_2R_3R_Lg_ms^3 + R_Lg_m + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_2R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_2L_2g_m\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m\right)}
10.381 INVALID-ORDER-381 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                        H(s) = \frac{C_2C_3L_2R_3g_ms^3 + g_m + s^2\left(C_2C_3R_3 + C_2L_2g_m\right) + s\left(C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_2R_3g_ms^4 + s^3\left(C_2C_3C_LR_3 + C_2C_3L_2g_m + C_2C_LL_2g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m\right) + s\left(C_3g_m + C_Lg_m\right)}
10.382 INVALID-ORDER-382 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                  H(s) = \frac{C_2C_3L_2R_3R_Lg_ms^3 + R_Lg_m + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3C_LL_2R_3R_Lg_ms^4 + g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_2R_3g_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_2L_2g_m + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m + C_2R_Lg_m\right)}
10.383 INVALID-ORDER-383 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                          H(s) = \frac{C_2C_3C_LL_2R_3R_Lg_ms^4 + g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_2R_3g_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_2L_2g_m + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_Lg_m\right)}{s^4\left(C_2C_3C_LL_2R_3g_m + C_2C_3C_LL_2R_Lg_m\right) + s^3\left(C_2C_3C_LR_3 + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_2L_2g_m + C_3C_LR_3R_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_LR_Lg_m\right)} + s\left(C_2 + C_3R_3g_m + C_2C_LR_2g_m\right) + s\left(C_2C_3C_LR_3R_L + C_2C_3C_LR_3R_L +
10.384 INVALID-ORDER-384 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                        H(s) = \frac{C_2C_3C_LL_2L_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_3 + C_2C_LL_2L_Lg_m\right) + s^3\left(C_2C_3L_2R_3g_m + C_2C_LL_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_2L_Lg_ms^5 + s^4\left(C_2C_3C_LL_2R_3g_m + C_2C_3L_L\right) + s^3\left(C_2C_3C_LR_3 + C_2C_3L_2g_m + C_2C_LL_2g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_3C_3C_LL_2R_3g_m\right) + s\left(C_3C_3C_LL_2R
10.385 INVALID-ORDER-385 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                          H(s) = \frac{C_2C_3L_2L_LR_3g_ms^4 + L_Lg_ms + s^3\left(C_2C_3L_LR_3 + C_2L_2L_Lg_m\right) + s^2\left(C_2L_L + C_3L_LR_3g_m\right)}{C_2C_3C_LL_2L_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_3 + C_2C_3L_LLg_m + C_2C_LL_Lg_m\right) + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_L + C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_3L_Lg_m + C_LL_Lg_m\right) + s\left(C_2C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_3L_Lg_m + C_2L_Lg_m\right) + s\left(C_2C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_3L_Lg_m + C_2L_Lg_m\right) + s\left(C_2C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_3L_Lg_m + C_2C_LL_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_3L_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m\right) + s^2\left(C_2C_3R_3 + C_2C_3R_3 + C_2C_3R_3\right) + s^2\left(C_2C_3R_3 + C_2C_3R_3 + C_2C_3R_3\right) + s^2\left(C_2C_3R_3 + C_2C_3R_3\right
10.386 INVALID-ORDER-386 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_3L_LL_Rg_m + S^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_LL_LL_g_m\right) + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_LR_3g_m + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_2L_2g_m + C_3C_LR_3R_Lg_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_2L_2g_m + C_3C_LR_3R_Lg_m + C_LL_Lg_m\right) + s\left(C_2 + C_3R_3g_m + C_2C_LR_2R_2g_m + C_2C_LR_2R_2g_m + C_2C_LR_2R_2g_m + C_2C_LR_2R_2g_m + C_2C_LR_2R_2g_m + C_2C_LR_2R_2g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_2R_2g_m +
10.387 INVALID-ORDER-387 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{C_2C_3L_2L_LR_3R_Lg_ms^4 + L_LR_Lg_ms + s^3\left(C_2C_3L_LR_3R_L + C_2L_2L_LR_Lg_m\right) + s^2\left(C_2L_LR_L + C_3L_LR_3R_Lg_m\right)}{C_2C_3C_LL_2L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(C_2C_3C_LL_LR_3R_L + C_2C_3L_LR_3g_m + C_2C_3L_LR_3g_m
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 $\frac{C_{2}C_{3}C_{L}L_{L}R_{3}R_{L}g_{m}s^{5}+R_{L}g_{m}+s^{4}\left(C_{2}C_{3}C_{L}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{L}R_{L}g_{m}\right)+s^{3}\left(C_{2}C_{3}L_{L}R_{3}+C_{2}C_{L}L_{L}R_{L}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{3}R_{L}+C_{2}L_{L}R_{3}g_{m}+C_{2}L_{L}L_{R}g_{m}\right)+s^{2}\left(C_{2}C_{3}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C_{2}L_{L}R_{L}+C$ 

10.388 INVALID-ORDER-388  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.389 INVALID-ORDER-389 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \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_2C_3C_LL_2L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(C_2C_3C_LL_LR_3R_L + C_2C_LL_2L_LR_2g_m\right) + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_LL_LR_4 + C_3C_LL_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_LL_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_2C_LL_LR_3g_m + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_LL_LR_3g_m + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_LL_LR_3g_m\right) + s^2\left(
10.390 INVALID-ORDER-390 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                     H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + C_2C_3L_3R_Ls^3 + C_2R_Ls + R_Lg_m + s^2\left(C_2L_2R_Lg_m + C_3L_3R_Lg_m\right)}{C_2C_3L_2L_2g_ms^4 + g_m + s^3\left(C_2C_3L_2R_Lg_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_L + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2 + C_3R_Lg_m\right)}
10.391 INVALID-ORDER-391 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                         H(s) = \frac{C_2C_3L_2L_3g_ms^4 + C_2C_3L_3s^3 + C_2s + g_m + s^2\left(C_2L_2g_m + C_3L_3g_m\right)}{C_2C_3C_LL_2L_3g_ms^5 + C_2C_3C_LL_3s^4 + s^3\left(C_2C_3L_2g_m + C_2C_LL_2g_m + C_3C_LL_3g_m\right) + s^2\left(C_2C_3 + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}
10.392 INVALID-ORDER-392 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + C_2C_3L_3R_Ls^3 + C_2R_Ls + R_Lg_m + s^2\left(C_2L_2R_Lg_m + C_3L_3R_Lg_m\right)}{C_2C_3C_LL_2L_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_L + C_2C_3L_2L_3g_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_3L_3R_Lg_m + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_3R_L + C_2C_LR_L + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2C_3R_Lg_m + C_2C_3L_3R_Lg_m\right) + s\left(C_2C_3R_Lg_m + C_3R_Lg_m\right) + s\left(C_2C_3R_L
10.393 INVALID-ORDER-393 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                       H(s) = \frac{C_2C_3C_LL_2L_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_L + C_2C_3L_2L_3g_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_2R_Lg_m + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_L + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2 + C_LR_Lg_m\right)}{C_2C_3C_LL_2L_3g_ms^5 + s^4\left(C_2C_3C_LL_2R_Lg_m + C_2C_3C_LL_3\right) + s^3\left(C_2C_3C_LR_L + C_2C_3L_2g_m + C_3C_LL_3g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_Lg_m\right) + s\left(C_3C_3C_LR_L + C_3C_3C_LR_L + C_3C_3C_LR_Lg_m\right) + s^2\left(C_3C_3C_LR_L + C_3C_3C_LR_L + C_3C_3C_LR_Lg_m\right) + s^2\left(C_3C_3C_LR_L + C_3C_3C_LR_L + C_3C_3C_LR_Lg_m\right) + s^2\left(C_3C_3C_LR_L + C_3C_3C_LR_Lg_m\right) + s^2\left(C_3C_3C_LR_Lg_m\right) + s^2\left(C_
10.394 INVALID-ORDER-394 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                   H(s) = \frac{C_2C_3C_LL_2L_3L_Lg_ms^6 + C_2C_3C_LL_3L_Ls^5 + C_2s + g_m + s^4\left(C_2C_3L_2L_3g_m + C_2C_LL_2L_Lg_m + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_3g_m + C_LL_Lg_m\right)}{s^5\left(C_2C_3C_LL_2L_3g_m + C_2C_3C_LL_2L_Lg_m\right) + s^4\left(C_2C_3C_LL_3 + C_2C_3C_LL_L\right) + s^3\left(C_2C_3L_2g_m + C_3C_LL_2g_m\right) + s^2\left(C_2C_3 + C_2C_L\right) + s\left(C_3g_m + C_LL_2g_m\right)}
10.395 INVALID-ORDER-395 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                     H(s) = \frac{C_2C_3L_2L_3L_Lg_ms^5 + C_2C_3L_3L_Ls^4 + C_2L_Ls^2 + L_Lg_ms + s^3\left(C_2L_2L_Lg_m + C_3L_3L_Lg_m\right)}{C_2C_3C_LL_2L_3L_Lg_ms^6 + C_2C_3C_LL_3L_Ls^5 + C_2s + g_m + s^4\left(C_2C_3L_2L_2g_m + C_2C_LL_2L_Lg_m + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_3L_4 + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_3g_m + C_3L_Lg_m\right)}
10.396 INVALID-ORDER-396 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_{L s}}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_3R_Lg_m + C_2C_3L_LL_3R_Lg_m + C_2C_3L_LL_3g_m + C_2C_LL_2L_g_m + C_3C_LL_3L_Lg_m + s^3\left(C_2C_3L_LL_2R_Lg_m + C_2C_LL_LL_2R_Lg_m + C_2C_LL_LL_2R_Lg_m + C_2C_LL_2R_Lg_m + C_2C_LL_2R_Lg_m + s^2\left(C_2C_LR_L + C_2L_2g_m + C_3L_2R_Lg_m + C_2C_LL_2R_Lg_m + C_2C_
10.397 INVALID-ORDER-397 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{C_2C_3L_2L_3L_LR_Lg_ms^5 + C_2C_3L_3L_LR_Ls^4 + C_2L_LR_Ls^2 + L_LR_Lg_ms + s^3\left(C_2L_2L_LR_Lg_m + C_3L_3L_LR_Lg_m\right)}{C_2C_3C_LL_2L_3L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_L + C_2C_3L_2L_3L_Lg_m\right) + s^4\left(C_2C_3L_2L_3R_Lg_m + C_2C_3L_2L_LR_Lg_m + C_3C_3L_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3L_LR_Lg_m + s^5\left(C_2C_3L_3L_LR_L + C_2C_3L_3L_LR_Lg_m\right) + s^4\left(C_2C_3L_2L_3L_LR_Lg_m + C_3C_3L_3L_LR_Lg_m\right) + s^4\left(C_2C_3L_3L_LR_Lg_m + C_3C_3L_2L_LR_Lg_m\right) + s^4\left(C_2C_3L_3L_LR_Lg_m + C_3C_3L_2L_LR_Lg_m\right) + s^4\left(C_2C_3L_2L_LR
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 $s) = \frac{C_2C_3C_LL_2L_3L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_L + C_2C_3L_2L_3L_Lg_m\right) + s^4\left(C_2C_3L_2L_3R_Lg_m + C_2C_3L_3L_LR_Lg_m + C_3C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3R_L + C_2C_LL_LR_L + C_2L_LL_Rg_m + C_3L_3L_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_3L_3L_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_3L_3L_LR_Lg_m\right) + s^2\left(C_2L_3R_Lg_m + C_3L_3L_LR_Lg_m\right) + s^2\left(C_2R_Lg_m + C_3L_2L_LR_Lg_m\right) + s^2\left(C_2R_Lg_m + C_3L_LR_Lg_m\right) + s^2\left(C_2R_Lg_m + C_3L_LR_Lg_m\right) + s^2\left(C_2R_Lg_m + C_3L_LR_Lg_m\right) + s^2\left(C_2R_Lg_m + C_3L_LR_Lg_m\right) + s^2\left(C_2R_$ 

10.398 INVALID-ORDER-398  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.399 INVALID-ORDER-399 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \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_2C_3C_LL_2L_3L_LR_Lg_ms^6 + C_2C_3C_LL_3L_LR_Ls^5 + C_2R_Ls + R_Lg_m + s^4\left(C_2C_3L_2L_3R_Lg_m + C_2C_LL_2L_LR_Lg_m + C_3C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3R_L + C_2C_LL_LR_L\right) + s^2\left(C_2L_2R_Lg_m + C_2C_LL_2L_Rg_m + C_2C_LL_2L_Rg_m + C_2C_LL_Rg_m + C_2C_LL_Rg_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_Rg_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_Rg_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_Rg_m\right) + s^3\left(C_2C_3L_Rg_m + C_2C_Rg_m\right) + s^3\left(C_2C_3L_Rg_m\right) + s^3
10.400 INVALID-ORDER-400 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                         H(s) = \frac{C_2L_2L_3R_Lg_ms^3 + C_2L_3R_Ls^2 + L_3R_Lg_ms}{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_3R_L + C_2L_2L_3g_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_3 + C_3L_3R_Lg_m\right) + s\left(C_2R_L + L_3g_m\right)}
10.401 INVALID-ORDER-401 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                 H(s) = \frac{C_2L_2L_3g_ms^3 + C_2L_3s^2 + L_3g_ms}{C_2s + g_m + s^4\left(C_2C_3L_2L_3g_m + C_2C_LL_2L_3g_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_3\right) + s^2\left(C_2L_2g_m + C_3L_3g_m + C_LL_3g_m\right)}
10.402 INVALID-ORDER-402 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                               H(s) = \frac{C_2L_2L_3R_Lg_ms^3 + C_2L_3R_Ls^2 + L_3R_Lg_ms}{R_{L}q_m + s^4\left(C_2C_3L_2L_3R_{L}q_m + C_2C_LL_2L_3R_{L}q_m\right) + s^3\left(C_2C_3L_3R_L + C_2C_LL_3R_L + C_2L_2L_3g_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_3 + C_3L_3R_Lg_m + C_LL_3R_Lg_m\right) + s\left(C_2R_L + L_3g_m\right)}
10.403 INVALID-ORDER-403 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_{L s}}\right)
                                                                                            H(s) = \frac{C_2C_LL_2L_3R_Lg_ms^4 + L_3g_ms + s^3\left(C_2C_LL_3R_L + C_2L_2L_3g_m\right) + s^2\left(C_2L_3 + C_LL_3R_Lg_m\right)}{C_2C_3C_LL_2L_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_L + C_2C_3L_2L_3g_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_3R_Lg_m + C_2C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_L + C_2L_2g_m + C_3L_3g_m\right) + s^2\left(C_2C_LR_L + C_2L_2g_m\right) + s^2\left(C_2C_LR_L + C_2C_LR_L + C_2C_LR
10.404 INVALID-ORDER-404 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                               H(s) = \frac{C_2C_LL_2L_3L_Lg_ms^5 + C_2C_LL_3L_Ls^4 + C_2L_3s^2 + L_3g_ms + s^3\left(C_2L_2L_3g_m + C_LL_3L_Lg_m\right)}{C_2C_3C_LL_2L_3L_Lg_ms^6 + C_2C_3C_LL_3L_Ls^5 + C_2s + g_m + s^4\left(C_2C_3L_2L_3g_m + C_2C_LL_2L_2g_m + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_3 + C_2C_LL_4\right) + s^2\left(C_2L_2g_m + C_3L_3g_m + C_LL_3g_m + C_2L_2g_m\right)}
10.405 INVALID-ORDER-405 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                    H(s) = \frac{C_2L_2L_3L_Lg_ms^3 + C_2L_3L_Lg^2 + L_3L_Lg_ms}{L_3g_m + L_Lg_m + s^4\left(C_2C_3L_2L_3L_Lg_m + C_2C_LL_2L_3L_Lg_m\right) + s^3\left(C_2C_3L_3L_L + C_2C_LL_3L_L\right) + s^2\left(C_2L_2L_3g_m + C_2L_2L_Lg_m + C_3L_3L_Lg_m + C_LL_3L_Lg_m\right) + s\left(C_2L_3 + C_2L_L\right)}
10.406 INVALID-ORDER-406 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_3L_Lg_ms^5 + L_3g_ms + s^4\left(C_2C_LL_2L_3R_Lg_m + C_2C_LL_3L_L\right) + s^3\left(C_2C_LL_3R_L + C_2L_2L_3g_m + C_LL_3L_Lg_m\right) + s^2\left(C_2L_3 + C_LL_3R_Lg_m\right) + s^2\left(C_2L_3 + C_LL_3R_Lg_m\right) + s^2\left(C_2L_3L_Lg_m + C_2C_LL_2L_2g_m + C_2C_LL_2L_2g_m\right) + s^2\left(C_2L_3L_2L_3R_Lg_m + C_2C_LL_3L_2g_m\right) + s^2\left(C_2L_3L_2L_3R_Lg_m + C_2C_LL_3L_2L_3g_m\right) + s^2\left(C_2L_3L_2L_3R_Lg_m + C_2C_LL_3L_2L_3g_m\right) + s^2\left(C_2L_3L_2L_3R_Lg_m + C_2C_LL_3L_2R_Lg_m\right) + s^2\left(C_2L_3L_2L_3R_Lg_m + C_2C_LL_3L_2R_Lg_m\right) + s^2\left(C_2L_3L_3R_Lg_m + C_2C_LL_3L_2R_Lg_m\right) + s^2\left(C_2L_3L_3R_Lg_m + C_2C_LL_3R_Lg_m\right) + s^2\left(C_2L_3R_Lg_m + C_2C_LL_3R_Lg_m\right) + s^2\left(C_2L_3
10.407 INVALID-ORDER-407 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
          H(s) = \frac{C_2L_2L_3L_LR_Lg_ms^3 + C_2L_3L_LR_Lg_ms}{L_3R_Lg_m + L_LR_Lg_m + s^4\left(C_2C_3L_2L_3L_LR_Lg_m + C_2C_LL_2L_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3L_LR_L + C_2L_2L_3L_Lg_m\right) + s^2\left(C_2L_2L_3R_Lg_m + C_2L_2L_LR_Lg_m + C_2L_3L_LR_Lg_m\right) + s^2\left(C_2L_3L_LR_Lg_m + C_2L_3L_LR_Lg_m + C_2L_3L_LR_Lg_m\right) + s^2\left(C_2L_3L_LR_Lg_m + C_2L_3L_LR_Lg_m\right) + s^2\left(C_2L_3L_2R_Lg_m + C_2L_3L_Lg_m\right) + s^2\left(C_2L_3L_2R_Lg_m + C_2L_3L_Lg_m\right) + s^2\left(C_2L_3L_2R_Lg_m + C_2L_2R_Lg_m\right) + s^2\left(C_2L_3L_2R_Lg_m + C_2L_2R_Lg_
10.408 INVALID-ORDER-408 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                       \frac{C_{2}C_{L}L_{2}L_{3}L_{L}R_{L}g_{m}s^{5} + L_{3}R_{L}g_{m}s + s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{L} + C_{2}L_{2}L_{3}L_{L}g_{m}\right) + s^{3}\left(C_{2}L_{2}L_{3}R_{L}g_{m} + C_{2}L_{3}L_{L} + C_{L}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + L_{3}L_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L} + C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L}g_{m}\right)
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C_{2}C_{L}L_{2}L_{3}L_{L}R_{L}g_{m}s^{5} + C_{2}C_{L}L_{3}L_{L}R_{L}s^{4} + C_{2}L_{3}R_{L}s^{2} + L_{3}R_{L}g_{m}s + s^{3}\left(C_{2}L_{2}L_{3}R_{L}g_{m} + C_{L}L_{3}L_{L}R_{L}g_{m}\right)
H(s) = \frac{C_2C_LL_2L_3L_LR_Lg_ms^5 + C_2C_LL_3L_LR_Lg_ms^5 + C_2L_LL_3L_LR_Lg_m + S^5 (C_2L_2L_3R_Lg_m + C_LL_3L_LR_Lg_m)}{C_2C_3C_LL_2L_3L_LR_Lg_ms^6 + R_Lg_m + S^5 (C_2C_3C_LL_3L_LR_Lg_m) + S^4 (C_2C_3L_2L_3R_Lg_m + C_2C_LL_2L_3R_Lg_m + C_2C_LL_3L_LR_Lg_m) + S^4 (C_2C_3L_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m) + S^4 (C_2C_3L_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m) + S^4 (C_2C_3L_3L_LR_Lg_m) + S^4 (C_2C_3L_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m) + S^4 (C_2C_3L_3R_Lg_m + C_2C_LL_3L_Lg_m) + S^4 (C_2C_3L_3R_Lg_m + C_2
10.410 INVALID-ORDER-410 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2} s}, L_3 s + R_3 + \frac{1}{C_{3} s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                       H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_3L_3R_L\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_3L_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3L_2L_3g_ms^4 + g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_2R_Lg_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_3 + C_2C_3R_L + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_3R_Lg_m\right)}
10.411 INVALID-ORDER-411 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                            H(s) = \frac{C_2C_3L_2L_3g_ms^4 + g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_3 + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_2L_3g_ms^5 + s^4\left(C_2C_3C_LL_2R_3g_m + C_2C_3C_LL_3\right) + s^3\left(C_2C_3C_LR_3 + C_2C_3L_2g_m + C_3C_LL_3g_m\right) + s^2\left(C_2C_3 + C_2C_L + C_3C_LR_3g_m\right) + s\left(C_3C_3C_LR_3g_m + C_3C_3C_LR_3g_m\right) + s\left(C_3C_3C_LR_3g_m + C_3C
10.412 INVALID-ORDER-412 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, L_3 s + R_3 + \frac{1}{C_{3s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_3L_3R_L\right) + s^2\left(C_2C_3R_3R_L + C_2L_2R_Lg_m + C_3L_3R_Lg_m\right) + s\left(C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3C_LL_2R_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_3L_2R_3g_m\right) + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_2R_2g_m + C_3C_LL_2R_2g_m + C_3C_LL_2R_2g_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_3L_2R_2g_m + C_3C_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_3R_2R_Lg_m + C_3C_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_3R_2R_Lg_m + C_3C_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_3R_2R_Lg_m + C_3C_LR_3R_Lg_m\right) + s^2\left(C_2C_3R_3R_L + C_2C_3R_2R_Lg_m\right) + s^2\left(C_2C_3R_3R_Lg_m\right) + 
10.413 INVALID-ORDER-413 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_3L_Ll_3R_L + C_2C_3L_2R_3g_m + s^3\left(C_2C_3C_LR_3R_L + C_2C_3L_2R_3g_m + C_2C_LL_2R_Lg_m + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_L + C_2L_2g_m + C_3C_LR_3R_Lg_m + C_3L_3g_m\right) + s\left(C_2 + C_3R_3g_m + C_2C_3C_LR_3R_Lg_m + C_3C_LR_3R_Lg_m + C_3C_LR_3R_Lg_m
10.414 INVALID-ORDER-414 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_LR_3g_m + C_2C_3C_LL_2L_Lg_m + C_3C_LL_Lg_m + C_3C_LL_2L_g_m + C_3C_LL_Lg_m + 
10.415 INVALID-ORDER-415 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2C_3L_2L_3L_1g_ms^5 + L_Lg_ms + s^4\left(C_2C_3L_2L_LR_3g_m + C_2C_3L_3L_L\right) + s^3\left(C_2C_3L_LR_3 + C_2L_2L_1g_m + C_3L_3L_1g_m\right) + s^2\left(C_2L_L + C_3L_LR_3g_m\right)}{C_2C_3C_LL_2L_3L_2g_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_1R_3g_m + C_2C_3L_2L_1g_m + C_2C_3L_2L_1g_m + C_3C_1L_2L_1g_m\right) + s^3\left(C_2C_3L_2L_2R_3g_m + C_2C_3L_2L_1g_m + C_3C_1L_1R_3g_m\right) + s^2\left(C_2C_3L_1L_2L_1R_3g_m + C_2C_3L_2L_1g_m + C_3C_1L_2L_1g_m + C_3C_1L_2L_1g_m\right) + s^3\left(C_2C_3L_2L_2R_3g_m + C_2C_3L_2L_1g_m + C_3C_1L_2L_1g_m\right) + s^2\left(C_2C_3L_1L_1R_3g_m + C_2C_3L_2L_1R_3g_m + C_2C_3L_2L_1g_m\right) + s^2\left(C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m\right) + s^2\left(C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m\right) + s^2\left(C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m\right) + s^2\left(C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1L_1R_3g_m + C_2C_3L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1R_3g_m + C_2C_3L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1R_3g_m + C_2C_3L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1R_3g_m + C_2C_3L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3L_1R_3g_m\right) + s^2\left(C_2C_3R_3R_3g_m + C_2C_3R_3g_m + C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_3g_m + C_2C_3R_3g_m + C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_3g_m + C_2C_3R_3g_m + C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_3g_m 
10.416 INVALID-ORDER-416 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.417 INVALID-ORDER-417 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \frac{c_{2}c_{3}L_{2}L_{3}L_{L}R_{L}g_{m}s^{6}+R_{L}g_{m}+s^{5}\left(c_{2}C_{3}C_{L}L_{2}L_{L}R_{3}R_{L}g_{m}+c_{2}C_{3}L_{2}L_{3}L_{L}g_{m}\right)+s^{4}\left(c_{2}C_{3}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{L}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{2}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{2}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{2}R_{2}g_{m}+c_{2}C_{3}L_{2}L_{2}R_{2}g_{m}+c_{2}C
10.418 INVALID-ORDER-418 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \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_2C_3C_LL_2L_3L_LR_2g_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_2L_LR_3R_Lg_m + C_2C_3L_2L_LR_3R_Lg_m + C_2C_3L_2L_LR_3g_m + C_2C_3L_2L_RR_3g_m + C_2C_3L_
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10.409 INVALID-ORDER-409  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

