### Filter Summary Report: TIA,simple,Z1,Z2,ZL

### Generated by MacAnalog-Symbolix

### December 10, 2024

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10.9 INVALID-ORDER-9 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$
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$10.11\text{INVALID-ORDER-11 } Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \dots $
$10.12 \text{INVALID-ORDER-} 12 \ Z(s) = \left(R_1, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
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$10.17 \text{INVALID-ORDER-17 } Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) $
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$10.24 \text{INVALID-ORDER-} 24 \ Z(s) = \left(R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $
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$10.27 \text{INVALID-ORDER-27 } Z(s) = \left(R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $
$10.28 \text{INVALID-ORDER-} 28 \ Z(s) = \left(R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
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$10.35 \text{INVALID-ORDER-} 35 \ Z(s) = \left(R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $
$10.36 \text{INVALID-ORDER-} 36 \ Z(s) = \left(R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \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(R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
10.38INVALID-ORDER-38 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
$10.39 \text{INVALID-ORDER-39 } Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right) $
$10.40 \text{INVALID-ORDER-} 40 \ Z(s) = \left(R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right) $
$10.41\text{INVALID-ORDER-41 } Z(s) = \left(R_1, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right) $
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$10.43\text{INVALID-ORDER-}43\ Z(s) = \left(R_1,\ L_2s + R_2 + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)' \qquad . $
$10.44 \text{INVALID-ORDER-} 44 \ Z(s) = \left(R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $
$10.45 \text{INVALID-ORDER-} 45 \ Z(s) = \left(R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $
$10.46 \text{INVALID-ORDER-} 46 \ Z(s) = \left(R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $

$10.47 \text{INVALID-ORDER-47 } Z(s) = \left( R_1, \ L_2 s + R_2 + \frac{1}{C_2 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) $	7
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$10.52 \text{INVALID-ORDER-} 52 \ Z(s) = \left( R_1, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	7
10.53INVALID-ORDER-53 $Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$	7
$10.54 \text{INVALID-ORDER-54 } Z(s) = \left( R_1, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $	3
$10.55 \text{INVALID-ORDER-} 55 \ Z(s) = \left(R_1, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) $	3
$10.56 \text{INVALID-ORDER-} 56 \ Z(s) = \left( R_1, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \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) $	3
10.57INVALID-ORDER-57 $Z(s) = \left(R_1, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	3
$10.58 \text{INVALID-ORDER-} 58 \ Z(s) = \left( R_1, \ \frac{R_2\left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right)  \dots $	3
$10.59INVALID-ORDER-59 \ Z(s) = \left(R_1, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right) $	3
$10.60 \text{INVALID-ORDER-} 60 \ Z(s) = \left( R_1, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) $	3
10.61INVALID-ORDER-61 $Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$ .	3
$10.62 \text{INVALID-ORDER-62 } Z(s) = \left( R_1, \ \frac{R_2\left(C_2L_2s^2 + 1\right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls} \right) $	3
$10.63 \text{INVALID-ORDER-} 63 \ Z(s) = \left(R_1, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ \dots $	)
$10.64 \text{INVALID-ORDER-} 64 \ Z(s) = \left( R_1, \ \frac{R_2\left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $	)
$10.65 \text{INVALID-ORDER-} 65 \ Z(s) = \left(R_1, \ \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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) $	Э
$10.66 \text{INVALID-ORDER-} 66 \ Z(s) = (L_1 s, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L) \qquad \qquad$	)
$10.67 \text{INVALID-ORDER-} 67 \ Z(s) = \left(L_1 s, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	
10.68INVALID-ORDER-68 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	
10.69INVALID-ORDER-69 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	
10.70INVALID-ORDER-70 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	
$10.71\text{INVALID-ORDER-71 } Z(s) = \left(L_1 s, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	
$10.72 \text{INVALID-ORDER-72 } Z(s) = \left(L_1 s, \ R_2, \ \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) $	
$10.73 \text{INVALID-ORDER-} 73 \ Z(s) = \left(L_1 s, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right) \left(L_1 s, \ \frac{1}{C_2 s}, \ \infty, \ $	
$10.74 \text{INVALID-ORDER-74 } Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \dots \dots$	)
$10.75 \text{INVALID-ORDER-} 75 \ Z(s) = \left(L_1 s, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)' \qquad . $	
$10.76 \text{INVALID-ORDER-} 76 \ Z(s) = \left(L_1 s, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $	
$10.77 \text{INVALID-ORDER-} 77 \ Z(s) = \left(L_1 s, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $	J
$10.78 \text{INVALID-ORDER-} 78 \ Z(s) = \left(L_1 s, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	
10.79INVALID-ORDER-79 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	
$10.80 \text{INVALID-ORDER-80 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right) $	
10.81INVALID-ORDER-81 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s+1}\right)$	
$10.82 \text{INVALID-ORDER-82 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$	1
$10.83 \text{INVALID-ORDER-83 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) $	1

$10.84 \text{INVALID-ORDER-84 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$	L
$10.85 \text{INVALID-ORDER-85 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) $	L
$10.86 \text{INVALID-ORDER-86 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \dots \dots$	L
$10.87 \text{INVALID-ORDER-87 } Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	L
10.88INVALID-ORDER-88 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	L
10.89INVALID-ORDER-89 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ .	L
$10.90 \text{INVALID-ORDER-90 } Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	2
$10.91\text{INVALID-ORDER-91 } Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $	2
$10.92 \text{INVALID-ORDER-92 } Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $	2
$10.93\text{INVALID-ORDER-93} \ Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	2
$10.94 \text{INVALID-ORDER-} 94 \ Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	2
10.95INVALID-ORDER-95 $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	2
$10.96 \text{INVALID-ORDER-} 96 \ Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right) $	2
10.97INVALID-ORDER-97 $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$	2
$10.98INVALID-ORDER-98\ Z(s) = \left(L_1s,\ L_2s + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls+1}\right) \qquad . \qquad $	2
$10.99 \text{INVALID-ORDER-} 99 \ Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $	}
$10.10 \text{ DNVALID-ORDER-} 100 \ Z(s) = \left( L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) $	}
10.10INVALID-ORDER-101 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	3
$10.102\text{NVALID-ORDER-}102\ Z(s) = \left(L_1s,\ L_2s + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ L_Ls + R_L + \frac{1}{C_Ls}\right) $	}
$10.10 \text{ BNVALID-ORDER-} 103 \ Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $	}
$10.104\text{NVALID-ORDER-}104\ Z(s) = \left(L_1s,\ L_2s + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	}
$10.10 \text{INVALID-ORDER-} 105 \ Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 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) $	\$
$10.10 \text{ (INVALID-ORDER-106 } Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right) $	}
$10.10 \text{INVALID-ORDER-} 107 \ Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $	
$10.10\$\text{NVALID-ORDER-}108\ Z(s) = \left(L_1s,\ L_2s + R_2 + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls+1}\right) \qquad . \qquad $	
10.10 <b>9</b> NVALID-ORDER-109 $Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	
$10.11 \text{ @NVALID-ORDER-110 } Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	
10.11INVALID-ORDER-111 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ .	
$10.112\text{NVALID-ORDER-}112\ Z(s) = \left(L_1s,\ L_2s + R_2 + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ L_Ls + R_L + \frac{1}{C_Ls}\right) $	Ė
$10.11 \text{\&NVALID-ORDER-} 113 \ Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	Ł
$10.114\text{NVALID-ORDER-}114 \ Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	
10.11 INVALID-ORDER-115 $Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	
10.116NVALID-ORDER-116 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$	Į
$10.11\text{ INVALID-ORDER-}117 \ Z(s) = \left(L_1 s, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $	j
10.11 NVALID-ORDER-118 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	
10.11 <b>2</b> NVALID-ORDER-119 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	
10.12 <b>0</b> NVALID-ORDER-120 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	
$10.12\text{INVALID-ORDER-}121\ Z(s) = \left(L_1 s,\ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2,\ \infty,\ \infty,\ \infty,\ \frac{L_L s}{C_L L_L s^2 + 1}\right)' \qquad \dots $	
10.12 <b>2</b> NVALID-ORDER-122 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	)

10.19 DNIVALID OPDED 192 $Z(s) = \begin{pmatrix} I_1 & I_2 & I_2 & I_3 & I_4 & I_5 & $
$10.12 \text{INVALID-ORDER-} 123 \ Z(s) = \left(L_1 s, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $ $10.12 \text{INVALID-ORDER-} 124 \ Z(s) = \left(L_1 s, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $ $55$
$10.124\text{NVALID-ORDER-}124\ Z(s) = \left(L_1s,\ \frac{L_2s}{C_2L_2s^2+1} + R_2,\ \infty,\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) $
$10.12 \text{5NVALID-ORDER-} 125 \ Z(s) = \left(L_1 s, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \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 $
$10.126 \text{NVALID-ORDER-} 126 \ Z(s) = \left( L_1 s, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L \right)  \dots $
$10.12\text{INVALID-ORDER-}127\ Z(s) = \left(L_1 s,\ \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_L s}\right)\ \dots \qquad \qquad 56$
$10.12 \$NVALID-ORDER-128 \ Z(s) = \left(L_1 s, \ \frac{R_2\left(C_2 L_2 s^2+1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $
10.129NVALID-ORDER-129 $Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.13 INVALID-ORDER-130 $Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.13INVALID-ORDER-131 $Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$
10.132NVALID-ORDER-132 $Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.13\( \text{2NVALID-ORDER-133} \( Z(s) = \) \left( L_1 s, \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty \infty, \i
10.13\(\text{INVALID-ORDER-134}\(Z(s) = \left( L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \inft
$10.13 \text{INVALID-ORDER-135 } Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \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}\right) $
10.136NVALID-ORDER-136 $Z(s) = \left(\frac{1}{C_{1,s}}, R_2, \infty, \infty, \infty, \infty, R_L\right)$
10.13 TNVALID-ORDER-137 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_t s}\right)$
10.13\( \text{ENVALID-ORDER-138} \( Z(s) = \bigcup \frac{1}{C_{1.8}}, \ R_2, \infty,
10.139NVALID-ORDER-139 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
$10.14 \text{ @NVALID-ORDER-140 } Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)' \dots \dots$
10.14INVALID-ORDER-141 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.142\text{NVALID-ORDER-}142 \ Z(s) = \left(\frac{1}{C_1 s}, \ R_2, \ \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{BNVALID-ORDER-143}\(Z(s) = \bigc\frac{1}{C_{t,s}}, R_2, \infty,
$10.14 \text{INVALID-ORDER-} 144 \ Z(s) = \left(\frac{1}{C_1 s}, \ R_2, \ \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)  . $
$10.145 \text{NVALID-ORDER-} 145 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $
$10.146\text{NVALID-ORDER-}146 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right) $ $58$
$10.14\text{INVALID-ORDER-}147 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $
$10.14 \text{NVALID-ORDER-} 148 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
$10.14 \mathfrak{P} \text{NVALID-ORDER-} 149 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ $
$10.150 \text{NVALID-ORDER-} 150 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \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{INVALID-ORDER-} 150 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $ $10.15 \text{INVALID-ORDER-} 151 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $ $58  Solution of the properties of the prop$
$10.152\text{NVALID-ORDER-}152 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \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}\right) $ $58$ $10.152\text{NVALID-ORDER-}152 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \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}\right) $ $58$
$10.152\text{NVALID-ORDER-}152 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L L_L s^2 + C_L R_L s + 1}\right) $
$10.15$ RNVALID-ORDER-153 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$
10.15\(\frac{1}{4}\)NVALID-ORDER-154\(Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty
$10.15 \text{INVALID-ORDER-} 155 \ Z(s) = \left( \frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) $
$10.15 \text{ 6NVALID-ORDER-} 156 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2+1}\right)'  \dots $
10.15 INVALID-ORDER-157 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.15 \text{INVALID-ORDER-} 157 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s + R_L + \frac{1}{C_L s}}{C_L L_L R_L s}\right) $ $10.15 \text{INVALID-ORDER-} 158 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $ $59  Solution of the properties of the prop$

10.15 <b>9</b> NVALID-ORDER-159 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.16 \text{ @NVALID-ORDER-} 160 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.16 \text{INVALID-ORDER-} 161 \ Z(s) = \left(\frac{1}{C_{1}s}, \ R_2 + \frac{1}{C_{2}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{T}s}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.162\text{NVALID-ORDER-}162 \ Z(s) = \left(\frac{1}{C_{18}}, \ R_2 + \frac{1}{C_{28}}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right) $
$10.16$ ENVALID-ORDER- $163$ $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$
$10.164\text{NVALID-ORDER-}164\ Z(s) = \left(\frac{1}{C_1s},\ R_2 + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \infty,\ L_Ls + \frac{1}{C_Ls}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $
$10.16 \text{INVALID-ORDER-} 165 \ Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)' \qquad \dots $
10.16 INVALID-ORDER-166 $Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$
$10.16\text{TNVALID-ORDER-}167\ Z(s) = \left(\frac{1}{C_{1s}},\ R_2 + \frac{1}{C_{2s}},\ \infty,\ \infty,\ \infty,\ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $
10.16\( \text{NVALID-ORDER-168} \( Z(s) = \left( \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \infty, \i
$10.16 \mathfrak{P} \text{NVALID-ORDER-} 169 \ Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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) $
$10.17 \text{ @NVALID-ORDER-170 } Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right) \qquad \qquad$
$10.17 \text{INVALID-ORDER-} 171 \ Z(s) = \left(\frac{1}{C_{1s}}, \ L_2 s + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{Ls}}\right) $
10.172NVALID-ORDER-172 $Z(s) = \left(\frac{1}{C_{1}s}, L_{2}s + \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{R_{L}}{C_{L}R_{L}s+1}\right)$ 61
$10.17$ 8NVALID-ORDER-173 $Z(s) = \left(\frac{1}{C_{1s}}, L_2s + \frac{1}{C_{2s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_{Ls}}\right)$ 61
$10.17 \text{ LVALID-ORDER-} 174 \ Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $
$10.17 \text{Invalid-order-} 175 \ Z(s) = \left(\frac{1}{C_{1s}}, \ L_2 s + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $
$10.176\text{NVALID-ORDER-}176\ Z(s) = \left(\frac{1}{C_1 s},\ L_2 s + \frac{1}{C_2 s},\ \infty,\ \infty,\ \infty,\ L_L s + R_L + \frac{1}{C_L s}\right) $
$10.17\text{INVALID-ORDER-}177\ Z(s) = \left(\frac{1}{C_1s},\ L_2s + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right) $
$10.17 \text{\&NVALID-ORDER-178 } Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
10.179NVALID-ORDER-179 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 61
$10.18 \text{ @NVALID-ORDER-} 180 \ Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ $
$10.18 \text{INVALID-ORDER-} 181 \ Z(s) = \left(\frac{1}{C_{1s}}, \ L_{2}s + R_{2} + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{Ls}}\right) $
$10.182\text{NVALID-ORDER-}182\ Z(s) = \left(\frac{1}{C_1s},\ L_2s + R_2 + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls + 1}\right) \qquad \qquad$
$10.18 \text{ENVALID-ORDER-} 183 \ Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $
$10.18 \text{ and } VALID-ORDER-184 \ Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $
$10.18 \text{INVALID-ORDER-} 185 \ Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)' \qquad . \qquad 62$
10.18 <b>t</b> NVALID-ORDER-186 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.18 \text{ENVALID-ORDER-} 188 \ Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
10.18 <b>9</b> NVALID-ORDER-189 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 62
$10.19 \text{ @NVALID-ORDER-190 } Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right) $
$10.19 \text{INVALID-ORDER-} 191 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $
$10.192\text{NVALID-ORDER-}192\ Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \frac{R_L}{C_LR_Ls+1}\right) \qquad . \qquad $
$10.19 \text{ENVALID-ORDER-} 193 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $
$10.194\text{NVALID-ORDER-}194 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $ $10.194\text{NVALID-ORDER-}195 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $ $63$
$10.19 \text{bNVALID-ORDER-} 195 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \qquad . \qquad $
$10.19 \text{ INVALID-ORDER-} 196 \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
10.19IN VALID-ORDER-197 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \infty, \frac{1}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

10.19 NVALID-ORDER-198 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.19 <b>9</b> NVALID-ORDER-199 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
10.20 (INVALID-ORDER-200 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)$
10.20INVALID-ORDER-201 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
$10.20 \text{ 2NVALID-ORDER-} 202 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $
10.20 \$\text{NVALID-ORDER-203} \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \inf
$10.20 \text{INVALID-ORDER-} 204 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \ \dots $
$10.20 \text{ INVALID-ORDER-} 205 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \qquad . $
$10.20 \text{ 6NVALID-ORDER-} 206 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.20 \text{INVALID-ORDER-} 207 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 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) $
$10.20 \$NVALID-ORDER-208 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
$10.20 \text{@NVALID-ORDER-} 209 \ Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \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)  . $
$10.21 \text{@NVALID-ORDER-} 210 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $
$10.21\text{INVALID-ORDER-}211 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $
$10.21 \text{ 2NVALID-ORDER-} 212 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s+1}, \ R_2, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2+1}\right) \dots \dots$
$10.21 \text{ENVALID-ORDER-} 213 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
$10.21 \text{INVALID-ORDER-} 214 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $
$10.21 \text{INVALID-ORDER-} 215 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
$10.21 \text{ 6NVALID-ORDER-} 216 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s+1}, \ R_2, \ \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 $
$10.21\text{TNVALID-ORDER-}217 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $
$10.21 \text{ ENVALID-ORDER-218 } Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) $
$10.21 \text{ (C}_1 R_1 s + 1 \text{ (C}_2 s \text{ (C}_1 R_1 s + 1 \text{ (C}_2 $
$10.22\text{@NVALID-ORDER-}220 \ Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)  \dots $
$ (C_1R_1s+1) C_2s + (C_1L_Ls+1) $ $ (C_1R_1s+1) C_2s + (C_1R_1s+1) $
$C_{1}R_{1}s+1,  C_{2}s,  \text{so, so, so, so, so, so, so, so, } L_{L}s+L_{L}+C_{L}s$ $10.222\text{NVALID-ORDER-}222  Z(s) = \left(\frac{R_{1}}{C_{1}R_{1}s+1},  \frac{1}{C_{2}s},  \infty,  \infty,  \infty,  \frac{L_{L}R_{L}s}{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}\right)  .  .  .  .  .  .  .  .  .  $
$10.22 \text{ENVALID-ORDER-} 223 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $ $10.22 \text{ENVALID-ORDER-} 223 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $ $10.22 \text{ENVALID-ORDER-} 223 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
$10.224\text{NVALID-ORDER-} 224 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L(C_L L_s^2 + 1)}{C_L L_L s^2 + 1}\right) $ $10.224\text{NVALID-ORDER-} 224 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L(C_L L_s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right) $ $10.224\text{NVALID-ORDER-} 224 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L(C_L L_s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right) $
$10.226 \text{NVALID-ORDER-} 226 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, K_L + \frac{1}{C_L s}\right) $ $10.226 \text{NVALID-ORDER-} 226 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, K_L + \frac{1}{C_L s}\right) $ $67$
$10.22 \text{INVALID-ORDER-} 226 \ Z(s) = \left(\frac{C_1 R_1 s + 1}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s + \frac{L_L s}{C_L s}\right) $ $10.22 \text{INVALID-ORDER-} 227 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $ $67$
$10.22\text{INVALID-ORDER-} 227 Z(s) = \left(\frac{R_1}{C_1 R_1 s+1}, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \infty, \frac{R_2}{C_L L_L s^2+1}\right) \dots \dots$
10.22\textbf{RNVALID-ORDER-228} $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 67
$10.22 \text{@NVALID-ORDER-} 229 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2}{C_2 R_2 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) $
$10.23 \text{ INVALID-ORDER-} 230 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
$10.23\text{INVALID-ORDER-}231\ Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \frac{R_2}{C_2R_2s+1},\ \infty,\ \infty,\ \infty,\ \frac{R_L\left(C_LL_Ls^2+1\right)'}{C_LL_Ls^2+C_LR_Ls+1}\right) $
$10.232\text{NVALID-ORDER-}232\ Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ R_2 + \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_Ls}\right) \qquad \qquad$
$10.23 \text{RNVALID-ORDER-} 233 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right) $