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10.419 INVALID-ORDER-419 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \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_2C_3C_LL_2L_3L_LR_2g_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_2L_LR_3R_Lg_m + C_2C_3C_LL_2L_LR_3R_L + C_2C_3L_2L_3R_Lg_m + C_2C_LL_2L_LR_2g_m + C_3C_LL_2L_LR_2g_m + C_3C_LL_2L_2R_2g_m + C_3C_LL_2L_2R_2g_m + C_3C_LL_2L_2R_2g_m + C_3C_LL_2L_2R_2g_m + C_3C_LL_2L_2R_2g_m + C_3C_LL_2L_2R_2g_m + C_3C_LL_2R_2g_m + C_3C_LL_2R_
10.420 INVALID-ORDER-420 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ R_L\right)
                                                                                                                                                                                               H(s) = \frac{C_2L_2L_3R_3R_Lg_ms^3 + C_2L_3R_3R_Lg_ms^3 + C_2L_3R_3R_Lg_ms}{C_2C_3L_2L_3R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_3R_L + C_2L_2L_3R_3g_m + C_2L_2L_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_3R_3 + C_2L_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_3g_m + L_3R_Lg_m\right)}
10.421 INVALID-ORDER-421 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                 10.422 INVALID-ORDER-422 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
                   H(s) = \frac{C_2L_2L_3R_3R_Lg_ms^3 + C_2L_3R_3R_Lg_ms}{R_3R_Lg_m + s^4\left(C_2C_3L_2L_3R_3R_Lg_m + C_2C_LL_2L_3R_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2L_2L_3R_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_3R_3R_Lg_m + C_2L_3R_3R_Lg_m\right) + s^2\left(C_2L_3R_3R_Lg_m + C_2L_3R_3R_Lg_m\right) + s^2\left(C_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s^2\left(C_2R_3R_Lg_m + C_2R_2R_Lg_m\right) + s^2\left(C_2R_3R_Lg_m + C_2R_2R_Lg_m\right) + s^2\left(C_2R_2R_Lg_m
10.423 INVALID-ORDER-423 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_3R_3R_Lg_ms^4 + L_3R_3g_ms + s^3\left(C_2C_LL_3R_3R_L + C_2L_2L_3R_3g_m\right) + s^2\left(C_2L_3R_3 + C_LL_3R_3R_Lg_m\right)}{C_2C_3C_LL_2L_3R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_2C_3L_LL_3R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3R_Lg_m\right) + s^3\left(C_2C_LL_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m + C_2C_LL_3R_3R_Lg_m\right) + s^2\left(C_2L_3R_3R_Lg_m + C_2C_LL_3R_3g_m\right) + s^2\left(C_2L_3R_3R_Lg_m + C_2C_LL_3R_3g_m\right) 
10.424 INVALID-ORDER-424 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_3L_LR_3g_ms^5 + C_2C_LL_3L_LR_3s^4 + C_2L_3R_3s^2 + L_3R_3g_ms + s^3\left(C_2L_2L_3R_3g_m + C_LL_3L_LR_3g_m\right)}{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_3 + C_2C_LL_3L_LR_3g_m\right) + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_LL_2L_3R_3g_m + C_2C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3g_m + C_2C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3g_m + C_2C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3 + C_2C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3g_m + C_2C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_3R_3g_m + C_2C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL
10.425 INVALID-ORDER-425 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                           H(s) = \frac{C_2L_2L_3L_LR_3g_ms^3 + C_2L_3L_LR_3g_ms}{L_3R_3g_m + L_LR_3g_m + s^4\left(C_2C_3L_2L_3L_LR_3g_m + C_2C_LL_2L_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3L_LR_3 + C_2L_2L_3L_LR_3 + C_2L_2L_3L_LR_3g_m + C_2L_2L_LR_3g_m + C_2L_3L_LR_3g_m + C_2L_3L_LR_3g_m\right) + s^2\left(C_2L_3L_3L_2R_3g_m + C_2L_3L_LR_3g_m + C_2L_3
10.426 INVALID-ORDER-426 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C_{2}C_{L}L_{2}L_{3}L_{L}R_{3}g_{m}s^{5} + L_{3}R_{3}g_{m}s + s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{3}\right) + s^{3}\left(C_{2}C_{L}L_{3}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{3}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{3}R_{L}g_{m} + C_{2
                                             \frac{C_2C_LL_2L_3L_LR_3g_ms^5 + L_3R_3g_ms + s^4\left(C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_3L_LR_3\right) + s^6\left(C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_3L_LR_3\right) + s^6\left(C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_3L_LR_3g_m + s^6\left(C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_3L_LR_3g_m 
10.427 INVALID-ORDER-427 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                             \frac{C_{2}L_{2}L_{1}R_{3}R_{L}g_{m}s^{3}+C_{2}L_{3}L_{L}R_{3}R_{L}g_{m}s}{L_{3}R_{3}R_{L}g_{m}+s^{4}\left(C_{2}C_{3}L_{2}L_{3}L_{L}R_{3}R_{L}g_{m}\right)+s^{3}\left(C_{2}C_{3}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{3}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{L}R_{3}R_{L}+C_{2}L_{2}L_{L
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 $H(s) = \frac{C_2C_LL_2L_3L_LR_3R_Lg_ms^5 + L_3R_3R_Lg_ms^5 + L_3R_3R_Lg_ms + s^4\left(C_2C_LL_3L_LR_3R_Lg_ms^5 + L_3R_3R_Lg_ms^5 + L_3R_3R_Lg_ms + s^4\left(C_2C_LL_3L_LR_3R_Lg_ms^5 + L_3R_3R_Lg_ms^5 + L$ 

10.428 INVALID-ORDER-428  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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10.429 INVALID-ORDER-429 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \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_2C_LL_2L_3L_LR_3R_Lg_ms^5 + C_2C_LL_3L_LR_3R_Ls^4 + C_2L_3R_3R_Ls^2 + L_3R_3R_Ls^2 + L_3R_3R_Ls^2 + L_3R_3R_Ls^2 + L_3R_3R_Lg_ms^2 + L_3R_3R_Lg
10.430 INVALID-ORDER-430 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
                                                                                                                                                        H(s) = \frac{C_2C_3L_2L_3R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_3R_L + C_2L_2L_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_3L_2R_Lg_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_3L_3R_L + C_2L_2R_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_Lg_m + C_2L_3 + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_Lg_m\right)}
10.431 INVALID-ORDER-431 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                         H(s) = \frac{C_2C_3L_2L_3R_3g_ms^4 + R_3g_m + s^3\left(C_2C_3L_3R_3 + C_2L_2L_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_3 + C_3L_3R_3g_m\right) + s\left(C_2R_3 + L_3g_m\right)}{C_2C_3C_LL_2R_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_3 + C_2C_LL_2R_3g_m\right) + s^3\left(C_2C_3L_3 + C_2C_LL_2R_3g_m + C_2C_LL_3R_3g_m\right) + s^2\left(C_2C_LR_3 + C_3L_3R_3g_m\right) + s
10.432 INVALID-ORDER-432 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_2C_3L_2L_3R_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_3R_L + C_2L_2L_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_3R_Lg_m\right) + s\left(C_2R_3R_L + C_3L_3R_3R_Lg_m\right) + s\left(C_2R_3R_L + L_3R_Lg_m\right)}{C_2C_3C_LL_2L_3R_3R_Lg_ms^5 + R_3g_m + R_Lg_m + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_3L_2L_3R_2g_m\right) + s^3\left(C_2C_3L_3R_3R_L + C_2C_LL_2R_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_2R_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_2R_2g_m\right) + s^2\left(C_2L_2R_2g_m + C_2L_2R_2g_m\right) + s^2\left(C_2L_2R_2g_m\right) + s^2\left(C_2L_2R_2g_m
10.433 INVALID-ORDER-433 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_3L_2L_3R_3g_m + C_2C_LL_2R_3R_Lg_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_2R_3R_Lg_m + C_2C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m + C_2L_3R_3g_m + C_3L_3R_3g_m + 
10.434 INVALID-ORDER-434 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_3 + C_2C_LL_2L_3L_Lg_m\right) + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_LL_2L_LR_3g_m + C_2C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_LR_3 + C_2L_LL_Rg_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_3L_Lg_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2L_2R_3g_m + C_2L_2L_2R_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2L_2R_3g_m + C_2L_2R_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_3g_m + C_2L_2R_3g_m\right) + s^2\left(C_2L_2R_3g_m +
10.435 INVALID-ORDER-435 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2C_3L_2L_3L_LR_3g_ms^5 + L_LR_3g_ms + s^4\left(C_2C_3L_3L_LR_3 + C_2L_2L_3L_Lg_m\right) + s^3\left(C_2L_2L_LR_3g_m + C_2L_3L_L + C_3L_3L_LR_3g_m\right) + s^2\left(C_2L_LR_3 + L_3L_Lg_m\right)}{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3L_3L_LR_3 + C_2C_LL_3L_LR_3g_m\right) + s^4\left(C_2C_3L_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m\right) + s^4\left(C_2C_3L_3L_LR
10.436 INVALID-ORDER-436 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_2L_3R_3R_Lg_m + C_2C_LL_2L_3L_Lg_m\right) + s^4\left(C_2C_3C_LL_3R_3g_m + C_2C_LL_2L_3R_3g_m + C_2C
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 $C_2C_3L_2L_3L_LR_3R_Lg_ms^5 + L_LR_3R_Lg_ms + s^4(C_2C_3L_3L_LR_3R_Lg_ms^5)$ 

 $H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_3g_m + C_2C_LL_2L_3L_LR_3g_m + C_2C_LL_2L_3L_2R_3g_m + C_2C_LL_2L_3L_2R_3g_m + C_2C_LL_2L_3L_2R_3g_m + C_2C_LL_2L_3L_2R_$ 

10.437 INVALID-ORDER-437  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

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10.439 INVALID-ORDER-439 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_3R_L + C_2C_LL_2L_3L_LR_Lg_m\right) + s^4\left(C_2C_3L_2L_3R_Lg_m + s^6\left(C_2C_3C_LL_3L_LR_3g_m + C_2C_3L_LL_3L_LR_3g_m + C_2C_3L_LL_3L_2G_m + C_2C_3L_LL_3L_2G_m + C_2C_3L_2L_3L_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10.440 INVALID-ORDER-440 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \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, R_L\right)
                                                                         H(s) = \frac{C_2C_3L_2L_3R_3R_Lg_ms^4 + C_2C_3L_3R_3R_Ls^3 + C_2R_3R_Ls + R_3R_Lg_m + s^2\left(C_2L_2R_3R_Lg_m + C_3L_3R_3R_Lg_m\right)}{R_3g_m + R_Lg_m + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_3L_2R_3R_Lg_m + S^2\left(C_2C_3R_3R_L + C_2L_2R_3g_m + C_2L_2R_Lg_m + C_3L_3R_3g_m + C_3L_3R_Lg_m\right) + s\left(C_2R_3 + C_2R_L + C_3R_3R_Lg_m\right)}
10.441 INVALID-ORDER-441 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \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{1}{C_L s}\right)
                                                                                          H(s) = \frac{C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_3R_3s^3 + C_2R_3s + R_3g_m + s^2\left(C_2L_2R_3g_m + C_3L_3R_3g_m\right)}{C_2C_3C_LL_2R_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_3 + C_2C_3L_2R_3g_m\right) + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_3 + C_2C_LL_2R_3g_m + C_3C_LL_3R_3g_m\right) + s^2\left(C_2C_3R_3 + C_2C_LR_3 +
10.442 INVALID-ORDER-442 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \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{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C_{2}C_{3}L_{2}L_{3}R_{3}R_{L}g_{m}s^{4} + C_{2}C_{3}L_{3}R_{3}R_{L}s^{3} + C_{2}R_{3}R_{L}s + R_{3}R_{L}g_{m} + s^{2}\left(C_{2}L_{2}R_{3}R_{L}g_{m} + C_{3}L_{3}R_{3}R_{L}g_{m}\right)
                                    10.443 INVALID-ORDER-443 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \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, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_3L_2R_3R_Lg_m + s^3\left(C_2C_3L_3R_3 + C_2C_LL_2R_3R_Lg_m + C_3C_LL_3R_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m + C_3L_LR_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_2L_2R_3g_m + C_3L_LR_3R_Lg_m\right) + s^2\left(C_2C_LR_3R_L + C_2C_3L_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_3C_LL_2R_3g_m\right) + s^2\left(C_2C_LR_3R_L + C_2C_3L_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_
10.444 INVALID-ORDER-444 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \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, \ L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + C_2C_3C_LL_3L_LR_3s^5 + C_2R_3s + R_3g_m + s^4\left(C_2C_3L_2L_3R_3g_m + C_3C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_LR_3\right) + s^2\left(C_2L_2R_3g_m + C_2C_3C_LL_2L_3R_3g_m + C_3C_LL_3L_2R_3g_m\right) + s^3\left(C_2C_3L_3R_3 + C_2C_LL_2R_3g_m + C_3C_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_3g_m + C_3C_LL_3R_3g_m\right) + s^3\left(C_3C_3L_3R_3g_m + C_3C_3L_3R_3g_m\right) + s^3\left(C_3C_3L_3R_3g_m + C_3C_3L_3R_3g_m
10.445 INVALID-ORDER-445 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \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_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2C_3L_2L_3L_LR_3g_ms^5 + C_2C_3L_3L_LR_3s^4 + C_2L_LR_3s^2 + L_LR_3g_ms + s^3\left(C_2L_2L_LR_3g_m + C_3L_3L_LR_3g_m\right)}{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3L_LL_3L_LR_3 + C_2C_3L_2L_3L_2g_m\right) + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_3L_2L_2R_3g_m + C_3C_3L_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3L_1R_3 + C_2C_3L_3L_1R_3 + C_2C_3L_3L_1R_3 + C_2C_3L_3L_1R_3 + C_3C_3L_3L_1R_3 + C_3C_3L_3L_3L_3R_3 + C_3C_3L_3L_3L_3R_3 + C_3C_3L_3L_3R_3 + C_3C_3L_3L_3L_3R_3 + C_3C_3L_3L_3R_3 +
10.446 INVALID-ORDER-446 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \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, L_L s + R_L + \frac{1}{C_L s}\right)
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 $\frac{C_2C_3C_LL_2L_3L_R3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_2L_3R_3R_Lg_m + C_2C_3C_LL_3L_R3\right) + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_3L_2L_3R_3g_m + C_2C_LL_2L_LR_3g_m + C_3C_LL_3L_LR_3\right) + s^4\left(C_2C_3C_LL_3R_3R_L + C_2C_3L_LR_3R_3R_L + C_2C_3L_LR_3g_m + C_3C_LL_2L_RR_3g_m + C_3C_LL_3L_RR_3g_m + C_3C_LL_3L_RR_3g_m + C_3C_LL_3L_RR_3g_m + C_3C_LL_3L_RR_3g_m + C_3C_LL_3L_RR_3g_m + C_3C_LL_3R_3R_L + C_3C_3C_LL_3R_3R_L + C_3C_3C_LL_3R_3R_$ 

 $H(s) = \frac{C_2C_3L_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_ms^6 + R_3R_Lg_ms$ 

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10.447 INVALID-ORDER-447  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $C_2C_3L_2L_3L_LR_3R_Lg_ms^5 + C_2C_3L_3L_LR_3R_Ls^4 + C_2L_LR_3R_Ls^2 + L_LR_3R_Ls^2 + L_LR_3R$ 

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10.448 INVALID-ORDER-448 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \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{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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 $H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_3R_L + C_2C_3L_2L_3L_LR_3g_m\right) + s^4\left(C_2C_3L_2L_3R_3g_m + s^6\left(C_2C_3C_LL_3L_LR_3g_m + s^6\left(C_2C_3C_LL_3L_LR_3g_m + C_2C_3L_2L_3L_Rg_m\right) + s^4\left(C_2C_3C_LL_3L_LR_3R_L + C_2C_3L_2L_3R_3g_m + C_2C_3L_3L_3R_3g_m + C_2C_3L_3L_3L_3R_3g_m + C_2C_3L_3L_$ 

10.449 INVALID-ORDER-449 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $I(s) = \frac{C_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + C_2C_3C_LL_3L_LR_3R_Lg_ms^6 + C_2C_3C_LL_3L_2R_3R_Lg_ms^6 + C_2C_3C_LL_3L_3R_3R_Lg_ms^6 + C_2C_3C_LL_3L_3R_3R_Lg$ 

**10.450** INVALID-ORDER-450  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2L_2R_3g_ms^2 + R_3g_m + s\left(C_2R_2R_3g_m + C_2R_3\right)}{C_2C_LL_2R_3g_ms^3 + g_m + s^2\left(C_2C_LR_2R_3g_m + C_2C_LR_3 + C_2L_2g_m\right) + s\left(C_2R_2g_m + C_2 + C_LR_3g_m\right)}$$

10.451 INVALID-ORDER-451  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L\right)}{C_2C_LL_2R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_L + C_2L_2R_3g_m + C_2L_2R_2g_m\right) + s\left(C_2R_2R_3g_m + C_2R_2R_Lg_m + C_2R_3R_Lg_m + C_2R_2R_Lg_m + C_2R_2R_Lg_m + C_2R_2R_Lg_m\right)}$$

**10.452** INVALID-ORDER-452  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2R_3R_Lg_ms^3 + R_3g_m + s^2\left(C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_L + C_2L_2R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3 + C_LR_3R_Lg_m\right)}{g_m + s^3\left(C_2C_LL_2R_3g_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_LR_2R_3g_m + C_2C_LR_2R_Lg_m + C_2C_LR_3 + C_2C_LR_3 + C_2C_LR_2 + C_2C_LR_3 +$$

10.453 INVALID-ORDER-453  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_LR_3g_ms^4 + R_3g_m + s^3\left(C_2C_LL_LR_2R_3g_m + C_2C_LL_LR_3\right) + s^2\left(C_2L_2R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3g_m + C_2R_3g_m\right)}{C_2C_LL_2L_2g_ms^4 + g_m + s^3\left(C_2C_LL_2R_3g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2C_LR_2R_3g_m + C_2C_LR_3 + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2R_2g_m + C_2L_LR_3g_m\right)}$$

10.454 INVALID-ORDER-454  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2L_2L_LR_3g_ms^3 + L_LR_3g_ms + s^2\left(C_2L_LR_2R_3g_m + C_2L_LR_3\right)}{C_2C_LL_2L_LR_3g_ms^4 + R_3g_m + s^3\left(C_2C_LL_LR_2R_3g_m + C_2L_LLg_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_LR_2g_m + C_2L_L+C_LL_R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3R_3g_m + C_2R_3R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3R_3g_m + C_2R_3R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3R_3g_m\right) + s\left(C_2R_2R_3g_m\right) + s\left(C_2R_3R_3g_m\right) + s\left(C_2R_3R_3g$$

10.455 INVALID-ORDER-455  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_LR_3g_ms^4 + R_3g_m + s^3\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_2R_3g_m + C_2C_LL_LR_3\right) + s^2\left(C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_L + C_2L_2R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3R_Lg_m + C_2R_2R_3g_m + C_2R_2R_3g_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m + C_2R_2R_3g_m + C_2R_2R_3g_m + C_2R_3R_Lg_m + C_$$

**10.456** INVALID-ORDER-456  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{C_2L_2L_R_3R_Lg_ms^3 + L_LR_3R_Lg_ms + s^2\left(C_2L_LR_2R_3R_Lg_m + C_2L_LR_3R_L\right)}{C_2C_LL_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_LL_LR_2R_3R_Lg_m + C_2L_LR_3g_m + C_2L_LR_2g_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_2R_3g_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m\right) + s\left(C_2R_2R_2R_2R_Lg_m\right) + s\left(C_2R_2R_2R_2R_Lg_m\right) + s\left(C_2R_2R_2R_2R_Lg_m\right) + s\left(C_2R_2R_2R_2R_Lg_m\right) + s\left($$

10.457 INVALID-ORDER-457  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{C_2C_LL_2L_R3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_LL_LR_2R_3R_Lg_m + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3g_m + C_2L_LR_3R_Lg_m + C_2L_LR_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_2R_3R_Lg_m + C_2R_2R_3R_Lg_m + C_2R_2R_3R_Lg_m + C_2R_2R_3g_m + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_LR_3g_m + C_2L_L$ 

10.458 INVALID-ORDER-458  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_2C_LL_2L_LR_3R_Lg_m + s^3\left(C_2C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3R_L\right) + s^2\left(C_2L_2R_3R_Lg_m + C_LL_LR_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_2R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_2R_2R_2R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_2R_2R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_2R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_Lg_m\right) + s\left(C_2R_2R_2R_Lg_m + C_2R_Lg_m\right) + s\left(C_2R_2R_Lg_m\right) + s\left(C_2R_2R$ 

**10.459** INVALID-ORDER-459  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{C_2 L_2 R_L g_m s^2 + R_L g_m + s \left(C_2 R_2 R_L g_m + C_2 R_L\right)}{C_2 C_3 L_2 R_L g_m s^3 + g_m + s^2 \left(C_2 C_3 R_2 R_L g_m + C_2 C_3 R_L + C_2 L_2 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_3 R_L g_m\right)}$$

**10.460** INVALID-ORDER-460  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2 L_2 g_m s^2 + g_m + s \left(C_2 R_2 g_m + C_2\right)}{s^3 \left(C_2 C_3 L_2 g_m + C_2 C_L L_2 g_m\right) + s^2 \left(C_2 C_3 R_2 g_m + C_2 C_1 + C_2 C_L R_2 g_m + C_2 C_L\right) + s \left(C_3 g_m + C_L g_m\right)}$$

**10.461** INVALID-ORDER-461  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2L_2R_Lg_ms^2 + R_Lg_m + s\left(C_2R_2R_Lg_m + C_2R_L\right)}{g_m + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_RR_Lg_m + C_2C_LR_Lg_m + C_2$$

**10.462** INVALID-ORDER-462  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2R_Lg_ms^3 + g_m + s^2\left(C_2C_LR_2R_Lg_m + C_2C_LR_L + C_2L_2g_m\right) + s\left(C_2R_2g_m + C_2 + C_LR_Lg_m\right)}{C_2C_3C_LL_2R_Lg_ms^4 + s^3\left(C_2C_3C_LR_2R_Lg_m + C_2C_3L_2g_m + C_2C_LL_2g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m\right) + s\left(C_2R_2g_m + C_2C_$$