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10.234NVALID-ORDER-234 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots
10.23 INVALID-ORDER-235 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.236NVALID-ORDER-236 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
10.23 INVALID-ORDER-237 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots
10.23\( \text{NVALID-ORDER-238} \( Z(s) = \left( \frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \)
10.239NVALID-ORDER-239 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                    \left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2 + C_LR_Ls+1}\right)
10.24INVALID-ORDER-241 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right) \dots
10.242NVALID-ORDER-242 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right) \dots
10.24\(\mathbb{B}\)NVALID-ORDER-243 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_r R_t s + 1}\right)
10.24 INVALID-ORDER-244 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.24 INVALID-ORDER-245 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.246NVALID-ORDER-246 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . .
10.24\(\text{TNVALID-ORDER-247}\) Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)
10.24\( \text{NVALID-ORDER-248} \( Z(s) = \left( \frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \end{array}
10.249NVALID-ORDER-249 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.25 INVALID-ORDER-250 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 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)
10.25INVALID-ORDER-251 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right) . . .
10.252NVALID-ORDER-252 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right) . . .
10.25 INVALID-ORDER-253 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_1 R_1 s + 1}\right)
10.254NVALID-ORDER-254 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.25 INVALID-ORDER-255 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.25 INVALID-ORDER-256 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) ...
10.25 INVALID-ORDER-257 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.25 NVALID-ORDER-258 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_1 L_1 R_1 s^2 + L_2 s + R_1}\right) \dots
10.259NVALID-ORDER-259 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.260NVALID-ORDER-260 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 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)
10.26INVALID-ORDER-261 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right) \dots
10.262NVALID-ORDER-262 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.26 INVALID-ORDER-263 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) . . .
10.264NVALID-ORDER-264 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.26 INVALID-ORDER-265 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.26 INVALID-ORDER-266 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
                                                                  \left(\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
10.26\( \text{NVALID-ORDER-268} \( Z(s) = \left( \frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \)
                                                                   \left(\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) . .
                                                                     \frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}
                                                                    \frac{R_1}{C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L . . .
10.272\text{NVALID-ORDER-}272 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)
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$10.27 \text{\$NVALID-ORDER-} 273 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	72
$10.27 \text{ INVALID-ORDER-} 274 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) \ \dots $	72
$10.27 \text{ INVALID-ORDER-} 275 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $	72
$10.27 \text{ 6NVALID-ORDER-} 276 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ \dots $	72
$10.27 \text{INVALID-ORDER-} 277 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) \ \dots $	72
$10.27 \$NVALID-ORDER-278 \ Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	72
$10.27 \text{ @NVALID-ORDER-279 } Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	72
$10.28 \text{ONVALID-ORDER-} 280 \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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) \ \dots $	73
$10.28 \text{INVALID-ORDER-} 281 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L\right) $	73
$10.28 \text{ 2NVALID-ORDER-} 282 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $	73
10.28 RNVALID-ORDER-283 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	73
$10.284\text{NVALID-ORDER-}284\ Z(s) = \left(R_1 + \frac{1}{C_1 s},\ R_2,\ \infty,\ \infty,\ \infty,\ L_L s + \frac{1}{C_L s}\right)$	73
$10.28 \text{INVALID-ORDER-} 285 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	73
$10.28 \text{ 6NVALID-ORDER-} 286 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)  \dots $	73
$10.28\text{ INVALID-ORDER-} 287 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $	73
10.28\textbf{Envalidation} VALID-ORDER-288 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	73
10.28 <b>9</b> NVALID-ORDER-289 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)'}{C_L L_L s^2 + C_L R_L s + 1}\right)$	74
$10.29 \text{@NVALID-ORDER-} 290 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $	74
$10.29 \text{INVALID-ORDER-} 291 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	74
10.29 <b>2</b> NVALID-ORDER-292 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	74
$10.29 \text{ INVALID-ORDER-} 293 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \ \ldots \ $	74
$10.29 \text{INVALID-ORDER-} 294 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)' \qquad \dots $	74
$10.29 \text{INVALID-ORDER-} 295 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$	74
$10.29 \text{ 6NVALID-ORDER-} 296 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \qquad \dots $	
$10.29\text{TNVALID-ORDER-}297 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	
$10.29 \text{\&NVALID-ORDER-} 298 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 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)  \dots $	
10.29 INVALID-ORDER-299 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	75
$10.30\text{@NVALID-ORDER-300 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots$	
$10.30 \text{INVALID-ORDER-301 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) $	
$10.302\text{NVALID-ORDER-302} \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) $	
$10.30$ RNVALID-ORDER-303 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots$	
$10.304\text{NVALID-ORDER-304} \ Z(s) = \left( R_1 + \frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) $	
$10.30 \text{ INVALID-ORDER-305 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \dots \dots$	75
$10.30 \text{ (NVALID-ORDER-306 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L L_s^2 + 1} + R_L\right) $	75
$10.30\text{INVALID-ORDER-}307 \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}\right) $	76
10.30\text{\text{RNVALID-ORDER-308}} $Z(s) = \left(R_1 + \frac{1}{2}, R_2 + \frac{1}{2}, \infty, \infty, \infty, \frac{1}{2}\right)$	76
$10.30$ NVALID-ORDER-308 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots$ $10.30$ NVALID-ORDER-309 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots$	76
$\langle  \forall_{1} \lor  \forall_{2} \lor  \forall_{1} \land \downarrow_{1} \lor \downarrow_{1} \downarrow$	

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10.310NVALID-ORDER-310 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
 10.31INVALID-ORDER-311 Z(s) = \left(R_1 + \frac{1}{C_{18}}, R_2 + \frac{1}{C_{28}}, \infty, \infty, \infty, L_L s + \frac{1}{C_{L8}}\right)
10.312NVALID-ORDER-312 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . .
10.31 INVALID-ORDER-313 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right).
10.314NVALID-ORDER-314 Z(s) = \left(R_1 + \frac{1}{C_{1s}}, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.31 INVALID-ORDER-315 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.316NVALID-ORDER-316 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 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)
10.31 INVALID-ORDER-317 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right).
 10.31 NVALID-ORDER-318 Z(s) = \left(R_1 + \frac{1}{C_{18}}, L_2 s + \frac{1}{C_{28}}, \infty, \infty, \infty, \frac{1}{C_{18}}\right)
 10.31 NVALID-ORDER-319 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
 10.320NVALID-ORDER-320 Z(s) = \left(R_1 + \frac{1}{C_{18}}, L_2 s + \frac{1}{C_{28}}, \infty, \infty, \infty, R_L + \frac{1}{C_{L8}}\right)
10.32INVALID-ORDER-321 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
 10.322NVALID-ORDER-322 Z(s) = \left(R_1 + \frac{1}{C_{18}}, L_2 s + \frac{1}{C_{28}}, \infty, \infty, \infty, \frac{L_{LS}}{C_{14}L_{18}^2 + 1}\right)
10.32 INVALID-ORDER-323 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.324NVALID-ORDER-324 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.32 INVALID-ORDER-325 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.326NVALID-ORDER-326 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 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)
10.32 INVALID-ORDER-327 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right).
 10.32\( \text{NVALID-ORDER-328} \( Z(s) = \left( R_1 + \frac{1}{C_{1s}}, L_2 s + R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \infty, \infty, \frac{1}{C_{Ls}} \right) \)
10.329NVALID-ORDER-329 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.33@NVALID-ORDER-330 Z(s) = \left(R_1 + \frac{1}{C_{1.5}}, L_2 s + R_2 + \frac{1}{C_{2.5}}, \infty, \infty, \infty, R_L + \frac{1}{C_{1.5}}\right)
 10.33INVALID-ORDER-331 Z(s) = \left(R_1 + \frac{1}{C_{1s}}, L_2 s + R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.332NVALID-ORDER-332 Z(s) = \left(R_1 + \frac{1}{C_{1s}}, L_2 s + R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.33BNVALID-ORDER-333 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.334NVALID-ORDER-334 Z(s) = \left(R_1 + \frac{1}{C_{1s}}, L_2s + R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.33 INVALID-ORDER-335 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.336NVALID-ORDER-336 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 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)
10.33 INVALID-ORDER-337 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right) \dots
10.33 NVALID-ORDER-338 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.339NVALID-ORDER-339 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
 10.340NVALID-ORDER-340 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
 10.34INVALID-ORDER-341 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.342NVALID-ORDER-342 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . .
10.348NVALID-ORDER-343 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.34 INVALID-ORDER-344 Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
10.34\( \text{INVALID-ORDER-345}\( Z(s) = \left( R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, 
10.346NVALID-ORDER-346 Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \frac{L_{2s}}{C_2 L_2 s^2 + 1} + R_2, \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)
10.34 INVALID-ORDER-347 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)
10.34\(\text{NVALID-ORDER-348}\) Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
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$10.34 \text{ 9NVALID-ORDER-349 } Z(s) = \left( R_1 + \frac{1}{C_1 s}, \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $	. 80
$10.35 \text{ @NVALID-ORDER-350 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \infty,  R_L + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	. 80
$10.35 \text{INVALID-ORDER-351 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \dots \dots$	. 80
$10.352\text{NVALID-ORDER-352} \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)'  \dots $	. 81
$10.35 \text{2NVALID-ORDER-353} \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)  \dots $	. 81
$10.354\text{NVALID-ORDER-}354\ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 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)  \dots $	. 81
$10.35 \text{INVALID-ORDER-355} \ Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	. 81
$10.35 \text{ @NVALID-ORDER-356 } Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \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 $	. 81
$10.35 \text{INVALID-ORDER-} 357 \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $	. 81
$10.35 \&NVALID-ORDER-358 \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	. 81
10.35 INVALID-ORDER-359 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 81
$10.36 \text{ @NVALID-ORDER-360 } Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	. 81
$10.36 \text{INVALID-ORDER-} 361 \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \qquad \dots $	. 82
$10.36 \text{ 2NVALID-ORDER-} 362 \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) \ \dots $	. 82
$10.36$ ENVALID-ORDER- $363$ $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \dots \dots$	. 82
$10.364\text{NVALID-ORDER-}364\ Z(s) = \left(L_1 s + \frac{1}{C_1 s},\ R_2,\ \infty,\ \infty,\ \infty,\ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	. 82
10.36\forall NVALID-ORDER-365 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)'}{C_L L_L s^2 + C_L R_L s + 1}\right)$	. 82
$10.36 \text{ NVALID-ORDER-366 } Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L\right) \dots \dots$	. 82
$10.36 \text{TNVALID-ORDER-} 367 \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $	. 82
$10.36 \text{\&NVALID-ORDER-368 } Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \qquad \dots $	. 82
10.36 NVALID-ORDER-369 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 82
$10.370\text{NVALID-ORDER-}370\ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	. 83
10.37INVALID-ORDER-371 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	. 83
10.372NVALID-ORDER-372 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	. 83
$10.37\text{BNVALID-ORDER-373} \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)  \dots $	. 83
10.374NVALID-ORDER-374 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	. 83
10.375NVALID-ORDER-375 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)'}{C_L L_L s^2 + C_L R_L s + 1}\right)$	. 83
$10.376\text{NVALID-ORDER-376} \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ R_L\right) $	. 83
$10.37\text{INVALID-ORDER-377 } Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$	. 83
$10.37 \text{\&NVALID-ORDER-378 } Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots$	
10.379NVALID-ORDER-379 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 84
10.380NVALID-ORDER-380 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	
10.38INVALID-ORDER-381 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_2 L_1 s^2 + 1}\right)$	. 84
$10.382 \text{NVALID-ORDER-382} \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \sum_{L_2 s} L_2 s + \frac{1}{C_2 s}\right) \\ 10.382 \text{NVALID-ORDER-383} \ Z(s) = \left(L_1 s + \frac{1}{C_1 s},  \frac{R_2}{C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \sum_{L_2 s} \frac{L_2 R_2 s}{C_2 R_2 s + 1},  \sum_{L_2 s} L_2 s + \frac{1}{C_2 s}\right) \\ \dots $	. 84
10.38\frac{1}{2}\text{NVALID-ORDER-383} $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_2 L_1 R_1 s^2 + L_2 s + R_1}\right)$	. 84
$10.38 \text{INVALID-ORDER-384} \ Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L L_s^2 + 1} + R_L\right) $	. 84
$10.38 \text{INVALID-ORDER-385 } Z(s) = \left( L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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 $	
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10.386NVALID-ORDER-386 Z(s) = \left(L_1 s + \frac{1}{C_{18}}, R_2 + \frac{1}{C_{28}}, \infty, \infty, \infty, \infty, R_L\right) \dots
10.38TNVALID-ORDER-387 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_4 s}\right) \dots
10.38 NVALID-ORDER-388 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.38 INVALID-ORDER-389 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.390NVALID-ORDER-390 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.39INVALID-ORDER-391 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.392NVALID-ORDER-392 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.39$NVALID-ORDER-393 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.394NVALID-ORDER-394 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots
10.39 INVALID-ORDER-395 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 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)
10.396NVALID-ORDER-396 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L\right) . . . . . . . .
10.39 INVALID-ORDER-397 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right) \ldots
10.39 NVALID-ORDER-398 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right).
10.399NVALID-ORDER-399 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.40 INVALID-ORDER-400 Z(s) = \left(L_1 s + \frac{1}{C_{1s}}, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_{Ls}}\right)
10.40INVALID-ORDER-401 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) . . .
10.402NVALID-ORDER-402 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.40 INVALID-ORDER-403 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.404NVALID-ORDER-404 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.40 INVALID-ORDER-405 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 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)
10.40 INVALID-ORDER-406 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L\right) . . .
10.40 TNVALID-ORDER-407 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right)
10.40 NVALID-ORDER-408 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.409NVALID-ORDER-409 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.410NVALID-ORDER-410 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.41INVALID-ORDER-411 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.412NVALID-ORDER-412 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) . . .
10.418NVALID-ORDER-413 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.414NVALID-ORDER-414 Z(s) = \left(L_1 s + \frac{1}{C_{1s}}, L_2 s + R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{L_L s}{C_{1L} L_1 s^2 + 1} + R_L\right)
10.41 INVALID-ORDER-415 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 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)
10.416NVALID-ORDER-416 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)...
10.41 INVALID-ORDER-417 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_1 s}\right) . . .
10.41 NVALID-ORDER-418 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) . . .
10.419NVALID-ORDER-419 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.420NVALID-ORDER-420 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.42INVALID-ORDER-421 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right)
10.422NVALID-ORDER-422 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.42 INVALID-ORDER-423 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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 \dots
10.424NVALID-ORDER-424 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right).
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10.42 $\delta$ NVALID-ORDER-425 $Z(s)=1$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \ \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) $	89
10.426NVALID-ORDER-426 $Z(s) = 1$	$\left(L_{1}s + \frac{1}{C_{1}s}, \frac{R_{2}(C_{2}L_{2}s^{2}+1)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \infty, \infty, \infty, R_{L}\right) $	89
10.42 TNVALID-ORDER-427 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \frac{1}{C_L s}\right)  \dots $	89
10.42\&NVALID-ORDER-428 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \infty,  \frac{R_L}{C_L R_L s + 1}\right)  \dots $	8
10.42 <b>9</b> NVALID-ORDER-429 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$	8
10.43 <b>0</b> NVALID-ORDER-430 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  L_L s + \frac{1}{C_L s}\right)  \dots $	89
10.43INVALID-ORDER-431 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	89
10.43 <b>2</b> NVALID-ORDER-432 $Z(s) = 1$	$\left(L_{1}s + \frac{1}{C_{1}s}, \frac{R_{2}\left(C_{2}L_{2}s^{2} + 1\right)}{C_{2}L_{2}s^{2} + C_{2}R_{2}s + 1}, \infty, \infty, \infty, \infty, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots \dots$	89
10.43 <b>B</b> NVALID-ORDER-433 $Z(s) = 1$	$\left(L_{1}s + \frac{1}{C_{1}s}, \frac{R_{2}(C_{2}L_{2}s^{2}+1)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \infty, \infty, \infty, \frac{L_{L}R_{L}s}{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}\right) \dots \dots$	90
10.43#NVALID-ORDER-434 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)\right)$	90
10.43 Invalid-order-435 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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) \right) \dots $	90
10.43 GNVALID-ORDER-436 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1},\ R_2,\ \infty,\ \infty,\ \infty,\ \frac{1}{C_Ls}\right)$	90
10.43 <b>T</b> NVALID-ORDER-437 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1},\ R_2,\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls+1}\right)$	90
10.43&NVALID-ORDER-438 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1},\ R_2,\ \infty,\ \infty,\ \infty,\ R_L+rac{1}{C_Ls} ight)$	90
10.43 <b>9</b> NVALID-ORDER-439 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1},\ R_2,\ \infty,\ \infty,\ \infty,\ L_Ls+rac{1}{C_Ls} ight)$	90
10.44 <b>0</b> NVALID-ORDER-440 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)'$	90
	$\left(\frac{L_1s}{C_1L_1s^2+1},\ R_2,\ \infty,\ \infty,\ \infty,\ L_Ls+R_L+rac{1}{C_Ls} ight)$	90
	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \dots \dots$	9
	$\left( \frac{L_1s}{C_1L_1s^2+1}, \ R_2, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	9
10.44\(\mathbb{I}\)NVALID-ORDER-444 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)'}{C_1L_1s^2+C_LR_1s+1}\right)$	9
10.445NVALID-ORDER-445 $Z(s) = 0$	$\left(\frac{L_1s}{CL_2s^2+1}, \frac{1}{Cos}, \infty, \infty, \infty, \infty, R_L\right)$	9
10.44 <b>6</b> NVALID-ORDER-446 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right) \qquad \qquad$	9
10.44TNVALID-ORDER- $447$ $Z(s) = 0$	$\left( rac{L_1s}{C_1L_1s^2+1}, rac{1}{C_2s}, \infty, \infty, \infty, R_L + rac{1}{C_Ls}  ight)$	9
10.448NVALID-ORDER- $448$ $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right) \dots \dots$	9
10.44 <b>9</b> NVALID-ORDER-449 $Z(s) = 0$	$\left(rac{L_1s}{C_1L_1s^2+1}, rac{1}{C_2s}, \infty, \infty, \infty, rac{L_Ls}{C_LL_Ls^2+1} ight) \dots \dots$	9
10.45 <b>0</b> NVALID-ORDER- $450$ $Z(s) = ($	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{1}{C_{2}s}, \infty, \infty, \infty, \infty, L_{L}s+R_{L}+\frac{1}{C_{L}s}\right). \dots \dots$	9
10.45INVALID-ORDER- $451$ $Z(s) = 0$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{L_{L}R_{L}s}{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}\right) \dots \dots$	9:
10.45 <b>P</b> NVALID-ORDER- $452$ $Z(s) = 0$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} + R_{L}\right)$	9:
10.45 <b>B</b> NVALID-ORDER-453 $Z(s) = 1$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\ \frac{1}{C_{2}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) \ $	9:
10.45INVALID-ORDER- $454$ $Z(s) = ($	$\left(\frac{L_1s}{C_1L_2s^2+1},\frac{R_2}{C_2R_2s+1},\infty,\infty,\infty,\infty,R_L\right)$	9:
10.45INVALID-ORDER- $455$ $Z(s) = 0$	$\left(\frac{L_1s}{CL_2^2+1}, \frac{R_2}{CR_2+1}, \infty, \infty, \infty, \frac{1}{C_2}\right)$	92
10.45 6NVALID-ORDER-456 $Z(s) = 0$	$\begin{pmatrix} c_1 L_1 s^{-}_{1} + c_2 R_2 s + c & c_1 c_2 s \\ \frac{L_1 s}{C_1 s^{-}_{2} + c_2}, & \frac{R_2}{C_2 s^{-}_{2} + c_2}, & \infty, & \infty, & \frac{R_L}{C_1 s^{-}_{2} + c_2} \end{pmatrix}$	9:
10.45 <b>T</b> NVALID-ORDER-457 $Z(s) = 0$	$ \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, \frac{R_{L}}{C_{L}R_{L}s+1}\right) \qquad (C_{L}s) \\ \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, \infty, \frac{R_{L}}{C_{L}s}\right) \qquad (C_{L}s) \\ \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, \infty, R_{L} + \frac{1}{C_{L}s}\right) \qquad (C_{L}s) \\ C_{L}s \\ C_{L$	9
10.45\( \text{8NVALID-ORDER-458} \) $Z(s) = 0$	$\left( \frac{C_1 L_1 s^2 + 1}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L + C_L s}{C_L s} \right)$	9
10.45 <b>0</b> NVALID-ORDER-459 Z(s) —	$\left( \frac{C_1 L_1 s^2 + 1}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right) = 0$	9
10.460NVALID_ORDER 460.7(e) = 1		0'
10.10m (11111111111111111111111111111111111	$\left( C_1L_1s^2+1, \ C_2R_2s+1, \ \cdots, \ \cdots, \ \cdots, \ \sum_{L^G-1}^{L^G-1} C_Ls \right)$	<i>J</i> •

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10.46INVALID-ORDER-461 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 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) ......
10.462NVALID-ORDER-462 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . .
10.46 INVALID-ORDER-463 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \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}\right)
10.464NVALID-ORDER-464 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right) . . . . . . . . . . . . .
10.46 INVALID-ORDER-465 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right) \dots \dots
10.46 INVALID-ORDER-466 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.46 INVALID-ORDER-467 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_1 s}\right) . . . .
10.46\( \text{NVALID-ORDER-468} \) Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right)
10.469NVALID-ORDER-469 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) ....
10.470NVALID-ORDER-470 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right).
10.47INVALID-ORDER-471 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) . . . .
10.472NVALID-ORDER-472 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1} + R_L\right)
10.47 INVALID-ORDER-473 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \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}\right)
10.47\(\text{INVALID-ORDER-474}\) Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L\right) \dots \dots
10.47 INVALID-ORDER-475 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right) \dots
10.476NVALID-ORDER-476 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) . . . .
10.47 INVALID-ORDER-477 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots
10.47\( \text{NVALID-ORDER-478} \) Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_2 s} \right) \quad \dots
10.479NVALID-ORDER-479 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots
10.48@NVALID-ORDER-480 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots
10.48INVALID-ORDER-481 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.482NVALID-ORDER-482 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1} + R_L\right)
10.48 INVALID-ORDER-483 Z(s) = \left(\frac{L_{1s}}{C_1L_1s^2+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.484NVALID-ORDER-484 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L\right) \dots
10.48 INVALID-ORDER-485 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right) \dots
10.48 INVALID-ORDER-486 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right).
10.48TNVALID-ORDER-487 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.48\text{NVALID-ORDER-488} Z(s) = \left(\frac{L_1 s}{C_2 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
10.489NVALID-ORDER-489 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right)
10.49@NVALID-ORDER-490 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
10.49INVALID-ORDER-491 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
10.492NVALID-ORDER-492 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.49 INVALID-ORDER-493 Z(s) = \left(\frac{L_{1s}}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 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)
10.494NVALID-ORDER-494 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right) . . .
10.49 INVALID-ORDER-495 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots
10.496NVALID-ORDER-496 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_1 R_1 s + 1}\right)
10.49 INVALID-ORDER-497 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.49\( \text{NVALID-ORDER-498} \) Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)
10.499NVALID-ORDER-499 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
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$10.50 \text{@NVALID-ORDER-500 } Z(s) = \left(\frac{L_{18}}{C_{1}L_{1}s^{2}+1}, \ \frac{L_{28}}{C_{2}L_{2}s^{2}+1} + R_{2}, \ \infty, \ \infty, \ \infty, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \ \dots \ $
10.50INVALID-ORDER-501 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.50 <b>2</b> NVALID-ORDER-502 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.50 \text{RNVALID-ORDER-} 503 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \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 $
$10.50 \text{ INVALID-ORDER-504 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right) $
$10.50 \text{ INVALID-ORDER-505 } Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  \frac{1}{C_L s} \right) \dots $
$10.50 \text{ 6NVALID-ORDER-506 } Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}(C_{2}L_{2}s^{2}+1)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \infty, \infty, \infty, \frac{R_{L}}{C_{L}R_{L}s+1}\right) \dots \dots$
$10.50 \text{ INVALID-ORDER-507 } Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},  \infty,  \infty,  \infty,  R_L + \frac{1}{C_L s} \right)  \dots $
$10.50 \text{\&NVALID-ORDER-508 } Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right)  \dots $
10.50 <b>9</b> NVALID-ORDER-509 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$
$10.51 \text{@NVALID-ORDER-5} 10 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right) $
10.51INVALID-ORDER-511 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
$10.512 \text{NVALID-ORDER-} 512 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)^{-1} $
$10.51 \text{ INVALID-ORDER-513 } Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}(C_{2}L_{2}s^{2}+1)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \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) $
10.51\Pinvalid NValid Order-514 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
10.51 INVALID-ORDER-515 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$
10.516NVALID-ORDER-516 $Z(s) = (L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s})$
10.51TNVALID-ORDER-517 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.51 NVALID-ORDER-518 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)^2$
10.51 NVALID-ORDER-519 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.520NVALID-ORDER-520 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.52INVALID-ORDER-521 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.52 <b>2</b> NVALID-ORDER-522 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
10.52\( \text{ENVALID-ORDER-523} \( Z(s) = \left( L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \in
10.52\PVALID-ORDER-524 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
$10.52 \text{5NVALID-ORDER-525} \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) $
$10.526 \text{NVALID-ORDER-526 } Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$
$10.52\text{INVALID-ORDER-}527 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $
$10.52 \text{NVALID-ORDER-} 528 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
$10.52$ NVALID-ORDER-529 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
$10.530\text{NVALID-ORDER-}530\ Z(s) = \left(L_1 s + R_1 + \frac{1}{G_2}, \frac{1}{G_2}, \infty, \infty, \infty, \infty, \frac{L_1 R_1 s}{G_2 S_1 S_2 S_1 S_2 S_2 S_2 S_2 S_2 S_2 S_2 S_2 S_2 S_2$
10.53 <b>0</b> NVALID-ORDER-530 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
$10.532\text{NVALID-ORDER-}532 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \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}\right) $
10.53\(\text{Envalue}\) PNVALID-ORDER-533\(Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \in
10.53\PVALID-ORDER-534 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
10.53 INVALID-ORDER-535 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