**10.463** INVALID-ORDER-463  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_Lg_ms^4 + g_m + s^3\left(C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2R_2g_m + C_2\right)}{C_2C_3C_LL_2L_2g_ms^5 + s^4\left(C_2C_3C_LL_LR_2g_m + C_2C_3C_LL_L\right) + s^3\left(C_2C_3L_2g_m + C_2C_LL_2g_m + C_3C_LL_Lg_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}$$

**10.464** INVALID-ORDER-464  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{C_2L_2L_Lg_ms^3 + L_Lg_ms + s^2\left(C_2L_LR_2g_m + C_2L_L\right)}{g_m + s^4\left(C_2C_3L_2L_Lg_m + C_2C_LL_2L_Lg_m\right) + s^3\left(C_2C_3L_LR_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_Lg_m + C_LL_Lg_m\right) + s\left(C_2R_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_Lg_m + C_2L_Lg_m\right) + s\left(C_2R_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_Lg_m + C_2L_Lg_m\right) + s\left(C_2R_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_3L_Lg_m\right) + s\left(C_2R_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2L_2g_m + C_2C_LL_Lg_m\right) + s^2\left(C_2R_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2R_2g_m + C_2C_LL_LR_2g_m + C_2C_LL_LR_2g_m\right) + s^2\left(C_2R_2g_m + C_2C_LR_2g_m\right) + s^2\left(C_2R_2g_m + C_$$

10.465 INVALID-ORDER-465  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{C_2C_LL_2L_Lg_ms^4 + g_m + s^3\left(C_2C_LL_2R_Lg_m + C_2C_LL_LR_2g_m + C_2C_LL_L\right) + s^2\left(C_2C_LR_2R_Lg_m + C_2C_LR_L + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2R_2g_m + C_2 + C_LR_Lg_m\right) + s\left(C_2R_2g_m + C_2 + C_LR_Lg_m\right) + s\left(C_2R_2g_m + C_2C_LR_Lg_m\right) + s\left(C_2R_2g_m + C_2C_LR_Lg_m\right)$$

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10.466 INVALID-ORDER-466 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                     H(s) = \frac{C_2L_2L_RLg_ms^3 + L_LR_Lg_ms + s^2\left(C_2L_LR_2R_Lg_m + C_2L_LR_L\right)}{R_Lg_m + s^4\left(C_2C_3L_2L_LR_Lg_m + C_2C_LL_LR_Lg_m\right) + s^3\left(C_2C_3L_LR_2R_Lg_m + C_2C_LL_LR_2R_Lg_m + C_2L_LR_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_LR_2g_m + C_2L_LR_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_LR_Lg_m + C_2L_LR_Lg_m\right) + s^2\left(C_2L_2R_Lg_m + C_2L_LR_Lg_m\right) + s^2\left(C_2R_Lg_m + C_2R_Lg_m\right) + s^2\left(C_2R_Lg_m\right) 
10.467 INVALID-ORDER-467 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \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_2C_LL_2L_LR_2g_ms^4 + R_Lg_m + s^3\left(C_2C_LL_LR_2R_Lg_m + C_2L_LR_2g_m + C_2LR_2g_m + C_2LR_2g_m + C_2LR_2g_m + C_
10.468 INVALID-ORDER-468 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{1}{C_3 s}, \infty, \infty, \infty, \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_2C_LL_2L_LR_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_LL_LR_2R_Lg_m + C_2C_LL_LR_L\right) + s^2\left(C_2L_2R_Lg_m + C_LL_LR_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_L\right)}{C_2C_3C_LL_LR_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_2g_m + C_2C_LL_LR_Lg_m\right) + s^3\left(C_2C_3L_2R_Lg_m + C_2C_LL_LR_2g_m + C_2C_LL_LR_2g_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LL_RR_2g_m + C_2C_LL_RR_2g_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_LR_2g_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_LR_2g_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_LR_2g_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_LR_2g_m\right) + s^2\left(C_2C_3R_LR_2g_m + C_2C_LR_LR_2g_m\right) + s^2\left(C_2C_3R_LR_2g_m + C_2C_LR_LR_2g_m\right) + s^2\left(C_2C_3R_LR_2g_m + C_2C_LR_2R_2g_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_2R_Lg_m\right) + s^2\left(C_2C_3R_LR_2g_m + C_2C_LR_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_LR_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_Lg_m\right) + s^2\left(C_2C_3R_LR_2g_m\right) + s^2\left(C_2
10.469 INVALID-ORDER-469 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                             H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L\right)}{C_2C_3L_2R_3R_Lg_ms^3 + R_3g_m + R_Lg_m + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_3R_3R_L + C_2L_2R_3g_m + C_2L_2R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2R_2R_Lg_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m\right)}
10.470 INVALID-ORDER-470 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                         H(s) = \frac{C_2L_2R_3g_ms^2 + R_3g_m + s\left(C_2R_2R_3g_m + C_2R_3\right)}{g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_LL_2R_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_LR_2R_3g_m + C_2C_LR_3 + C_2L_2g_m\right) + s\left(C_2R_2g_m + C_2 + C_3R_3g_m + C_2R_3g_m\right)}
10.471 INVALID-ORDER-471 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                        H(s) = \frac{C_2L_2R_3R_Lg_ms^2 + R_3R_Lg_m + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_L\right)}{R_3g_m + R_Lg_m + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_LL_2R_3R_Lg_m\right) + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2L_2R_3g_m + C_2L_2R_3g_m + C_2L_2R_3g_m + C_2R_2R_2g_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_2R_2g_m + C_2R_2g_m + C_2R_2g_m + C_2R_2g_m + C_2R_2g_m + C_2R_2g_m + C_2R_2g_m + C_2R
10.472 INVALID-ORDER-472 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2R_3R_Lg_ms^3 + R_3g_m + s^2\left(C_2C_LR_2R_3R_Lg_m + C_2C_LR_3R_L + C_2L_2R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3 + C_LR_3R_Lg_m\right)}{C_2C_3C_LL_2R_3R_Lg_ms^4 + g_m + s^3\left(C_2C_3C_LR_2R_3R_Lg_m + C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LR_2R_3g_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_2R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_3R_Lg_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_2R_3g_m + C_2C_LR_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_3R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_2R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_2R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_2R_Lg_m + C_2C_LR_3R_Lg_m\right) + s\left(C_2R_3R_Lg_m + C_2C_LR_3R_Lg
10.473 INVALID-ORDER-473 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_R3g_ms^4 + R_3g_m + s^3\left(C_2C_LL_LR_2R_3g_m + C_2C_LL_LR_3\right) + s^2\left(C_2L_2R_3g_m + C_LL_LR_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3\right)}{C_2C_3C_LL_2L_R3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_3g_m + C_2C_LL_LR_3 + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_LL_R_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_LL_RR_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C_3R_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C_3R_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C_3R_3g_m + C_2C_LR_3g_m\right) + s^2\left(C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_
10.474 INVALID-ORDER-474 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
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 $H(s) = \frac{C_2L_2L_R_3g_ms^3 + L_LR_3g_ms + s^2\left(C_2L_LR_2R_3g_m + C_2L_LR_3\right)}{R_3g_m + s^4\left(C_2C_3L_2L_LR_3g_m + C_2C_LL_2L_LR_3g_m + s^3\left(C_2C_3L_LR_2R_3g_m + C_2C_LL_LR_3g_m + C_2L_LR_3g_m + C_2LR_3g_m + C$ 

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10.475 INVALID-ORDER-475 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}s^{4} + R_{3}g_{m} + s^{3}\left(C_{2}C_{L}L_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{2}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{3}\right) + s^{2}\left(C_{2}C_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{L} + C_{2}L_{2}R_{3}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{L} + C_{2}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{3}R_{L}g_{m} + C_{2}C_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{L}R_{3}R_{L}g_{m}\right) + s^{2}\left(C_{L
H(s) = \frac{C_2C_LL_2L_R3g_ms^s + R_3g_m + s^o\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_3\right) + s^o\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_3\right) + s^o\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_3\right) + s^o\left(C_2C_LL_2R_3R_Lg_m + C_2C_LL_LR_3\right) + s^o\left(C_2C_LL_2R_3g_m + C_2C_LL_2R_3g_m + C_2C_LL_2
10.476 INVALID-ORDER-476 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C_2L_2L_LR_3R_Lg_ms^3 + L_LR_3R_Lg_ms + s^2(C_2L_LR_2R_3R_Lg_m + C_2L_LR_3R_L)
                                                       \frac{C_{2}L_{2}L_{L}R_{3}R_{L}g_{m}s^{3}+L_{L}R_{3}R_{L}g_{m}s+s^{2}\left(C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{2}R_{3}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}L_{L}R_{3}R_{L}g_{m}+C
10.477 INVALID-ORDER-477 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C_{2}C_{L}L_{2}L_{L}R_{3}R_{L}g_{m}s^{4} + R_{3}R_{L}g_{m} + s^{3}\left(C_{2}C_{L}L_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{3}R_{L} + C_{2}L_{2}L_{L}R_{3}g_{m}\right) + s^{2}\left(C_{2}C_{L}L_{L}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{3}R_{L} + C_{2}L_{L}R_{3}g_{m}\right) + s^{2}\left(C_{2}C_{L}L_{L}R_{3}R_{L} + C_{2}L_{L}R_{3}R_{L} + C_{2}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{2}C_{L}L_{L}R_{3}R_{L} + C_{2}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{2}C_{L}L_{L}R_{3}R_{L}\right) + s^{2}\left(C_{2}C_{L}L_{L}R_{3}
H(s) = \frac{C_2C_LL_2L_LR_3R_Lg_ms^4 + R_3R_Lg_m + s^3\left(C_2C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3R_L + C_2L_2L_LR_3g_m\right) + s^2\left(C_2C_LL_LR_3R_Lg_ms^5 + R_3g_m + R_Lg_m + s^4\left(C_2C_3C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3g_m + C_2C_LLR_3g_m + C_2C_LL_LR_3g_m + C_2C_LLR_3g_m + C_2C_L
10.478 INVALID-ORDER-478 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \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_2C_LL_2L_LR_3R_Lg_ms^5 + R_3R_Lg_m + s^5\left(C_2C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3R_Lg_m + C_2C_LL_LR_3R_Lg_m + s^5\left(C_2C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3R_Lg_m + C_2C_LL_LR_3R_Lg_m + s^5\left(C_2C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3R_Lg_m + C_2C_LL_LR_2R_3R_Lg_m + C_2C_LL_LR_3R_Lg_m + C_2C_LL_LR_3R_Lg
10.479 INVALID-ORDER-479 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                   H(s) = \frac{C_2C_3L_2R_3R_Lg_ms^3 + R_Lg_m + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_3R_3R_L + C_2L_2R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_L + C_3R_3R_Lg_m\right)}{g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_2R_Lg_m + C_2C_3R_L + C_2L_2g_m\right) + s\left(C_2R_2g_m + C_2 + C_3R_3g_m + C_3R_Lg_m\right)}
10.480 INVALID-ORDER-480 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                   H(s) = \frac{C_2C_3L_2R_3g_ms^3 + g_m + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_3 + C_2L_2g_m\right) + s\left(C_2R_2g_m + C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_2R_3g_ms^4 + s^3\left(C_2C_3C_LR_2R_3g_m + C_2C_3L_2g_m + C_2C_LL_2g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m\right) + s\left(C_3R_3g_m + C_3R_3g_m\right) + s\left(C_3R_3g_m\right) + s\left(C_3R_3g_m + C_3R_3g_m\right) + s\left(C_3R_3g_m + C_3R_3g_m\right) + s\left(C_3R_3g_m + C_3R_3g_m\right) + s\left(C_3R_3g_m\right) + s\left(C_
10.481 INVALID-ORDER-481 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{C_2C_3L_2R_3R_Lg_m + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_3R_3R_L + C_2L_2R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_L + C_3R_3R_Lg_m\right)}{C_2C_3C_LL_2R_3R_Lg_m + s^3\left(C_2C_3C_LR_2R_3R_Lg_m + C_2C_3L_2R_3g_m + C_2C_3L_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_2R_Lg_m + C_2C_3R_2R_Lg_m + C_2C_3R_Lg_m + C_2C_3R_Lg_m\right) + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_3R_Lg_m + C_2C_3R_Lg
10.482 INVALID-ORDER-482 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                       H(s) = \frac{C_2C_3C_LL_2R_3R_Lg_ms^4 + g_m + s^3\left(C_2C_3C_LR_2R_3R_Lg_m + C_2C_3L_LR_3R_L + C_2C_3L_2R_3g_m + C_2C_LL_2R_Lg_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_LR_2R_Lg_m + C_2C_LR_L + C_2L_2g_m + C_3C_LR_3R_Lg_m\right) + s\left(C_2R_2g_m + C_2 + C_3R_3g_m + C_2R_Lg_m\right)}{s^4\left(C_2C_3C_LL_2R_3g_m + C_2C_3C_LR_2R_2g_m + C_2C_LR_2R_2g_m + C_2C_LR_2R_2g_m + C_2C_LR_2g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m + C_2C_LR_2g_m\right) + s^2\left(C_2C_3R_2g_m + C
10.483 INVALID-ORDER-483 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                H(s) = \frac{C_2C_3C_LL_2L_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_2R_3g_m + C_2C_3C_LL_LR_3 + C_2C_LL_Lg_m\right) + s^3\left(C_2C_3L_2R_3g_m + C_2C_LL_LR_2g_m + C_2C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_3 + C_2L_2g_m + C_LL_Lg_m\right) + s\left(C_2R_2g_m + C_2+C_3R_3g_m\right)}{C_2C_3C_LL_2L_2g_ms^5 + s^4\left(C_2C_3C_LL_2R_3g_m + C_2C_3C_LL_LR_2g_m + C_2C_3C_LL_LR_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_3g_m + C_2C_3R_3g_m + C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_3R_3g_m + C_2C_3R_3g_m + C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_3g_m + C
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10.484 INVALID-ORDER-484 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2C_3L_LR_3g_ms^4 + L_Lg_ms + s^3\left(C_2C_3L_LR_2R_3g_m + C_2C_3L_LR_3 + C_2L_LLg_m\right) + s^2\left(C_2L_LR_2g_m + C_2L_L + C_3L_LR_3g_m\right)}{C_2C_3C_LL_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_LR_2g_m + C_2C_3L_LL_Rg_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_2g_m + C_2C_3L_LR_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3L_LR_3g_m + C_2C
10.485 INVALID-ORDER-485 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_LR_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_3C_LL_LR_3g_m + C_2C_3C_LR_3g_m + C_
10.486 INVALID-ORDER-486 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}s^{4} + L_{L}R_{L}g_{m}s + s^{3}\left(C_{2}C_{3}L_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{3}L_{L}R_{3}R_{L} + C_{2}L_{2}L_{L}R_{L}g_{m}\right)
H(s) = \frac{C_2C_3L_2L_LR_3R_Lg_ms + s + L_LR_Lg_ms + s + (C_2C_3L_LR_2R_3R_Lg_m + C_2C_3L_LR_3R_Lg_m + C_2C_3L_LR_2R_3R_Lg_m + s + (C_2C_3L_LR_2R_3R_Lg_m + C_2C_3L_LR_2R_3R_Lg_m + C_2C_3L_LR_2R_3g_m + C_2C_3L_LR_2R_3g_m + C_2C_3L_LR_2R_2R_3g_m + C_2C_3L_LR_2R_2R_2g_m + 
10.487 INVALID-ORDER-487 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \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_2C_3C_LL_2L_LR_3R_Lg_ms^5 + R_Lg_m + s^4\left(C_2C_3C_LL_LR_2R_3R_Lg_m + C_2C_3L_LR_3g_m + C_2C_LL_LR_2g_m\right) + s^3\left(C_2C_3L_LR_3R_Lg_m + C_2C_3L_LR_3g_m + C_2C_3L_LR
10.488 INVALID-ORDER-488 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \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_{2}C_{3}C_{L}L_{2}L_{L}R_{3}R_{L}g_{m}s^{5} + R_{L}g_{m} + s^{4}\left(C_{2}C_{3}C_{L}L_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{3}C_{L}L_{L}R_{3}R_{L} + C_{2}C_{L}L_{2}L_{L}R_{L}g_{m}\right) + s^{3}\left(C_{2}C_{3}L_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{2}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{2}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{L}R_{2}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{L}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}R_{L}g_{m}\right)
H(s) = \frac{C_2C_3C_LL_2L_LR_3R_Lg_m + C_2C_3C_LL_LR_2R_3R_Lg_m + C_2C_3C_LL_LR_3R_L + C_2C_LL_2L_LR_Lg_m) + s^*(C_2C_3L_2R_3R_Lg_m + C_2C_LL_LR_2R_Lg_m)}{g_m + s^5(C_2C_3C_LL_2L_LR_3g_m + C_2C_3C_LL_LR_2R_2g_m + C_2C_3C_LL_LR_2R_2g_m + C_2C_3C_LL_LR_2R_Lg_m) + s^3(C_2C_3C_LL_2R_2R_3R_Lg_m + C_2C_3C_LL_2R_2R_3R_Lg_m + C_2C_3C_LL_2R_2R_2g_m + C_2C_3C_LL_2R_2R_2g_m) + s^3(C_2C_3C_LL_2R_2R_3R_Lg_m + C_2C_3C_LL_2R_2R_2g_m + C_2C_3C_LL_2R_2R_2g_m + C_2C_3C_LL_2R_2R_2g_m + C_2C_3C_LL_2R_2R_2g_m) + s^3(C_2C_3C_LL_2R_2R_2g_m + C_2C_3C_LL_2R_2R_2g_m + C_2C_3C_LR_2R_2R_2g_m + C_2C_3C_LR_2R_2R_2g_m + C_2C_3C_LR_2R_2g_m + C_2C_2C_LR_2R_2g_m + C
10.489 INVALID-ORDER-489 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                          H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_L\right) + s^2\left(C_2L_2R_Lg_m + C_3L_3R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_L\right)}{C_2C_3L_2L_3g_ms^4 + g_m + s^3\left(C_2C_3L_2R_Lg_m + C_2C_3L_3R_2g_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_2R_Lg_m + C_2C_3R_L + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2R_2R_Lg_m + C_2R_Lg_m + C_2R_Lg_m\right)}
10.490 INVALID-ORDER-490 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_{L s}}\right)
                                                                                                                                                                                                               H(s) = \frac{C_2C_3L_2L_3g_ms^4 + g_m + s^3\left(C_2C_3L_3R_2g_m + C_2C_3L_3\right) + s^2\left(C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2R_2g_m + C_2\right)}{C_2C_3C_LL_2L_3g_ms^5 + s^4\left(C_2C_3C_LL_3R_2g_m + C_2C_3C_LL_3\right) + s^3\left(C_2C_3L_2g_m + C_2C_LL_2g_m + C_3C_LL_3g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_3 + C_2C_LR_2g_m + C_2C_L\right) + s\left(C_3g_m + C_Lg_m\right)}
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10.491 INVALID-ORDER-491 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_L\right) + s^2\left(C_2L_2R_Lg_m + C_3L_3R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_L\right)}{C_2C_3C_LL_2R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_Lg_m + C_2C_3L_2R_Lg_m + C_2C_3L_3R_Lg_m + C_2C_3L_3R_Lg_m\right) + s^2\left(C_2C_3R_Lg_m + C_2C_3L_3R_Lg_m + C_2C_3L_3R_Lg_m\right) + s^2\left(C_2C_3R_Lg_m + C_2C_3R_Lg_m + C_2C_LR_Lg_m + C_2C_LR_Lg_m\right) + s^2\left(C_2C_3R_Lg_m + C_2C_LR_Lg_m + C_2C_LR_Lg_m + C_2C_LR_Lg_m\right) + s^2\left(C_2C_3R_Lg_m + C_2C_LR_Lg_m\right) + s^2\left(C_2C_3R_Lg_m\right) + s^2\left(C_2C_3R_Lg_m + C_2C_LR_Lg_m\right) + s^2\left(C_2C_3R_Lg_m\right) + s^2\left(C_2$ 

**10.492** INVALID-ORDER-492 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_2C_3C_LL_2L_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_2R_Lg_m + C_2C_3C_LL_3R_L + C_2C_3L_2L_3g_m\right) + s^3\left(C_2C_3L_3R_2g_m + C_2C_LL_2R_Lg_m + C_3C_LL_3R_Lg_m\right) + s^2\left(C_2C_LR_2R_Lg_m + C_2C_LR_L + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2R_2g_m + C_2C_LR_Lg_m\right)}{C_2C_3C_LL_2L_3g_ms^5 + s^4\left(C_2C_3C_LL_2R_Lg_m + C_2C_3C_LL_3R_2g_m + C_2C_3C_LL$ 

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10.493 INVALID-ORDER-493 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                             \frac{C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}g_{m}s^{6} + g_{m} + s^{5}\left(C_{2}C_{3}C_{L}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}C_{L}L_{3}L_{L}\right) + s^{4}\left(C_{2}C_{3}L_{2}L_{3}g_{m} + C_{2}C_{L}L_{2}L_{L}g_{m} + C_{3}C_{L}L_{3}L_{L}g_{m}\right) + s^{3}\left(C_{2}C_{3}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{L}R_{2}g_{m} + C_{2}C_{L}L_{L}\right) + s^{2}\left(C_{2}L_{2}g_{m} + C_{3}L_{3}g_{m} + C_{L}L_{L}g_{m}\right) + s^{2}\left(C_{2}C_{3}L_{2}L_{L}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{2}g_{m} + C_{2}C_{L}L_{2}g_{m} + C_{2}C_{L}L_{2}g_{m} + C_{2}C_{L}L_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{2}g_{m} + C_{2}C_{L}L_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{2}g_{m} + C_{2}C_{L}L_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}R_{2}g_{m} + C_{2}C_{3}C_{L}L_{2}L_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m} + C_{2}C_{L}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m} + C_{2}C_{L}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m} + C_{2}C_{L}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m} + C_{2}C_{L}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{m}\right) + s^{4}\left(C_{2}C_{3}C_{L}L_{3}L_{2}R_{2}g_{
10.494 INVALID-ORDER-494 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2C_3L_2L_3L_Lg_ms^5 + L_Lg_ms + s^4\left(C_2C_3L_3L_Lg_m + C_2C_3L_3L_L\right) + s^3\left(C_2L_2L_Lg_m + C_3L_3L_Lg_m\right) + s^2\left(C_2L_LR_2g_m + C_2L_L\right)}{C_2C_3C_LL_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3L_LL_3L_Lg_m + C_2C_3L_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3L_Lg_m + C_2C_3L_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_LL_3L_Lg_m + C_2C_3L_LL_3L_Lg_m\right) + s^3\left(C_2L_2L_Lg_m + C_2L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2C_3L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2C_3L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2L_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2L_LL_2L_Lg_m + C_2C_3L_LL_2L_Lg_m\right) + s^3\left(C_2L_2L_Lg_m + C_2C_3L_LL_Lg_m\right) + s^3\left(C_2L_Lg_m + C_2C_3L_Lg_m\right) + s^3\left(C_2L_Lg_m + C_2C_2L_Lg_m\right) + s^3\left(C_2L_Lg_m + C_2C_2L_Lg_m\right) + s^3\left(C_2L_Lg_m + C_2C_2L_Lg_m\right) + s^3\left(C_2L
10.495 INVALID-ORDER-495 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_3R_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C_3C_LL_3R_Lg_m + C_2C_3L_Lg_{Lg} + C_2C_
10.496 INVALID-ORDER-496 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H(s) = \frac{C_2C_3L_2L_3L_LR_Lg_ms^5 + L_LR_Lg_ms + s^5 \left(C_2C_3L_3L_LR_Lg_m + C_2C_3L_3L_LR_Lg_m + C_2C_3L_3L_LR_L
10.497 INVALID-ORDER-497 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_2 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                           \frac{C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{L}g_{m}s^{6}+R_{L}g_{m}+s^{5}\left(C_{2}C_{3}C_{L}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{2}L_{3}L_{L}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}L_{3}L_{L}R_{L}g_{m}\right)+s^{3}\left(C_{2}C_{3}L_{3}L_{L}R_{L}g_{m}\right)+s^{3}\left(C_{2}C_{3}L_{3}L_{L}R_{L}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{2}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{L}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_{2}C_{3}L_{L}R_{L}g_{m}+C_
10.498 INVALID-ORDER-498 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \infty, \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_2C_3C_LL_2L_3L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_Lg_m + C_2C_3C_LL_3L_LR_L\right) + s^4\left(C_2C_3L_LL_3L_LR_Lg_m + C_2C_LL_2L_LR_Lg_m + C_3C_LL_3L_LR_Lg_m\right)}{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_3L_LR_Lg_m + C_2C_3C_LL_3L_LR_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C_3C_LL_3L_Lg_m + C_2C
10.499 INVALID-ORDER-499 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                        H(s) = \frac{C_2L_2L_3R_Lg_ms^3 + L_3R_Lg_ms + s^2\left(C_2L_3R_2R_Lg_m + C_2L_3R_L\right)}{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_3R_2R_Lg_m + C_2L_3L_3R_L\right) + s^2\left(C_2L_2R_Lg_m + C_2L_3R_2g_m + C_2L_3 + C_3L_3R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_L + L_3g_m\right)}
10.500 INVALID-ORDER-500 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
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 $H(s) = \frac{{C_2}{L_2}{L_3}{g_m}{s^3} + {L_3}{g_m}{s} + {s^2}\left( {{C_2}{L_3}{R_2}{g_m} + {C_2}{L_3}} \right)}{{g_m} + {s^4}\left( {{C_2}{C_3}{L_2}{L_3}{g_m} + {C_2}{C_L}{L_2}{L_3}{g_m}} \right) + {s^3}\left( {{C_2}{C_3}{L_3}{R_2}{g_m} + {C_2}{C_L}{L_3}{R_2}{g_m} + {C_2}{C_L}{L_3}{R_2}{g_m} + {C_2}{C_L}{L_3} \right) + {s^2}\left( {{C_2}{L_2}{g_m} + {C_3}{L_3}{g_m} + {C_L}{L_3}{g_m}} \right) + s\left( {{C_2}{R_2}{g_m} + {C_2}{C_L}{L_3}{R_2}{g_m} + {C_2}{C_L}{L_3} \right) + s^2\left( {{C_2}{L_2}{g_m} + {C_2}{L_2}{L_3}{g_m} + {C_2}{L_2}{L_3}{g_m} \right) + s\left( {{C_2}{R_2}{g_m} + {C_2}{C_L}{L_3}{R_2}{g_m} + {C_2}{C_L}{L_3} \right) + s^2\left( {{C_2}{L_2}{g_m} + {C_2}{L_2}{L_3}{g_m} + {C_2}{C_L}{L_3} \right) + s^2\left( {{C_2}{L_2}{g_m} + {C_2}{C_L}{L_3} \right) + s^2\left( {{C_2}{L_2}{$ 

10.501 INVALID-ORDER-501  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{C_2L_2L_3R_Lg_ms^3 + L_3R_Lg_ms + s^2\left(C_2L_3R_2R_Lg_m + C_2L_3R_L\right)}{R_Lg_m + s^4\left(C_2C_3L_2L_3R_Lg_m + C_2C_LL_3R_Lg_m + C_2C_LL_3R_Lg_m + C_2L_2L_3R_Lg_m + C_2L_3R_Lg_m + C$$

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10.502 INVALID-ORDER-502 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2R_2R_2g_m + S^4\left(C_2C_LL_3R_2R_Lg_m + C_2C_LL_3R_Lg_m + C_2C_LL_3R_Lg_m + C_2L_3R_Lg_m + C_
10.503 INVALID-ORDER-503 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_3L_Lg_ms^5 + L_3g_ms + s^4\left(C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_L\right) + s^3\left(C_2L_2L_3g_m + C_LL_3L_Lg_m\right) + s^2\left(C_2L_3R_2g_m + C_2L_3\right)}{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_3C_LL_3L_L\right) + s^4\left(C_2C_3L_2L_3g_m + C_2C_LL_2L_1g_m + C_3C_LL_3L_Lg_m\right) + s^3\left(C_2C_3L_3R_2g_m + C_2C_LL_3R_2g_m + C_2C_LL_3R_2g_m
10.504 INVALID-ORDER-504 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                          10.505 INVALID-ORDER-505 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_3L_Lg_ms^5 + L_3g_ms + s^4\left(C_2C_LL_2L_3R_Lg_m + C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_L\right) + s^3\left(C_2C_LL_3R_2R_Lg_m + C_2C_LL_3R_L + C_2L_2L_3g_m + C_2C_LL_3L_Lg_m + C_2C_LL_3
10.506 INVALID-ORDER-506 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C_2L_2L_3L_LR_Lg_ms^3 + L_3L_LR_Lg_ms + s^2(C_2L_3L_LR_2R_Lg_m + C_2L_3L_LR_L)
H(s) = \frac{C_2L_2L_3L_LR_Lg_ms^{\circ} + L_3L_LR_Lg_ms + s^{\circ} \left(C_2L_3L_LR_Lg_m + C_2L_3L_LR_L\right)}{L_3R_Lg_m + L_LR_Lg_m + s^4 \left(C_2C_3L_2L_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2L_3L_LR_Lg_m 
10.507 INVALID-ORDER-507 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C_{2}C_{L}L_{2}L_{3}L_{L}R_{L}g_{m}s^{5} + L_{3}R_{L}g_{m}s + s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{L} + C_{2}L_{2}L_{3}L_{L}g_{m}\right) + s^{3}\left(C_{2}C_{L}L_{3}L_{L}R_{L} + C_{2}L_{3}L_{L}R_{L} + C_{2}L_{3}L_{L}g_{m}\right) + s^{3}\left(C_{2}C_{L}L_{3}L_{L}R_{L} + C_{2}L_{3}L_{L}R_{L} + C_{2}L_{3}L_{L}R_{L}\right) + s^{3}\left(C_{2}C_{L}L_{3}L_{L}R_{L} + C_{2}L_{3}L_{L}R_{L}\right) + s^{3}\left(C_{2}C_{L}L_{3}L_{L}R_{L}\right) + s^{3}\left(C
H(s) = \frac{C_2C_LL_2L_3L_LR_Lg_ms^5 + L_3R_Lg_ms + s^4\left(C_2C_LL_3L_LR_2R_Lg_m + C_2C_LL_3L_LR_L + C_2L_2L_3L_Lg_m\right) + s^3\left(C_2C_3C_LL_2L_3L_LR_Lg_m + s^5\left(C_2C_3L_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3L_3L_LR_Lg_m + C_2C_3L_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m\right) + s^3\left(C_2C_3C_LL_3L_LR_Lg_m + C_2C_LL_3L_LR_Lg_m + C_2C_LL_3L_Lg_m + C_2C_LL_3L_Lg_m + C
10.508 INVALID-ORDER-508 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \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_{2}C_{L}L_{2}L_{3}L_{L}R_{L}g_{m}s^{5} + L_{3}R_{L}g_{m}s + s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{L}\right) + s^{3}\left(C_{2}L_{2}L_{3}R_{L}g_{m} + C_{2}C_{L}L_{3}R_{L}\right) + s^{3}\left(C_{2}L_{2}L_{3}R_{L}g_{m} + C_{2}C_{L}L_{3}R_{L}\right) + s^{3}\left(C_{2}L_{2}L_{3}R_{L}g_{m} + C_{2}C_{L}L_{3}R_{L}\right) + s^{3}\left(C_{2}L_{2}L_{3}R_{L}g_{m} + C_
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_2g_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3L_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + C_2C_LL_3L_LR_2g_m + c_2C_LL_3L_LR_2g_m + c_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + c_2C_LL_3L_LR_2g_m + c_2C_LL_3L_LR_2g_m + s^5\left(C_2C_3C_LL_3L_LR_2g_m + c_2C_LL_3L_LR_2g_m + c_2C_LL_3L_2g_m + c_2
10.509 INVALID-ORDER-509 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
                                                                                                                    H(s) = \frac{C_2C_3L_2L_3R_Lg_ms^4 + R_Lg_m + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_L\right) + s^2\left(C_2C_3R_2R_3R_Lg_m + C_2C_3R_3R_L + C_2L_2R_Lg_m + C_3L_3R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_Lg_m + C_2R_Lg_m + C_2R_Lg_m\right)}{C_2C_3L_2L_3g_ms^4 + g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_3R_2g_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_2R_Lg_m + C_2C_3R_3R_L + C_2L_2R_Lg_m + C_3L_3R_Lg_m\right) + s\left(C_2R_2R_Lg_m + C_2R_Lg_m + C_2R_Lg_m + C_2R_Lg_m\right)}
10.510 INVALID-ORDER-510 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                 H(s) = \frac{C_2C_3L_2L_3g_ms^4 + g_m + s^3\left(C_2C_3L_2R_3g_m + C_2C_3L_3R_2g_m + C_2C_3L_3\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_3 + C_2L_2g_m + C_3L_3g_m\right) + s\left(C_2R_2g_m + C_2 + C_3R_3g_m\right)}{C_2C_3C_LL_2R_3g_m + C_2C_3C_LL_3R_2g_m + C_2C_3C_LR_3 + c_2C_3C_LR_3 + c_2C_3C_LR_3 + c_2C_3C_LR_3 + c_2C_3C_LR_3 + c_2C_3C_LR_3g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_3C_LR_3g_m + c_2C_3C_LR_3g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_3C_LR_3g_m + c_2C_3C_LR_3g_m\right) + s^2\left(C_2C_3R_2g_m + C_2C_3C_LR_3g_m + c_2C_3C_LR_3g_m\right) + s^2\left(C_2C_3R_2g_m + c_2C_3R_3g_m\right) + s^2\left(C_2C_3R_3g_m\right) + s^2\left(C_2C_3R_3
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**10.512** INVALID-ORDER-512 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_2L_3R_Lg_ms^5 + g_m + s^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_3C_LL_3R_2g_m + C_2C_3L_2R_3g_m + C_2C_3L_$$

10.513 INVALID-ORDER-513 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_LR_3g_m + C_2C_3L_LL_Rl_2g_m +$$

10.514 INVALID-ORDER-514 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3L_2L_3L_1g_ms^5 + L_Lg_ms + s^4\left(C_2C_3L_2L_LR_3g_m + C_2C_3L_3L_L\right) + s^3\left(C_2C_3L_LR_2R_3g_m + C_2C_3L_LR_3 + C_2L_2L_Lg_m + C_2C_3L_LR_3 + C_2C_3L_LR_3$$

10.515 INVALID-ORDER-515 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_3R_Lg_m + C_2C_3C_LL_2L_1R_3g_m + C_2C_3C_LL_3L_LR_2g_m + C_2C_3C_LL_3R_Lg_m + C_2C_3C_LL_3R_Lg_m + C_2C_3C_LL_3R_Lg_m + C_2C_3C_LL_3R_Lg_m + C_2C_3C_LL_3R_Lg_m + C_2C_3C_LL_2R_3g_m + C_2C_3C_LL_3R_2g_m + C_2C_3C_LL_3R_$$

**10.516** INVALID-ORDER-516 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{C_2C_3L_2L_3L_LR_Lg_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_2L_LR_3R_Lg_m + C_2C_3C_LL_3L_LR_2g_m + S^4\left(C_2C_3C_LL_2R_3R_Lg_m + C_2C_3L_2L_3R_Lg_m + C_2C_3L_2L_3R_Lg_m + S^4\left(C_2C_3C_LL_LR_3R_L + C_2C_3L_2L_3R_Lg_m + C_2C_3L_2L_RR_3g_m + C_2C_3L_2L_2L_2R_3g_m + C_2C_3L_2L_2R_3g_m + C_2C_3L_2L_2R_3g_m + C_2C_3L_2L_2R_3g_m + C_2C_3L_2L_2R_3g$$

10.517 INVALID-ORDER-517 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_2L_3L_LR_2g_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_2L_LR_3R_Lg_m + C_2C_3C_LL_3L_LR_2R_Lg_m + C_2C_3L_LL_RR_3R_Lg_m + C_2C_3L_LL_RR_3R_Lg_m + C_2C_3L_LL_RR_3R_Lg_m + C_2C_3L_LL_RR_3g_m + C_2C_3L_LL_RR_3g_$$

10.518 INVALID-ORDER-518 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{C_2C_3C_LL_2L_3L_LR_2g_ms^6 + R_Lg_m + s^5\left(C_2C_3C_LL_2L_LR_3R_Lg_m + C_2C_3C_LL_3L_LR_2R_Lg_m + C_2C_3C_LL_3L_LR_2\right) + s^4\left(C_2C_3C_LL_2L_3L_Lg_ms^6 + g_m + s^5\left(C_2C_3C_LL_2L_3R_Lg_m + C_2C_3C_LL_2L_Rg_m + C_2C_3C_LL_3L_LR_2g_m + C_2C_3C_LL_3L_LR_2g_m + C_2C_3C_LL_3L_LR_2g_m + C_2C_3C_LL_3R_Lg_m + C_2C_3C_LL_$$

10.519 INVALID-ORDER-519 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{C_2L_2R_3R_Lg_ms^3 + L_3R_3R_Lg_ms + s^2\left(C_2L_3R_2R_3R_Lg_m + C_2L_3R_3R_Lg_m + C_2L_3R_3R$$

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10.520 INVALID-ORDER-520 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_L s}\right)
                                            H(s) = \frac{C_2L_2R_3g_ms^3 + L_3R_3g_ms + s^2\left(C_2L_3R_2g_m + C_2L_3R_3\right)}{R_3g_m + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_LL_2R_3g_m\right) + s^3\left(C_2C_3L_3R_2R_3g_m + C_2C_LL_3R_3g_m + C_2L_2L_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_3R_3g_m + C_2L_3R_3g_m + C_2L_3R_3g_m\right) + s^2\left(C_2L_3R_3g_m + C_2L_3R_3g_m\right)
10.521 INVALID-ORDER-521 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C_2L_2L_3R_3R_Lg_ms^3 + L_3R_3R_Lg_ms + s^2(C_2L_3R_2R_3R_Lg_m + C_2L_3R_3R_L)
                                            \frac{C_{2}L_{2}L_{3}R_{3}R_{L}g_{m}s^{s}+L_{3}R_{3}R_{L}g_{m}s+s^{2}\left(C_{2}L_{3}R_{2}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{3}R_{L}g_
10.522 INVALID-ORDER-522 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_LL_2L_3R_3R_Lg_ms^4 + L_3R_3g_ms + s^3\left(C_2C_LL_3R_2R_3R_Lg_m + C_2C_LL_3R_3R_L + C_2L_2L_3R_3g_m\right) + s^3\left(C_2C_3C_LL_2L_3R_3R_Lg_m + s^4\left(C_2C_3C_LL_3R_2R_3R_Lg_m + C_2C_LL_3R_3g_m + C_2C_LL_3R
10.523 INVALID-ORDER-523 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C_{2}C_{L}L_{2}L_{3}L_{L}R_{3}g_{m}s^{5} + L_{3}R_{3}g_{m}s + s^{4}\left(C_{2}C_{L}L_{3}L_{L}R_{2}R_{3}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{3}\right) + s^{3}\left(C_{2}L_{2}L_{3}R_{3}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{3}R_{3}g_{m} + C_{2}C_{L}L_{3}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{3}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{2}L_{2}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{2}L_{2}R_{3}\right) + s^{4}
H(s) = \frac{C_2C_LL_2L_3L_LK_3g_ms^\circ + L_3K_3g_ms + s^*\left(C_2C_LL_3L_LK_2K_3g_m + C_2C_LL_3L_LK_3\right) + s^*\left(C_2L_LL_3L_LK_3\right) + s^*\left(C_2L_LL_3L_LK_3\right) + s^*\left(C_2L_LL_3L_LK_3g_m + C_2L_LL_3L_LK_3g_m + C_2L_2L_3L_LK_3g_m + C_2L_2L_3L_LK_3g_m + C_2L_2L_3L_LK_3g_m + C_2L_2L_3L_LK_3g_m + C_2L_2L_3L_LK_3g_m + C
10.524 INVALID-ORDER-524 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{C_2L_2L_3L_LR_3g_ms^3 + L_3L_LR_3g_ms + s^2\left(C_2L_3L_LR_2R_3g_m + C_2L_3L_LR_3\right)}{L_3R_3g_m + L_LR_3g_m + s^4\left(C_2C_3L_2L_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m + C_2L_2L_3L_LR_3g_m + C_2L_3L_LR_3g_m + C
10.525 INVALID-ORDER-525 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.526 INVALID-ORDER-526 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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 $H(s) = \frac{C_2 L_2 L_3 L_L R_3 R_L g_m s^3 + L_3 L_L R_3 R_L g_m s + s^2 \left(C_2 L_3 L_L R_3 R_L g_m s + s^2 \right) \right) \right) \right) \right)}$ 

10.527 INVALID-ORDER-527  $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \infty, \ \infty, \ \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{1}{C_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3R_Lg_m + C_2C_3L_2L_3L_LR_3g_m + C_2C_LL_2L_3L_LR_3g_m + C_2C_LL_2L_3L_2R_3g_m + C_2C_LL_2L_3L_3L_3R_3g_m + C_2C_LL_3L_3L_3R_3g_m + C_2C_LL_3L_3L_3R_3g_m + C_2C_LL_3L_3L_3R_3g_m + C_2C_LL_3L_3L_3R_3g_m + C_2C_LL_3L_3L_3R_3g_m + C_2C_3L_3L_3L_3R_3g_m + C_2C_3L_3L_3R_3g_m + C_2C_3L_3L_3R_3g_m + C_2C_3L_3L_3R_3g_m + C_2C_3L_3L_3R_$ 

10.528 INVALID-ORDER-528  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

 $H(s) = \frac{C}{C_2C_3C_LL_2L_3L_LR_3R_Lg_m + s^5(C_2C_3C_LL_3L_LR_2R_3R_Lg_m + C_2C_LL_2L_3L_LR_3g_m + C_2C_LL_2L_3L_LR_3g_m + C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_2L_3R_3R_Lg_m + C_2C_LL_3L_LR_3R_Lg_m +$ 

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10.529 INVALID-ORDER-529 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L\right)
H(s) = \frac{C_2C_3L_2L_3R_3R_Lg_m s^4 + R_3R_Lg_m + s^3\left(C_2C_3L_3R_2R_3R_Lg_m + C_2L_3R_Lg_m\right) + s^2\left(C_2L_2R_3R_Lg_m + C_2L_3R_Lg_m + C_2L_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s\left(C_2R_2R_3R_Lg_m + C_2R_3R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2R_2R_Lg_m\right) + s\left(C_2R_2R_3g_m + C_2R_
10.530 INVALID-ORDER-530 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_1 s}\right)
                                            \frac{C_{2}C_{3}L_{2}L_{3}R_{3}g_{m}s^{4}+R_{3}g_{m}+s^{3}\left(C_{2}C_{3}L_{3}R_{2}R_{3}g_{m}+C_{2}L_{3}L_{3}R_{3}g_{m}\right)+s^{2}\left(C_{2}L_{2}R_{3}g_{m}+C_{2}L_{3}+C_{3}L_{3}R_{3}g_{m}\right)+s\left(C_{2}R_{2}R_{3}g_{m}+C_{2}R_{3}+L_{3}g_{m}\right)}{C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+S^{5}+g_{m}+s^{4}\left(C_{2}C_{3}L_{L}R_{3}R_{2}g_{m}+C_{2}C_{L}L_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}\right)+s^{2}\left(C_{2}C_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}\right)+s^{2}\left(C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}\right)+s^{2}\left(C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}L_{3}R_{3}g_{m}+C_{2}C_{L}
10.531 INVALID-ORDER-531 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H(s) = \frac{C_2C_3L_2L_3R_3R_Lg_m s^{\frac{2}{3}} + R_3R_Lg_m + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_3R_Lg_m + C_2C_3L_3R_3R_L + C_2L_2L_3R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2L_3R_3R_Lg_m + S^{\frac{2}{3}}\left(C_2C_3L_3R_2R_3R_Lg_m + C_2C_3L_3R_3R_L + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_2g_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_2g_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_2R_2g_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_2R_2g_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_2g_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m + C_2C_3L_3R_2R_Lg_m\right) + s^{\frac{2}{3}}\left(C_2C_3L_3R_2R_2g_m + C_2C_3L_3R_2R_Lg_
10.532 INVALID-ORDER-532 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_2R_3R_Lg_m + C_2C_3L_2L_3R_3g_m + C_2C_LL_2R_3R_Lg_m + C_2C_LL_3R_2R_Lg_m + C_2C_LL_3R_Lg_m + C_2C_LL_2R_Lg_m + C_2C_LL_2R_
10.533 INVALID-ORDER-533 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3g_m + C_2C_LL_2L_3L_Lg_m\right) + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_LL_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m\right) + s^3\left(C_2C_3L_3R_2R_3g_m + C_2C_3L_3R_3R_3g_m + C_2C_3L_3L_RR_3g_m + C_2C_LL_3L_RR_3g_m + C_2C_LL_3L_LR_3g_m + C_2C_LL_3L_RR_3g_m + C_2C_LL_3L_RR_3g_m
10.534 INVALID-ORDER-534 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3g_m + C_2C_3L_2L_3L_Lg_m + C_2C_LL_2L_3L_Lg_m + s^4\left(C_2C_3L_2L_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m + C_2C_LL_3L_LR_3g_m + s^4\left(C_2C_3L_3L_LR_3g_m + c_2C_LL_3L_LR_3g_m + c_2C_LL_3L_LR
10.535 INVALID-ORDER-535 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_2L_3R_3R_Lg_m + C_2C_3L_LL_2L_3R_3g_m + C_2C_LL_2L_3R_2g_m + C_2C_LL_2L_2R_2g_m + C_2C_LL_
10.536 INVALID-ORDER-536 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \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_2C_3C_LL_2L_3L_LR_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3R_Lg_m + C_2C_3L_2L_3L_LR_3g_m + C_2C_3L_2L_3L_LR_2g_m + s^4\left(C_2C_3L_2L_3L_LR_2g_m + C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_LR_2g_m + c_2C_3L_3L_2R_2g_m + c_2C_3L_3L_2R_2
10.537 INVALID-ORDER-537 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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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 $H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5}{R_3g_m + R_Lg_m + s^6\left(C_2C_3C_LL_2L_3L_LR_3g_m + C_2C_3C_LL_3L_LR_2g_m + C_2C_3C_LL_3L_LR_3g_m + C_2C_3C_LL_3L_2G_m + C_2C_3C_LL_3L_3L_2g_m + C_2C_3C_LL_3L_3L_3g_m + C_2C_3C_LL_3L_3L_3$ 

10.538 INVALID-ORDER-538  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

 $H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3R_Lg_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3R_Lg_m + C_2C_3L_LL_3L_LR_3g_m + C_2C_LL_2L_3L_LR_2g_m\right) + s^4\left(C_2C_3L_2L_3R_3R_Lg_m + C_2C_3L_3L_LR_2g_m + C_2C_3L_3L_LR_3g_m + C$ 