10.536NVALID-ORDER-536 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 10
10.53 <b>T</b> NVALID-ORDER-537 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	. 10
10.53 NVALID-ORDER-538 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	. 10
10.53 NVALID-ORDER-539 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	. 101
$10.54 \text{@NVALID-ORDER-}540 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{R_2}{C_2 R_2 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)  \dots $	. 10
10.54INVALID-ORDER-541 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	. 105
$10.542\text{NVALID-ORDER-}542\ Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s},\ \frac{R_2}{C_2R_2s + 1},\ \infty,\ \infty,\ \infty,\ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$	. 105
$10.54 \text{ ENVALID-ORDER-} 543 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right) $	. 103
10.54\PVALID-ORDER-544 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	. 105
10.54 INVALID-ORDER-545 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	. 105
10.546NVALID-ORDER-546 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 102
$10.54 \text{INVALID-ORDER-} 547 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $	. 105
$10.54 \text{\&NVALID-ORDER-548 } Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$	. 105
10.54 NVALID-ORDER-549 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	. 105
$10.55 \text{@NVALID-ORDER-} 550 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \ \dots $	. 10
10.55INVALID-ORDER-551 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	. 10
10.552NVALID-ORDER-552 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	. 10
$10.55$ RNVALID-ORDER-553 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right) \dots$	. 10
10.554NVALID-ORDER-554 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	. 10
10.55 INVALID-ORDER-555 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$	. 10
10.55 (INVALID-ORDER-556 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	. 10
$10.55 \text{INVALID-ORDER-} 557 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \ \dots $	. 10:
$10.55 \$NVALID-ORDER-558 \ Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) \qquad . $	. 103
10.55 <b>Q</b> NVALID-ORDER-559 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$	. 10
$10.56 \text{@NVALID-ORDER-} 560 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) $	. 10
10.56INVALID-ORDER-561 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	
10.562NVALID-ORDER-562 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	
10.56\( \text{BNVALID-ORDER-563} \( Z(s) = \left( L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \infty, \ \infty, \infty, \ \infty, \infty, \infty, \infty, \infty, \infty, \ \infty, \ \infty, \ \infty, \ \infty, \inft	. 10
10.56\PVALID-ORDER-564 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$	
10.56 INVALID-ORDER-565 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	. 10
10.56 <b>C</b> NVALID-ORDER-566 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	. 104
10.56 <b>T</b> NVALID-ORDER-567 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$	
10.56 NVALID-ORDER-568 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	. 10
10.56 <b>9</b> NVALID-ORDER-569 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$	. 10
10.57 <b>0</b> NVALID-ORDER-570 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	. 10
10.57INVALID-ORDER-571 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	
10.572NVALID-ORDER-572 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right) \dots \dots$	
10.57 NVALID-ORDER-573 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$	. 10
10.57 INVALID-ORDER-574 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	. 10

$10.57 \text{INVALID-ORDER-575} \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	. 10
10.576NVALID-ORDER-576 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 10
10.57INVALID-ORDER-577 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	. 10
10.57 NVALID-ORDER-578 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	. 10
10.57 NVALID-ORDER-579 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	. 10
10.58 INVALID-ORDER-580 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$	. 10
10.58INVALID-ORDER-581 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	. 10
10.582NVALID-ORDER-582 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$	. 10
10.58 INVALID-ORDER-583 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$	. 10
10.584NVALID-ORDER-584 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	. 10
$10.58 \text{INVALID-ORDER-585} \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	. 100
10.58 <b>6</b> NVALID-ORDER-586 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	. 10
$10.58 \text{INVALID-ORDER-} 587 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $	. 10'
10.58 NVALID-ORDER-588 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	. 10'
$10.58 \text{ (DNVALID-ORDER-589 } Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \ldots \ldots$	. 10'
$10.59 \text{@NVALID-ORDER-590 } Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	. 10'
10.59INVALID-ORDER-591 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	. 10'
$10.592\text{NVALID-ORDER-}592\ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s},\ \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1},\ \infty,\ \infty,\ \infty,\ \frac{R_L\left(C_L L_L s^2 + 1\right)'}{C_L L_L s^2 + C_L R_L s + 1}\right)\ \dots$	. 10
10.59 <b>2</b> NVALID-ORDER-592 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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) \dots $ $10.592NVALID-ORDER-593 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots $	. 10'
10.59\( \text{RNVALID-ORDER-593} \( Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \inftiget( \infty, \infty	<ul><li>10°</li><li>10°</li><li>10°</li></ul>
10.59\( \text{NVALID-ORDER-593} \( Z(s) = \begin{pmatrix} \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, & R_2, & \infty, &	<ul><li>. 10</li><li>. 10</li><li>. 10</li><li>. 10</li></ul>
$10.59 \texttt{INVALID-ORDER-}593 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \\ 10.59 \texttt{INVALID-ORDER-}594 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right) \\ 10.59 \texttt{INVALID-ORDER-}595 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) \\ 10.59 \texttt{INVALID-ORDER-}596 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \\ 10.59 \texttt{INVALID-ORDER-}596 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \\ 10.59 \texttt{INVALID-ORDER-}596 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \\ 10.59 \texttt{INVALID-} CRDER-596 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \\ 10.59 \texttt{INVALID-} CRDER-596 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$	. 108
$ 10.59 \texttt{ENVALID-ORDER-593} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{ENVALID-ORDER-594} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) . $ $ 10.59 \texttt{ENVALID-ORDER-595} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{ENVALID-ORDER-596} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{ENVALID-ORDER-597} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_1 s^2 s^2 + L_1 s + R_1} \right) . $	. 108
$ 10.59 \texttt{NNVALID-ORDER-593} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-594} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-595} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-596} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-597} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-598} \ Z(s) = \left( \frac{L_1 R_2 s}{C_1 L_1 R_2 c^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-598} \ Z(s) = \left( \frac{L_1 R_2 s}{C_1 L_2 c^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) . $	. 108 . 108
$ 10.59 \texttt{NNVALID-ORDER-593} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-594} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-595} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-596} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-597} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-598} \ Z(s) = \left( \frac{L_1 R_2 s}{C_1 L_1 R_2 c^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) . $ $ 10.59 \texttt{NNVALID-ORDER-598} \ Z(s) = \left( \frac{L_1 R_2 s}{C_1 L_2 c^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) . $	. 108 . 108
$ \begin{array}{l} 10.59 \&nvalid-Order-593 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) \\ 10.59 \&nvalid-Order-594 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s} \right) \\ 10.59 \&nvalid-Order-595 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) \\ 10.59 \&nvalid-Order-596 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \\ 10.59 \&nvalid-Order-597 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_1 s^2 + L_1 s + L_1} \right) \\ 10.59 \&nvalid-Order-598 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \\ 10.59 \&nvalid-Order-599 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s R_1 s}{C_L L_1 R_1 s^2 + L_1 s + R_L} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s R_1 s}{C_L L_L R_2 s^2 + L_L s + R_L} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + L_1 s + R_L} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + L_1 s + R_L} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + L_1 s + R_L} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + L_1 s + R_L} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + L_1 s + L_1} \right) \\ 10.60 \&nvalid-Order-600 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_1 R_1 s}{C_1 L_1 R_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_1 R_1 s}{C_1 L_1 R_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ $	<ul><li>. 108</li><li>. 108</li><li>. 108</li><li>. 108</li><li>. 108</li></ul>
$ \begin{array}{l} 10.59 \text{NNVALID-ORDER-593} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) \\ 10.59 \text{INVALID-ORDER-594} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) \\ 10.59 \text{INVALID-ORDER-595} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) \\ 10.59 \text{INVALID-ORDER-595} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \\ 10.59 \text{INVALID-ORDER-596} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \\ 10.59 \text{INVALID-ORDER-597} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \\ 10.59 \text{INVALID-ORDER-599} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_1 s^2 + L_L s + R_L} \right) \\ 10.60 \text{INVALID-ORDER-600} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_1 s^2 + L_1 s + R_L} \right) \\ 10.60 \text{INVALID-ORDER-601} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L C_L L_2 s^2 + 1}{C_L L_L R_3 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L C_L L_2 s^2 + 1}{C_L L_L R_3 s^2 + L_L s + R_L} \right) \\ 10.60 \text{INVALID-ORDER-601} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L C_L L_2 s^2 + 1}{C_L L_L R_3 s^2 + L_L s + R_L} \right) \\ 10.60 \text{INVALID-ORDER-601} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L C_L L_2 s^2 + 1}{C_L L_2 s^2 + 1} \right) \\ 10.60 \text{INVALID-ORDER-601} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_1 C_L L_2 s^2 + 1}{C_1 L_2 s^2 + 1} \right) \\ 10.60 \text{INVALID-ORDER-601} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_1 R_2 s}{C_1 L_1 s^2 + L_1 s + R_1} \right) \\ 10.60 \text{INVALID-ORDER-601} \ Z(s) = $	<ul><li>. 108</li><li>. 108</li><li>. 108</li><li>. 108</li><li>. 108</li><li>. 108</li></ul>
$ \begin{array}{l} 10.59 \text{ENVALID-ORDER-593} \ Z(s) = \left( \frac{L_2 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) \\ 10.59 \text{ENVALID-ORDER-594} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1} \right) \\ 10.59 \text{ENVALID-ORDER-595} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s} \right) \\ 10.59 \text{ENVALID-ORDER-596} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right) \\ 10.59 \text{ENVALID-ORDER-597} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + L_L + \frac{1}{C_L s} \right) \\ 10.59 \text{ENVALID-ORDER-598} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \\ 10.59 \text{ENVALID-ORDER-599} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_1 s}{C_L L_L R_1 s^2 + L_1 s + R_L} \right) \\ 10.60 \text{ENVALID-ORDER-600} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_1 s}{C_L L_L R_1 s^2 + L_1 s + R_L} \right) \\ 10.60 \text{ENVALID-ORDER-601} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_1 s}{C_L L_L R_1 s^2 + L_1 s + R_1} \right) \\ 10.60 \text{ENVALID-ORDER-602} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_1 s}{C_L L_L R_1 s^2 + L_1 s + R_1} \right) \\ 10.60 \text{ENVALID-ORDER-602} \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L \right)$	<ul> <li>108</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> </ul>
$ \begin{aligned} &10.59 \text{Invalid-order.} 593 \ Z(s) = \left(\frac{L_R s}{C_1 L_R s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \\ &10.59 \text{Invalid-order.} 594 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s^2 + L_1}\right) \\ &10.59 \text{Invalid-order.} 595 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \\ &10.59 \text{Invalid-order.} 596 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \\ &10.59 \text{Invalid-order.} 597 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \\ &10.59 \text{Invalid-order.} 597 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \\ &10.59 \text{Invalid-order.} 599 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \\ &10.60 \text{Invalid-order.} 600 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, \frac{R_L (C_L L_L s^2 + 1)}{C_L L_2 s^2 + L_1 s + R_1}\right) \\ &10.60 \text{Invalid-order.} 602 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ R_2, \infty, \infty, \infty, \frac{R_L (C_L L_L s^2 + 1)}{C_L s^2 + C_L s + R_1}\right) \\ &10.60 \text{Invalid-order.} 602 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, \infty, R_L\right) \\ &10.60 \text{Invalid-order.} 603 \ Z(s) = \left(\frac{L_1 R s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 c_s, \infty, \infty, \infty, R_L\right) \\ &10.60 \text$	. 108 . 108 . 108 . 108 . 108 . 108 . 108
$ \begin{array}{l} 10.59 \text{NVALID-ORDER-593} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{1}{C_{LS}} \right) \\ 10.59 \text{NVALID-ORDER-594} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{R_L}{C_L R_L s + L_1} \right) \\ 10.59 \text{NVALID-ORDER-595} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  R_L + \frac{1}{C_L s} \right) \\ 10.59 \text{NVALID-ORDER-596} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  L_L s + \frac{1}{C_L s} \right) \\ 10.59 \text{NVALID-ORDER-597} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L s^2}{C_L L_L s^2 + 1} \right) \\ 10.59 \text{NVALID-ORDER-598} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L R_L s}{C_L s} \right) \\ 10.59 \text{NVALID-ORDER-599} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L R_L s}{C_L L_L R_L s^2 + L_1 s + R_L} \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L R_L s}{C_L L_L s^2 + L_1 s + R_L} \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L R_L s}{C_L L_L s^2 + L_1 s + R_L} \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ R_2,  \infty,  \infty,  \infty,  \frac{R_L (C_L L_L s^2 + L_L s + R_L)}{C_L L_L s^2 s + L_L s + R_L} \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ L_{L_R},  C_{L_R},  \infty,  \infty,  \infty,  R_L \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ L_{L_R},  C_{L_R},  \infty,  \infty,  \infty,  \infty,  R_L \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ L_{L_R},  C_{L_R},  \infty,  \infty,  \infty,  \infty,  R_L \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ L_{L_R},  C_{L_R},  \infty,  \infty,  \infty,  \infty,  R_L \right) \\ 10.60 \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{R,R}}{C_{ILR,R}^2 s^2 + L_1 s + R_1}, \ L_{L_R},  C_$	. 108 . 108 . 108 . 108 . 108 . 108 . 108 . 108
$ \begin{array}{l} 10.59 \& \text{NVALID-ORDER-593} \ Z(s) = \left( \frac{L_{RR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, \frac{1}{C_{1-k}} \right) \\ 10.59 \& \text{NVALID-ORDER-594} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, \infty, \frac{R_s}{C_{1-R} + k+1} \right) \\ 10.59 \& \text{NVALID-ORDER-595} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, R_L + \frac{L_{Ls}}{C_{2s}} \right) \\ 10.59 \& \text{NVALID-ORDER-596} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, L_{LS} + \frac{L_{Ls}}{C_{2s}} \right) \\ 10.59 \& \text{NVALID-ORDER-597} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, \frac{L_L s}{C_{LL}R_s^{2} + L_{1-k+R}} \right) \\ 10.59 \& \text{NVALID-ORDER-598} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, L_L s + R_L + \frac{L_{Cs}}{C_{1-LR}} \right) \\ 10.59 \& \text{NVALID-ORDER-599} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, \frac{L_L R_s s}{C_{1-LR}R_s^{2} + L_{1-k+R}} \right) \\ 10.60 \& \text{NVALID-ORDER-600} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, \frac{R_L C_L L_s R_s s}{C_{1-LR}R_s^{2} + L_{1-k+R}} \right) \\ 10.60 \& \text{NVALID-ORDER-602} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \ R_2, \infty, \infty, \infty, \frac{R_L C_L L_s R_s s}{C_{1-LR}R_s^{2} + L_{1-k+R}} \right) \\ 10.60 \& \text{NVALID-ORDER-603} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty, \infty, R_L \right) \\ 10.60 \& \text{NVALID-ORDER-604} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty, \infty, R_L \frac{L_{LR}}{C_{2s}} \right) \\ 10.60 \& \text{NVALID-ORDER-605} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty, \infty, R_L \frac{L_{LR}}{C_{2s}} \right) \\ 10.60 \& \text{NVALID-ORDER-605} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty, \infty, R_L \frac{L_{2s}}{C_{2s}} \right) \\ 10.60 \& \text{NVALID-ORDER-605} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty, \infty, R_L \frac{L_{2s}}{C_{2s}} \right) \\ 10.60 \& \text{NVALID-ORDER-605} \ Z(s) = \left( \frac{L_{LR}}{C_{1-LR}R_s^{2} + L_{1-k+R}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty, \infty, R_L \frac{L_{2s}}{C_{2s}}, \frac{L_{2s}}{C_{2s}}, \infty, \infty \right)$	. 103 . 103 . 103 . 103 . 103 . 103 . 103 . 103 . 104
$\begin{aligned} &10.59 \text{RNVALID-ORDER-593} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  \frac{1}{C_{1,s}}\right) \\ &10.59 \text{RNVALID-ORDER-594} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  \frac{R_1}{C_{1,L_2}}\right) \\ &10.59 \text{RNVALID-ORDER-595} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  R_L + \frac{1}{C_L s}\right) \\ &10.59 \text{RNVALID-ORDER-597} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  L_L s + \frac{1}{C_L s}\right) \\ &10.59 \text{RNVALID-ORDER-597} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L s + R_L}{C_L s^2 + L_1 s^2 + L_1}\right) \\ &10.59 \text{RNVALID-ORDER-599} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  L_L s + R_L + \frac{1}{C_L s}\right) \\ &10.59 \text{RNVALID-ORDER-599} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L s + R_L}{C_L L_L R_1 s^2 + L_L s^2 + R_L}\right) \\ &10.60 \text{RNVALID-ORDER-600} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  \frac{L_L s + R_L}{C_L L_L R_1 s^2 + L_L s^2 + R_L}\right) \\ &10.60 \text{RNVALID-ORDER-602} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  \frac{R_L}{C_L L_L R_1 s^2 + L_L s^2 + 1}\right) \\ &10.60 \text{RNVALID-ORDER-6002} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ R_2,  \infty,  \infty,  \infty,  R_L \right) \\ &10.60 \text{RNVALID-ORDER-6002} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ L_2 s,  \infty,  \infty,  R_L \right) \\ &10.60 \text{RNVALID-ORDER-6002} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ L_2 s,  \infty,  \infty,  \infty,  R_L \right) \\ &10.60 \text{RNVALID-ORDER-6002} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ L_2 s,  \infty,  \infty,  \infty,  R_L \right) \\ &10.60 \text{RNVALID-ORDER-6002} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ L_2 s,  \infty,  \infty,  \infty,  R_L \right) \\ &10.60 \text{RNVALID-ORDER-6002} \ Z(s) = \left(\frac{L_2 R_{13}}{C_{1,L_1 R_1 S^2 + L_1 s^2 + R_1}}, \ L_2 s,  $	. 103 . 103 . 103 . 103 . 103 . 103 . 103 . 103 . 109 . 109
$\begin{aligned} &10.598\text{NVALID-ORDER-} 32 \left(s\right) = \left(\frac{l_1 l_1 l_2}{c_1 l_2 l_3 l_3 l_4 l_4 l_4 l_5} R_2\right),  \infty, \infty, \infty, \frac{l_2 l_2}{c_2 l_4}\right) \\ &10.598\text{NVALID-ORDER-} 594 \left(s\right) = \left(\frac{l_1 l_2 l_3}{c_1 l_4 l_3 l_4 l_4 l_4 l_5} R_2\right),  \infty, \infty, \infty, \frac{l_2 l_2}{c_2 l_4 l_4 l_4 l_4 l_4 l_4 l_4 l_4 l_4 l_4$	. 103 . 103 . 103 . 103 . 103 . 103 . 103 . 103 . 103 . 105 . 105 . 105
$\begin{aligned} &10.59\text{RVALID-ORDER-593} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-594} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-595} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-596} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-597} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-598} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-599} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{RL}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-599} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{RL}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.59\text{RVALID-ORDER-699} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{RL}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-600} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}}{C_{\text{LLR}}^{\text{RL}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-601} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-602} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-603} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-606} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-606} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LLR}}^{\text{LR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-606} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LLR}} L_{\text{LS}}^{\text{LR}}} R_s} \right) \\ &10.60\text{RVALID-ORDER-606} \ Z(s) = \left( \frac{L_{\text{LR}}^{\text{LR}} L_{\text{LS}}}{C_{\text{LR}} L_{\text{LS}}^{\text{LR}}} $	. 103 . 103 . 103 . 103 . 103 . 103 . 103 . 109 . 109 . 109 . 109
$\begin{aligned} &10.598\text{NVALID-ORDER-} 32 \left(s\right) = \left(\frac{l_1 l_1 l_2}{c_1 l_2 l_3 l_3 l_4 l_4 l_4 l_5} R_2\right),  \infty, \infty, \infty, \frac{l_2 l_2}{c_2 l_4}\right) \\ &10.598\text{NVALID-ORDER-} 594 \left(s\right) = \left(\frac{l_1 l_2 l_3}{c_1 l_4 l_3 l_4 l_4 l_4 l_5} R_2\right),  \infty, \infty, \infty, \frac{l_2 l_2}{c_2 l_4 l_4 l_4 l_4 l_4 l_4 l_4 l_4 l_4 l_4$	. 103 . 103 . 103 . 103 . 103 . 103 . 103 . 103 . 109 . 109 . 109 . 109