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H(s) = \frac{C_2C_3L_2R_3R_Lg_m + s^3\left(C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_3R_Lg_m + s^2\left(C_2L_2R_3R_Lg_m + C_3L_3R_3R_Lg_m + C_2R_3R_Lg_m + C_2R_3R_L
10.540 INVALID-ORDER-540 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \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{1}{C_L s}\right)
H(s) = \frac{C_2C_3L_2L_3R_3g_ms^4 + R_3g_m + s^3\left(C_2C_3L_3R_2R_3g_m + C_2C_3L_3R_3\right) + s^2\left(C_2L_2R_3g_m + C_3L_3R_3g_m\right) + s\left(C_2R_2R_3g_m + C_2R_3\right)}{C_2C_3C_LL_2R_3g_ms^5 + g_m + s^4\left(C_2C_3C_LL_3R_2g_m + C_2C_3L_2R_3g_m + C_2C_3L_3R_2g_m + C_2C_3L_3R_3g_m\right) + s^2\left(C_2C_3R_2R_3g_m + C_2C_3R_3g_m + C_2C
10.541 INVALID-ORDER-541 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \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{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H(s) = \frac{C_2C_3L_2L_3R_3R_Lg_ms^5 + R_3R_Lg_m + s^6\left(C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_3R_Lg_m + C_2C_3L_3R_3R_Lg_
10.542 INVALID-ORDER-542 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \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, R_L + \frac{1}{C_L s}\right)
                                                 \frac{C_2C_3C_LL_2L_3R_3R_Lg_ms^5 + R_3g_m + s^4\left(C_2C_3C_LL_3R_2R_3R_Lg_m + C_2C_3C_LL_3R_3R_L + C_2C_3L_LL_3R_3g_m\right) + s^3\left(C_2C_3L_3R_2R_3g_m + C_2C_3L_LR_3R_2R_3g_m + C_2C_3L_LR_3R_2R_3g_m + C_2C_3L_LR_3R_2R_2g_m + C_2C_3L_LR_3R_2g_m + C_2C_3L_LR_3R_2g_
10.543 INVALID-ORDER-543 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \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, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_3L_LR_2R_3g_m + C_2C_3C_LL_3L_LR_3\right) + s^4\left(C_2C_3L_2L_3R_3g_m + C_2C_LL_2L_LR_3g_m + C_3C_LL_3L_LR_3g_m\right) + s^4\left(C_2C_3C_LL_3L_LR_3g_m + S_3C_LL_3L_RR_3g_m + C_3C_LL_3L_RR_3g_m + C_3C_LL_3L_RR_3
10.544 INVALID-ORDER-544 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
H(s) = \frac{C_2C_3L_2L_3L_LR_3g_ms^5 + L_LR_3g_ms + s^4\left(C_2C_3L_3L_LR_2R_3g_m + C_2C_3L_3L_LR_3\right) + s^3\left(C_2L_2L_LR_3g_m + C_2C_3L_3L_LR_3g_m + S^4\left(C_2C_3L_3L_LR_3g_m + S^4\left(C_2C_3L_3L_LR_3g_m + S^4\left(C_2C_3L_3L_LR_3g_m + C_2C_3L_3L_LR_3g_m + S^4\left(C_2C_3L_3L_LR_3g_m + S^4\left(C_2C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C_{2}C_{3}L_{2}L_{3}L_{L}R_{3}g_{m}s^{5} + L_{L}R_{3}g_{m}s + s^{4}\left(C_{2}C_{3}L_{3}L_{L}R_{2}R_{3}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{3}\right) + s^{3}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{3}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}L_{2}L_{L}R_{3}\right) + s^{4}\left(C_{2}L_{2}L_{L}R_{3}g_{m} + C_{2}L_
10.545 INVALID-ORDER-545 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \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, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H(s) = \frac{C_2C_3C_LL_2L_3L_LR_3g_ms^6 + R_3g_m + s^5\left(C_2C_3C_LL_2L_3R_3R_Lg_m + C_2C_3C_LL_3L_LR_3g_m + C_2C_3C_LL_3L_LR_3\right) + s^4\left(C_2C_3C_LL_3L_LR_3g_m + s^5\left(C_2C_3C_LL_3L_LR_3g_m + C_2C_3C_LL_3L_LR_3g_m + C_2C_3C_LL_3L_LR_3g_m + C_2C_3C_LL_3R_3R_Lg_m + C_2C_3C_LL_
10.546 INVALID-ORDER-546 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                 \frac{C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{3}R_{L}g_{m}s^{6} + R_{3}R_{L}g_{m} + s^{5}\left(C_{2}C_{3}C_{L}L_{3}L_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{3}L_{2}L_{3}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{3}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{3}g_{m} + C_{2}C_{3}L_{3}L_{L}R_{3}
10.547 INVALID-ORDER-547 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \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{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C_2C_3C_LL_2L_3L_LR_3R_Lg_ms^6 + R_3R_Lg_m + s^5
H(s) = \frac{1}{R_3 g_m + R_L g_m + s^6 \left( C_2 C_3 C_L L_2 L_3 L_L R_3 g_m + C_2 C_3 C_L L_2 L_2 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L g_m + C_2 C_3 C_L L_3 L_L R_3 R_L
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10.539 INVALID-ORDER-539  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \frac{R_3 \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \infty, \infty, R_L\right)$ 

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10.548 INVALID-ORDER-548 Z(s) = \left( \infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2 + C_3R_3s+1}, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2 + C_LR_Ls+1} \right)
H(s) = \frac{10.549}{R_3g_m + R_Lg_m + s^6(C_2C_3C_LL_2L_3L_LR_3g_m + C_2C_3C_LL_2L_3L_Rg_m) + s^5(C_2C_3C_LL_2L_3R_3R_Lg_m + C_2C_3C_LL_3L_LR_2R_3g_m + C_2C_3C_LL_3L_LR_2R_2g_m + C_2C_3C_LL_3L_LR_2R_2g_
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10.550 INVALID-ORDER-550 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = \frac{L_2 R_3 R_L g_m s + R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_2 L_2 R_2 R_3 R_L g_m + C_2 L_2 R_3 R_L \right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^3 \left(C_2 C_L L_2 R_2 R_3 R_L g_m + C_2 L_2 R_2$$

 $H(s) = \frac{L_2 R_3 g_m s + R_2 R_3 g_m + R_3 + s^2 \left(C_2 L_2 R_2 R_3 g_m + C_2 L_2 R_3\right)}{R_2 q_m + s^3 \left(C_2 C_L L_2 R_3 g_m + C_2 C_L L_2 R_3\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_L L_2 R_3 g_m\right) + s \left(C_L R_2 R_3 g_m + C_L R_3 + L_2 g_m\right) + 1}$ 

10.551 INVALID-ORDER-551 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^3 \left(C_2 C_L L_2 R_2 R_3 R_L g_m + C_2 C_L L_2 R_3 R_L\right) + s^2 \left(C_2 L_2 R_3 g_m + C_2 L_2 R_3 g_m + C_2 L_2 R_3 R_L g_m\right) + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L + L_2 R_3 g_m\right)}{R_2 g_m + s^3 \left(C_2 C_L L_2 R_2 R_3 g_m + C_2 C_L L_2 R_3 + C_2 C_L L_2 R_3 + C_2 C_L L_2 R_3\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 R_3 g_m + C_L L_2 R_3 g_m\right) + s \left(C_L R_2 R_3 g_m + C_L R_3 R_L + L_2 R_3 g_m\right)}$$

10.552 INVALID-ORDER-552 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_L L_2 L_L R_3 g_m s^3 + L_2 R_3 g_m s + R_2 R_3 g_m + R_3 + s^4 \left(C_2 C_L L_2 L_L R_2 R_3 g_m + C_2 C_L L_2 L_L R_3\right) + s^2 \left(C_2 L_2 R_3 g_m + C_2 L_2 R_3 g_m + C_2 L_L R_2 R_3 g_m + C_L L_L R_3\right)}{R_2 g_m + s^4 \left(C_2 C_L L_2 L_L R_2 g_m + C_2 C_L L_2 L_L\right) + s^3 \left(C_2 C_L L_2 R_2 R_3 g_m + C_2 L_L L_L g_m\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_L L_2 R_3 g_m + C_L L_L R_2 g_m + C_L L_L\right) + s \left(C_L R_2 R_3 g_m + C_L R_3 + L_2 g_m\right) + 1}$$

**10.553** INVALID-ORDER-553 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{L_2L_LR_3g_ms^2 + s^3\left(C_2L_2L_LR_2R_3g_m + C_2L_2L_LR_3\right) + s\left(L_LR_2R_3g_m + L_LR_3\right)}{R_2R_3g_m + R_3 + s^4\left(C_2C_LL_2L_LR_2R_3g_m + C_2C_LL_2L_LR_3\right) + s^3\left(C_2L_2L_LR_2g_m + C_2L_2L_LR_3g_m\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3g_m + C_2L_LR_3g_m + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3g_m + C_2L_LR_3g_m + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3g_m + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_3g_m + C_2L_LR_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_3g_m + C_2L_2R_3g_m + C_2L_2R_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_3g_m\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_3g_m\right) + s^2\left(C_2R_3g_m + C_2R_3g_m\right) + s^2\left(C_2R_3g_m\right) + s^2\left(C_2R_3g_m\right$$

10.554 INVALID-ORDER-554 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_2 C_L L_2 L_L R_2 g_3 g_m + C_2 C_L L_2 L_L R_3\right) + s^3 \left(C_2 C_L L_2 R_2 R_3 R_L g_m + C_2 L_L R_3 g_m\right) + s^2 \left(C_2 L_2 R_3 g_m + C_2 L_2 R_3 g_m + C_L L_2 R_3 g_m + C_L L_L R_3\right) + s \left(C_L R_2 R_3 R_L g_m + C_L R_3 R_L + L_2 R_3 g_m\right)}{R_2 g_m + s^4 \left(C_2 C_L L_2 L_L R_2 g_m + C_2 C_L L_2 R_2 R_3 g_m + C_2 C_L L_2 R_3 g_m + C_2 C_$$

10.555 INVALID-ORDER-555 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$$

$$H(s) = \frac{L_2 L_L R_3 R_L g_m s^2 + s^3 \left(C_2 L_2 L_L R_2 R_3 R_L g_m + C_2 L_2 L_L R_3 R_L\right) + s \left(L_L R_2 R_3 R_L g_m + L_L R_3 R_L\right)}{R_2 R_3 R_L g_m + R_3 R_L + s^4 \left(C_2 C_L L_2 L_L R_3 R_L g_m + C_2 L_2 L_L R_3 R_L\right) + s^3 \left(C_2 L_2 L_L R_3 R_L g_m + C_2 L_2 L_L R_3 R_L g_m + C_2 L_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 L_L R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m\right) + s^2 \left(C_2 L_2 R_3 R_$$

**10.556** INVALID-ORDER-556 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^4 \left(C_2 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 L_L L_R R_3 R_L g_m + C_2 L_2 L_L R_3 R_L g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_2 R_2 g_m + C_2 L_2 R_2$$

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10.558 INVALID-ORDER-558 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{1}{C_3s}, \infty, \infty, R_L\right)
                                                                                                                                                                       H(s) = \frac{L_2 R_L g_m s + R_2 R_L g_m + R_L + s^2 \left(C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L\right)}{R_2 q_m + s^3 \left(C_2 C_3 L_2 R_2 R_L q_m + C_2 C_3 L_2 R_L\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_3 L_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_3 R_L + L_2 g_m\right) + 1}
10.559 INVALID-ORDER-559 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                         H(s) = \frac{L_2 g_m s + R_2 g_m + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2\right) + 1}{s^3 \left(C_2 C_3 L_2 R_2 g_m + C_2 C_4 L_2 R_2 g_m + C_2 C_4 L_2\right) + s^2 \left(C_3 L_2 g_m + C_4 L_2 g_m\right) + s \left(C_3 R_2 g_m + C_3 + C_4 R_2 g_m + C_4 L_2\right)}
10.560 INVALID-ORDER-560 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls + 1}\right)
                                                                        H(s) = \frac{L_2 R_L g_m s + R_2 R_L g_m + R_L + s^2 \left(C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L \right)}{R_2 g_m + s^3 \left(C_2 C_3 L_2 R_L g_m + C_2 C_3 L_2 R_L + C_2 C_L L_2 R_2 R_L g_m + C_2 L_2 R_L \right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 R_L g_m + C_L L_2 R_L g_m + C_L L_2 R_L g_m + C_L R_L g_m + 
10.561 INVALID-ORDER-561 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                   10.562 INVALID-ORDER-562 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                  10.563 INVALID-ORDER-563 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                        10.564 INVALID-ORDER-564 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                     \frac{R_{2}g_{m}+s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}\right)+s^{3}\left(C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}L_{L}L_{2}R_{L}g_{m}+C_{2}L_{L}L_{2}R_{L}g_{m}+C_{L}L_{L}R_{2}g_{m}+C_{L}L_{L}R_{2}g_{m}+C_{L}L_{L}\right)+s\left(C_{L}R_{2}R_{L}g_{m}+C_{L}R_{L}L_{L}g_{m}\right)+1}{s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{L}g
10.565 INVALID-ORDER-565 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_2L_LR_Lg_ms^2 + s^3\left(C_2L_2L_LR_2R_Lg_m + C_2L_2L_LR_L\right) + s\left(L_LR_2R_Lg_m + L_LR_L\right)}{R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_LR_2R_Lg_m + C_2C_3L_2L_LR_L + C_3L_LR_Lg_m + C_2L_2L_LR_Lg_m + C_2L_2R_Lg_m + C_2L_2R_Lg_m
10.566 INVALID-ORDER-566 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{1}{C_3 s}, \infty, \infty, \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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10.557 INVALID-ORDER-557  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

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10.568 INVALID-ORDER-568 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, R_L\right)
                                                                                                                  H(s) = \frac{L_2 R_3 R_L g_m s + R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_2 L_2 R_2 R_3 R_L g_m + C_2 L_2 R_3 R_L \right)}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^3 \left(C_2 C_3 L_2 R_3 R_L g_m + C_2 C_3 L_2 R_3 R_L \right) + s^2 \left(C_2 L_2 R_2 R_3 g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_3 R_L g_m + C_3 L_2 R_3 R_L g_m + C_3 R_3 R_L g_m 
10.569 INVALID-ORDER-569 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                          H(s) = \frac{L_2 R_3 g_m s + R_2 R_3 g_m + R_3 + s^2 \left(C_2 L_2 R_2 R_3 g_m + C_2 L_2 R_3\right)}{R_2 g_m + s^3 \left(C_2 C_3 L_2 R_3 g_m + C_2 C_3 L_2 R_3 + C_2 C_L L_2 R_3 g_m + C_2 C_L L_2 R_3\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_3 L_2 R_3 g_m + C_L L_2 R_3 g_m + C_3 R_3 + C_L R_2 R_3 g_m + C_L R_3 + L_2 g_m\right) + 1}
10.570 INVALID-ORDER-570 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)
H(s) = \frac{L_2 R_3 R_L g_m s + R_2 R_3 R_L g_m + R_3 R_L + s^2 \left(C_2 L_2 R_2 R_3 R_L g_m + C_2 L_2 R_3 R_L g_m
10.571 INVALID-ORDER-571 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                           \frac{R_{2}R_{3}g_{m}+R_{3}+s^{3}\left(C_{2}C_{L}L_{2}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}R_{3}R_{L}g_{m}+C_{2}L_{2}R_{3}R_{L}g_{m}+s^{2}\left(C_{2}L_{2}R_{3}R_{L}g_{m}+C_{2}L_{2}R_{3}R_{L}g_{m}+s^{2}\left(C_{2}L_{2}R_{3}R_{L}g_{m}+C_{2}L_{2}R_{3}R_{L}g_{m}+C_{2}L_{2}R_{3}R_{L}g_{m}+C_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{2}R_{3}R_{L}g_{m}+c_{2}L_{
10.572 INVALID-ORDER-572 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                         \frac{C_L L_2 L_L R_3 g_m s^3 + L_2 R_3 g_m + R_3 + s^4 \left(C_2 C_L L_2 L_L R_3 g_m + C_2 C_L L_2 L_L R_3\right) + s^2 \left(C_2 L_2 R_3 g_m + C_2 R_3 
10.573 INVALID-ORDER-573 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
H(s) = \frac{L_2L_LR_3g_ms^2 + s^3\left(C_2L_2L_LR_2R_3g_m + C_2L_2L_LR_3\right) + s\left(L_LR_2R_3g_m + L_LR_3\right)}{R_2R_3g_m + R_3 + s^4\left(C_2C_3L_2L_LR_2g_m + C_2C_2L_LL_R_3 + C_2C_LL_2L_R_3\right) + s^3\left(C_2L_2L_LR_3g_m + C_2L_2L_LR_3g_m + C_2L_2L_R_3g_m + C_2L_2
10.574 INVALID-ORDER-574 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10.575 INVALID-ORDER-575 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L_2L_LR_3R_Lg_ms^2 + s^3\left(C_2L_2L_LR_2R_3R_Lg_m + C_2L_2L_LR_3R_L\right) + s\left(L_LR_2R_3R_Lg_m + L_LR_3R_Lg_m + L_L
                                           \frac{L_2L_LR_3R_Lg_m + S_1(C_2L_2L_LR_3R_Lg_m + C_2L_2L_LR_3R_Lg_m + C_2L_2L_2R_3R_Lg_m + C_2L_2L_2R_3R_Lg_m + C_2L_2R_3R_Lg_m + C_2L_2R_3R_Lg_m + C_2L_2R_3R_Lg_m + C_2L_2R_3R_Lg
10.576 INVALID-ORDER-576 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \frac{1}{R_{2}R_{3}g_{m}+R_{3}+R_{L}+s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{L
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 $H(s) = \frac{C_L L_2 L_L R_L g_m s^3 + L_2 R_L g_m + R_L + s^4 \left(C_2 C_L L_2 L_L R_2 R_L g_m + C_2 C_L L_2 L_L R_L\right) + s^2 \left(C_2 L_2 R_L g_m + C_2 R_L g_m + C$ 

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

10.567 INVALID-ORDER-567  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

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10.577 INVALID-ORDER-577 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3}{C_3R_3s + 1}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H(s) = \frac{C_L L_2 L_L R_3 R_L g_m + R_3 + R_L + s^5 \left(C_2 C_3 C_L L_2 L_L R_3 R_L g_m + C_2 C_L L_2 L_L R_3 R_L g_m + R_2 R_L g_m + C_2 C_L L_2 L_L R_3 R_L g_m + R_3 R_L g_m + R_4 R_L
10.578 INVALID-ORDER-578 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L\right)
                                                                                                                                                             H(s) = \frac{R_2 R_L g_m + R_L + s^3 \left(C_2 C_3 L_2 R_2 R_3 R_L g_m + C_2 C_3 L_2 R_3 R_L g_m + C_2 L_2 R_L g_m + C_2 L_2 R_L g_m + C_2 L_2 R_L g_m + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L + L_2 R_L g_m\right)}{R_2 g_m + s^3 \left(C_2 C_3 L_2 R_2 R_3 g_m + C_2 C_3 L_2 R_L g_m + C_2 C_3 L_2 R_L\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_3 L_2 R_3 g_m + C_3 L_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L + L_2 R_L g_m\right)} + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_3 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_2 R_L g_m + C_3 R_2 R_L g_m\right) + s \left(C_3 R_2 R_L g_m + C_3 R_L g_m\right) + s \left(C
10.579 INVALID-ORDER-579 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                               10.580 INVALID-ORDER-580 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_2 R_L g_m + R_L + s^3 \left(C_2 C_3 L_2 R_2 R_3 R_L g_m + C_2 C_3 L_2 R_3 R_L g_m + C_2 L_2 R_L + C_3 L_2 R_3 R_L g_m + s^2 \left(C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L + C_3 L_2 R_3 R_L g_m + s^2 \left(C_2 L_2 R_2 R_L g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_2 R_2 R_L g_m + C_2
10.581 INVALID-ORDER-581 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                           \frac{R_{2}g_{m} + s^{4} \left(C_{2}C_{3}C_{L}L_{2}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{3}C_{L}L_{2}R_{3}R_{L}g_{m} + C_{2}C_{3}L_{2}R_{3}g_{m} + C_{2}C_{3}L_{2}R_{3}g_{m} + C_{2}C_{L}L_{2}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}R_{3}R_{L}g_{m} + C_{2}C_{L}L_{2}R_{3}R_{L}g_{m} + C_{3}L_{2}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m} + C_{2
10.582 INVALID-ORDER-582 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                           \frac{R_{2}g_{m} + s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{L}R_{2}g_{m} + C_{2}C_{3}C_{L}L_{2}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}L_{R}g_{m} + C_{2}C_{L}L_{L}L_{R}g_{m} + C_{2}C_{L}L_{L}L_{R}g_{m} + C_{2}C_{L}L_{L}L_{R}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{2}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{2}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{2}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L}R_{3}g_{m} + C_{2}C_{L}L_{L
10.583 INVALID-ORDER-583 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                                         s^{4} \left(C_{2} C_{3} L_{L} L_{R} R_{3} g_{m}+C_{2} C_{3} L_{L} L_{R} R_{3} g_{m}+C_{2} L_{L} L_{R} R_{3} g_{m}+C_{2} L_{L} L_{R} R_{3} g_{m}+C_{3} L_{L} R_{3} g_{m}+C_{3} L_{L} R_{3} g_{m}+C_{4} L_{L} R_{3} g_{m}+C_{5} L_{L} L_{R} R_{3} g_{m}+C_{5} L_{L} L_{L} R_{3} g_{m}+C_
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**10.584** INVALID-ORDER-584  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_3 C_L L_2 L_L R_3 g_m + C_2 C_3 L_L L_L R_3 g_m + C_2 C_3$ 

10.585 INVALID-ORDER-585  $Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $\frac{(L_1 + L_2 + L_3 + L_4 + L_5 + L_4 + L_5 + L_4 + L_4 + L_5 + L_4 + L$ 

10.586 INVALID-ORDER-586  $Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

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

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10.587 INVALID-ORDER-587 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, R_3 + \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R_{2}R_{L}g_{m} + R_{L} + s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{L}R_{2}R_{3}R_{L}g_{m} + C_{2}C_{3}C_{L}L_{2}L_{L}R_{3}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L} + C_{2}C_{L}L_{2}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L} + C_{2}C_{L}L_{2}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{L}R_{L}g_{m} + C_{2}C_{L}L_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{L}R_{L}g_{m} + C_{2}C_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{L}R_{L}g_{m} + C_{2}C_{L}R_{L}\right) + s^{4}\left(C_{2}C_{L}L_{L}R_{L}g_{m
H(s) = \frac{16216Lgm + 16L + 3 + 62C_3C_LL_2L_LR_2R_3gm + C_2C_3C_LL_2L_LR_2R_1gm + C_2C_3C_LL_2L_LR_2gm + C_2C_3C_LL_2L_2L_2gm + C_2C_3C_LL_2L_2L_2gm + C_2C_3C_LL_2L_2L_2gm + C_2C_3C_LL_2L_2L_2gm + C_2C_3C_LL_2L_2gm + C_2C_3C_LL_2gm + C_2C
10.588 INVALID-ORDER-588 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                   H(s) = \frac{C_3L_2L_3R_Lg_ms^3 + L_2R_Lg_ms + R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_3R_2R_Lg_m + C_2C_3L_2L_3R_L\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L + C_3L_3R_2R_Lg_m + C_3L_3R_L\right)}{R_2g_m + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^3\left(C_2C_3L_2R_2R_Lg_m + C_2C_3L_2R_Lg_m + C_3L_2R_Lg_m + C_3L_3R_2g_m + C_
10.589 INVALID-ORDER-589 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                             H(s) = \frac{C_3L_2L_3g_ms^3 + L_2g_ms + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 + C_3L_3R_2g_m + C_3L_3\right) + 1}{C_3C_LL_2L_3g_ms^4 + s^5\left(C_2C_3C_LL_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^3\left(C_2C_3L_2R_2g_m + C_2C_3L_2 + C_2C_LL_2R_2g_m + C_3C_LL_3R_2g_m + C_3C_LL_3\right) + s^2\left(C_3L_2g_m + C_3L_3R_2g_m + C_3L_3\right) + s^2\left(C_3L_2g_m + C_3L_3R_2g_m +
10.590 INVALID-ORDER-590 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C_{3}L_{2}L_{3}R_{L}g_{m}s^{3} + L_{2}R_{L}g_{m}s + R_{2}R_{L}g_{m} + R_{L} + s^{4}\left(C_{2}C_{3}L_{2}L_{3}R_{2}R_{L}g_{m} + C_{2}C_{3}L_{2}L_{3}R_{L}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{L}g_{m} + C_{2}L_{2}R_{L} + C_{3}L_{3}R_{2}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{L}g_{m} + C_{2}L_{2}R_{L} + C_{3}L_{3}R_{2}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{L}g_{m} + C_{2}L_{2}R_{L} + C_{3}L_{3}R_{2}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{2}L_{3}R_{L}g_{m} + C_{3}L_{3}R_{L}g_{m}\right) + s^{2}\left(C_{3}L_{3}R_{L}g_{m} + C_{3}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}R_{L
H(s) = \frac{C_3L_2L_3R_Lg_ms^s + L_2R_Lg_ms + R_2R_Lg_m + R_L + s^* \left(C_2C_3L_2L_3R_2R_Lg_m + C_2L_2R_Lg_m + C_2
10.591 INVALID-ORDER-591 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                          \frac{R_{2}g_{m} + s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m} + C_{2}C_{3}C_{L}L_{2}L_{3}R_{L}g_{m} + C_{2}C_{3}L_{2}L_{3}R_{2}g_{m} + C_{2}C_{3}L_{2}L_{3}R_{2}g_{m} + C_{2}C_{3}L_{2}L_{3}R_{2}g_{m} + C_{2}C_{L}L_{2}R_{L}g_{m} + C_{2}C_{L}L_{2}R_{L}g_
10.592 INVALID-ORDER-592 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                        \frac{C_{3}C_{L}L_{2}L_{3}L_{L}g_{m}s^{5} + L_{2}g_{m}s + R_{2}g_{m} + s^{6}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}L_{L}L_{3}L_{L}\right) + s^{4}\left(C_{2}C_{3}L_{2}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{2}g_{m} + C_{2
10.593 INVALID-ORDER-593 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, L_3s + \frac{1}{C_3s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
H(s) = \frac{C_3L_2L_3L_Lg_ms^4 + L_2L_Lg_ms^2 + s^5\left(C_2C_3L_2L_3L_LR_2g_m + C_2C_3L_2L_LR_2g_m + C_2L_2L_L + C_3L_3L_LR_2g_m + C_3L_3L_L\right) + s\left(L_LR_2g_m + L_2L_LR_2g_m + C_2L_2L_L + C_3L_2L_LR_2g_m + C_3L_2L_2R_2g_m + C_3L_2L_2R_2g_m + C_3L_2L_2R_2g_m + C_3L_2L_2R_2g_m + C_3L_2L_2R_2g_m + C_3
10.594 INVALID-ORDER-594 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{R_2 R_L g_m + R_L + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 R_L g_m + C_2 C_3 L_L L_3 L_L R_2 g_m + C_2 C_3 L_2 L_3 R_L R_2 g_m + C_2 C_3 L_2 L_3 R_L R_2 g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R$ 