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\left(\frac{L_1R_1s}{C_1L_1R_1s^2+L_1s+R_1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right) \ldots \ldots
                               10.614NVALID-ORDER-614 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots
                               \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_{L.s}}\right) \dots \dots
                               \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots \dots \dots
                               10.61\( \text{NVALID-ORDER-618} \( Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) \quad \qq \quad \q
10.619NVALID-ORDER-619 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) .....
                               \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \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}
10.62 ONVALID-ORDER-620 Z(s) =
\left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) . . .
10.62BNVALID-ORDER-623 Z(s) = 1
10.624NVALID-ORDER-624 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots \dots
                                                                                              10.62 INVALID-ORDER-625 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) ......
10.626NVALID-ORDER-626 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
10.629NVALID-ORDER-629 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_L s^2 + 1} + R_L\right) \dots
                               \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 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)
10.63 ONVALID-ORDER-630 Z(s) = 
10.632NVALID-ORDER-632 Z(s) = 1
                               \left(\frac{L_1R_1s}{C_1L_1R_1s^2+L_1s+R_1}, L_2s+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_1R_1s+1}\right) \ldots \ldots
10.63BNVALID-ORDER-633 Z(s) =
10.63 INVALID-ORDER-634 Z(s) = \left(\frac{L_1 R_1 s}{C_2 L_1 R_1 s^2 + L_2 s + R_3}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_2 s}\right) . . .
                               10.635NVALID-ORDER-635 Z(s) =
                               \left(\frac{L_1R_1s}{C_1L_1R_1s^2+L_1s+R_1}, L_2s+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_1L_1s^2+1}\right) ......
10.63 6NVALID-ORDER-636 Z(s) =
10.63TNVALID-ORDER-637 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots
                               10.63NVALID-ORDER-638 Z(s) =
10.639NVALID-ORDER-639 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1} + R_L\right)
                               \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 s + \frac{1}{C_2 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}
10.64 ONVALID-ORDER-640 Z(s) =
                                                                                   10.642NVALID-ORDER-642 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_1 s}\right) \dots \dots \dots
                                                                                                \left(\frac{L_1 R_1 s}{C_1 L_2 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) ......
10.64INVALID-ORDER-644 Z(s) =
10.64 GNVALID-ORDER-646 Z(s) =
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$10.65 \text{ @NVALID-ORDER-650 } Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ L_2 s + R_2 + \frac{1}{C_2 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) \ \dots $	114
$10.65 \text{INVALID-ORDER-} 651 \ Z(s) = \left( \underbrace{\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ R_L \right) \ \dots $	114
$10.65 \text{2NVALID-ORDER-} 652 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	114
$10.65 \text{ 2NVALID-ORDER-} 653 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $	114
$10.654\text{NVALID-ORDER-}654\ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) \ \dots $	114
$10.65 \text{INVALID-ORDER-} 655 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s} \right)  \dots $	114
$10.65 \text{ 6NVALID-ORDER-} 656 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)' \ \dots $	114
$10.65 \text{TNVALID-ORDER-} 657 \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots $	114
$10.65 \& NVALID-ORDER-658 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \ \dots $	115
$10.65 \text{ @NVALID-ORDER-}659 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ \dots $	115
$10.66 \text{ @NVALID-ORDER-} 660 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \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 $	115
$10.66 \text{INVALID-ORDER-} 661 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ R_L\right) \ \dots $	115
$10.662\text{NVALID-ORDER-}662\ Z(s) = \left(\frac{L_1 R_{1s}}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $	115
$10.66 \text{ 2NVALID-ORDER-} 663 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)\right)  \dots $	115
$10.664\text{NVALID-ORDER-}664\ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) $	115
$10.66 \text{ Invalid-order} \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $	115
$10.666 \text{NVALID-ORDER-} 666 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)  \dots $	115
$10.66TNVALID-ORDER-667\ Z(s) = \left(\frac{L_1R_1s}{C_1L_1R_1s^2 + L_1s + R_1}, \frac{R_2\left(C_2L_2s^2 + 1\right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	116
$10.66 \$NVALID-ORDER-668\ Z(s) = \left(\frac{L_1R_1s}{C_1L_1R_1s^2 + L_1s + R_1}, \frac{R_2(C_2L_2s^2 + 1)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	116
$10.66 \text{ (NVALID-ORDER-669 } Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots$	116
$10.67 \text{ INVALID-ORDER-} 670 \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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) $ $10.67 \text{ INVALID-ORDER-} 671 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$	116
$10.67 \text{INVALID-ORDER-} 671 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)  \dots $	116
$10.672 \text{NVALID-ORDER-} 672 \ Z(s) = \left(\frac{L_1 s}{C_1 L_2 c_2^2 + 1} + R_1, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_2 R_2 c_2 + 1}\right)  \dots $	116
$10.67$ <b>2</b> NVALID-ORDER-673 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$	116
10.674NVALID-ORDER-674 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	
10.67 INVALID-ORDER-675 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	116
10.676NVALID-ORDER-676 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	117
$10.67\text{INVALID-ORDER-}677\ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1,\ R_2,\ \infty,\ \infty,\ \infty,\ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right) \ \dots $	117
10.67\text{\text{8}NVALID-ORDER-678} $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	117
$10.679 \text{NVALID-ORDER-} 679 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ R_2, \ \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 $	117
$10.68 \text{ @NVALID-ORDER-680 } Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L \right) $	
$10.68 \text{INVALID-ORDER-} 681 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right) \ \dots $	117
10.682NVALID-ORDER-682 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	
10.682NVALID-ORDER-683 $Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}, \frac{1}{C_{2}s}, \infty, \infty, \infty, \infty, R_{L} + \frac{1}{C_{L}s}\right)$	
10.684NVALID-ORDER-684 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	117
$10.68 \text{INVALID-ORDER-} 685 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \qquad \dots $	118

10.686NVALID-ORDER-686 $Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}, \frac{1}{C_{2}s}, \infty, \infty, \infty, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$
$10.68\text{TNVALID-ORDER-}687\ Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1,\ \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)  \dots \qquad 118$
$10.68 \text{\&NVALID-ORDER-} 688 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $
10.68 NVALID-ORDER-689 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
10.69@NVALID-ORDER-690 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)$
10.69INVALID-ORDER-691 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
10.692NVALID-ORDER-692 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$
10.69 <b>ENVALID-ORDER-693</b> $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.694NVALID-ORDER-694 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
$10.69 \text{ INVALID-ORDER-} 695 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ \dots $
10.696NVALID-ORDER-696 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$ .
$10.69 \text{FNVALID-ORDER-} 697 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \frac{R_2}{C_2 R_2 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) \ \dots $
10.69 NVALID-ORDER-698 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ .
$10.69 \text{ (NVALID-ORDER-699 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 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) $
10.70 INVALID-ORDER-700 $Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}, R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \infty, R_{L}\right)$
10.70INVALID-ORDER-701 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
10.702NVALID-ORDER-702 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$
10.70 INVALID-ORDER-703 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.704NVALID-ORDER-704 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.70 INVALID-ORDER-705 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.70 <b>6</b> NVALID-ORDER-706 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.70 TNVALID-ORDER-707 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
10.70 NVALID-ORDER-708 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.70 \mathfrak{D} \text{NVALID-ORDER-709} \ Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$ $10.71 \mathfrak{D} \text{NVALID-ORDER-710} \ Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L \right) $ $10.71 \mathfrak{I} \text{NVALID-ORDER-711} \ Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s} \right) $ $120$
10.71 INVALID-ORDER-710 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L\right)$
10.71INVALID-ORDER-711 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
$10.712\text{NVALID-ORDER-712} \ Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)  \dots $
10.71 \$\text{NVALID-ORDER-713} \ Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 s}, \infty, \infty
10.71\(\text{INVALID-ORDER-714}\(Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty,
$10.71 \text{ INVALID-ORDER-715 } Z(s) = \left(\frac{L_{1s}}{C_{L}L_{1s}^{2}+1} + R_{1}, \ L_{2s} + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_{Ls}}{C_{L}L_{Ls^{2}+1}}\right) \dots 121$ $10.71 \text{ INVALID-ORDER-716 } Z(s) = \left(\frac{L_{1s}}{C_{1}L_{1s}^{2}+1} + R_{1}, \ L_{2s} + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ \infty, \ L_{Ls} + R_{L} + \frac{1}{C_{Ls}}\right) \dots 121$
10.716NVALID-ORDER-716 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$
$10.71 \text{ INVALID-ORDER-717 } Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right) $
10.71\bigs_NVALID-ORDER-718 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
$10.71 \text{ @NVALID-ORDER-719 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 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) $
10.720NVALID-ORDER-720 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$
10.72INVALID-ORDER-721 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
$10.722 \text{NVALID-ORDER-} 722 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)  \dots $
10.72\mathbb{B}\mathbb{N}\mathbb{A}\mathbb{L}\mathbb{ID}\-ORDER-723 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right) \ \dots \ 122$
$10.724\text{NVALID-ORDER-}724 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)  \dots $

10.725NVALID-ORDER-725 $Z(s) = 1$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1},\ L_{2}s+R_{2}+\frac{1}{C_{2}s},\ \infty,\ \infty,\ \infty,\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right)\ \dots$	122
10.726NVALID-ORDER-726 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	122
10.72TNVALID-ORDER-727 $Z(s) = 1$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1},\ L_{2}s+R_{2}+\frac{1}{C_{2}s},\ \infty,\ \infty,\ \infty,\ \frac{L_{L}R_{L}s}{C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}}\right)\ .\ .\ .\ .\ .\ .\ .\ .\ .\ .\ .\ .\ .\$	122
10.72\NVALID-ORDER-728 $Z(s) = 1$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1},\ L_{2}s+R_{2}+\frac{1}{C_{2}s},\ \infty,\ \infty,\ \infty,\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}+R_{L}\right)$	122
10.72 <b>9</b> NVALID-ORDER-729 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$	122
10.73 <b>0</b> NVALID-ORDER-730 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L\right)$	123
10.73 <b>I</b> NVALID-ORDER-731 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	123
10.73 <b>2</b> NVALID-ORDER-732 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$	123
	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1},\ \frac{L_{2}s}{C_{2}L_{2}s^{2}+1}+R_{2},\ \infty,\ \infty,\ \infty,\ R_{L}+\frac{1}{C_{L}s}\right)$	123
10.73#NVALID-ORDER-734 $Z(s) = 1$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1}, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1}+R_{2}, \infty, \infty, \infty, L_{L}s+\frac{1}{C_{L}s}\right)$	123
	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \frac{L_2s}{C_2L_2s^2+1}+R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots$	123
	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \infty, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots \dots$	123
	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \dots \dots$	123
	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	123
10.73 <b>9</b> NVALID-ORDER-739 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right) \ \dots $	124
10.74 <b>0</b> NVALID-ORDER-740 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L\right) \dots \dots$	124
10.74INVALID-ORDER-741 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots$	124
10.742NVALID-ORDER-742 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right) \dots \dots$	124
10.74\( \mathbb{R}\) NVALID-ORDER-743 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right) \dots \dots$	124
10.74\PNVALID-ORDER-744 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right) \dots \dots$	124
10.745NVALID-ORDER-745 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots$	124
10.746NVALID-ORDER-746 $Z(s) =$	$\begin{pmatrix} C_1 L_1 s + 1 & \cdots & C_2 L_2 s & + C_2 L_2 s + 1 & \cdots & \cdots & - & - & C_L s \end{pmatrix}$	124
10.74 INVALID-ORDER-747 $Z(s) =$	$\left( \begin{array}{cccccccccccccccccccccccccccccccccccc$	124
10.74\nbelownerthalforder-748 $Z(s) = 10.74$	$\begin{pmatrix} C_1 L_1 s + 1 \end{pmatrix}$	
10.74 <b>9</b> NVALID-ORDER-749 $Z(s) =$	$\begin{pmatrix} c_1 L_1 s^{-+} 1 & \cdots & c_2 L_2 s^{-+} + c_2 L_2 s^{-+} 1 & \cdots & \cdots & c_L L_L s^{-+} + c_L L_L s^{-+} 1 \end{pmatrix}$	125
10.75 ONVALID-ORDER-750 $Z(s) =$	$\left(C_{1}D_{1}s+C_{1}h_{1}s+1\right)$	125
10.75INVALID-ORDER-751 $Z(s) =$	$\left(C_1L_1s + C_1R_1s + 1\right)$	125
10.75 <b>2</b> NVALID-ORDER-752 $Z(s) =$	$\left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ R_2,\ \infty,\ \infty,\ \infty,\ R_L+\frac{1}{C_Ls}\right)$	125
10.75 <b>B</b> NVALID-ORDER-753 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)  \dots $	125
10.754NVALID-ORDER-754 $Z(s) =$	$\left(C_{1}D_{1}S^{-1}C_{1}R_{1}S^{-1}\right)$	125
10.75 NVALID-ORDER-755 $Z(s) =$	$\left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ R_2,\ \infty,\ \infty,\ \infty,\ L_Ls+R_L+\frac{1}{C_Ls}\right)\right].$	125
10.75 NVALID-ORDER-756 $Z(s) =$	$\left(C_L B_L s + C_L R_L s + T L s + R_L \right)$	125
10.75 INVALID-ORDER-757 $Z(s) =$		126
10.75 NVALID-ORDER-758 $Z(s) = 10.75$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1},\ R_2,\ \infty,\ \infty,\ \infty,\ \frac{R_L(C_LL_Ls^2+1)^{'}}{C_LL_Ls^2+C_LR_Ls+1}\right)\ \dots \dots$	126

10.75 <b>9</b> NVALID-ORDER-759 $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)$	126
10.76 <b>0</b> NVALID-ORDER-760 $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	126
$10.76 \text{INVALID-ORDER-} 761 \ Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right) \ \dots $	126
$10.762\text{NVALID-ORDER-}762\ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ R_L + \frac{1}{C_Ls}\right)$	126
$10.76 \text{ 2NVALID-ORDER-} 763 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right) \ \dots $	126
$10.764\text{NVALID-ORDER-}764\ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ \frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	126
$10.76 \text{INVALID-ORDER-} 765 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \ \dots $	126
$10.76 \text{ INVALID-ORDER-766 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2 + 1\right)}{C_1L_1s^2 + C_1R_1s + 1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right) \qquad $	127
$10.76 \text{INVALID-ORDER-} 767 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) $	127
$10.76 \text{NVALID-ORDER-} 768 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)  \dots $	127
$10.76 \text{ @NVALID-ORDER-769 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ R_L\right) \ \dots $	127
10.77 <b>0</b> NVALID-ORDER-770 $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	127
$10.77 \text{INVALID-ORDER-771 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right) $	127
$10.772\text{NVALID-ORDER-}772\ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ \frac{R_2}{C_2R_2s+1},\ \infty,\ \infty,\ \infty,\ R_L + \frac{1}{C_Ls}\right)\ \dots \dots$	127
$10.77 \text{ 2NVALID-ORDER-} 773 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right) \ \dots $	127
$10.77 \text{ 1 INVALID-ORDER-774 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) \ \dots $	127
10.77 INVALID-ORDER-775 $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$	128
$10.77 \text{ INVALID-ORDER-776 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ \dots $	128
$10.77\text{INVALID-ORDER-777 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \ \dots $	128
$10.77 \$NVALID-ORDER-778 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right) \ \dots $	128
10.779NVALID-ORDER-779 $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$	128
10.78 <b>DNVALID-ORDER-780</b> $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	128
10.78INVALID-ORDER-781 $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$	128
10.782NVALID-ORDER-782 $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$	
10.78 INVALID-ORDER-783 $Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$	
10.784NVALID-ORDER-784 $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$	
10.78 INVALID-ORDER-785 $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	129
$10.78 \text{ INVALID-ORDER-786 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)  \dots $	129
$10.78 \text{INVALID-ORDER-787} \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \ \dots $	
$10.78 \text{\&NVALID-ORDER-788 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2 + 1\right)}{C_1L_1s^2 + C_1R_1s + 1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)  \dots $	129
10.78 INVALID-ORDER-789 $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)$	129

10.79 <b>0</b> NVALID-ORDER-790 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_Ls}\right) \ \dots \ $	129
10.79INVALID-ORDER-791 $Z(s) =$	$\left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls+1}\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	129
10.79 <b>2</b> NVALID-ORDER-792 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ R_L+\frac{1}{C_Ls}\right)\ \dots \dots$	129
10.79 <b>B</b> NVALID-ORDER-793 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ L_Ls+\frac{1}{C_Ls}\right)  \dots \qquad \dots \qquad \dots $	130
10.794NVALID-ORDER-794 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ \frac{L_Ls}{C_LL_Ls^2+1}\right)^{\frac{1}{2}} \ \dots \$	130
10.79Б NVALID-ORDER-795 $Z(s) =$	$\left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ L_Ls+R_L+\frac{1}{C_Ls}\right)\ \dots$	130
10.796NVALID-ORDER-796 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+\frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ \dots $	130
10.79 <b>T</b> NVALID-ORDER-797 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}+R_L\right) \dots \dots$	130
10.79&NVALID-ORDER-798 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right) \dots \dots$	130
10.79 <b>9</b> NVALID-ORDER-799 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $	130
10.80 <b>0</b> NVALID-ORDER-800 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots$	130
10.80INVALID-ORDER-801 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$	130
10.80 <b>2</b> NVALID-ORDER-802 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1},\ L_2s+R_2+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ R_L+\frac{1}{C_Ls}\right)\ .$	131
10.80 <b>B</b> NVALID-ORDER-803 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, L_Ls+\frac{1}{C_Ls}\right)  \dots $	131
10.80#NVALID-ORDER-804 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots$	131
10.80 Invalid-order-805 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}\right).$	131
10.806NVALID-ORDER-806 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \dots \dots$	131
10.80 TNVALID-ORDER-807 $Z(s) =$	$\left( C_{L}L_{L}S + C_{L}L_{L}S + 1 \right)$	131
10.80\&NVALID-ORDER-808 $Z(s) =$		
10.80 <b>9</b> NVALID-ORDER-809 $Z(s) =$	$\left( c_1L_1s + c_1R_1s + 1 + c_2L_2s + 1 \right)$	131
10.81 <b>0</b> NVALID-ORDER-810 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	
10.81INVALID-ORDER-811 $Z(s) =$	$\left( c_1L_1s + c_1R_1s + 1 + c_2L_2s + 1 \right)$	
10.812NVALID-ORDER-812 $Z(s) =$	$\begin{pmatrix} C_1L_1s^*+C_1h_1s+1 & C_2L_2s^*+1 & \cdots & \cdots & - & C_Ls \end{pmatrix}$	
10.81 <b>B</b> NVALID-ORDER-813 $Z(s) =$	$\begin{pmatrix} c_1L_1s & +c_1n_1s+1 & c_2L_2s & +1 \\ & & & & & & & & & & & & & & & & & & $	
10.81#NVALID-ORDER-814 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	
10.81 INVALID-ORDER-815 $Z(s) =$	$\left(C_1L_1s + C_1R_1s + 1 + C_2L_2s + C_2L_2s + 1 + C_2L_2s $	
10.816NVALID-ORDER-816 $Z(s) =$	$\left(\begin{smallmatrix} C_1L_1s & +C_1R_1s+1 \end{smallmatrix}, \begin{smallmatrix} C_2L_2s & +1 \end{smallmatrix}\right)$	
10.81 <b>T</b> NVALID-ORDER-817 $Z(s) =$		
10.81&NVALID-ORDER-818 $Z(s) =$	$\sqrt{ \mathcal{O}_1D_1S } +  \mathcal{O}_1D_1S  +  \mathcal{O}_2D_2S  + 1$	
10.81 <b>9</b> NVALID-ORDER-819 $Z(s) =$	$\left( c_{1}L_{1}s + c_{1}R_{1}s + 1 + c_{2}L_{2}s + c_{2}L_{2}s + 1 + \cdots + c_{n} \right)$	
10.820NVALID-ORDER-820 $Z(s) =$	$\left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots$	133

$10.82 \text{INVALID-ORDER-821 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right) $
$10.822\text{NVALID-ORDER-822} \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.82 \text{ INVALID-ORDER-823 } Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)  .  .  .  .  .  .  .  .  .  $
$10.824\text{NVALID-ORDER-824} \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)' \ \dots \ $
$10.82 \text{5NVALID-ORDER-825} \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.826 \text{NVALID-ORDER-826} \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right) \ \dots $
$10.82\text{INVALID-ORDER-827} \ Z(s) = \left(R_1(C_1L_1s^2 + L_2R_2s +$
$10.82 \$NVALID-ORDER-828 \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(C_LL_Ls^2+1\right)'}{C_LL_Ls^2+C_LR_Ls+1}\right) \ \dots $
1 PolynomialError

1 Examined H(z) for TIA simple Z1 Z2 ZL:  $\frac{Z_1Z_L(Z_2g_m+1)}{Z_1Z_2g_m+Z_1+Z_2+Z_L}$ 

$$H(z) = \frac{Z_1 Z_L (Z_2 g_m + 1)}{Z_1 Z_2 g_m + Z_1 + Z_2 + Z_L}$$

- 2 HP
- 3 BP
- **3.1** BP-1  $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