10.595 INVALID-ORDER-595  $Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

10.596 INVALID-ORDER-596  $Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)$ 

 $C_3L_2L_3L_LR_Lg_ms^4 + L_2L_LR_Lg_ms^2 + s^5(C_2C_3L_2L_3L_LR_Lg_ms^2)$ 

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H(s) = \frac{C_3C_LL_2L_3L_LR_Lg_ms^5 + L_2R_Lg_ms + R_2R_Lg_m + R_L + s^6\left(C_2C_3C_LL_2L_3L_LR_2R_Lg_m + C_2C_3C_LL_2L_3L_LR_L\right) + s^4\left(C_2C_3C_LL_2L_3L_LR_2g_m + C_2C_3C_LL_2L_3L_LR_2g_m + C_2C_3C_LL_2L_3R_Lg_m + C_2C_3C_L
10.598 INVALID-ORDER-598 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \infty, R_L\right)
                                                                              H(s) = \frac{L_2L_3R_Lg_ms^2 + s^3\left(C_2L_2L_3R_2R_Lg_m + C_2L_2L_3R_L\right) + s\left(L_3R_2R_Lg_m + L_3R_L\right)}{R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_3R_2R_Lg_m + C_2C_3L_2L_3R_L\right) + s^3\left(C_2L_2L_3R_2g_m + C_2L_2L_3 + C_3L_2L_3R_Lg_m\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L + C_3L_3R_2R_Lg_m + C_3L_3R_L + L_2L_3g_m\right) + s\left(L_2R_Lg_m + L_3R_2g_m + L_3R_2g_m + L_3R_2g_m\right) + s\left(L_2R_Lg_m + L_3R_2g_m + L_3R_2g_m + L_3R_2g_m\right) + s\left(L_3R_2R_Lg_m + L_3R_2g_m\right) + s\left(L_3R_2R_2R_2g_m + L_3R_2g_m\right) + s\left(L_3R_2R_2R_2g_m + L_3R_2g_m\right) + s\left(L_3R_2R_2R_2g_m + L_3R_2g_m\right) + s\left(L_3R_2R_2R_2g_m + L_3R_2g_m\right) + s\left(L_3R_2R_2R_2g_m\right) + s\left(L_3R_2R_2R_2g
10.599 INVALID-ORDER-599 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                               H(s) = \frac{L_2 L_3 g_m s^2 + s^3 \left(C_2 L_2 L_3 R_2 g_m + C_2 L_2 L_3\right) + s \left(L_3 R_2 g_m + L_3\right)}{L_2 g_m s + R_2 g_m + s^4 \left(C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_4 L_2 L_3 R_2 g_m + C_2 C_4 L_2 L_3\right) + s^3 \left(C_3 L_2 L_3 g_m + C_4 L_2 L_3 g_m\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_3 L_3 R_2 g_m + C_4 L_3\right) + 1}
10.600 INVALID-ORDER-600 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_2 L_3 R_L g_m s^2 + s^3 \left( C_2 L_2 L_3 R_L g_m + C_2 L_2 L_3 R_L \right) + s \left( L_3 R_2 R_L g_m + L_3 R_L \right)}{R_2 R_L g_m + R_L + s^4 \left( C_2 C_3 L_2 L_3 R_2 R_L g_m + C_2 C_2 L_2 L_3 R_2 R_L g_m + C_2 L_2 L_3 R_L g_m + C_2 L_2 R_L g_m + C_2 R_L g_m + C
10.601 INVALID-ORDER-601 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                             s^{4} \left(C_{2} C_{L} L_{2} L_{3} R_{2} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} R_{L} g_{m}+C_{2} L_{2} L_{3} R_{L} g_{m}\right)+s^{2} \left(C_{L} L_{3} R_{2} R_{L} g_{m}+C_{L} L_{3} R_{L} +L_{2} L_{3} g_{m}\right)+s \left(L_{3} R_{2} g_{m}+L_{2} L_{3} R_{L} R_{
10.602 INVALID-ORDER-602 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
10.603 INVALID-ORDER-603 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
10.604 INVALID-ORDER-604 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_1 s + R_1 + \frac{1}{C_1 s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      s^{5}\left(C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}+C_{L}L_{2}L_{3}L_{L}g_{m}\right)+s^{3}\left(C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}\right)+s^{3}\left(C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{2}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{2
                              \frac{s^{*}\left(C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}\right)+s^{*}\left(C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L
10.605 INVALID-ORDER-605 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L_2L_3L_LR_Lg_ms^2 + s^3\left(C_2L_2L_3L_LR_2R_Lg_m + C_2L_2L_3L_LR_L\right) + s\left(L_3L_LR_2R_Lg_m + L_3L_LR_L\right)
                             10.606 INVALID-ORDER-606 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \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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10.597 INVALID-ORDER-597  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

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10.607 INVALID-ORDER-607 Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \infty, \ \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_2 L_3 L_L R_L g_m s^4 + L_2 L_3 R_L g_m s^2 + s^5 (C_2 C_L L_2 L_3 L_L R_L g_m s^4)
10.608 INVALID-ORDER-608 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)
                                       \frac{R_{2}R_{L}g_{m}+R_{L}+s^{4}\left(C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}R_{3}R_{L}g_{m}+C_{2}L_{3}R_{L}g_{m}+C_{2}L_{2}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}R_{L}g_{m}+C_{3}L_{3}
10.609 INVALID-ORDER-609 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)
H(s) = \frac{R_2g_m + s^4 \left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^3 \left(C_2C_3L_2R_3g_m + C_2L_2R_3g_m + C_2L_2 + C_3L_2R_3g_m + C_3L_3R_2g_m + C_3L_3\right) + s \left(C_3R_2R_3g_m + C_3R_3 + L_2g_m\right) + 1}{s^5 \left(C_2C_3C_LL_2L_3R_2g_m + C_2C_3L_2L_3R_2g_m + C_2C_3L_2R_3g_m + C_3C_3L_2R_3g_m + C_3C_3L_3R_3g_m + 
10.610 INVALID-ORDER-610 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R_{2}R_{L}g_{m}+R_{L}+s^{4}\left(C_{2}C_{3}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{L}\right)+s^{3}\left(C_{2}C_{3}L_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{3}R_{L}+C_{3}L_{2}R_{2}R_{2}+C_{3}L_{2}R_{2}R_{2}+C_{3}L_{2}R_{2}+C_
H(s) = \frac{R_2R_Lg_m + R_L + s \cdot (c_2c_3L_2L_3R_2R_Lg_m + c_2c_3L_2L_3R_L) + s \cdot (c_2c_3L_2L_3R_Lg_m + c_2c_3L_2L_3R_Lg_m + c_2c_3L_2R_3R_L + c_3L_2R_3R_L + c_3L_2R_3R_L + c_3L_2R_3R_Lg_m + c_
10.611 INVALID-ORDER-611 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, L_3s + R_3 + \frac{1}{C_4s}, \infty, \infty, R_L + \frac{1}{C_{Ls}}\right)
H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_L g_m + C_2 C_3 L_L L_2 R_3 R_L g_m + C_2 C_3 L_L L_2 R_2 R_L g_m + C_2 C_3 L_L L_2 R_L g_m + C_2 C_3
10.612 INVALID-ORDER-612 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_L R_3 g_m + C_2 C_3 C_L L_2 L_L R_3 g_m + C_2 C_3 L_L L_L R_3 g_m + C_3 C_L L_2 L_L R_3 g_m + C_3 C_L L_2 L_L R_3 g_m + C_2 C_3 L_L L_L R_3 g_m + C_2 C_3 L_L L_L R_2 g_m + C_3 C_L R_2 R_3 g_m + C_3 C_L R_3 R_3 g_m +
10.613 INVALID-ORDER-613 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s^{\circ} \left( C_{2}C_{3}L_{2}L_{1}R_{2}g_{m} + C_{2}C_{3}L_{2}L_{1}R_{2}g_{m} + C_{2}C_{3}L_{2}L_{1}R_{2}R_{3}g_{m} + C_{2}C_{3}L_{2}L_{1}R_{3} + C_{3}L_{2}L_{1}R_{3} + C_{3}L_{2}L_{1}R_{3} + C_{3}L_{2}L_{1}R_{3} + C_{3}L_{2}L_{1}R_{3} + C_{3}L_{2}L_{1}R_{2}g_{m} + C_{2}C_{3}L_{2}L_{1}R_{2}g_{m} + C
10.614 INVALID-ORDER-614 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_3 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_1 s + R_1 + \frac{1}{C_1 s}\right)
10.615 INVALID-ORDER-615 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                       \overline{R_{2}R_{L}g_{m}+R_{L}+s^{6}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{3}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{2}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{2}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}+C_{2}C_{3}L_{L}L_{L}R_{L}+C_{2}C_{3}L_{L}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_{L}+C_{2}C_{3}L_
10.616 INVALID-ORDER-616 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \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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 $H(s) = \frac{R_2 R_L g_m + R_L + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 L_L L_2 L_3 L_L R_2 g_m + C_2 C_3 L_2 L_3 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_3 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 R_2 R_2 g_m + C_2$ 

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10.618 INVALID-ORDER-618 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, R_L\right)
H(s) = \frac{L_2L_3R_3R_Lg_ms^2 + s^3\left(C_2L_2L_3R_2R_3R_Lg_m + C_2L_2L_3R_3R_L\right) + s\left(L_3R_2R_3R_Lg_m + L_3R_3R_L\right)}{R_2R_3R_Lg_m + R_3R_L + s^4\left(C_2C_3L_2L_3R_2R_3R_Lg_m + C_2L_2L_3R_3R_Lg_m + C_2L_2L_3R_3R_Lg_m + C_2L_2L_3R_3R_Lg_m + C_2L_2L_3R_3R_Lg_m + C_2L_2L_3R_3R_Lg_m + C_2L_2L_3R_3R_Lg_m + C_2L_2R_3R_Lg_m + C_3L_3R_3R_Lg_m + C_3
10.619 INVALID-ORDER-619 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \frac{1}{C_{Ls}}\right)
H(s) = \frac{L_2L_3R_3g_ms^2 + s^3\left(C_2L_2L_3R_2g_m + C_2L_2L_3R_3\right) + s\left(L_3R_2g_m + L_3R_3\right)}{R_2R_3g_m + R_3 + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_2L_2L_3R_3 + C_2C_2L_2L_3R_3\right) + s^3\left(C_2L_2L_3R_2g_m + C_2L_2L_3R_3g_m + C_2L_2L_3R_3g_m + C_2L_2L_3R_3g_m + C_2L_2R_3g_m + C_2L_2R_
10.620 INVALID-ORDER-620 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L_2L_3R_3R_Lg_ms^2 + s^3(C_2L_2L_3R_2R_3R_Lg_m + C_2L_2L_3R_3R_L) + s(L_3R_2R_3R_Lg_m + L_3R_3R_L)
H(s) = \frac{L_2 L_3 R_3 R_L g_m s^2 + s^3 \left(C_2 L_2 L_3 R_2 R_3 R_L g_m + C_2 L_2 L_3 R_3 R_L g_m + C_2 L_2 L_3 R_3 R_L g_m + C_2 L_2 L_3 R_3 R_L g_m + L_3 R_3 R_L \right)}{R_2 R_3 R_L g_m + R_3 R_L + s^4 \left(C_2 C_3 L_2 L_3 R_3 R_L g_m + C_2 L_2 L_3 R_2 R_L g
10.621 INVALID-ORDER-621 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                              \frac{s^{4} \left(C_{2} C_{L} L_{2} L_{3} R_{2} R_{3} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} R_{3} R_{L}\right)+s^{3} \left(C_{2} L_{L} L_{3} R_{3} R_{L}\right)+s^{3} \left(C_{2} L_{L} L_{3} R_{3} R_{L}\right)+s^{4} \left(C_{2} C_{3} L_{2} L_
10.622 INVALID-ORDER-622 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C_L L_2 L_3 L_L R_3 g_m s^4 + L_2 L_3 R_3 g_m s^2 + s^5 (C_2 C_L L_2 L_3 L_L R_2 R_3 g_m s^4)
                              10.623 INVALID-ORDER-623 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                              10.624 INVALID-ORDER-624 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                              \overline{R_{2}R_{3}g_{m}+R_{3}+s^{6}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}L_{L}L_{3}L_{L}R_{3}\right)+s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{3}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{3}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{L}L_{3}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}R_{3}g_{m}\right)+s^{4}\left(C_{2}C_{3}L_{L}L_{2}L_{3}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_
10.625 INVALID-ORDER-625 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                            10.626 INVALID-ORDER-626 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \infty, \infty, \infty, \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_L L_L s^2 + 1}\right)
                              \overline{R_2 R_3 R_L q_m + R_3 R_L + s^6 \left( C_2 C_3 C_L L_2 L_3 L_L R_2 R_3 R_L q_m + C_2 C_3 L_L L_3 L_L R_3 R_L \right) + s^5 \left( C_2 C_3 L_2 L_3 L_L R_3 R_L + C_2 C_L L_2 L_3 L_L R_3 R_L + C_2 C_L L_2 L_3 L_L R_3 R_L R_3 R_L + C_2 C_L L_2 L_3 L_L R_3 R_L R_3 R_L \right) + s^5 \left( C_2 C_3 L_2 L_3 L_L R_3 R_L R_3 R_L + C_2 C_L L_2 L_3 L_L R_3 R_L R
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10.617 INVALID-ORDER-617  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$ 

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10.627 INVALID-ORDER-627 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{L_3R_3s}{C_3L_3R_3s^2 + L_3s + R_3}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
H(s) = \frac{1}{R_2 R_3 R_L g_m + R_3 R_L + s^6 \left( C_2 C_3 C_L L_2 L_3 L_L R_2 R_3 R_L g_m + C_2 C_3 L_L L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_3 R_L g_m + C_2 C_L L_2 L_3 L
10.628 INVALID-ORDER-628 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, R_L\right)
H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^4 \left(C_2 C_3 L_2 L_3 R_2 R_1 g_m + C_2 C_3 L_2 L_3 R_2 R_L g_m + C_2 L_2 L_3 R_L + C_3 L_2 L_3 R_2 R_L g_m + C_2 L_2 R_3 R_L g_m + C_2 L_2 R_2 R_L g_m + C_2 L
10.629 INVALID-ORDER-629 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_3 L_2 L_3 R_3 g_m + C_2 L_2 L_3 + C_3 L_2 L_3 R_3 g_m + C_2 L_2 R_3 g
10.630 INVALID-ORDER-630 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R_2R_3R_Lg_m + R_3R_L + s^4(C_2C_3L_2L_3R_2R_3R_Lg_m + C_2C_3L_2L_3R_3R_Lg_m)
                                       \frac{R_{2}R_{3}R_{L}g_{m}+R_{3}R_{L}+s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{3}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{2}g_{m}+C_{2}C_{3}L_{2}L_
10.631 INVALID-ORDER-631 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                       \frac{R_{2}R_{3}g_{m}+R_{3}+s^{5}\left(C_{2}C_{3}C_{L}L_{2}L_{3}R_{2}R_{3}R_{L}g_{m}+C_{2}C_{3}L_{L}L_{2}L_{3}R_{3}R_{L}\right)+s^{4}\left(C_{2}C_{3}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}L_{2}L_{3}R_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{2}R_{L}g_{m
10.632 INVALID-ORDER-632 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                        \frac{R_{2}R_{3}g_{m}+R_{3}+s^{6}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}L_{L}L_{2}L_{3}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{3}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}+C_{2}C_{L
10.633 INVALID-ORDER-633 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               s^{5}\left(C_{2}C_{3}L_{2}L_{3}L_{L}R_{2}R_{3}g_{m}+C_{2}C_{3}L_{2}L_{3}L_{L}R_{3}\right)+s^{4}\left(C_{2}L_{2}L_{3}L_{L}R_{2}g_{m}\right)
                                        10.634 INVALID-ORDER-634 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{R_2 R_3 g_m + R_3 + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_3 L_L R_3 g_m + C_2 C_3 L_L L_3 L_L R_3 g_m + C_2 C_3 L_L L_3 R_2 R_3 R_L g_m + C_2 C_3 L_L L_3 L_L R_3 g_m + C_2 C_3 L_L L_3 L_L R_3 g_m + S^4 \left(C_2 C_3 L_L L_3 L_L R_3 g_m + C_2 C_3 L_L L_3 L_L R_3 g_m + C_2 C_3 L_L L_3 R_2 R_3 g_m + C_2 C_3 L_L
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10.635 INVALID-ORDER-635  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$ 