Parameters:

Q: 
$$C_L \sqrt{\frac{1}{C_L L_L}} (R_1 R_2 g_m + R_1 + R_2)$$
  
wo:  $\sqrt{\frac{1}{C_L L_L}}$   
bandwidth:  $\frac{1}{C_L (R_1 R_2 g_m + R_1 + R_2)}$   
K-LP: 0  
K-HP: 0  
K-BP:  $R_1 (R_2 g_m + 1)$   
Qz: 0  
Wz: None

**3.2** BP-2  $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{C_L R_L \sqrt{\frac{1}{C_L L_L}} (R_1 R_2 g_m + R_1 + R_2)}{R_1 R_2 g_m + R_1 + R_2 + R_L} \\ &\text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ &\text{bandwidth:} \ \frac{R_1 R_2 g_m + R_1 + R_2 + R_L}{C_L R_L (R_1 R_2 g_m + R_1 + R_2)} \\ &\text{K-LP:} \ 0 \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{R_1 R_L (R_2 g_m + 1)}{R_1 R_2 g_m + R_1 + R_2 + R_L} \\ &\text{Qz:} \ 0 \\ &\text{Wz:} \ \text{None} \end{aligned}$$

**3.3** BP-3  $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 s (R_2 g_m + 1)}{C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L R_2 s + 1}$$

Q: 
$$\frac{L_1\sqrt{\frac{1}{C_LL_1(R_2g_m+1)}}(R_2g_m+1)}{R_2}$$
 wo: 
$$\sqrt{\frac{1}{C_LL_1(R_2g_m+1)}}$$
 bandwidth: 
$$\frac{R_2}{L_1(R_2g_m+1)}$$
 K-LP: 0 K-HP: 0 K-BP: 
$$\frac{L_1(R_2g_m+1)}{C_LR_2}$$
 Qz: 0

Wz: None

**3.4** BP-4 
$$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

# $H(s) = \frac{L_1 R_L s \left( R_2 g_m + 1 \right)}{C_L L_1 R_2 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L}$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_L L_1 R_L \sqrt{\frac{R_2 + R_L}{C_L L_1 R_L (R_2 g_m + 1)}} (R_2 g_m + 1)}{C_L R_2 R_L + L_1 R_2 g_m + L_1} \\ \text{wo:} \ \sqrt{\frac{R_2 + R_L}{C_L L_1 R_L (R_2 g_m + 1)}} \\ \text{bandwidth:} \ \frac{C_L R_2 R_L + L_1 R_2 g_m + L_1}{C_L L_1 R_L (R_2 g_m + 1)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{L_1 R_L (R_2 g_m + 1)}{C_L R_2 R_L + L_1 R_2 g_m + L_1} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

**3.5** BP-5 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L\right)$$

### Parameters:

Q: 
$$\frac{C_1\sqrt{\frac{1}{C_1L_1}}(R_2+R_L)}{R_2g_m+1}$$
 wo:  $\sqrt{\frac{1}{C_1L_1}}$  bandwidth:  $\frac{R_2g_m+1}{C_1(R_2+R_L)}$  K-LP: 0 K-HP: 0 K-BP:  $R_L$  Qz: 0 Wz: None

**3.6** BP-6 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, R_L\right)$$

# $H(s) = \frac{L_1 R_1 R_L s \left(R_2 g_m + 1\right)}{C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_L s^2 + L_1 R_1 R_2 g_m s + L_1 R_1 s + L_1 R_2 s + L_1 R_L s + R_1 R_2 + R_1 R_L}$

 $H(s) = \frac{L_1 R_L s \left(R_2 g_m + 1\right)}{C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^2 + L_1 R_2 g_m s + L_1 s + R_2 + R_L}$ 

#### Parameters:

$$\begin{aligned} &\text{Q: } \frac{C_1R_1\sqrt{\frac{1}{C_1L_1}}(R_2+R_L)}{R_1R_2g_m+R_1+R_2+R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_1L_1}} \\ &\text{bandwidth: } \frac{R_1R_2g_m+R_1+R_2+R_L}{C_1R_1(R_2+R_L)} \\ &\text{K-LP: } 0 \\ &\text{K-HP: } 0 \\ &\text{K-BP: } \frac{R_1R_L(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L} \\ &\text{Qz: } 0 \\ &\text{Wz: None} \end{aligned}$$

### 4 LP

# **4.1** LP-1 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left( R_2 g_m + 1 \right)}{C_1 C_L R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_L R_2 R_L g_m s + C_L R_L s + R_2 g_m + 1}$ 

Parameters:

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

**4.2** LP-2  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{R_1 \left( R_2 g_m + 1 \right)}{C_1 C_L R_1 R_2 s^2 + C_1 R_1 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$ 

Parameters:

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

**4.3** LP-3  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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

Parameters:

5 BS

**5.1** BS-1 
$$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 (R_2 g_m + 1) (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$$

Parameters:

Q: 
$$\frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_1 R_2 g_m + R_1 + R_2}$$
 wo:  $\sqrt{\frac{1}{C_L L_L}}$  bandwidth:  $\frac{R_1 R_2 g_m + R_1 + R_2}{L_L}$  K-LP:  $R_1 \left( R_2 g_m + 1 \right)$  K-HP:  $R_1 \left( R_2 g_m + 1 \right)$  K-BP: 0 Qz: None Wz:  $\sqrt{\frac{1}{C_L L_L}}$ 

**5.2** BS-2 
$$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

Parameters:

Q: 
$$\frac{L_L\sqrt{\frac{1}{C_LL_L}}(R_1R_2g_m + R_1 + R_2 + R_L)}{R_L(R_1R_2g_m + R_1 + R_2)}$$
 wo: 
$$\sqrt{\frac{1}{C_LL_L}}$$
 bandwidth: 
$$\frac{R_L(R_1R_2g_m + R_1 + R_2)}{L_L(R_1R_2g_m + R_1 + R_2 + R_L)}$$
 K-LP: 
$$\frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L}$$
 K-HP: 
$$\frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L}$$
 K-BP: 0 Qz: None Wz: 
$$\sqrt{\frac{1}{C_LL_L}}$$

**5.3** BS-3 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L (R_2 g_m + 1) (C_1 L_1 s^2 + 1)}{C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_2 s + C_1 R_L s + R_2 g_m + 1}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_2g_m+1)}{R_2+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_1L_1}} \\ \text{bandwidth:} \ \frac{R_2+R_L}{L_1(R_2g_m+1)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ R_L \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_1L_1}} \end{array}$$

$$\mathbf{5.4} \quad \mathbf{BS-4} \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2, \ \infty, \ \infty, \ \infty, \ R_L\right)$$
 
$$H(s) = \frac{R_1R_L\left(R_2g_m+1\right)\left(C_1L_1s^2+1\right)}{C_1L_1R_1s^2+C_1L_1R_2s^2+C_1L_1R_2s^2+C_1L_1R_2s+C_1R_1R_2s+C_1R_1R_2s+R_1R_2g_m+R_1+R_2+R_L}$$

$$\begin{aligned} & \text{Q:} \ \frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_1R_2g_m + R_1 + R_2 + R_L)}{R_1(R_2 + R_L)} \\ & \text{wo:} \ \sqrt{\frac{1}{C_1L_1}} \\ & \text{bandwidth:} \ \frac{R_1(R_2 + R_L)}{L_1(R_1R_2g_m + R_1 + R_2 + R_L)} \\ & \text{K-LP:} \ \frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L} \\ & \text{K-HP:} \ \frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L} \\ & \text{K-BP:} \ 0 \\ & \text{Qz:} \ \text{None} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_1L_1}} \end{aligned}$$

### 6 GE

**6.1** GE-1 
$$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

### Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_1 R_2 g_m + R_1 + R_2 + R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ & \text{bandwidth:} \ \frac{R_1 R_2 g_m + R_1 + R_2 + R_L}{L_L} \\ & \text{K-LP:} \ R_1 \left( R_2 g_m + 1 \right) \\ & \text{K-HP:} \ R_1 \left( R_2 g_m + 1 \right) \\ & \text{K-BP:} \ \frac{R_1 R_L (R_2 g_m + 1)}{R_1 R_2 g_m + R_1 + R_2 + R_L} \\ & \text{Qz:} \ \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

**6.2** GE-2 
$$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

### Parameters:

Q: 
$$C_L \sqrt{\frac{1}{C_L L_L}} \left( R_1 R_2 g_m + R_1 + R_2 + R_L \right)$$
  
wo:  $\sqrt{\frac{1}{C_L L_L}}$   
bandwidth:  $\frac{1}{C_L (R_1 R_2 g_m + R_1 + R_2 + R_L)}$   
K-LP:  $\frac{R_1 R_L (R_2 g_m + 1)}{R_1 R_2 g_m + R_1 + R_2 + R_L}$   
K-HP:  $\frac{R_1 R_L (R_2 g_m + 1)}{R_1 R_2 g_m + R_1 + R_2 + R_L}$   
K-BP:  $R_1 \left( R_2 g_m + 1 \right)$   
Qz:  $C_L R_L \sqrt{\frac{1}{C_L L_L}}$   
Wz:  $\sqrt{\frac{1}{C_L L_L}}$ 

**6.3** GE-3 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

Q: 
$$\frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_1g_m+1)}{R_1+R_L}$$

$$H(s) = \frac{R_1 (R_2 g_m + 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_L s + 1}$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_L s + R_1 g_m + 1}$$

wo: 
$$\sqrt{\frac{1}{C_2L_2}}$$
 bandwidth:  $\frac{R_1+R_L}{L_2(R_1g_m+1)}$  K-LP:  $\frac{R_1R_Lg_m}{R_1g_m+1}$  K-HP:  $\frac{R_1R_Lg_m}{R_1g_m+1}$  K-BP:  $\frac{R_1R_L}{R_1+R_L}$  Qz:  $L_2g_m\sqrt{\frac{1}{C_2L_2}}$  Wz:  $\sqrt{\frac{1}{C_2L_2}}$ 

**6.4** GE-4 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + R_1 g_m + 1}$$

#### Parameters:

$$\begin{aligned} & \text{Q: } \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_1g_m+1)}{R_1R_2g_m+R_1+R_2+R_L} \\ & \text{wo: } \sqrt{\frac{1}{C_2L_2}} \\ & \text{bandwidth: } \frac{R_1R_2g_m+R_1+R_2+R_L}{L_2(R_1g_m+1)} \\ & \text{K-LP: } \frac{R_1R_Lg_m}{R_1g_m+1} \\ & \text{K-HP: } \frac{R_1R_Lg_m}{R_1g_m+1} \\ & \text{K-BP: } \frac{R_1R_L(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L} \\ & \text{Qz: } \frac{L_2g_m\sqrt{\frac{1}{C_2L_2}}}{R_2g_m+1} \\ & \text{Wz: } \sqrt{\frac{1}{C_2L_2}} \end{aligned}$$

**6.5** GE-5 
$$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_L s^2 + L_2 R_1 g_m s + L_2 s + R_1 R_2 g_m + R_1 + R_2 + R_L R_2 g_m + R_1 R_2 g_m + R_2 g_$$

#### Parameters:

$$Q: \frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_1R_2g_m + R_1 + R_2 + R_L)}{R_1g_m + 1}$$
wo:  $\sqrt{\frac{1}{C_2L_2}}$ 
bandwidth:  $\frac{R_1g_m + 1}{C_2(R_1R_2g_m + R_1 + R_2 + R_L)}$ 
K-LP:  $\frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L}$ 
K-HP:  $\frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L}$ 
K-BP:  $\frac{R_1R_Lg_m}{R_1g_m + 1}$ 
Qz:  $\frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_2g_m + 1)}{g_m}$ 
Wz:  $\sqrt{\frac{1}{C_2L_2}}$ 

**6.6 GE-6** 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_L s^2 + C_2 R_1 R_2 s + C_2 R_2 R_L s + R_1 R_2 g_m + R_1 + R_2 + R_L R_2 g_m + R_1 R_2 g_m + R_$$

$$\begin{aligned} &\text{Q: } \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_1R_2g_m + R_1 + R_2 + R_L)}{R_2(R_1 + R_L)} \\ &\text{wo: } \sqrt{\frac{1}{C_2L_2}} \\ &\text{bandwidth: } \frac{R_2(R_1 + R_L)}{L_2(R_1R_2g_m + R_1 + R_2 + R_L)} \end{aligned}$$

**6.7** GE-7 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right)}{C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_1 s + R_2 g_m + 1}$$

### Parameters:

$$\begin{array}{l} \text{Q: } \frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L} \\ \text{wo: } \sqrt{\frac{1}{C_1L_1}} \\ \text{bandwidth: } \frac{R_1R_2g_m+R_1+R_2+R_L}{L_1(R_2g_m+1)} \\ \text{K-LP: } R_L \\ \text{K-HP: } R_L \\ \text{K-BP: } \frac{R_1R_L(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L} \\ \text{Qz: } \frac{L_1\sqrt{\frac{1}{C_1L_1}}}{R_1} \\ \text{Wz: } \sqrt{\frac{1}{C_1L_1}} \end{array}$$

**6.8** GE-8 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 L_1 R_1 R_2 g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + L_1 R_2 g_m s + L_1 s + R_1 R_2 g_m + R_1 + R_2 + R_L r_2 r_2 r_3}$$

### Parameters:

$$\begin{aligned} &\text{Q: } \frac{C_1\sqrt{\frac{1}{C_1L_1}}(R_1R_2g_m + R_1 + R_2 + R_L)}{R_2g_m + 1} \\ &\text{wo: } \sqrt{\frac{1}{C_1L_1}} \\ &\text{bandwidth: } \frac{R_2g_m + 1}{C_1(R_1R_2g_m + R_1 + R_2 + R_L)} \\ &\text{K-LP: } \frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L} \\ &\text{K-HP: } \frac{R_1R_L(R_2g_m + 1)}{R_1R_2g_m + R_1 + R_2 + R_L} \\ &\text{K-BP: } R_L \\ &\text{Qz: } C_1R_1\sqrt{\frac{1}{C_1L_1}} \\ &\text{Wz: } \sqrt{\frac{1}{C_1L_1}} \end{aligned}$$

### 7 AP

### 8 INVALID-NUMER

8.1 INVALID-NUMER-1 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

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

Q: 
$$\frac{C_2C_LR_1R_L\sqrt{\frac{R_1g_m+1}{C_2C_LR_1R_L}}}{C_2R_1+C_2R_L+C_LR_1R_Lg_m+C_LR_L}$$

K-LP:  $\frac{R_1R_Lg_m}{R_1g_m+1}$ K-HP: 0

K-BP:  $\frac{C_2R_1R_L}{C_2R_1+C_2R_L+C_LR_1R_Lg_m+C_LR_L}$ 

Qz: 0 Wz: None

### 8.2 INVALID-NUMER-2 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L R_1 R_2 s^2 + C_2 R_2 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$$

#### Parameters:

Q: 
$$\frac{C_2C_LR_1R_2\sqrt{\frac{1}{C_2C_LR_1R_2}}}{C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2}$$
wo:  $\sqrt{\frac{1}{C_2C_RR_1R_2}}$ 

wo:  $\sqrt{\frac{1}{C_2C_LR_1R_2}}$  bandwidth:  $\frac{C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2}{C_2C_LR_1R_2}$  K-LP:  $R_1\left(R_2g_m+1\right)$ 

K-HP: 0

K-BP:  $\frac{C_2R_1R_2}{C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2}$ 

Qz: 0 Wz: None

### 8.3 INVALID-NUMER-3 $Z(s) = \left(R_1, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$

#### Parameters:

Q: 
$$\frac{C_2C_LR_1R_2R_L\sqrt{\frac{R_1R_2g_m+R_1+R_2+R_L}{C_2C_LR_1R_2R_L}}}{C_2R_1R_2+C_2R_2R_L+C_LR_1R_2R_Lg_m+C_LR_1R_L+C_LR_2R_L}$$
wo: 
$$\sqrt{\frac{R_1R_2g_m+R_1+R_2+R_L}{C_2C_LR_1R_2R_L}}$$
bandwidth: 
$$\frac{C_2R_1R_2+C_2R_2R_L+C_LR_1R_2R_Lg_m+C_LR_1R_L+C_LR_2R_L}{C_2C_LR_1R_2R_L}$$
K-LP: 
$$\frac{R_1R_L(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L}$$
K-HP: 
$$0$$
K-BP: 
$$\frac{C_2R_1R_2R_L}{C_2R_1R_2R_L}$$

K-BP:  $\frac{C_2R_1R_2R_L}{C_2R_1R_2+C_2R_2R_L+C_LR_1R_2R_Lg_m+C_LR_1R_L+C_LR_2R_L}$  Qz: 0

Wz: None

8.4 INVALID-NUMER-4  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_1 R_L \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L R_1 R_2 g_m s^2 + C_2 C_L R_1 R_L s^2 + C_2 C_L R_2 R_L s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + C_L R_1 R_L g_m s + C_L R_L s + R_1 g_m + 1}$$

$$\begin{aligned} & \text{Q:} \ \frac{C_2C_LR_L\sqrt{\frac{R_1g_m+1}{C_2C_LR_L(R_1R_2g_m+R_1+R_2)}}(R_1R_2g_m+R_1+R_2)}{C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L+C_LR_1R_Lg_m+C_LR_L} \\ & \text{wo:} \ \sqrt{\frac{R_1g_m+1}{C_2C_LR_L(R_1R_2g_m+R_1+R_2)}} \\ & \text{bandwidth:} \ \frac{C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L+C_LR_1R_Lg_m+C_LR_L}{C_2C_LR_L(R_1R_2g_m+R_1+R_2)} \\ & \text{K-LP:} \ \frac{R_1R_Lg_m}{R_1g_m+1} \\ & \text{K-HP:} \ 0 \\ & \text{K-BP:} \ \frac{C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L+C_LR_1R_Lg_m+C_LR_L}{C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L+C_LR_1R_Lg_m+C_LR_L} \\ & \text{Qz:} \ 0 \\ & \text{Wz:} \ \text{None} \end{aligned}$$

### 8.5 INVALID-NUMER-5 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

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

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_1\sqrt{\frac{1}{C_LL_1(R_2g_m+1)}}(R_2g_m+1)}{R_2+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_1(R_2g_m+1)}} \\ \text{bandwidth:} \ \frac{R_2+R_L}{L_1(R_2g_m+1)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ R_L \\ \text{K-BP:} \ \frac{L_1(R_2g_m+1)}{C_L(R_2+R_L)} \\ \text{Qz:} \ C_LR_L\sqrt{\frac{1}{C_LL_1(R_2g_m+1)}} \\ \text{Wz:} \ \text{None} \end{array}$$

8.6 INVALID-NUMER-6  $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{L_1 R_L s (C_2 s + g_m)}{C_2 L_1 s^2 + C_2 R_L s + L_1 g_m s + 1}$$

Parameters:

$$\begin{aligned} &\text{Q: } \frac{C_2L_1\sqrt{\frac{1}{C_2L_1}}}{C_2R_L + L_1g_m} \\ &\text{wo: } \sqrt{\frac{1}{C_2L_1}} \\ &\text{bandwidth: } \frac{C_2R_L + L_1g_m}{C_2L_1} \\ &\text{K-LP: 0} \\ &\text{K-HP: } R_L \\ &\text{K-BP: } \frac{L_1R_Lg_m}{C_2R_L + L_1g_m} \\ &\text{Qz: } \frac{C_2\sqrt{\frac{1}{C_2L_1}}}{g_m} \\ &\text{Wz: None} \end{aligned}$$

8.7 INVALID-NUMER-7  $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{L_1 (C_2 s + g_m)}{C_2 C_L L_1 s^2 + C_2 + C_L L_1 g_m s + C_L}$ 

Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{C_2\sqrt{\frac{C_2+C_L}{C_2C_LL_1}}}{g_m} \\ &\text{wo:} \ \sqrt{\frac{C_2+C_L}{C_2C_LL_1}} \\ &\text{bandwidth:} \ \frac{g_m}{C_2} \\ &\text{K-LP:} \ \frac{L_1g_m}{C_2+C_L} \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{C_2}{C_Lg_m} \\ &\text{Qz:} \ 0 \\ &\text{Wz:} \ \text{None} \end{aligned}$$

8.8 INVALID-NUMER-8  $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 L_1 R_2 s^2 + C_2 R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L}$$

```
\begin{aligned} &\text{Q: } \frac{C_2L_1R_2\sqrt{\frac{R_2+R_L}{C_2L_1R_2}}}{C_2R_2R_L+L_1R_2g_m+L_1} \\ &\text{wo: } \sqrt{\frac{R_2+R_L}{C_2L_1R_2}} \\ &\text{bandwidth: } \frac{C_2R_2R_L+L_1R_2g_m+L_1}{C_2L_1R_2} \\ &\text{K-LP: 0} \\ &\text{K-HP: } R_L \\ &\text{K-BP: } \frac{L_1R_L(R_2g_m+1)}{C_2R_2R_L+L_1R_2g_m+L_1} \\ &\text{Qz: } \frac{C_2R_2\sqrt{\frac{R_2+R_L}{C_2L_1R_2}}}{R_2g_m+1} \\ &\text{Wz: None} \end{aligned}
```

### 8.9 INVALID-NUMER-9 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{L_1 R_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 R_2 s + C_2 R_L s + L_1 g_m s + 1}$$

### Parameters:

$$\begin{array}{l} \mathbf{Q} \colon \frac{C_2L_1\sqrt{\frac{1}{C_2L_1(R_2g_m+1)}}(R_2g_m+1)}{C_2R_2+C_2R_L+L_1g_m} \\ \mathbf{wo} \colon \sqrt{\frac{1}{C_2L_1(R_2g_m+1)}} \\ \mathbf{bandwidth} \colon \frac{C_2R_2+C_2R_L+L_1g_m}{C_2L_1(R_2g_m+1)} \\ \mathbf{K}\text{-LP} \colon 0 \\ \mathbf{K}\text{-HP} \colon R_L \\ \mathbf{K}\text{-BP} \colon \frac{L_1R_Lg_m}{C_2R_2+C_2R_L+L_1g_m} \\ \mathbf{Qz} \colon \frac{C_2\sqrt{\frac{1}{C_2L_1(R_2g_m+1)}(R_2g_m+1)}}{g_m} \\ \mathbf{Wz} \colon \mathbf{None} \end{array}$$