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10.637 INVALID-ORDER-637 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{C_3L_3R_3s^2 + L_3s + R_3}{C_3L_3s^2 + 1}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
H(s) = \frac{1}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^6 \left( C_2 C_3 C_L L_2 L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_2 L_3 L_L R_3 + C_2 C_2 C_L L_2 L_3 L_L R_3
10.638 INVALID-ORDER-638 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, R_L\right)
H(s) = \frac{C_3L_2L_3R_3R_Lg_ms + R_2R_3R_Lg_m + R_3R_L + s^4\left(C_2C_3L_2L_3R_3R_Lg_m + C_2C_3L_2L_3R_3R_Lg_m + C_2L_2R_3R_Lg_m + C_2L_2R_2R_Lg_m + C_2L_2R_2R
10.639 INVALID-ORDER-639 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{1}{C_Ls}\right)
H(s) = \frac{C_3L_2L_3R_3g_ms^3 + L_2R_3g_m + R_3 + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3R_3\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3 + C_3L_3R_2g_m + C_3L_3R_3\right)}{R_2g_m + s^5\left(C_2C_3C_LL_2L_3R_2g_m + C_2C_3L_2L_3R_3\right) + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3R_3g_m + C_2C_3L_2R_3g_m + C_2C_3L_2R_3g_m + C_3C_3L_3R_3g_m + 
10.640 INVALID-ORDER-640 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C_3L_2L_3R_3R_Lg_ms^3 + L_2R_3R_Lg_ms + R_2R_3R_Lg_m + R_3R_Ls_m
                                        \frac{C_3L_2L_3R_3R_Lg_ms + L_2R_3R_Lg_ms + L_2R_3R_Lg_ms + L_2R_3R_Lg_ms + L_2R_3R_Lg_ms + L_2R_3R_Lg_m + C_2C_3L_2L_3R_3R_Lg_m + C_2C_3L_2L_3R_2R_Lg_m + C_2C_3L_2L_2R_2R_2R_Lg_m + C_2C_3L_2R_2R_2R_Lg_m + C_2C_3L_2R_2R_2R_L
10.641 INVALID-ORDER-641 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H(s) = \frac{R_2 R_3 g_m + R_3 + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_3 C_L L_2 L_3 R_3 R_L\right) + s^4 \left(C_2 C_3 L_L L_2 R_3 R_L + C_2 C_3 L_L L_2 R_2 R_L + C_2 C_3 L
10.642 INVALID-ORDER-642 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)
                                     \frac{C_{3}C_{L}L_{2}L_{3}L_{R}3g_{m}s^{5}+L_{2}R_{3}g_{m}s+R_{2}R_{3}g_{m}+R_{3}+s^{6}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{3}\right)+s^{4}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_{3}R_{3}g_{m}+C_{2}C_{3}C_{L}L_{2}L_
10.643 INVALID-ORDER-643 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C_3L_2L_3L_LR_3g_ms^4 + L_2L_LR_3g_ms^2 + s^5\left(C_2C_3L_2L_3L_LR_2R_3g_ms^2\right)
H(s) = \frac{C_3L_2L_3L_LR_3g_ms^2 + L_2L_LR_3g_ms^2 + L_2L_LR_3g_ms
10.644 INVALID-ORDER-644 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \frac{R_2R_3g_m + R_3 + s^{\circ}\left(C_2C_3C_LL_2L_3L_LR_2g_m + C_2C_3C_LL_2L_3L_LR_2g_m + C_2C_3C_LL_2L_3L_LR_3) + s^{\circ}\left(C_2C_3C_LL_2L_3L_LR_3 + C_2C_3C_LL_2L_3L_LR_3\right) + s^{\circ}\left(C_2C_3C_LL_2L_3L_LR_3 + C_2C_3C_LL_2L_3R_2R_3g_m + C_2C_3C_LL_2L_3R_3R_3g_m + C_2C_3C_LL_2R_3R_3R_3g_m + C_2C_3C_LL_2R_3R_3g_m +
10.645 INVALID-ORDER-645 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
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10.646 INVALID-ORDER-646 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2 + L_Ls + R_L}{C_LL_Ls^2 + 1}\right)
10.647 INVALID-ORDER-647 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \frac{R_3\left(C_3L_3s^2 + 1\right)}{C_3L_3s^2 + C_3R_3s + 1}, \infty, \infty, \infty, \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)
                  10.648 INVALID-ORDER-648 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                      H(s) = \frac{C_2R_2R_3s + R_2R_3g_m + R_3 + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3\right)}{R_2q_m + s^3\left(C_2C_LL_2R_3q_m + C_2C_LL_2R_3\right) + s^2\left(C_2C_LR_2R_3 + C_2L_2R_2q_m + C_2L_2\right) + s\left(C_2R_2 + C_LR_2R_3q_m + C_LR_3\right) + 1}
10.649 INVALID-ORDER-649 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)
                                                  H(s) = \frac{C_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_2L_2R_2R_3R_Lg_m + C_2L_2R_3R_L\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^3\left(C_2C_LL_2R_2R_3R_Lg_m + C_2L_2R_2R_3R_L + C_2L_2R_2R_3R_L + C_2L_2R_2R_2R_2R_L + C_2L_2R_3R_L\right) + s\left(C_2R_2R_3 + C_2L_2R_2R_3R_L + C_2L_2R_2R_3R_L + C_2L_2R_2R_2R_L + C_2L_2R_2R_2R_L + C_2L_2R_2R_2R_L + C_2L_2R_2R_2R_L\right)}
10.650 INVALID-ORDER-650 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                 H(s) = \frac{R_2 R_3 g_m + R_3 + s^3 \left(C_2 C_L L_2 R_2 R_3 R_L g_m + C_2 C_L L_2 R_3 R_L \right) + s^2 \left(C_2 C_L R_2 R_3 R_L + C_2 L_2 R_3 g_m + C_2 L_2 R_3 \right) + s \left(C_2 R_2 R_3 + C_L R_2 R_3 R_L g_m + C_L R_3 R_L \right)}{R_2 g_m + s^3 \left(C_2 C_L L_2 R_2 R_3 g_m + C_2 C_L L_2 R_2 R_4 g_m + C_2 C_L L_2 R_3 + C_2
10.651 INVALID-ORDER-651 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                             H(s) = \frac{C_2C_LL_LR_2R_3s^3 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^4\left(C_2C_LL_2L_LR_2R_3g_m + C_2C_LL_2L_LR_3\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3 + C_LL_LR_2R_3g_m + C_LL_LR_3\right)}{R_2g_m + s^4\left(C_2C_LL_2L_LR_2g_m + C_2C_LL_2L_L\right) + s^3\left(C_2C_LL_2R_2R_3g_m + C_2C_LL_2R_3 + C_2C_LL_R\right) + s^2\left(C_2C_LR_2R_3 + C_2L_2R_2g_m + C_2L_2 + C_LL_R2g_m + C_LL_L\right) + s\left(C_2R_2R_3g_m + C_LR_3\right) + 1}
10.652 INVALID-ORDER-652 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                               H(s) = \frac{C_2L_LR_2R_3s^2 + s^3\left(C_2L_2L_LR_2R_3g_m + C_2L_2L_LR_3\right) + s\left(L_LR_2R_3g_m + L_LR_3\right)}{R_2R_3g_m + R_3 + s^4\left(C_2C_LL_2L_LR_2R_3g_m + C_2L_LL_RR_3\right) + s^3\left(C_2C_LL_LR_2R_3 + C_2L_LR_2g_m + C_2L_LL_RR_3\right) + s\left(C_2L_2R_2R_3g_m + C_2L_LR_2\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_LR_2 + C_LL_RR_2R_3g_m + C_LL_RR_3\right) + s\left(C_2R_2R_3 + L_LR_2g_m + L_LR_3\right)}
10.653 INVALID-ORDER-653 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_2 C_L L_2 L_L R_2 R_3 g_m + C_2 C_L L_2 L_L R_3\right) + s^3 \left(C_2 C_L L_2 R_3 R_L g_m + C_2 C_L L_2 R_3 R_L + C_2 C_L L_L R_2 R_3\right) + s^2 \left(C_2 C_L R_2 R_3 R_L + C_2 L_2 R_3 g_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 R_L + C_2 L_L R_3 R_L + C_2 L_L R_2 R_3 R_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 R_L + C_2 L_L R_3 R_L + C_2 L_L R_2 R_3 R_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 R_L + C_2 L_L R_2 R_3 R_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 R_L + C_2 L_L R_2 R_3 R_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 R_L + C_2 L_L R_2 R_3 R_m + C_L L_L R_3\right) + s \left(C_2 R_2 R_3 R_L + C_2 L_L R_3 R_m + C_L R_3 R_L + C_2 L_L R_3 R_m + C_L R_3 R_L + C_2 L_L R_3 R_m + C_L R_3 R
10.654 INVALID-ORDER-654 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
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10.655 INVALID-ORDER-655 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^4 \left(C_2 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 L_L L_R R_3 R_L + C_2 L_L R_2 R_2 R_L + C_2 L_L R
10.656 INVALID-ORDER-656 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.657 INVALID-ORDER-657 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                       H(s) = \frac{C_2R_2R_Ls + R_2R_Lg_m + R_L + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L\right)}{R_2q_m + s^3\left(C_2C_3L_2R_2R_Lg_m + C_2C_3L_2R_L\right) + s^2\left(C_2C_3R_2R_L + C_2L_2R_2g_m + C_2L_2\right) + s\left(C_2R_2 + C_3R_2R_Lg_m + C_3R_L\right) + 1}
10.658 INVALID-ORDER-658 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                          H(s) = \frac{C_2R_2s + R_2g_m + s^2\left(C_2L_2R_2g_m + C_2L_2\right) + 1}{s^3\left(C_2C_3L_2R_2g_m + C_2C_3L_2 + C_2C_LL_2R_2g_m + C_2C_LL_2\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2\right) + s\left(C_3R_2g_m + C_3 + C_LR_2g_m + C_L\right)}
10.659 INVALID-ORDER-659 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                H(s) = \frac{C_2 R_2 R_L s + R_2 R_L g_m + R_L + s^2 \left(C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L\right)}{R_2 g_m + s^3 \left(C_2 C_3 L_2 R_L g_m + C_2 C_2 L_2 R_L g_m + C_2 C_L L_2 R_L g_m + C_2 C_L L_2 R_L\right) + s^2 \left(C_2 C_3 R_2 R_L + C_2 C_L R_2 
10.660 INVALID-ORDER-660 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                            H(s) = \frac{R_2 g_m + s^3 \left(C_2 C_L L_2 R_2 R_L g_m + C_2 C_L L_2 R_L\right) + s^2 \left(C_2 C_L R_2 R_L + C_2 L_2 R_2 g_m + C_2 L_2\right) + s \left(C_2 R_2 + C_L R_2 R_L g_m + C_L R_L\right) + 1}{s^4 \left(C_2 C_3 C_L L_2 R_L g_m + C_2 C_3 L_2 R_L g_m + C_2 C_3 L_2 R_2 g_m + C_2 C_L L_2 R_2 g_m + C_2 C_L L_2\right) + s^2 \left(C_2 C_3 R_2 + C_2 C_L R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 C_L R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_2 R_L g_m + C_3 R_2\right) + s \left(C_3 R_2 R_2 R_2 R_2\right) 
10.661 INVALID-ORDER-661 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                                         H(s) = \frac{C_2C_LL_LR_2s^3 + C_2R_2s + R_2g_m + s^4\left(C_2C_LL_2L_LR_2g_m + C_2C_LL_2L_L\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 + C_LL_LR_2g_m + C_LL_L\right) + 1}{C_2C_3C_LL_LR_2s^4 + s^5\left(C_2C_3C_LL_2L_LR_2g_m + C_2C_3C_LL_2L_L\right) + s^3\left(C_2C_3L_2R_2g_m + C_2C_LL_2R_2g_m + C_2C_LL_2 + C_3C_LL_LR_2g_m + C_3C_LL_L\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2\right) + s\left(C_3R_2g_m + C_3C_LR_2g_m + C_3C_LL_L\right) + s^2\left(C_3C_LL_2L_LR_2g_m + C_3C_LL_LR_2g_m\right) + s^2\left(C_3C_LL_2L_LR_2g_m + C_3C_LL_LR_2g_m\right) + s^2\left(C_3C_LL_2L
10.662 INVALID-ORDER-662 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                H(s) = \frac{C_2L_LR_2s^2 + s^3\left(C_2L_2L_LR_2g_m + C_2L_2L_L\right) + s\left(L_LR_2g_m + L_L\right)}{C_2R_2s + R_2g_m + s^4\left(C_2C_3L_2L_LR_2g_m + C_2C_3L_2L_L + C_2C_LL_2L_LR_2g_m + C_2C_LL_2L_L\right) + s^3\left(C_2C_3L_LR_2 + C_2C_LL_LR_2\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 + C_3L_LR_2g_m + C_3L_L + C_LL_LR_2g_m + C_LL_L\right) + 1}
10.663 INVALID-ORDER-663 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_2 g_m + s^4 \left(C_2 C_L L_2 L_L R_2 g_m + C_2 C_L L_2 L_L\right) + s^3 \left(C_2 C_L L_2 R_L g_m + C_2 C_L L_2 R_L + C_2 C_L L_2 R_2 g_m + C_2 L_2 + C_L L_L R_2 g_m + C_L L_L\right) + s \left(C_2 R_2 + C_L R_2 R_L g_m + C_L R_L\right) + s \left(C_2 R_2 R_L + C_2 C_L L_2 R_L g_m + C_L L_L\right) + s^2 \left(C_2 C_L R_2 R_L + C_2 C_L L_2 R_2 g_m + C_2 C_L R_2 R_2 g_m + C
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H(s) = \frac{R_2 R_L g_m + R_L + s^4 \left(C_2 C_L L_2 L_L R_2 R_L g_m + C_2 C_L L_2 L_L R_2 R_L + C_2 L_2 L_L R_2 g_m + C_2 L_2 L_L \right) + s^2 \left(C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L + C_2 L_L R_2 R_L g_m + C_
10.666 INVALID-ORDER-666 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
H(s) = \frac{C_2C_LL_LR_2R_Ls^3 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^4\left(C_2C_LL_2L_LR_2R_Lg_m + C_2C_LL_2L_LR_L\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L + C_LL_LR_2R_Lg_m + C_LL_LR_2
10.667 INVALID-ORDER-667 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, R_L\right)
                                                                                                          H(s) = \frac{C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L + s^2\left(C_2L_2R_2R_3R_Lg_m + C_2L_2R_3R_L\right)}{R_2R_3g_m + R_2R_Lg_m + R_3 + R_L + s^3\left(C_2C_3L_2R_3R_Lg_m + C_2C_3L_2R_3R_L\right) + s^2\left(C_2C_3R_2R_3R_L + C_2L_2R_2R_3g_m + C_2L_2R_3R_L + C_2L_2R_3 + C_2L_2R_L\right) + s\left(C_2R_2R_3 + C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L\right)}
10.668 INVALID-ORDER-668 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                             H(s) = \frac{C_2R_2R_3s + R_2R_3g_m + R_3 + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3\right)}{R_2g_m + s^3\left(C_2C_3L_2R_2R_3g_m + C_2C_3L_2R_3 + C_2C_LL_2R_3g_m + C_2C_LL_2R_3\right) + s^2\left(C_2C_3R_2R_3 + C_2C_LR_2R_3 + C_2L_2R_2g_m + C_2L_2\right) + s\left(C_2R_2 + C_3R_2R_3g_m + C_3R_3 + C_LR_2R_3g_m + C_LR_3\right) + 1}
10.669 INVALID-ORDER-669 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
10.670 INVALID-ORDER-670 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_2 R_3 g_m + R_3 + s^3 \left(C_2 C_L L_2 R_3 R_L g_m + C_2 C_L L_2 R_3 R_L + C_2 L_2 R_3 g_m + C_2 L_2 R_3 R_L +
10.671 INVALID-ORDER-671 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C_{2}C_{L}L_{L}R_{2}R_{3}s^{3} + C_{2}R_{2}R_{3}s + R_{2}R_{3}g_{m} + R_{3} + s^{4}\left(C_{2}C_{L}L_{2}L_{L}R_{2}R_{3}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{3}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{3}g_{m} + C_{2}L_{2}R_{3} + C_{L}L_{L}R_{2}R_{3}g_{m} + C_{L}L_{L}R_{3}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{3}g_{m} + C_{2}L_{2}R_{3} + C_{L}L_{L}R_{2}R_{3}g_{m} + C_{L}L_{L}R_{3}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{3}g_{m} + C_{2}L_{2}R_{3} + C_{L}L_{L}R_{2}R_{3}g_{m} + C_{L}L_{L}R_{3}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m} + C_{L}L_{L}R_{3}\right) + s^{2}\left(C_{2}L_{2}R_{3}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{3}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{3}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{3}R_{3}g_{m} + C_{2}L_{2}R_{3}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{3}R_{3}g_{m}\right) + s^{2}\left(C_{2}L_{2}
                                     \frac{C_2C_LL_LR_2R_3s^3 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^4\left(C_2C_LL_2L_LR_3g_m + C_2C_LL_2L_LR_3\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3g_m + C
10.672 INVALID-ORDER-672 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C_2L_LR_2R_3s^2 + s^3(C_2L_2L_LR_2R_3g_m + C_2L_2L_LR_3) + s(L_LR_2R_3g_m + L_LR_3)
                                     \frac{C_2L_LR_2R_3s + s^-(C_2L_2L_LR_2R_3g_m + C_2L_2L_LR_3) + s(L_LR_2R_3g_m + L_LR_3)}{R_2R_3g_m + R_3 + s^4(C_2C_3L_2L_LR_3g_m + C_2L_2L_LR_3 + C_2C_LL_LR_2R_3g_m + C_2L_2L_LR_3) + s^2(C_2L_2R_2R_3g_m + C_2L_2L_R_3 + C_2L_LR_2R_3g_m + C_2L_LR_2R
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 $H(s) = \frac{C_2L_LR_2R_Ls^2 + s^3\left(C_2L_2L_LR_2R_Lg_m + C_2L_2L_LR_L\right) + s\left(L_LR_2R_Lg_m + L_LR_L\right)}{R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_LR_2R_Lg_m + C_2C_3L_2L_LR_2R_Lg_m + C_2L_2L_LR_2\right) + s^3\left(C_2C_3L_LR_2R_L + C_2L_LR_2R_Lg_m + C_2L_2L_LR_2\right) + s^3\left(C_2L_2R_LR_2R_L + C_2L_LR_2R_Lg_m + C_2L_2R_LR_2\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_LR_2R_L + C_2L_LR_2R_LR_2\right) + s^2\left(C_2L_2R_2R_LR_2R_L + C_2L_LR_2R_LR_2 + C_2L_LR_2R_LR_2\right) + s^2\left(C_2L_2R_2R_LR_2R_L + C_2L_LR_2R_LR_2 + C_2L_LR_2\right) + s^2\left(C_2L_2R_2R_LR_2R_L + C_2L_LR_2R_LR_2 + C_2L_LR_2\right) + s^2\left(C_2L_2R_2R_LR_2 + C_2L_LR_2R_L + C_2L_LR_2\right) + s^2\left(C_2L_2R_2R_LR_2 + C_2L_LR_2\right) + s^2\left(C_2L_2R_2R_2R_2 + C_2L_2R_2\right) + s^2\left(C_2L_2R_2R_2\right) + s$ 

10.664 INVALID-ORDER-664  $Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

10.665 INVALID-ORDER-665  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{1}{C_3s}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

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10.673 INVALID-ORDER-673 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                           H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_2 C_L L_2 L_L R_2 R_3 g_m + C_2 C_L L_2 L_L R_3\right) + s^3 \left(C_2 C_L L_2 R_2 R_3 R_L g_m + C_2 C_L L_2 R_3 R_L + C_2 C_L L_2 R_3 R_L + C_2 C_L L_2 R_3 R_L + C_2 C_2 C_L L_2 R_2 R_3 R_L + C_2 C_2 C_L L_2 R_2 R_3 R_L + C_2 C_3 C_L L_2 R_3 R_L + C_2 C_L L_2 R_2 R_2 R_L + C_2 C_L L_2 R_2 R_2
10.674 INVALID-ORDER-674 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   C_2L_LR_2R_3R_Ls^2 + s^3\left(C_2L_2L_LR_2R_3R_Lg_m + C_2L_2L_LR_3R_L\right) + s\left(L_LR_2R_3R_Lg_m + L_LR_3R_Lg_m\right)
10.675 INVALID-ORDER-675 Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
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$$H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^* \left(C_2 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 C_L L_2 L_L R_2 R_3 R_L + C_2 C_L L$$

$$\begin{aligned} \textbf{10.677} \quad \textbf{INVALID-ORDER-677} \ \ Z(s) &= \left( \infty, \ \frac{R_2\left( C_2L_2s^2 + 1 \right)}{C_2L_2s^2 + C_2R_2s + 1}, \ R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \infty, \ R_L \right) \\ & H(s) &= \frac{R_2R_Lg_m + R_L + s^3 \left( C_2C_3L_2R_2R_3R_Lg_m + C_2C_3L_2R_3R_L \right) + s^2 \left( C_2C_3R_2R_3R_L + C_2L_2R_2R_Lg_m + C_2L_2R_L \right) + s \left( C_2R_2R_L + C_3R_2R_3R_Lg_m + C_3R_3R_L \right) }{R_2g_m + s^3 \left( C_2C_3L_2R_2R_3g_m + C_2C_3L_2R_2R_2g_m + C_2C_3L_2R_3 + C_2C_3L_2R_3 + C_2C_3R_2R_3 + C_2C_3R_2R_2 + C_2L_2R_2g_m + C_2L_2 \right) + s \left( C_2R_2 + C_3R_2R_3g_m + C_3R_2R_2g_m + C_3R_3R_L \right) + 1} \end{aligned}$$

$$\begin{aligned} \textbf{10.678} \quad \textbf{INVALID-ORDER-678} \ \ Z(s) &= \left( \infty, \ \frac{R_2\left( C_2L_2s^2 + 1 \right)}{C_2L_2s^2 + C_2R_2s + 1}, \ R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{1}{C_Ls} \right) \\ & \qquad \qquad \\ H(s) &= \frac{R_2g_m + s^3 \left( C_2C_3L_2R_2g_m + C_2C_3L_2R_3 \right) + s^2 \left( C_2C_3R_2R_3 + C_2L_2R_2g_m + C_2L_2 \right) + s \left( C_2R_2 + C_3R_2R_3g_m + C_3R_3 \right) + 1}{s^4 \left( C_2C_3C_LL_2R_2g_m + C_2C_3L_2R_3 \right) + s^3 \left( C_2C_3C_LR_2R_3 + C_2C_3L_2R_2g_m + C_2C_3L_2 + C_2C_LL_2 \right) + s^2 \left( C_2C_3R_2 + C_2C_LR_2 + C_3C_LR_2 + C_3C_LR_3 \right) + s \left( C_3R_2g_m + C_3 + C_4R_2g_m + C_4C_1 \right)} \end{aligned}$$

10.679 INVALID-ORDER-679 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_2 R_L g_m + R_L + s^3 \left(C_2 C_3 L_2 R_2 R_3 R_L g_m + C_2 C_3 L_2 R_3 R_L + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L \right) + s \left(C_2 R_2 R_L + C_3 R_2 R_3 R_L g_m + C_3 R_3 R_L \right)}{R_2 g_m + s^4 \left(C_2 C_3 C_L L_2 R_3 R_L g_m + C_2 C_3 L_2 R_3 R_L + C_2 C_2 L_2 R_3 R_L \right) + s^2 \left(C_2 C_3 R_2 R_3 R_L + C_2 C_2 L_2 R_3 R_L + C_2 C_2 L_2 R_2 R_2 R_L + C_2 C_2 L_2 R_2 R_2 R_L + C_2 C_2 R_2 R_3 R_L + C_2 C_2 R_2 R_2 R_L + C_2 R_2 R_2 R$$

10.680 INVALID-ORDER-680 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_2 g_m + s^4 \left(C_2 C_3 C_L L_2 R_2 R_3 R_L g_m + C_2 C_3 C_L L_2 R_3 R_L g_m + C_2 C_3 L_L R_3 R_L\right) + s^3 \left(C_2 C_3 C_L R_2 R_3 R_L + C_2 C_3 L_2 R_3 g_m + C_2 C_L L_2 R_L g_m + C_2 C_L L_2 R_L\right) + s^2 \left(C_2 C_3 R_2 R_3 + C_2 C_L R_2 R_L + C_2 L_2 R_2 g_m + C_2 L_2 + C_3 C_L R_2 R_3 R_L g_m + C_3 C_L R_3 R_L\right) + s \left(C_2 R_2 + C_3 R_2 R_3 g_m + C_2 C_L L_2 R_2 R_L + C_2 C_L R$$

10.681 INVALID-ORDER-681 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_3 C_L L_2 L_L R_2 R_3 g_m + C_2 C_3 C_L L_L L_R A_3\right) + s^4 \left(C_2 C_3 C_L L_L R_2 R_3 + C_2 C_L L_L L_R A_2 R_3 + C_2 C_L L_L L_R A_2 R_3 R_3 + C_2 C_L L_L R_2 R_3 R_3 + C_2 C_L R_2 R$$

10.685 INVALID-ORDER-685  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

 $H(s) = \frac{R_2 R_L g_m + R_L + s^5 \left(C_2 C_3 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_2 L_L R_3 R_L\right) + s^4 \left(C_2 C_3 C_L L_L R_2 R_3 R_L + C_2 C_3 L_2 L_L R_2 R_2 R_L + C_2 C_3 L_2 L_L R_2 R_2 R_2 R_L + C_2 C_3 L_2 L_L R_2 R_2 R_L + C_2 C_3 L_2 L_L R_2 R_2 R_L +$ 

10.686 INVALID-ORDER-686  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, R_3 + \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

10.687 INVALID-ORDER-687  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{C_2C_3L_3R_2R_Ls^3 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_3R_2R_Lg_m + C_2C_3L_2L_3R_L\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L + C_3L_3R_2R_Lg_m + C_3L_3R_L\right)}{R_2g_m + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^3\left(C_2C_3L_2R_2R_Lg_m + C_2C_3L_2R_L + C_2C_3L_3R_2\right) + s^2\left(C_2C_3R_2R_L + C_2L_2R_2g_m + C_2L_2 + C_3L_3R_2g_m + C_3L_3\right) + s\left(C_2R_2 + C_3R_2R_Lg_m + C_3R_2R_Lg_$ 

10.688 INVALID-ORDER-688  $Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{C_2C_3L_3R_2s^3 + C_2R_2s + R_2g_m + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 + C_3L_3R_2g_m + C_3L_3\right) + 1}{C_2C_3C_LL_3R_2s^4 + s^5\left(C_2C_3C_LL_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^3\left(C_2C_3L_2R_2g_m + C_2C_3L_2 + C_2C_LL_2R_2g_m + C_3C_LL_3R_2g_m + C_3C_LL_3\right) + s^2\left(C_2C_3R_2 + C_2C_LR_2\right) + s\left(C_3R_2g_m + C_3L_3\right) + s^2\left(C_3C_3C_LL_3R_2g_m + C_3C_LL_3R_2g_m + C_3C_LL_3\right) + s^2\left(C_3C_3C_LL_3R_2g_m + C_3C_LL_3\right) + s^2\left(C_3C_3C_LL_3R_3g_m + C_3C$ 

10.689 INVALID-ORDER-689  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$ 

 $H(s) = \frac{C_2C_3L_3R_2R_Ls^3 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_3R_2R_Lg_m + C_2C_3L_2L_3R_L\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L + C_3L_3R_2R_Lg_m + C_3L_3R_L\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_L + C_3L_3R_2R_Lg_m + C_2L_2R_L\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_Lg_m + C_2L_2R_L$ 

10.690 INVALID-ORDER-690  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$ 

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_L g_m + C_2 C_3 C_L L_2 L_3 R_L\right) + s^4 \left(C_2 C_3 C_L L_3 R_2 R_L + C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_3 L_2 L_3\right) + s^3 \left(C_2 C_3 L_3 R_2 + C_2 C_L L_2 R_L g_m + C_2 C_L L_2 R_L g_m + C_3 C_L L_3 R_L\right) + s^2 \left(C_2 C_L R_2 R_L + C_2 L_2 R_2 g_m + C_2 L_2 R_2 g_m + C_2 L_2 R_2 R_L g_m + C_2 L_2 R_L g_m +$ 

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10.691 INVALID-ORDER-691 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                      \frac{C_{2}C_{3}C_{L}L_{3}L_{L}R_{2}s^{5} + C_{2}R_{2}s + R_{2}g_{m} + s^{6}\left(C_{2}C_{3}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{3}L_{L}L_{3}L_{L}\right) + s^{4}\left(C_{2}C_{3}L_{2}L_{3}L_{L}R_{2}g_{m} + C_{2}C_{L}L_{2}L_{L}R_{2}g_{m} + C_{2
10.692 INVALID-ORDER-692 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{C_2C_3L_3L_LR_2s^4 + C_2L_LR_2s^2 + s^5\left(C_2C_3L_2L_3L_LR_2g_m + C_2C_3L_2L_LR_2g_m + C_2L_2L_L + C_3L_3L_LR_2g_m + C_3L_3L_L\right) + s^4\left(C_2C_3L_LL_2L_2L_LR_2g_m + C_2C_3L_2L_LR_2g_m + C_2C_3L_2L_2R_2g_m + C_2C_3L_2L_2R_2g_m + C_2C_3L_2R_2g_m + C_2C_3L_2R_2g_m + C_2C_3L_2R_2g_m + C_2C_3L_2R_2g_m + C_2C_3L_2R_2g_m + C_2C_3L_2R_2g_m + C
10.693 INVALID-ORDER-693 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_3 L_L\right) + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_L g_m + C_2 C_3 C_L L_2 L_3 R_L + C_2 C_3 C_L L_3 L_L R_2\right) + s^4 \left(C_2 C_3 C_L L_3 R_2 R_L + C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_L L_2 L_L R_2 g_m + C_2 C_3 C_L L_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_L R_2 R
10.694 INVALID-ORDER-694 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C_2C_3L_3L_LR_2R_Ls^4 + C_2L_LR_2R_Ls^2 + s^5(C_2C_3L_2L_3L_LR_2R_2R_Ls^2)
                                       \frac{C_2C_3L_3L_LR_2R_Lg_m + C_2C_3L_2L_3L_LR_2R_Lg_m + C_2C_3L_2L_2R_LR_2R_Lg_m + C_2C_3L_2R_LR_2R_Lg_m + C_2C_3L_2R_
10.695 INVALID-ORDER-695 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
H(s) = \frac{R_2 R_L g_m + R_L + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_1 R_L R_L \right) + s^5 \left(C_2 C_3 C_L L_3 L_L R_2 R_L + C_2 C_3 L_2 L_3 L_L R_2 g_m + C_2 C_3 L_2 L_3 R_L R_2 + C_2 C_3 L_2 L_3 R_L R_2 + C_2 C_2 L_2 L_L R_2 R_L g_m + C_2 C_2 L_2 L_L R_2 R_L g_m + C_2 C_3 L_2 L_2 L_L R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 L_2 R_2 R_L g_m + C_2 C_3 L_2 L_2 R_L g_m + C_2 C_3 L_2 L_2 R_2 
10.696 INVALID-ORDER-696 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + \frac{1}{C_3s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
H(s) = \frac{C_2C_3C_LL_3L_LR_2R_Ls^5 + C_2R_2R_Ls + R_2R_Lg_m + R_L + s^6\left(C_2C_3C_LL_2L_3L_LR_2R_Lg_m + C_2C_3C_LL_2L_3L_LR_L\right) + s^4\left(C_2C_3C_LL_2L_3L_LR_2R_Lg_m + C_2C_3C_LL_2L_3L_LR_2R_Lg_m + C_2C_3C_LL_2L_3R_LR_2R_Lg_m + C_2C_3C_LL_2L_2R_Lg_m + C_2C_3C_LL_2R_2R_Lg_m + C_2C_3C_LL_2R_LR_2R_Lg_m + C_2C_3C_LL_2R_2R_Lg_m + C_2C_3C_L
10.697 INVALID-ORDER-697 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, R_L\right)
                                                                                                  H(s) = \frac{C_2L_3R_2R_Ls^2 + s^3\left(C_2L_2L_3R_2R_Lg_m + C_2L_2L_3R_L\right) + s\left(L_3R_2R_Lg_m + L_3R_L\right)}{R_2R_Lg_m + R_L + s^4\left(C_2C_3L_2L_3R_2R_Lg_m + C_2C_3L_2L_3R_L\right) + s^3\left(C_2C_3L_3R_2R_L + C_2L_2L_3R_2g_m + C_2L_2L_3\right) + s^2\left(C_2L_2R_2R_Lg_m + C_2L_2R_2 + C_3L_3R_2R_Lg_m + C_3L_3R_L\right) + s\left(C_2R_2R_L + L_3R_2g_m + L_3R_L\right)}
10.698 INVALID-ORDER-698 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls}\right)
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 $\textbf{10.699 INVALID-ORDER-699} \ Z(s) = \left( \infty, \ \frac{R_2\left( C_2L_2s^2 + 1 \right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \frac{L_3s}{C_3L_3s^2 + 1}, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls + 1} \right) \\ H(s) = \frac{C_2L_3R_2R_Ls^2 + s^3\left( C_2L_2L_3R_2R_Lg_m + C_2L_2L_3R_L \right) + s\left( L_3R_2R_Lg_m + L_3R_L \right)}{R_2R_Lg_m + R_L + s^4\left( C_2C_3L_2L_3R_2R_Lg_m + C_2C_LL_2L_3R_2R_Lg_m + C_2C_LL_2L_3R_2 + C_2C_LL_2L_2R_2 + C_2C_LL_2L_2R_2 + C_2C_LL_2L_2R_2 + C_2C_LL_2L_2R_2 + C_2C_LL_2L_2R_2$ 

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10.700 INVALID-ORDER-700 Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{3}\left(C_{2}C_{L}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}g_{m}+C_{2}L_{2}L_{3}\right)+s^{2}\left(C_{2}L_{3}R_{2}+C_{L}L_{3}R_{2}R_{L}g_{m}+C_{L}L_{3}R_{L}\right)+s\left(L_{3}R_{2}g_{m}+L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L_{3}R_{2}R_{L}+C_{2}L
H(s) = \frac{s^4 \left( C_2 C_L L_2 L_3 R_2 R_L g_m + C_2 C_L L_2 L_3 R_2 R_L + C_2 L_2 L_3 R_2 g_m + C_2 L_2 L_3 \right) + s^2 \left( C_2 L_3 R_2 + C_L L_3 R_2 R_L g_m + C_L L_3 R_L \right) + s \left( L_3 R_2 g_m + C_L L_3 R_2 R_L g_m + C_L L_
10.701 INVALID-ORDER-701 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_LL_3L_LR_2s^4 + C_2L_3R_2s^2 + s^5\left(C_2C_LL_2L_3L_LR_2g_m + C_2C_LL_2L_3L_L\right) + s^3\left(C_2L_2L_3R_2g_m + C_2L_2L_3 + C_LL_3L_LR_2g_m + C_LL_3L_L\right) + s\left(L_3R_2g_m + C_LL_3L_LR_2g_m + C_LL_3L_LR_2g_
10.702 INVALID-ORDER-702 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{C_2L_3L_LR_2s^2 + s^3\left(C_2L_2L_3L_LR_2g_m + C_2L_2L_3L_L\right) + s\left(L_3L_LR_2g_m + L_3L_L\right)}{L_3R_2g_m + L_3 + L_LR_2g_m + L_L + s^4\left(C_2C_3L_2L_3L_LR_2g_m + C_2C_3L_2L_3L_LR_2g_m + C_2C_LL_3L_L\right) + s^3\left(C_2C_3L_3L_LR_2g_m + C_2L_2L_3R_2g_m + C_2L_2R_2g_m + C_2L_
10.703 INVALID-ORDER-703 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 s^{5}\left(C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}g_{m}+C_{2}C_{L}L_{2}L_{3}L_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{2}R_{L}g_{m}+C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{3}\left(C_{2}C_{L}L_{2}L_{3}L_{L}R_{2}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{3}L_{L}R_{2}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_{3}R_{L}+C_{2}C_{L}L_{2}L_{3}R_{L}\right)+s^{4}\left(C_{2}C_{L}L_{2}L_
                                                      \frac{s^{3} \left(C_{2} C_{L} L_{2} L_{3} L_{L} R_{2} g_{m}+C_{2} C_{L} L_{2} L_{3} R_{L} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} R_{L} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} R_{L} +C_{2} C_{L} L_{2} L_{3} R_{L} R_{L} +C_{2} C_{3} L_{L} L_{2} L_{3} R_{L} R_{L} +C_{2} C_{3} L_{L} L_{2} L_{2} L_{2} R_{L} R_{L} +C_{2} C_{3} L_{L} L_{2} L_{2} L_{2} R_{L} R_{L} R_{L} +C_{2} C_{L} L_{2} L_{2} L_{2} R_{L} R_{L} R_{L} +C_{2} C_{L} L_{2} L_{2} L_{2} R_{L} R_{L} R_{L} R_{L} +C_{2} C_{L} L_{2} L_{2} L_{2} R_{L} R_
10.704 INVALID-ORDER-704 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C_{2}L_{3}L_{L}R_{2}R_{L}s^{2} + s^{3}\left(C_{2}L_{2}L_{3}L_{L}R_{2}R_{L}g_{m} + C_{2}L_{2}L_{3}L_{L}R_{L}\right) + s\left(L_{3}L_{L}R_{2}R_{L}g_{m} + L_{3}L_{L}R_{L}\right)
H(s) = \frac{C_2L_3L_LK_2K_LS^- + s^-(C_2L_2L_3L_LK_2) + s(L_3L_LK_2) + s(L_3L_LK_2
10.705 INVALID-ORDER-705 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                                                     \frac{s^{5} \left(C_{2} C_{L} L_{2} L_{3} L_{L} R_{2} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} L_{L} R_{2}\right)+s^{4} \left(C_{2} C_{L} L_{3} L_{L} R_{2} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} L_{L} R_{2} R_{L} g_{m}+C_{2} C_{L} L_{2} L_{3} L_{L} R_{2} R_{L} g_{m}+C_{2} C_{3} L_{2} L_
10.706 INVALID-ORDER-706 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C_2C_LL_3L_LR_2R_Ls^4 + C_2L_3R_2R_Ls^2 + s^5(C_2C_LL_2L_3L_LR_2R_2R_Ls^2)
H(s) = \frac{C_2C_LL_3L_LR_2R_Lg_m + C_2C_3L_2L_3L_LR_2R_Lg_m + C_2C_LL_3L_LR_2R_Lg_m + C_2C_LL_2L_3L_LR_2R_Lg_m + C_2C_LL_2L_2R_Lg_m + C_2C_LL_2R_Lg_m + C
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 $H(s) = \frac{R_2g_m + s^4 \left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2L_3\right) + s^3 \left(C_2C_3L_2R_3g_m + C_2C_3L_2R_3 + C_2C_3L_2R_3 + C_2C_3L_2R_3 + C_2L_2R_2g_m + C_2L_2 + C_3L_3R_2g_m + C_3L_3\right) + s \left(C_2R_2 + C_3R_2R_3g_m + C_3R_3\right) + 1}{s^5 \left(C_2C_3C_LL_2L_3R_2g_m + C_2C_3L_LL_2R_3g_m + C_2C_3L_2R_3g_m + C_2C_3L_2R_3g_m + C_2C_3L_2R_3g_m + C_2C_3L_2R_3g_m + C_2C_3L_2R_3g_m +$ 

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

10.707 INVALID-ORDER-707  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L\right)$ 

10.708 INVALID-ORDER-708  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls}\right)$ 

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10.709 INVALID-ORDER-709 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
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 $H(s) = \frac{R_2 R_L g_m + R_L + s^4 \left( C_2 C_3 L_2 L_3 R_2 R_L g_m + C_2 C_3 L_2 L_3 R_L \right) + s^3 \left( C_2 C_3 L_2 R_2 R_3 R_L g_m + C_2 C_3 L_2 R_3 R_L + C_2 C_3 L_2 R_2 R_L + C_$ 

10.710 INVALID-ORDER-710 
$$Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_L g_m + C_2 C_3 C_L L_2 L_3 R_L\right) + s^4 \left(C_2 C_3 C_L L_2 R_3 R_L g_m + C_2 C_3 C_L L_2 R_3 R_L + C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_3 L_2 R_3 R_L + C_2 C_3 L_2 R_2 R_L + C_2 C_3 L_2 R_L + C_2 C_3 L_2 R_2 R_L + C_2 C_3 L_2 R_L + C_2 C_3 L$ 

10.711 INVALID-ORDER-711 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_L R_2 g_m + C_2 C_3 C_L L_2 L_L R_2 g_m + C_2 C_3 L_L L_L R_2 g_m + C_2 C_3 C_L L_2 L_L R_2 g_m + C_2 C_3 L_L L_L R_2 g_m + C_2 C_3$ 

10.712 INVALID-ORDER-712 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.713 INVALID-ORDER-713 
$$Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_3 L_L\right) + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_L g_m + C_2 C_3 C_L L_2 L_2 R_3 R_L + C_2 C_3 C_L L_2 L_2 R_3 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_2 R_L g_m + C_2 C_3 C_L L_2 R_2 R_L$ 

10.714 INVALID-ORDER-714 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{1}{R_2 R_L g_m + R_L + s^6 \left( C_2 C_3 C_L L_2 L_3 L_L R_2 R_L g_m + C_2 C_3 C_L L_2 L_1 R_2 R_1 R_L + C_2 C_3 C_L L_2 L_2 R_3 R_L g_m + C_2 C_3 L_2 L_3 L_L R_2 R_L + C_2 C_3 L_2 L_2 L_2 R_2 R_L + C_2 C_3 L_2 L_3 L_L R_2 R_L + C_2 C_3 L_2 L_3 L_L R_2 R_L + C_2 C_3 L_2 L_2 L_2 R_2 R_L + C_2 C_3 L_2 L_2 L_2 R_2 R_L + C_2 C_3 L_2 L_2 R$ 

10.715 INVALID-ORDER-715 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{R_2 R_L g_m + R_L + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 R_L g_m + C_2 C_3 C_L L_2 L_L R_2 R_3 R_L g_m + C_2 C_3 C_L L_2 L_L R_3 R_L + C_2 C_3 C_L L_2 L_L R_3 R_L + C_2 C_3 C_L L_3 L_L R_2 g_m + C_2 C_3 L_2 L_3 L_L R_2 g_m + C_2 C_3 L_2 L_2 R_3 R_L + C_2 C_3 L_2 L_2 R_2 R_2 g_m + C_2 C_3 L_2 L_2 R_2 R_2 g_m + C_2 C_3 C_L L_2 R_2 R_2 g_m + C_2 C_3 C_L L_2 R_2 R_2 g_m + C_2 C_3 C_L L_2 R_2 R_2 g_m + C_2 C$ 

10.716 INVALID-ORDER-716 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

10.717 INVALID-ORDER-717 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, R_L\right)$$

```
H(s) = \frac{C_2L_3R_2R_3s^2 + s^3\left(C_2L_2L_3R_2g_m + C_2L_2L_3R_3\right) + s\left(L_3R_2g_m + L_3R_3\right)}{R_2R_3g_m + R_3 + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_4L_2L_3R_3\right) + s^3\left(C_2C_3L_3R_2R_3g_m + C_2L_2L_3R_2g_m + C_2L_2L_3R_3\right) + s^2\left(C_2L_2R_3g_m + C_2L_2R_3g_m + C_2L_2R
10.719 INVALID-ORDER-719 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C_2L_3R_2R_3R_Ls^2 + s^3(C_2L_2L_3R_2R_3R_Lg_m + C_2L_2L_3R_3R_L) + s(L_3R_2R_3R_Lg_m + L_3R_3R_L)
H(s) = \frac{C_2L_3R_2R_3R_Ls^2 + s^3\left(C_2L_2L_3R_2R_3R_Lg_m + C_2L_2L_3R_3R_L\right) + s\left(L_3R_2R_3R_Lg_m + L_3R_3R_L\right)}{R_2R_3R_Lg_m + R_3R_L + s^4\left(C_2C_3L_2L_3R_2R_3R_Lg_m + C_2C_LL_2L_3R_3R_L\right) + s^3\left(C_2C_3L_3R_2R_3R_L + C_2C_LL_3R_3R_L\right) + s^3\left(C_2C_3L_3R_3R_L + C_2C_LL_3R_3R_L\right) + s^3\left(C_2C_3L_3R_3R_L\right) + s^3\left(C_
10.720 INVALID-ORDER-720 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{s^4 \left( C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_3 R_L g_m + C_2 C_L L_2 L_3 R_3 R_L \right) + s^3 \left( C_2 C_L L_2 L_3 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 R_2 R_2 g_m + C_2 C_L L_2 L_3 R_2 g_m + C_2 C_L L_2 L_3 R_
10.721 INVALID-ORDER-721 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, 1 \right)
                              10.722 INVALID-ORDER-722 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{C_2L_3L_LR_2R_3s^2 + s^3\left(C_2L_2L_3L_LR_2R_3g_m + C_2L_2L_3L_LR_3\right) + s\left(L_3L_LR_2R_3g_m + L_3L_LR_3\right)}{L_3R_2R_3g_m + L_3R_3 + L_LR_2R_3g_m + L_LR_3 + s^4\left(C_2C_3L_2L_3L_LR_3 + C_2C_LL_2L_3L_LR_3\right) + s^3\left(C_2C_3L_3L_LR_2R_3 + C_2L_2L_3L_LR_3\right) + s^3\left(C_2C_3L_3L_LR_3 + C_2L_2L_3L_LR_3\right) + s^3\left(C_2C_3
10.723 INVALID-ORDER-723 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
10.724 INVALID-ORDER-724 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{C_2 L_3 L_L R_2 R_3 R_L g_m + L_3 R_3 R_L + L_L R_2 R_3 R_L g_m + L_L R_3 R_L + s^4 \left(C_2 C_3 L_2 L_3 L_L R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_2 R_3 R_L g_m + C_2 C_L L_2 L_3 L_L R_2 R_3 R_L + C_2 C_L L_3 L_L R_3 R_L + C_2 C_L
10.725 INVALID-ORDER-725 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)
                              10.726 INVALID-ORDER-726 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
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10.718 INVALID-ORDER-718  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$ 

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10.727 INVALID-ORDER-727 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ R_L\right)
```

10.728 INVALID-ORDER-728 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 R_3 g_m + R_3 + s^4 \left(C_2 C_3 L_2 L_3 R_2 g_m + C_2 C_3 L_2 L_3 R_2 g_m + C_2 L_2 L_3\right) + s^2 \left(C_2 L_2 R_3 g_m + C_2 L_2 R$ 

10.729 INVALID-ORDER-729 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)$$

10.730 INVALID-ORDER-730 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 R_3 g_m + R_3 + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_3 L_L L_2 R_3 R_L g_m + C_2 C_3 L_L L_2 R_3 R_L g_m + C_2 C_3 L_L L_2 R_3 R_L + C_2 C_3 L_L L_2 R_2 R_3 R_L + C_2 C_3 L_L R_2 R_2 R_2 R_L + C_2 C_3 L_L R_2 R_2 R_2 R_L + C_2 C_3 L_L R_2$ 

10.731 INVALID-ORDER-731 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 R_3 g_m + R_3 + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_1 L_1 R_2 R_3 g_m + C_2 C_L L_2 L_1 L_1 R_2 R_3 + C_2 C_L L_2 L_1 L_1 R_2 R_3 + C_2 C_L L_2 L_1 L_1 R_2 R_3 g_m + C_2 C_2 L_2 L_2 L_2 R_2 R_3 g_m + C_2 C_2 L_2 L_2 R_2 R_3 R_2 R_3 R_2 R_3 R_2 R_3 R_2 R_3 R_2 R_3 R_3 R$ 

10.732 INVALID-ORDER-732 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.733 INVALID-ORDER-733 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_2 R_3 g_m + R_3 + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_2 L_3 L_L R_3\right) + s^5 \left(C_2 C_3 C_L L_2 L_3 R_2 R_3 R_L g_m + C_2 C_3 C_L L_2 L_3 R_2 R_3 R_L + C_2 C_3 C_L L_2 L_3 L_L R_2 g_m + C_2 C_L L_2 L_3 L_L R_2 g_m + C_2 C_3 C_L L_2 L_3 R_2 R_3 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_2 R_L + C_2 C_3 C_L L_2 L_3 R_2 R_L + C_2 C_3 C_L L_2 L_3$ 

10.734 INVALID-ORDER-734 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

10.735 INVALID-ORDER-735 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{R_2 R_3 R_L g_m + R_3 R_L + s^6 \left(C_2 C_3 C_L L_2 L_3 L_L R_2 R_3 R_L g_m + C_2 C_3 L_L L_3 L_L R_2 R_3 g_m + C_2 C_3 L_2 L_3 L_L R_2 R_3 g_m + C_2 C_3 L_2 L_3 L_L R_3 + C_2 C_L L_2 L_3 L_L R_2 R_2 g_m + C_2 C_3 L_2 L_3 L_L R_2 R_3 g_m + C_2 C_3 L_2 L_3 L_L R_2 R_2 g_m + C_2 C_3 L_2 L_3 L_L R_2 R_3 g_m + C_2 C_3 L_2 L_3 L_L R_2 R_2 g_m + C_2 C_3 L_2 L_3 L_L R_2 R_3 g$ 

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10.737 INVALID-ORDER-737 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ R_L\right)
H(s) = \frac{C_2C_3L_3R_2R_3R_Ls^3 + C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_L + s^4\left(C_2C_3L_2L_3R_3R_Lg_m + C_2C_3L_2L_3R_3R_L\right) + s^2\left(C_2L_2R_2R_3R_Lg_m + C_2L_2R_3R_L + C_3L_3R_2R_3R_Lg_m + C_2L_2R_3R_L + C_3L_3R_2R_3R_Lg_m + C_2L_3R_3R_Lg_m + C_2
10.738 INVALID-ORDER-738 Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_3L_3R_2R_3s^3 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^4\left(C_2C_3L_2L_3R_2R_3g_m + C_2C_3L_2L_3R_3\right) + s^2\left(C_2L_2R_2R_3g_m + C_2L_2R_3 + C_3L_3R_2R_3g_m + C_3L_3R_3\right)}{R_2g_m + s^5\left(C_2C_3C_LL_2L_3R_2g_m + C_2C_3L_2L_3R_3\right) + s^4\left(C_2C_3L_2L_3R_2g_m + C_2C_3L_2R_3g_m + C_
10.739 INVALID-ORDER-739 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C_2C_3L_3R_2R_3R_Ls^3 + C_2R_2R_3R_Ls + R_2R_3R_Lg_m + R_3R_Ls
                                    \frac{ \cup_{2} \cup_{3} \bot_{3} \pi_{2} \pi_{3} \pi_{L} s^{-} + \cup_{2} \pi_{2} \pi_{3} \pi_{L} s + \pi_{2} \pi_{2} \pi_{L} s + \pi_{2} \pi_{L} s
10.740 INVALID-ORDER-740 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10.741 INVALID-ORDER-741 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_3C_LL_3L_LR_2R_3s^5 + C_2R_2R_3s + R_2R_3g_m + R_3 + s^6\left(C_2C_3C_LL_2L_3L_LR_2R_3g_m + C_2C_3C_LL_2L_3L_LR_3\right) + s^4\left(C_2C_3C_LL_2L_3L_LR_2R_3g_m + C_2C_3C_LL_2L_3L_LR_3\right) + s^4\left(C_2C_3C_LL_3L_LR_2R_3g_m + C_2C_3C_LL_2L_3R_3\right) + s^4\left(C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_2R_3R_3 + C_2C_3C_LL_3L_3R_3R_3 + C_2C_3C_LL_3L
10.742 INVALID-ORDER-742 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3(C_3L_3s^2+1)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C_2C_3L_3L_LR_2R_3s^4 + C_2L_LR_2R_3s^2 + s^5(C_2C_3L_2L_3L_LR_2R_3s^2)
H(s) = \frac{C_2C_3L_3L_LR_2R_3s^2 + C_2L_LR_2R_3s^2 + C_2L_LR_2R_3s^2 + S^3\left(C_2C_3L_2L_3L_LR_2R_3s^2 + S^3\left(C_2C_3L_2L_3L_LR_2R_3s^2 + C_2L_LR_2R_3s^2 + C_2L_LR_2R_3s^2 + S^3\left(C_2C_3L_2L_3L_LR_2R_3s^2 + C_2L_LR_2R_3s^2 + C_2L_LR
10.743 INVALID-ORDER-743 Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \frac{R_2R_3g_m + R_3 + s^{\circ}\left(C_2C_3C_LL_2L_3L_LR_2g_m + C_2C_3C_LL_2L_3L_LR_3g_m + C_2C_3C_LL_2L_3L_LR_3\right) + s^{\circ}\left(C_2C_3C_LL_2L_3L_LR_3g_m + C_2C_3C_LL_2L_3R_2R_3g_m + C_2C_3C_LL_2L_3R_3 + C_2C_3C
10.744 INVALID-ORDER-744 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
```

 $H(s) = \frac{1}{R_2 R_3 g_m + R_2 R_L g_m + R_3 + R_L + s^6 \left( C_2 C_3 C_L L_2 L_3 L_L R_2 R_3 g_m + C_2 C_3 C_L L_2 L_3 L_L R_3 + C_2 C_3 C_L L_3 L_L R$ 

10.736 INVALID-ORDER-736  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$ 

10.745 INVALID-ORDER-745  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{C_LL_LR_Ls^2+L_Ls+R_L}{C_LL_Ls^2+1}\right)$ 

10.746 INVALID-ORDER-746 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

## 11 PolynomialError