# 8.10 INVALID-NUMER-10 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L R_2 s + C_2 + C_L L_1 g_m s + C_L C_1 R_2 s + C_2 C_L R_$$

#### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_2L_1\sqrt{\frac{C_2+C_L}{C_2C_LL_1(R_2g_m+1)}}(R_2g_m+1)}{C_2R_2+L_1g_m}\\ \text{wo:} \ \sqrt{\frac{C_2+C_L}{C_2C_LL_1(R_2g_m+1)}}\\ \text{bandwidth:} \ \frac{C_2R_2+L_1g_m}{C_2L_1(R_2g_m+1)}\\ \text{K-LP:} \ \frac{L_1g_m}{C_2+C_L}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_2L_1(R_2g_m+1)}{C_L(C_2R_2+L_1g_m)}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

# 8.11 INVALID-NUMER-11 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 s + g_m\right)}{C_1 C_2 R_L s^2 + C_1 s + C_2 s + g_m} \label{eq:hamiltonian}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_{1}C_{2}R_{L}\sqrt{\frac{g_{m}}{C_{1}C_{2}R_{L}}}}{\frac{C_{1}+C_{2}}{C_{1}C_{2}R_{L}}} \\ \text{wo:} \ \sqrt{\frac{g_{m}}{C_{1}C_{2}R_{L}}} \\ \text{bandwidth:} \ \frac{C_{1}+C_{2}}{C_{1}C_{2}R_{L}} \\ \text{K-LP:} \ R_{L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_{2}R_{L}}{C_{1}+C_{2}} \end{array}$$

Qz: 0 Wz: None

### 8.12 INVALID-NUMER-12 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

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

#### Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{R_L \sqrt{\frac{g_m}{R_L (C_1 C_2 + C_1 C_L + C_2 C_L)}} (C_1 C_2 + C_1 C_L + C_2 C_L)}{C_1 + C_2 + C_L R_L g_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{R_L (C_1 C_2 + C_1 C_L + C_2 C_L)}} \\ \text{bandwidth:} \ \frac{C_1 + C_2 + C_L R_L g_m}{R_L (C_1 C_2 + C_1 C_L + C_2 C_L)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2 R_L}{C_1 + C_2 + C_L R_L g_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$ 

### 8.13 INVALID-NUMER-13 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_L \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_2 R_2 s + R_2 g_m + 1}$$

### Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_1C_2R_2R_L\sqrt{\frac{R_2g_m+1}{C_1C_2R_2R_L}}}{C_1R_2+C_1R_L+C_2R_2} \\ \text{wo:} \ \sqrt{\frac{R_2g_m+1}{C_1C_2R_2R_L}} \\ \text{bandwidth:} \ \frac{C_1R_2+C_1R_L+C_2R_2}{C_1C_2R_2R_L} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_2R_L}{C_1R_2+C_1R_L+C_2R_2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$ 

# 8.14 INVALID-NUMER-14 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 R_2 R_L s^2 + C_1 C_L R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_2 C_L R_2 R_L s^2 + C_2 R_2 s + C_L R_2 R_L g_m s + C_L R_L s + R_2 g_m + 1}$$

$$\begin{aligned} &\text{Q:} \ \frac{R_2R_L\sqrt{\frac{R_2g_m+1}{R_2R_L(C_1C_2+C_1C_L+C_2C_L)}}}{C_1R_2+C_1R_L+C_2R_2+C_LR_2R_Lg_m+C_LR_L}\\ &\text{wo:} \ \sqrt{\frac{R_2g_m+1}{R_2R_L(C_1C_2+C_1C_L+C_2C_L)}}\\ &\text{bandwidth:} \ \frac{C_1R_2+C_1R_L+C_2R_2+C_LR_2R_Lg_m+C_LR_L}{R_2R_L(C_1C_2+C_1C_L+C_2C_L)}\\ &\text{K-LP:} \ R_L\\ &\text{K-HP:} \ 0\\ &\text{K-BP:} \ \frac{C_2R_2R_L}{C_1R_2+C_1R_L+C_2R_2+C_LR_2R_Lg_m+C_LR_L}\\ &\text{Qz:} \ 0\\ &\text{Wz:} \ \text{None} \end{aligned}$$

### 8.15 INVALID-NUMER-15 $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$

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

#### Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_1C_2\sqrt{\frac{g_m}{C_1C_2(R_2+R_L)}}(R_2+R_L)}{C_1+C_2R_2g_m+C_2} \\ & \text{wo:} \ \sqrt{\frac{g_m}{C_1C_2(R_2+R_L)}} \\ & \text{bandwidth:} \ \frac{C_1+C_2R_2g_m+C_2}{C_1C_2(R_2+R_L)} \\ & \text{K-LP:} \ R_L \\ & \text{K-HP:} \ 0 \\ & \text{K-BP:} \ \frac{C_2R_L(R_2g_m+1)}{C_1+C_2R_2g_m+C_2} \\ & \text{Qz:} \ 0 \\ & \text{Wz:} \ \text{None} \end{aligned}$$

8.16 INVALID-NUMER-16  $Z(s) = \left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{{R_1}\left( {{R_2}{g_m} + 1} \right)\left( {{C_L}{R_L}s + 1} \right)}{{{C_1}{C_L}{R_1}{R_2}{s^2} + {C_1}{C_L}{R_1}{R_L}{s^2} + {C_1}{R_1}s + {C_L}{R_1}{R_2}{g_m}s + {C_L}{R_1}s + {C_L}{R_2}s + {C_L}{R_L}s + 1}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_1C_LR_1\sqrt{\frac{1}{C_1C_LR_1(R_2+R_L)}}(R_2+R_L)}{C_1R_1+C_LR_1R_2g_m+C_LR_1+C_LR_2+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_1C_LR_1(R_2+R_L)}} \\ \text{bandwidth:} \ \frac{C_1R_1+C_LR_1R_2g_m+C_LR_1+C_LR_2+C_LR_L}{C_1C_LR_1(R_2+R_L)} \\ \text{K-LP:} \ R_1\left(R_2g_m+1\right) \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_LR_1R_L(R_2g_m+1)}{C_1R_1+C_LR_1R_2g_m+C_LR_1+C_LR_2+C_LR_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.17 INVALID-NUMER-17  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_1 R_L (C_2 s + g_m)}{C_1 C_2 R_1 R_L s^2 + C_1 R_1 s + C_2 R_1 s + C_2 R_L s + R_1 g_m + 1}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_1C_2R_1R_L\sqrt{\frac{R_1g_m+1}{C_1C_2R_1R_L}}}{C_1R_1+C_2R_1+C_2R_L} \\ \text{wo:} \ \sqrt{\frac{R_1g_m+1}{C_1C_2R_1R_L}} \\ \text{bandwidth:} \ \frac{C_1R_1+C_2R_1+C_2R_L}{C_1C_2R_1R_L} \\ \text{K-LP:} \ \frac{R_1R_Lg_m}{R_1g_m+1} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_1R_L}{C_1R_1+C_2R_1+C_2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.18 INVALID-NUMER-18  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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

$$\text{Q: } \frac{R_1R_L\sqrt{\frac{R_1g_m+1}{R_1R_L\left(C_1C_2+C_1C_L+C_2C_L\right)}}(C_1C_2+C_1C_L+C_2C_L)}{C_1R_1+C_2R_1+C_2R_L+C_LR_1R_Lg_m+C_LR_L}$$

```
wo: \sqrt{\frac{R_1g_m+1}{R_1R_L(C_1C_2+C_1C_L+C_2C_L)}} bandwidth: \frac{C_1R_1+C_2R_1+C_2R_L+C_LR_1R_Lg_m+C_LR_L}{R_1R_L(C_1C_2+C_1C_L+C_2C_L)} K-LP: \frac{R_1R_Lg_m}{R_1g_m+1} K-HP: 0 K-BP: \frac{C_2R_1R_L}{C_1R_1+C_2R_1+C_2R_L+C_LR_1R_Lg_m+C_LR_L} Qz: 0 Wz: None
```

## 8.19 INVALID-NUMER-19 $Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_1 R_L \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 R_1 R_2 R_L s^2 + C_1 R_1 R_2 s + C_1 R_1 R_L s + C_2 R_1 R_2 s + C_2 R_2 R_L s + R_1 R_2 g_m + R_1 + R_2 + R_L}$$

### Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_1C_2R_1R_2R_L\sqrt{\frac{R_1R_2g_m+R_1+R_2+R_L}{C_1C_2R_1R_2R_L}}}{C_1R_1R_2+C_1R_1R_L+C_2R_1R_2+C_2R_2R_L} \\ \text{wo:} \ \sqrt{\frac{R_1R_2g_m+R_1+R_2+R_L}{C_1C_2R_1R_2R_L}} \\ \text{bandwidth:} \ \frac{C_1R_1R_2+C_1R_1R_L+C_2R_1R_2+C_2R_2R_L}{C_1C_2R_1R_2R_L} \\ \text{K-LP:} \ \frac{R_1R_L(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_1R_2R_L}{C_1R_1R_L+C_2R_1R_2+C_2R_2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$ 

## **8.20** INVALID-NUMER-20 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 R_1 s + C_2 C_L R_1 R_2 s^2 + C_2 R_2 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$$

### Parameters:

$$Q \colon \frac{R_1R_2\sqrt{\frac{1}{R_1R_2(C_1C_2+C_1C_L+C_2C_L)}}(C_1C_2+C_1C_L+C_2C_L)}{C_1R_1+C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2}$$
 wo: 
$$\sqrt{\frac{1}{R_1R_2(C_1C_2+C_1C_L+C_2C_L)}}$$
 bandwidth: 
$$\frac{C_1R_1+C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2}{R_1R_2(C_1C_2+C_1C_L+C_2C_L)}$$
 K-LP: 
$$R_1\left(R_2g_m+1\right)$$
 K-HP: 
$$0$$
 K-BP: 
$$\frac{C_2R_1R_2}{C_1R_1+C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2}$$
 Qz: 
$$0$$
 Wz: None

# 8.21 INVALID-NUMER-21 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$\begin{array}{c} R_1R_2R_L\sqrt{\frac{R_1R_2g_m+R_1+R_2+R_L}{R_1R_2R_L(C_1C_2+C_1C_L+C_2C_L)}}}(C_1C_2+C_1C_L+C_2C_L)\\ Q\colon \frac{C_1R_1R_2+C_1R_1R_L+C_2R_1R_2+C_2R_2R_L+C_LR_1R_2R_Lg_m+C_LR_1R_L+C_LR_2R_L}{R_1R_2g_m+R_1+R_2+R_L}\\ \text{wo: }\sqrt{\frac{R_1R_2g_m+R_1+R_2+R_L}{R_1R_2R_L(C_1C_2+C_1C_L+C_2C_L)}}\\ \text{bandwidth: }\frac{C_1R_1R_2+C_1R_1R_L+C_2R_1R_2+C_2R_2R_L+C_LR_1R_2R_Lg_m+C_LR_1R_L+C_LR_2R_L}{R_1R_2R_L(C_1C_2+C_1C_L+C_2C_L)}\\ \text{K-LP: }\frac{R_1R_L(R_2g_m+1)}{R_1R_2g_m+R_1+R_2+R_L}\\ \text{K-HP: }0\\ \text{K-BP: }\frac{C_2R_1R_2R_L}{C_1R_1R_2+C_1R_1R_2+C_2R_1R_2+C_2R_2R_L+C_LR_1R_2R_Lg_m+C_LR_1R_L+C_LR_2R_L}\\ \text{Qz: }0\\ \text{Wz: None} \end{array}$$

### **8.22** INVALID-NUMER-22 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_1 R_L \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_1 R_L s^2 + C_1 R_1 s + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + R_1 g_m + 1}$$

#### Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_1C_2R_1\sqrt{\frac{R_1g_m+1}{C_1C_2R_1(R_2+R_L)}}(R_2+R_L)}{C_1R_1+C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L} \\ \text{wo:} \ \sqrt{\frac{R_1g_m+1}{C_1C_2R_1(R_2+R_L)}} \\ \text{bandwidth:} \ \frac{C_1R_1+C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L}{C_1C_2R_1(R_2+R_L)} \\ \text{K-LP:} \ \frac{R_1R_Lg_m}{R_1g_m+1} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_1R_L(R_2g_m+1)}{C_1R_1+C_2R_1R_2g_m+C_2R_1+C_2R_2+C_2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$ 

## 8.23 INVALID-NUMER-23 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{{R_L \left( {R_2 g_m + 1} \right)\left( {C_1 R_1 s + 1} \right)}}{{C_1 C_L R_1 R_2 R_L g_m s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_2 R_L s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_L R_2 R_L g_m s + C_L R_L s + R_2 g_m + 1}}$$

### Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_1C_LR_L\sqrt{\frac{R_2g_m+1}{C_1C_LR_L(R_1R_2g_m+R_1+R_2)}}(R_1R_2g_m+R_1+R_2)}{C_1R_1R_2g_m+C_1R_1+C_1R_2+C_1R_L+C_LR_2R_Lg_m+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{R_2g_m+1}{C_1C_LR_L(R_1R_2g_m+R_1+R_2)}} \\ \text{bandwidth:} \ \frac{C_1R_1R_2g_m+C_1R_1+C_1R_2+C_1R_L+C_LR_2R_Lg_m+C_LR_L}{C_1C_LR_L(R_1R_2g_m+R_1+R_2)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_1R_1R_2g_m+C_1R_1+C_1R_2+C_1R_L+C_LR_2R_Lg_m+C_LR_L}{C_1R_1R_2g_m+C_1R_1+C_1R_2+C_1R_L+C_LR_2R_Lg_m+C_LR_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$ 

# 8.24 INVALID-NUMER-24 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_1 (C_2 s + g_m)}{C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 s^2 + C_2 + C_L L_1 g_m s + C_L}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{\frac{C_2 + C_L}{L_1(C_1C_2 + C_1C_L + C_2C_L)}}}{C_Lg_m}(C_1C_2 + C_1C_L + C_2C_L)} \\ \text{wo:} \ \sqrt{\frac{C_2 + C_L}{L_1(C_1C_2 + C_1C_L + C_2C_L)}} \\ \text{bandwidth:} \ \frac{C_Lg_m}{C_1C_2 + C_1C_L + C_2C_L} \\ \text{K-LP:} \ \frac{L_1g_m}{C_2 + C_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2}{C_Lg_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

**8.25** INVALID-NUMER-25 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 R_1 \left( C_2 s + g_m \right)}{C_1 C_2 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_1 s^2 + C_2 L_1 s + C_2 R_1 + C_L L_1 R_1 g_m s + C_L L_1 s + C_L R_1}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_1\sqrt{\frac{C_2+C_L}{L_1(C_1C_2+C_1C_L+C_2C_L)}}}{C_2+C_LR_1g_m}(C_1C_2+C_1C_L+C_2C_L)}\\ \text{Wo:} \ \frac{C_2+C_LR_1g_m+C_L}{L_1(C_1C_2+C_1C_L+C_2C_L)}\\ \text{bandwidth:} \ \frac{C_2+C_LR_1g_m+C_L}{R_1(C_1C_2+C_1C_L+C_2C_L)}\\ \text{K-LP:} \ \frac{L_1g_m}{C_2+C_L}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_2R_1}{C_2+C_LR_1g_m+C_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

### 9 INVALID-WZ

**9.1** INVALID-WZ-1  $Z(s) = \left(R_1, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L R_1 R_2 s^2 + C_2 C_L R_2 R_L s^2 + C_2 R_2 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_L s + 1}$$

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_2C_LR_2\sqrt{\frac{1}{C_2C_LR_2(R_1+R_L)}}(R_1+R_L)}{C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2+C_LR_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_2C_LR_2(R_1+R_L)}} \\ & \text{bandwidth:} \ \frac{C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2+C_LR_L}{C_2C_LR_2(R_1+R_L)} \\ & \text{K-LP:} \ R_1\left(R_2g_m+1\right) \\ & \text{K-HP:} \ \frac{R_1R_L}{R_1+R_L} \\ & \text{K-BP:} \ \frac{R_1(C_2R_2+C_LR_2R_Lg_m+C_LR_L)}{C_2R_2+C_LR_1R_2g_m+C_LR_1+C_LR_2+C_LR_L} \\ & \text{Qz:} \ \frac{C_2C_LR_2R_L\sqrt{\frac{1}{C_2C_LR_2(R_1+R_L)}}}{C_2R_2+C_LR_2R_Lg_m+C_LR_L} \\ & \text{Wz:} \ \sqrt{\frac{R_2g_m+1}{C_2C_LR_2R_L}} \end{aligned}$$

9.2 INVALID-WZ-2  $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 (C_2 s + g_m) (C_L R_L s + 1)}{C_2 C_L L_1 s^2 + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L}$$

Parameters:

$$\begin{aligned} & \text{Q: } \frac{C_2 L_1 \sqrt{\frac{C_2 + C_L}{C_2 C_L L_1}}}{C_2 R_L + L_1 g_m} \\ & \text{wo: } \sqrt{\frac{C_2 + C_L}{C_2 C_L L_1}} \\ & \text{bandwidth: } \frac{C_2 R_L + L_1 g_m}{C_2 L_1} \\ & \text{K-LP: } \frac{L_1 g_m}{C_2 + C_L} \\ & \text{K-HP: } R_L \\ & \text{K-BP: } \frac{L_1 (C_2 + C_L R_L g_m)}{C_L (C_2 R_L + L_1 g_m)} \\ & \text{Qz: } \frac{C_2 C_L R_L \sqrt{\frac{C_2 + C_L}{C_2 C_L L_1}}}{C_2 + C_L R_L g_m} \\ & \text{Wz: } \sqrt{\frac{g_m}{C_2 C_L R_L}} \end{aligned}$$

**9.3** INVALID-WZ-3  $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L R_2 s + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L}$$

Q: 
$$\frac{C_2L_1\sqrt{\frac{C_2+C_L}{C_2C_LL_1(R_2g_m+1)}}(R_2g_m+1)}{C_2R_2+C_2R_L+L_1g_m}$$

$$\begin{aligned} &\text{wo: } \sqrt{\frac{C_2 + C_L}{C_2 C_L L_1 (R_2 g_m + 1)}} \\ &\text{bandwidth: } \frac{C_2 R_2 + C_2 R_L + L_1 g_m}{C_2 L_1 (R_2 g_m + 1)} \\ &\text{K-LP: } \frac{L_1 g_m}{C_2 + C_L} \\ &\text{K-HP: } R_L \\ &\text{K-BP: } \frac{L_1 (C_2 R_2 g_m + C_2 + C_L R_L g_m)}{C_L (C_2 R_2 + C_2 R_L + L_1 g_m)} \\ &\text{Qz: } \frac{C_2 C_L R_L \sqrt{\frac{C_2 + C_L}{C_2 C_L L_1 (R_2 g_m + 1)}} (R_2 g_m + 1)}{C_2 R_2 g_m + C_2 + C_L R_L g_m} \\ &\text{Wz: } \sqrt{\frac{g_m}{C_2 C_L R_L (R_2 g_m + 1)}} \end{aligned}$$

# 9.4 INVALID-WZ-4 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_L \left( C_2 s + g_m \right) \left( C_1 R_1 s + 1 \right)}{C_1 C_2 R_1 s^2 + C_1 C_2 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_2 s + g_m}$$

#### Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_1 C_2 \sqrt{\frac{g_m}{C_1 C_2(R_1 + R_L)}}(R_1 + R_L)}{C_1 R_1 g_m + C_1 + C_2} \\ & \text{wo:} \ \sqrt{\frac{g_m}{C_1 C_2(R_1 + R_L)}} \\ & \text{bandwidth:} \ \frac{C_1 R_1 g_m + C_1 + C_2}{C_1 C_2(R_1 + R_L)} \\ & \text{K-LP:} \ R_L \\ & \text{K-HP:} \ \frac{R_1 R_L}{R_1 + R_L} \\ & \text{K-BP:} \ \frac{R_L (C_1 R_1 g_m + C_2)}{C_1 R_1 g_m + C_1 + C_2} \\ & \text{Qz:} \ \frac{C_1 C_2 R_1 \sqrt{\frac{g_m}{C_1 C_2(R_1 + R_L)}}}{C_1 R_1 g_m + C_2} \\ & \text{Wz:} \ \sqrt{\frac{g_m}{C_1 C_2 R_1}} \end{aligned}$$

**9.5** INVALID-WZ-5 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_2 R_L s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_2 R_2 s + R_2 g_m + 1}$$

#### Parameters:

$$\begin{aligned} & Q \colon \frac{C_1 C_2 R_2 \sqrt{\frac{R_2 g_m + 1}{C_1 C_2 R_2 (R_1 + R_L)}} (R_1 + R_L)}{C_1 R_1 R_2 g_m + C_1 R_1 + C_1 R_2 + C_1 R_L + C_2 R_2} \\ & \text{wo: } \sqrt{\frac{R_2 g_m + 1}{C_1 C_2 R_2 (R_1 + R_L)}} \\ & \text{bandwidth: } \frac{C_1 R_1 R_2 g_m + C_1 R_1 + C_1 R_2 + C_1 R_L + C_2 R_2}{C_1 C_2 R_2 (R_1 + R_L)} \\ & \text{K-LP: } R_L \\ & \text{K-HP: } \frac{R_1 R_L}{R_1 + R_L} \\ & \text{K-BP: } \frac{R_L (C_1 R_1 R_2 g_m + C_1 R_1 + C_2 R_2)}{C_1 R_1 R_2 g_m + C_1 R_1 + C_1 R_2 + C_1 R_L + C_2 R_2} \\ & \text{Qz: } \frac{C_1 C_2 R_1 R_2 \sqrt{\frac{R_2 g_m + 1}{C_1 C_2 R_2 (R_1 + R_L)}}}{C_1 R_1 R_2 g_m + C_1 R_1 + C_2 R_2} \\ & \text{Wz: } \sqrt{\frac{R_2 g_m + 1}{C_1 C_2 R_1 R_2}} \end{aligned}$$

# **9.6** INVALID-WZ-6 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$

$$H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 R_1 R_2 g_m s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_2 R_2 g_m s + C_2 s + g_m}$$

$$\begin{aligned} &\text{Q:} \ \frac{C_1C_2\sqrt{\frac{g_m}{C_1C_2(R_1R_2g_m+R_1+R_2+R_L)}}(R_1R_2g_m+R_1+R_2+R_L)}{C_1R_1g_m+C_1+C_2R_2g_m+C_2} \\ &\text{wo:} \ \sqrt{\frac{g_m}{C_1C_2(R_1R_2g_m+R_1+R_2+R_L)}} \\ &\text{bandwidth:} \ \frac{C_1R_1g_m+C_1+C_2R_2g_m+C_2}{C_1C_2(R_1R_2g_m+R_1+R_2+R_L)} \\ &\text{K-LP:} \ R_L \end{aligned}$$

K-HP: 
$$\frac{R_1 R_L (R_2 g_m + 1)}{R_1 R_2 g_m + R_1 + R_2 + R_L}$$
K-BP: 
$$\frac{R_L (C_1 R_1 g_m + C_2 R_2 g_m + C_2)}{C_1 R_1 g_m + C_1 + C_2 R_2 g_m + C_2}$$
Qz: 
$$\frac{C_1 C_2 R_1 \sqrt{\frac{g_m}{C_1 C_2 (R_1 R_2 g_m + R_1 + R_2 + R_L)}}}{C_1 R_1 g_m + C_2 R_2 g_m + C_2}$$

### 10 INVALID-ORDER

10.1 INVALID-ORDER-1  $Z(s) = (R_1, R_2, \infty, \infty, \infty, R_L)$ 

$$H(s) = \frac{R_1 R_L (R_2 g_m + 1)}{R_1 R_2 g_m + R_1 + R_2 + R_L}$$

10.2 INVALID-ORDER-2  $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 (R_2 g_m + 1)}{C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$$

10.3 INVALID-ORDER-3  $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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

10.4 INVALID-ORDER-4  $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 (R_2 g_m + 1) (C_L R_L s + 1)}{C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_L s + 1}$$

10.5 INVALID-ORDER-5  $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_1 R_L (C_2 s + g_m)}{C_2 R_1 s + C_2 R_L s + R_1 g_m + 1}$$

10.6 INVALID-ORDER-6  $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 (C_2 s + g_m)}{s (C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L)}$$

10.7 INVALID-ORDER-7  $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 (C_2 s + g_m) (C_L R_L s + 1)}{s (C_2 C_L R_1 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L)}$$

10.8 INVALID-ORDER-8  $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 (C_2 s + g_m) (C_L L_L s^2 + 1)}{s (C_2 C_L L_L s^2 + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L)}$$

10.9 INVALID-ORDER-9 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_1 s \left(C_2 s + g_m\right)}{C_2 C_L L_L R_1 s^3 + C_2 L_L s^2 + C_2 R_1 s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

10.10 INVALID-ORDER-10 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 (C_2 s + g_m) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_2 C_L L_L s^2 + C_2 C_L R_1 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L)}$$

10.11 INVALID-ORDER-11 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

**10.12** INVALID-ORDER-12 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_L s^3 + C_2 L_L s^2 + C_2 R_1 s + C_2 R_L s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

**10.13** INVALID-ORDER-13 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

**10.14** INVALID-ORDER-14 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 R_1 R_2 s + C_2 R_2 R_L s + R_1 R_2 g_m + R_1 + R_2 + R_L}$$

**10.15** INVALID-ORDER-15 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_L R_2 s^3 + C_2 C_L R_1 R_2 s^2 + C_2 R_2 s + C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$$

**10.16** INVALID-ORDER-16 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_1 s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_L R_1 R_2 s^3 + C_2 L_L R_2 s^2 + C_2 R_1 R_2 s + C_L L_L R_1 R_2 g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_2 s^2 + L_L s + R_1 R_2 g_m + R_1 + R_2 r^2}$$

**10.17** INVALID-ORDER-17 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_2 R_2 s + R_2 g_m + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_2 C_L L_L R_2 s^3 + C_2 C_L R_1 R_2 s^2 + C_2 C_L R_2 R_L s^2 + C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_L s + 1}$$

**10.18** INVALID-ORDER-18 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_1 R_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_L R_1 R_2 R_L s^3 + C_2 L_L R_1 R_2 s^2 + C_2 L_L R_2 R_L s^2 + C_L L_L R_1 R_2 R_L g_m s^2 + C_L L_L R_1 R_2 s^2 + C_L L_L R_1 R_2 g_m s + L_L R_1 s + L_L R_2 s + L_L R_1 s + R_1 R_2 R_L g_m + R_1 R_L + R_2 R_L g_m s^2 + C_L L_L R_1 R_2 R_L g_m s^2 + C_L L_L R_1 R_2 R_L g_m s^2 + L_L R_1 R_2 g_m s + L_L R_1 s + L_L R_2 s + L_L R_1 R_2 R_L g_m + R_1 R_L + R_2 R_L g_m s^2 + C_L R_1 R_2 R_L g_m$$

**10.19** INVALID-ORDER-19 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.20 INVALID-ORDER-20 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

10.21 INVALID-ORDER-21  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_1 R_L \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + R_1 g_m + 1}$$

10.22 INVALID-ORDER-22  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.23** INVALID-ORDER-23  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L \right)}$$

10.24 INVALID-ORDER-24  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L L_L s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 + C_L R_1 g_m + C_L \right)}$$

10.25 INVALID-ORDER-25  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L R_1 s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_L R_1 g^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 L_L s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

**10.26** INVALID-ORDER-26  $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L L_L s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L \right)}$$

10.27 INVALID-ORDER-27 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

**10.28** INVALID-ORDER-28 
$$Z(s) = \left(R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_2 C_L L_L R_1 g_m s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 L_L s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

10.29 INVALID-ORDER-29 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_L R_1 g^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L R_1 R_2 R_L g_m s^2 + C_2 C_L R_1 R_2 s^2 + C_2 C_L R_1 R_2 s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + C_L R_1 R_L g_m s + C_L R_1 R_2 g_m s$$

10.30 INVALID-ORDER-30 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L \right)}$$

10.31 INVALID-ORDER-31 
$$Z(s) = \left(R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 C_L L_2 R_1 R_L g_m s^3 + C_2 C_L L_2 R_L s^3 + C_2 C_L R_1 R_L s^2 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_L s + C_L R_1 R_L g_m s + C_L R_L s + R_1 g_m + 1}$$

**10.32** INVALID-ORDER-32 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_1 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.33** INVALID-ORDER-33  $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.34** INVALID-ORDER-34  $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L R_1 s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_2 C_L L_2 L_L R_1 g_m s^4 + C_2 C_L L_L L_1 s^4 + C_2 C_L L_L R_1 s^3 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 L_L s^2 + C_2 L_1 s^2 + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

**10.35** INVALID-ORDER-35  $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_1 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.36** INVALID-ORDER-36 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_2 C_L L_2 L_L R_1 R_L g^4 + C_2 C_L L_L R_1 R_L s^3 + C_2 L_2 L_L R_3 g_m s^3 + C_2 L_2 L_L R_1 g_m s^3 + C_2 L_2 L_L R_1 g_m s^3 + C_2 L_2 R_1 R_L g^3 + C_2 L_L R_1 g^2 + C_2 L_L R_1$$

10.37 INVALID-ORDER-37  $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{R_1 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_2 C_L L_2 L_L R_1 g_m s^4 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_L s^3 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 L_L s^2 + C_2 R_1 s + C_2 R_L s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

10.38 INVALID-ORDER-38 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 C_L L_2 L_L R_1 g_m s^4 + C_2 C_L L_2 R_1 R_L g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L R_1 R_L s^2 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_L s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + C_L R_1 R_L g_m s + C_L$$

**10.39** INVALID-ORDER-39  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.40** INVALID-ORDER-40  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_2 R_1 R_L g_m s^3 + C_2 C_L L_2 R_L g^3 + C_2 C_L R_1 R_2 R_L g_m s^2 + C_2 C_L R_2 R_L s^2 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + C_L R_1 R_L g_m s + C_L R_1 R_1 R_1 g_m s + C_L R_1 R_1 g_m s + C_L R_1 R_1 R_1 g_m s + C_L R_1 R_1 R_1 g_m s + C_L R_$$

10.41 INVALID-ORDER-41  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 C_L R_2 s$$

**10.42** INVALID-ORDER-42  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 + C_L R_1 g_m + C_L \right)}$$

10.43 INVALID-ORDER-43  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L R_1 s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_2 L_L R_1 g_m s^4 + C_2 C_L L_L R_1 R_2 g_m s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 L_L s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_L L_L R_1 g_m s^2 + C_L R_1 g_$$

**10.44** INVALID-ORDER-44  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_L s^2 + C_2 C_L L_L s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_2 s + C_2 C_L R_1 g_m + C_L \right)}$$

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10.45 INVALID-ORDER-45 Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \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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$$H(s) = \frac{L_L R_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_2 L_L R_1 R_L g_m s^4 + C_2 C_L L_L R_1 R_2 R_L g_m s^3 + C_2 C_L L_L R_1 R_2 s^3 + C_2 L_L L_R g_m s^3 + C_2 L_L R_1 R_2 g_m s^2 + C_2 L_L R_2 g_m s^2 + C_2 L_$$

**10.46** INVALID-ORDER-46  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L R_L s^2 + L_L s + R_L \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_L L_R 1 g_m s^4 + C_2 C_L L_L R_1 R_2 g_m s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 L_L R_1 g_m s^2 + C_2 L_2 s^2 + C_2 L_L s^2 + C_2 R_1 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_1 s + C_2 R_2 s + C_2 R_1 s + C_2 R_2 s$$

10.47 INVALID-ORDER-47  $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_1 R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_L R_1 g_m s^4 + C_2 C_L L_L R_1 R_2 g_m s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L R_1 R_2 R_2 g_m s^2 + C_2 C_L R_2 R_2 s^$$

**10.48** INVALID-ORDER-48  $Z(s) = \left(R_1, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_1 \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 L_2 s^2 + C_L L_2 R_1 g_m s^2 + C_L L_2 s^2 + C_L L_$$

**10.49** INVALID-ORDER-49  $Z(s) = \left(R_1, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 R_L s^3 + C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_1 s^2 + C_L L_2 R_1 R_L g_m s^2 + C_L L_2 R_1 R_L g_m s + C_L R_1 R_L g_m s + C_L R_1 R_L g_m s + L_2 s + R_1 R_2 g_m s + R_1 + R_2 + R_L R_2 g_m s^2 + C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_$$

**10.50** INVALID-ORDER-50  $Z(s) = \left(R_1, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 L_2 R_2 s^2 + C_L L_2 R_1 g_m s^2 + C_L L_2 s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_1 R_2 g_m s^2 + C_L R_1 R_2$$

10.51 INVALID-ORDER-51  $Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_L L_2 L_L s^4 + C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 L_2 s^2 + C_L L_2 R_1 g_m s^2 + C_L L_2 s^2 + C_L$$

10.52 INVALID-ORDER-52  $Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$ 

$$H(s) = \frac{L_L R_1 s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_2 C_L L_2 L_L R_1 R_2 g_m s^4 + C_2 C_L L_2 L_L R_1 s^4 + C_2 C_L L_2 L_L s^3 + C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_L L_2 L_L R_1 g_m s^3 + C_L L_L R_1 g_m s^3 + C_L L_L R_1 g_m s^2 + C_L R_1 g_$$

**10.53** INVALID-ORDER-53  $Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$ 

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_L L_2 L_L s^4 + C_2 C_L L_2 R_1 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_L s^3 + C_2 L_L g_s^2 + C_L L_2 g_m s^2 + C_L L_2 g_m s^2 + C_L L_2 g_m s + C_L R_1 g_m s + C_L R_1 s + C_L R_2 s + C_L R_1 g_m s^2 + C_L R_2 g_m s^2 + C_$$

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10.54 INVALID-ORDER-54 Z(s) = \left(R_1, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L_L R_1 R_L s \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)
H(s) = \frac{L_L R_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_2 C_L L_2 L_L R_1 R_2 R_L g_m s^4 + C_2 C_L L_2 L_L R_1 R_2 g_m s^3 + C_2 L_2 L_L R_1 s^3 + C_2 L_2 L_L R_2 s^3 + C_2 L_2 L_L R_
10.55 INVALID-ORDER-55 Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
10.56 INVALID-ORDER-56 Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                      \frac{R_{1}R_{L}\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{C_{2}C_{L}L_{2}L_{L}R_{1}s^{2}+C_{2}L_{2}L_{L}R_{1}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{2}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1}s^{3}+C_{2}L_{L}R_{1
10.57 INVALID-ORDER-57 Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                      H(s) = \frac{R_1 \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L R_1 R_2 s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}
10.58 INVALID-ORDER-58 Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                    H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_2 R_1 R_2 R_L g_m s^3 + C_2 C_L L_2 R_1 R_L s^3 + C_2 C_L L_2 R_1 R_2 R_L s^2 + C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 
10.59 INVALID-ORDER-59 Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                 H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L R_1 R_2 s^2 + C_2 C_L R_2 R_L s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_1 s + 1}
10.60 INVALID-ORDER-60 Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                               H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_2 L_1 s^4 + C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L L_1 R_2 s^3 + C_2 C_L L_1 R_2 s^2 + C_2 L_2 s^
10.61 INVALID-ORDER-61 Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                           H(s) = \frac{L_L R_1 s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_2 L_L R_1 R_2 g_m s^4 + C_2 C_L L_L L_R L_2 s^4 + C_2 C_L L_L R_1 R_2 s^3 + C_2 L_2 L_L s^3 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_2 L_L R_2 s^2 + C_2 L_L R_1 s^2 + C_L L_L R_1 s^2 + C_
10.62 INVALID-ORDER-62 Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                          H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_2 L_L s^4 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L R_2 R_2 s^2 + C_2 L_2 s^2 + C_2 L_
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10.63 INVALID-ORDER-63 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

$$L_L R_1 R_L s \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)$$

 $H(s) = \frac{L_L R_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_2 L_L R_1 R_2 R_L g_m s^4 + C_2 C_L L_L R_1 R_2 R_L s^3 + C_2 L_2 L_L R_1 R_2 s^3 + C_2 L_2 L_L R_1 s^3 + C_2 L_2 R_2 R_2 s^3 + C_2 L_2 R_2 R_2 s^3 + C_2 L_2 R_2 R_$ 

10.64 INVALID-ORDER-64 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$R_1 \left( C_L L_L R_L s^2 + L_L s + R_L \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)$$

 $H(s) = \frac{R_1 \left( C_L L_L R_L s^2 + L_L s + R_L \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_2 C_L L_2 L_L R_1 s^4 + C_2 C_L L_2 L_L R_2 s^4 + C_2 C_L L_L R_1 R_2 s^3 + C_2 L_L R_2 R_2 s^3 + C_2 L_2 R_1 s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_$ 

10.65 INVALID-ORDER-65 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_1 R_L \left(C_L L_L s^2 + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_2 L_L R_1 R_2 g_m s^4 + C_2 C_L L_2 L_L R_1 s^4 + C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 R_2 g_m s^4 + C_2 C_L$$

10.66 INVALID-ORDER-66  $Z(s) = (L_1 s, R_2, \infty, \infty, \infty, R_L)$ 

$$H(s) = \frac{L_1 R_L s (R_2 g_m + 1)}{L_1 R_2 g_m s + L_1 s + R_2 + R_L}$$

10.67 INVALID-ORDER-67  $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 s (R_2 g_m + 1) (C_L L_L s^2 + 1)}{C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L L_L s^2 + C_L R_2 s + 1}$$

10.68 INVALID-ORDER-68  $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

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

10.69 INVALID-ORDER-69  $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 s \left(R_2 g_m + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_L L_1 R_2 q_m s^2 + C_L L_1 s^2 + C_L L_L s^2 + C_L R_2 s + C_L R_L s + 1}$$

10.70 INVALID-ORDER-70  $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_1 L_L R_L s^2 \left(R_2 g_m + 1\right)}{C_L L_1 L_L R_2 R_L g_m s^3 + C_L L_1 L_L R_L s^3 + C_L L_L R_2 R_L s^2 + L_1 L_L R_2 g_m s^2 + L_1 L_L s^2 + L_1 R_2 R_L g_m s + L_1 R_L s + L_L R_2 s + L_L R_L s + R_2 R_L g_m s^2 + L_1 R_2 R_L g_m s^2 + L_1 R_2 R_L g_m s + L_1 R_L s + L_2 R_2 R_L g_m s + L_1 R_2 R_L g_m s + L_1$$

10.71 INVALID-ORDER-71  $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

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

10.72 INVALID-ORDER-72 
$$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L\left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

10.73 INVALID-ORDER-73 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_2 s + g_m\right)}{C_2 C_L L_1 R_L s^3 + C_2 L_1 s^2 + C_2 R_L s + C_L L_1 R_L g_m s^2 + C_L R_L s + L_1 g_m s + 1}$$

10.74 INVALID-ORDER-74 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 (C_2 s + g_m) (C_L L_L s^2 + 1)}{C_2 C_L L_1 s^2 + C_2 C_L L_L s^2 + C_2 + C_L L_1 g_m s + C_L}$$

10.75 INVALID-ORDER-75 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{{{L_1}{L_L}{s^2}\left( {{C_2}s + {g_m}} \right)}}{{{C_2}{C_L}{L_1}{L_L}{s^4} + {C_2}{L_1}{s^2} + {C_2}{L_L}{s^2} + {C_L}{L_1}{L_L}{g_m}{s^3} + {C_L}{L_L}{s^2} + {L_1}{g_m}{s + 1}}$$

10.76 INVALID-ORDER-76 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 \left( C_2 s + g_m \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_2 C_L L_1 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L}$$

10.77 INVALID-ORDER-77 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

10.78 INVALID-ORDER-78 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_{1}s\left(C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{2}C_{L}L_{1}L_{L}s^{4} + C_{2}C_{L}L_{L}R_{L}s^{3} + C_{2}L_{1}s^{2} + C_{2}L_{L}s^{2} + C_{2}R_{L}s + C_{L}L_{1}L_{L}g_{m}s^{3} + C_{L}L_{L}s^{2} + L_{1}g_{m}s + 1}$$

10.79 INVALID-ORDER-79 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_2 s + g_m\right) \left(C_L L_L s^2 + 1\right)}{C_2 C_L L_1 L_L s^4 + C_2 C_L L_1 R_L s^3 + C_2 C_L L_1 R_L s^3 + C_2 L_1 s^2 + C_2 R_L s + C_L L_1 L_L g_m s^3 + C_L L_1 R_L g_m s^2 + C_L L_L s^2 + C_L R_L s + L_1 g_m s + 1}$$

10.80 INVALID-ORDER-80 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

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

10.81 INVALID-ORDER-81 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s+1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 R_2 R_L s^3 + C_2 L_1 R_2 s^2 + C_2 R_2 R_L s + C_L L_1 R_2 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L r_2 R_L r_$$

**10.82** INVALID-ORDER-82 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.83 INVALID-ORDER-83 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 s \left(C_L L_L s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 R_2 s + C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L L_L s^2 + C_L R_2 s + 1}$$

10.84 INVALID-ORDER-84 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_1 L_L s^2 \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_L R_2 s^4 + C_2 L_1 R_2 s^2 + C_2 L_1 R_2 s^2 + C_1 L_1 L_L R_2 g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_2 s^2 + L_1 R_2 g_m s + L_1 s + L_1 s + R_2 r^2}$$

**10.85** INVALID-ORDER-85 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.86 INVALID-ORDER-86 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

10.87 INVALID-ORDER-87 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_{1}s\left(C_{2}R_{2}s + R_{2}g_{m} + 1\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{2}C_{L}L_{1}L_{L}R_{2}s^{4} + C_{2}C_{L}L_{L}R_{2}s^{3} + C_{2}L_{1}R_{2}s^{2} + C_{2}L_{L}R_{2}s^{2} + C_{2}R_{L}s + C_{L}L_{1}L_{L}R_{2}g_{m}s^{3} + C_{L}L_{1}L_{L}s^{3} + C_{L}L_{L}R_{2}s^{2} + L_{1}R_{2}g_{m}s + L_{1}s + L_{L}s + R_{2} + R_{L}s + L_{L}s +$$

10.88 INVALID-ORDER-88 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_L R_2 s^4 + C_2 C_L L_1 R_2 R_L s^3 + C_2 L_1 R_2 s^2 + C_2 R_2 R_L s + C_L L_1 L_L R_2 g_m s^3 + C_L L_1 L_L s^3 + C_L L_1 R_2 s^2 + C_L L_L R_$$

**10.89** INVALID-ORDER-89 
$$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_1 R_2 R_L g_m s^3 + C_2 C_L L_1 R_L s^3 + C_2 C_L R_2 R_L s^2 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 R_L s + C_L L_1 R_L g_m s^2 + C_L R_L s + L_1 g_m s + 1}$$

**10.90** INVALID-ORDER-90  $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_2 s + C_2 + C_L L_1 g_m s + C_L}$$

**10.91** INVALID-ORDER-91  $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_1 L_L s^2 \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_1 L_L R_2 g_m s^4 + C_2 C_L L_1 L_L s^4 + C_2 C_L L_L R_2 s^3 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 L_L s^2 + C_2 L_2 s^2 + C_L L_1 L_L g_m s^3 + C_L L_L s^2 + L_1 g_m s + 1}$$

**10.92** INVALID-ORDER-92  $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_2 s + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L R_2 c_L R_$$

10.93 INVALID-ORDER-93  $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

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

**10.94** INVALID-ORDER-94  $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{L_{1}s\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{2}C_{L}L_{1}L_{L}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{L}R_{2}s^{3} + C_{2}C_{L}L_{L}R_{2}s^{3} + C_{2}L_{1}R_{2}g_{m}s^{2} + C_{2}L_{1}s^{2} + C_{2}L_{L}s^{2} + C_{2}R_{2}s + C_{2}R_{L}s + C_{L}L_{1}L_{L}g_{m}s^{3} + C_{L}L_{L}s^{2} + L_{1}g_{m}s + 1}}$$

10.95 INVALID-ORDER-95  $Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_1 L_L R_2 g_m s^4 + C_2 C_L L_1 L_2 s^4 + C_2 C_L L_1 R_2 g_m s^3 + C_2 C_L L_1 R_2 s^3 + C_$$

10.96 INVALID-ORDER-96  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$ 

$$H(s) = \frac{L_1 R_L s \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_L s + L_1 g_m s + 1}$$

10.97 INVALID-ORDER-97  $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

10.98 INVALID-ORDER-98  $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_2 C_L L_1 L_2 R_L g_m s^4 + C_2 C_L L_1 R_L s^3 + C_2 C_L L_2 R_L s^3 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_L s + C_L L_1 R_L g_m s^2 + C_L R_L s + L_1 g_m s + 1}$$

**10.99** INVALID-ORDER-99  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L}$$

**10.100** INVALID-ORDER-100  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_L s^2 + C_2 + C_L L_1 g_m s + C_L}$$

**10.101** INVALID-ORDER-101  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_1 L_L s^2 \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_2 C_L L_1 L_2 L_2 g_m s^5 + C_2 C_L L_1 L_L s^4 + C_2 C_L L_2 L_L s^4 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 L_L s^2 + C_L L_1 L_L g_m s^3 + C_L L_L s^2 + L_1 g_m s + 1}$$

**10.102** INVALID-ORDER-102  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L R_L s + C_2 C_$$

**10.103** INVALID-ORDER-103  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_1 L_L R_L s^2 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 L_L R_L g^3 + C_2 C_L L_1 L_L R_L s^4 + C_2 C_L L_2 L_L R_L s^4 + C_2 L_1 L_2 R_L g_m s^3 + C_2 L_1 L_L s^3 + C_2 L_1 R_L s^2 + C_2 L_2 R_L s^2 + C_$$

10.104 INVALID-ORDER-104  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{L_{1}s\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{2}C_{L}L_{1}L_{2}g_{m}s^{5} + C_{2}C_{L}L_{1}L_{L}s^{4} + C_{2}C_{L}L_{L}L_{S}^{4} + C_{2}C_{L}L_{L}R_{L}s^{3} + C_{2}L_{1}L_{2}g_{m}s^{3} + C_{2}L_{1}s^{2} + C_{2}L_{L}s^{2} + C_{2}L_{L}s^{2} + C_{2}L_{L}s^{2} + C_{L}L_{1}L_{L}g_{m}s^{3} + C_{L}L_{L}s^{2} + L_{1}g_{m}s + 1}}$$

10.105 INVALID-ORDER-105  $Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_2 C_L L_1 L_2 L_2 g_m s^5 + C_2 C_L L_1 L_2 R_L g_m s^4 + C_2 C_L L_1 L_L s^4 + C_2 C_L L_2 L_L s^4 + C_2 C_L L_2 R_L s^3 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_L s + C_L L_1 L_2 g_m s^3 + C_L L_1 R_L g_m s^3 + C_L R_L g_m s^$$

**10.106** INVALID-ORDER-106  $Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 L_1 L_2 q_m s^3 + C_2 L_1 R_2 q_m s^2 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_2 R_L s + L_1 q_m s + 1}$$

10.107 INVALID-ORDER-107  $Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_2 s + C_2 + C_L L_1 g_m s + C_L R_2 s + C_2 C_L L_1 g_m s + C_L R_2 g_m s^2 + C_2 C_L R_2 g_m s^2$$

$$\textbf{10.108} \quad \textbf{INVALID-ORDER-108} \ Z(s) = \left(L_{1}s, \ L_{2}s + R_{2} + \frac{1}{C_{2}s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_{L}}{C_{L}R_{L}s+1}\right)$$
 
$$H(s) = \frac{L_{1}R_{L}s\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{C_{2}C_{L}L_{1}L_{2}R_{L}g_{m}s^{4} + C_{2}C_{L}L_{1}R_{2}R_{L}g_{m}s^{3} + C_{2}C_{L}L_{2}R_{L}s^{3} + C_{2}C_{L}L_{2}R_{L}s^{3} + C_{2}C_{L}L_{2}R_{L}s^{3} + C_{2}L_{1}L_{2}g_{m}s^{3} + C_{2}L_{1}R_{2}g_{m}s^{2} + C_{2}L_{1}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + C_{2}R_{L}s + C_{L}L_{1}R_{L}g_{m}s^{2} + C_{L}R_{L}s + L_{1}g_{m}s + 1}{L_{1}R_{L}g_{m}s^{2} + C_{2}L_{1}R_{2}g_{m}s^{2} + C_{2}L$$

**10.109** INVALID-ORDER-109 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_2 s + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L R_2 g_m s^2 + C_2 C_L R_2 g_m$$

**10.110** INVALID-ORDER-110 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_L s^2 + C_2 C_L R_2 s + C_2 + C_L L_1 g_m s + C_L R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_2$$

10.111 INVALID-ORDER-111 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_1 L_L s^2 \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_1 L_2 L_2 g_m s^5 + C_2 C_L L_1 L_L R_2 g_m s^4 + C_2 C_L L_1 L_L s^4 + C_2 C_L L_L L_2 s^3 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 L_1 s^2 + C_2 L_2 s^3 + C_2 L_1 L_2 g_m s^3 + C_2 L_2 g_m s^$$

**10.112** INVALID-ORDER-112 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_1 s^2 + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 + C_L L_1 g_m s + C_L R_2 g_m s^2 + C_2 C_$$

10.113 INVALID-ORDER-113 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_1 L_2 L_L R_2 g_m s^5 + C_2 C_L L_1 L_L R_2 g_m s^4 + C_2 C_L L_1 L_L R_2 s^4 + C_2 C_L L_2 L_L R_2 s^3 + C_2 L_1 L_L R_2 g_m s^3 + C_2 L_1 R_2 g_m s^3 +$$

10.114 INVALID-ORDER-114 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_{1}s\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{C_{2}C_{L}L_{1}L_{2}g_{m}s^{5} + C_{2}C_{L}L_{1}L_{L}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{1}R_{2}s^{3} + C_{2}L_{1}L_{2}g_{m}s^{3} + C_{2}L_{1}R_{2}g_{m}s^{2} + C_{2}L_{1}s^{2} + C_{2}L_{2}s^{2} + C_{2}L_$$

**10.115** INVALID-ORDER-115 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_2 C_L L_1 L_2 L_L g_m s^5 + C_2 C_L L_1 L_L R_2 g_m s^4 + C_2 C_L L_1 L_L s^4 + C_2 C_L L_1 R_L s^3 + C_2 C_L L_2 L_L s^4 + C_2 C_L L_2 R_L s^3 + C_2 C_L R_2 R_L s^3 + C_$$

**10.116** INVALID-ORDER-116 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_2 R_2 s^2 + C_2 L_2 R_L s^2 + L_1 L_2 g_m s^2 + L_1 R_2 g_m s + L_1 s + L_2 s + R_2 + R_L}$$

**10.117** INVALID-ORDER-117  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{L_{1}s\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{L}L_{2}L_{2}s^{2} + C_{L}L_{1}L_{2}g_{m}s^{3} + C_{L}L_{1}R_{2}g_{m}s^{2} + C_{L}L_{1}s^{2} + C_{L}L_{2}s^{2} + C_{L}R_{2}s + 1}$ **10.118** INVALID-ORDER-118  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 R_L g_m s^4 + C_2 C_L L_1 R_L s^4 + C_2 C_L L_2 R_L s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_2 s^2 + C_L L_1 R_L s^2 + C_L L_1 R_L g_m s^3 + C_L L_$ **10.119** INVALID-ORDER-119  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{C_{2}C_{L}L_{1}L_{2}g_{m}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{L}L_{1}L_{2}g_{m}s^{3}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{2}s^{2}+C_{L}R_{2}s+C_{L}R_{L}s+1}$ **10.120** INVALID-ORDER-120  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{2}L_{2}s^{4}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}L_{2}s^{2}+C_{L}L_{1}L_{2}g_{m}s^{3}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{1}$ 10.121 INVALID-ORDER-121  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_1 L_L s^2 \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 L_L R_2 g_m s^5 + C_2 C_L L_2 L_L R_2 s^4 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_2 L_L s^3 +$ 10.122 INVALID-ORDER-122  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{2}s^{4} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{L}s^{3} + C_{2}L_{2}s^{2} + C_{L}L_{1}L_{2}g_{m}s^{3} + C_{L}L_{1}R_{2}g_{m}s^{2} + C_{L}L_{1}s^{2} + C_{L}L_{2}s^{2} + C_{L}L_{1}s^{2} + C_{L}L$ 10.123 INVALID-ORDER-123  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 10.124 INVALID-ORDER-124  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{L_{1}s\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{2}C_{L}L_{1}L_{2}L_{L}R_{2}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}s^{4} + C_{2}L_{1}L_{2}R_{2}g_{m}s^{3} + C_{2}L_{1}L_{2}s^{3} + C_{2}L_{2}L_{L}s^{3} + C_{2}L_{2}L_{L}s^{3} + C_{2}L_{2}L_{L}s^{3} + C_{L}L_{1}L_{L}R_{2}g_{m}s^{3} + C_{L}L_{1}L_{L}S^{3} +$ 10.125 INVALID-ORDER-125  $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{C_1 - C_2 - C_1 - C_2 - C_2 - C_3 - C_4 - C$ 

 $L_1R_Ls\left(C_LL_Ls^2+1\right)\left(C_2L_2R_2g_ms^2+C_2L_2s^2+L_2g_ms+R_2g_m+1\right)$ 

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10.126 INVALID-ORDER-126 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                               H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_2 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_L s^2 + C_2 R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L}
10.127 INVALID-ORDER-127 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{L_1 s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 R_2 g_m s^4 + C_2 C_L L_1 L_2 s^4 + C_2 C_L L_1 R_2 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 L_2 s^2 + C_2 R_2 s + C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L R_2 s + 1}
10.128 INVALID-ORDER-128 Z(s) = \left(L_1 s, \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                 H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 R_L g_m s^4 + C_2 C_L L_1 R_2 R_L s^3 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_2 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_L s^2 + C_2 L_2 R_L s^2 + C_L L_1 R_L g_m s^2 + C_L L_
10.129 INVALID-ORDER-129 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                     H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{C_{2}C_{L}L_{1}L_{2}g_{m}s^{4}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{L}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{2}+C_{2}L_{2}s^{2}+C_{2}L_{2}s^{2}+C_{2}L_{2}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}
10.130 INVALID-ORDER-130 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                   H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{C_{2}C_{L}L_{1}L_{2}g_{m}s^{4}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}L_{2}L_{2}s^{4}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}L_{2}L_{2}s^{4}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+C_{2}L_{2}s^{4}+
10.131 INVALID-ORDER-131 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                             H(s) = \frac{L_1 L_L s^2 \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 L_L R_2 g_m s^5 + C_2 C_L L_1 L_L R_2 s^4 + C_2 C_L L_2 L_L R_2 s^4 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_2 L_
10.132 INVALID-ORDER-132 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                         H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{1}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{2} + C_{2}L_{2}s^{2} + C_{2
10.133 INVALID-ORDER-133 Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 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{L_1 L_L R_L s^2 \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 L_L R_2 R_L g_m s^5 + C_2 C_L L_1 L_L R_2 R_L s^4 + C_2 L_1 L_2 L_L R_2 g_m s^4 + C_2 L_1 L_2 R_L g_m s^3 + C_2 L_2 R_L g_m s^3 + C_2 R_L g_m s^
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 $H(s) = \frac{L_{1}s\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{C_{2}C_{L}L_{1}L_{2}L_{L}R_{2}s^{4} + C_{2}C_{L}L_{1}L_{L}R_{2}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}s^{3} + C_{2}L_{1}L_{2}s^{3} + C_{2}L_{1}L_{2}s^{3} + C_{2}L_{1}L_{2}s^{3} + C_{2}L_{1}L_{2}s^{3} + C_{2}L_{1}L_{2}s^{3} + C_{2}L_{1}L_{2}s^{2} + C_{2}L_{2}R_{L}s^{2} + C_{2}L_{2}R_{$ 

10.134 INVALID-ORDER-134  $Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

10.135 INVALID-ORDER-135 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_2 C_L L_1 L_2 L_L R_2 g_m s^5 + C_2 C_L L_1 L_2 L_L s^5 + C_2 C_L L_1 L_2 R_L s^4 + C_2 C_L L_2 L_L R_2 s^4 + C_2 C_L$ 

10.136 INVALID-ORDER-136 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L (R_2 g_m + 1)}{C_1 R_2 s + C_1 R_L s + R_2 g_m + 1}$$

10.137 INVALID-ORDER-137 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_2 g_m + 1}{s \left( C_1 C_L R_2 s + C_1 + C_L R_2 g_m + C_L \right)}$$

10.138 INVALID-ORDER-138 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(R_2 g_m + 1) (C_L R_L s + 1)}{s (C_1 C_L R_2 s + C_1 C_L R_L s + C_1 + C_L R_2 g_m + C_L)}$$

10.139 INVALID-ORDER-139 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(R_2 g_m + 1) (C_L L_L s^2 + 1)}{s (C_1 C_L L_L s^2 + C_1 C_L R_2 s + C_1 + C_L R_2 g_m + C_L)}$$

10.140 INVALID-ORDER-140 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left( R_2 g_m + 1 \right)}{C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 R_2 s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$$

10.141 INVALID-ORDER-141 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(R_2 g_m + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 C_L L_L s^2 + C_1 C_L R_2 s + C_1 C_L R_L s + C_1 + C_L R_2 g_m + C_L)}$$

10.142 INVALID-ORDER-142 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(R_2 g_m + 1\right)}{C_1 C_L L_L R_2 R_L s^3 + C_1 L_L R_2 s^2 + C_1 L_L R_L s^2 + C_1 R_2 R_L s + C_L L_L R_2 R_L g_m s^2 + C_L L_L R_L s^2 + L_L R_2 g_m s + L_L s + R_2 R_L g_m + R_L}$$

**10.143** INVALID-ORDER-143 
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 R_2 s + C_1 R_L s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$$

**10.144** INVALID-ORDER-144 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + C_L R_2 R_L g_m s + C_L R_L s + R_2 g_m + 1}$$

10.145 INVALID-ORDER-145 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2 s + g_m}{s \left( C_1 C_2 s + C_1 C_L s + C_2 C_L s + C_L g_m \right)}$$

10.146 INVALID-ORDER-146 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.147 INVALID-ORDER-147 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_2 s + g_m) (C_L L_L s^2 + 1)}{s (C_1 C_2 C_L L_L s^3 + C_1 C_2 s + C_1 C_L s + C_2 C_L s + C_L g_m)}$$

10.148 INVALID-ORDER-148 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

**10.149** INVALID-ORDER-149 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_2s + g_m) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 C_2 C_L L_L s^3 + C_1 C_2 C_L R_L s^2 + C_1 C_2 s + C_1 C_L s + C_2 C_L s + C_L g_m)}$$

10.150 INVALID-ORDER-150 
$$Z(s) = \left(\frac{1}{C_1 s}, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

**10.151** INVALID-ORDER-151 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{(C_2s + g_m)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{C_1C_2C_LL_LR_Ls^4 + C_1C_2L_Ls^3 + C_1C_2R_Ls^2 + C_1C_LL_Ls^3 + C_1s + C_2C_LL_Ls^3 + C_2s + C_LL_Lg_ms^2 + g_m}$$

10.152 INVALID-ORDER-152 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_2 s + g_m \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_2 C_L L_L R_L s^4 + C_1 C_2 R_L s^2 + C_1 C_L L_L s^3 + C_1 C_L R_L s^2 + C_1 s + C_2 C_L L_L s^3 + C_2 C_L R_L s^2 + C_2 s + C_L L_L g_m s^2 + C_L R_L g_m s + g_m r^2}$$

**10.153** INVALID-ORDER-153 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2 R_2 s + R_2 g_m + 1}{s \left( C_1 C_2 R_2 s + C_1 C_L R_2 s + C_1 + C_2 C_L R_2 s + C_L R_2 g_m + C_L \right)}$$

**10.154** INVALID-ORDER-154 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L R_2 R_L s^2 + C_1 C_2 R_2 s + C_1 C_L R_2 s + C_1 C_L R_L s + C_1 + C_2 C_L R_2 s + C_L R_2 g_m + C_L\right)}$$

**10.155** INVALID-ORDER-155 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L L_L R_2 s^3 + C_1 C_2 R_2 s + C_1 C_L L_L s^2 + C_1 C_L R_2 s + C_1 + C_2 C_L R_2 s + C_L R_2 g_m + C_L\right)}$$

**10.156** INVALID-ORDER-156 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 R_2 s + C_2 C_L L_L R_2 s^3 + C_2 R_2 s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$$

**10.157** INVALID-ORDER-157 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

**10.158** INVALID-ORDER-158  $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

**10.159** INVALID-ORDER-159  $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

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

**10.160** INVALID-ORDER-160  $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 R_2 R_L s^2 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_R s^3 + C_1 C_L R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_2 C_L L_L R_2 s^3 + C_2 C_L R_2 R_L s^2 + C_L L_L R_2 g_m s^2 + C_L L_L R_2 g_m s^2 + C_L L_L R_2 g_m s^2 + C_L R_2 R_L g_m s + C_L R_2 R_L$$

**10.161** INVALID-ORDER-161  $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

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

**10.162** INVALID-ORDER-162  $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

**10.163** INVALID-ORDER-163 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

**10.164** INVALID-ORDER-164 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

**10.165** INVALID-ORDER-165 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 L_L s^3 + C_1 C_2 L_L s^3 + C_1 C_L L_L s^3 + C_1 s + C_2 C_L L_L R_2 g_m s^3 + C_2 C_L L_L s^3 + C_2 R_2 g_m s + C_2 s + C_L L_L g_m s^2 + g_m s^3 + C_2 C_L L_L s^3 + C_2 C_L L_L$$

**10.166** INVALID-ORDER-166 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_L s^3 + C_1 C_2 C_L R_2 s^2 + C_1 C_2 C_L R_L s^2 + C_1 C_2 s + C_1 C_L s + C_2 C_L R_2 g_m s + C_2 C_L s + C_L g_m\right)}$$

10.167 INVALID-ORDER-167 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 R_L s + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 L_L$$

**10.168** INVALID-ORDER-168 
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{2}R_{2}s^{2} + C_{1}C_{2}R_{L}s^{2} + C_{1}C_{L}L_{L}s^{3} + C_{1}s + C_{2}C_{L}L_{L}R_{2}g_{m}s^{3} + C_{2}C_{L}L_{L}s^{3} + C_{2}s + C_{L}L_{L}g_{m}s^{2} + g_{m}}$$

**10.169** INVALID-ORDER-169 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 C_L R_2 R_L s^3 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 C_L L_L s^3 + C_2 C_L L_L R_2 g_m s^3 + C_2 C_L L_L s^3$$

**10.170** INVALID-ORDER-170  $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

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

10.171 INVALID-ORDER-171 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

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

10.172 INVALID-ORDER-172 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 L_2 s^3 + C_1 C_2 R_L s^2 + C_1 S_1 + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L R_L s^2 + C_2 L_2 g_m s^2 + C_2 s + C_L R_L g_m s + g_m R_L \left( C_2 L_2 R_L s^2 + C_1 C_2 R_L s^2 + C_1 C_2 R_L s^2 + C_2 C_L R_L s^2 + C_2 C_L$$

**10.173** INVALID-ORDER-173 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_2 s^3 + C_1 C_2 C_L R_L s^2 + C_1 C_2 s + C_1 C_L s + C_2 C_L L_2 g_m s^2 + C_2 C_L s + C_L g_m\right)}$$

**10.174** INVALID-ORDER-174 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_2 s^3 + C_1 C_2 C_L L_L s^3 + C_1 C_2 s + C_1 C_L s + C_2 C_L L_2 g_m s^2 + C_2 C_L s + C_L g_m\right)}$$

10.175 INVALID-ORDER-175 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_2 L_L s^5 + C_1 C_2 L_2 s^3 + C_1 C_2 L_L s^3 + C_1 C_L L_L s^3 + C_1 s + C_2 C_L L_L L_L g_m s^4 + C_2 C_L L_L s^3 + C_2 L_2 g_m s^2 + C_2 s + C_L L_L g_m s^2 + g_m}$$

**10.176** INVALID-ORDER-176 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_2 s^3 + C_1 C_2 C_L L_L s^3 + C_1 C_2 C_L R_L s^2 + C_1 C_2 s + C_1 C_L s + C_2 C_L L_2 g_m s^2 + C_2 C_L s + C_L g_m\right)}$$

10.177 INVALID-ORDER-177 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_2 L_L R_L s^5 + C_1 C_2 L_2 L_L s^4 + C_1 C_2 L_2 R_L s^3 + C_1 C_L L_L R_L s^3 + C_1 L_L s^2 + C_1 R_L s + C_2 C_L L_L L_L R_L g_m s^4 + C_2 C_L L_L L_L R_L g_m s^3 + C_2 L_2 L_L g_m s^3 + C_2 L_2 R_L g_m s^2 + C_2 R_L s + C_L L_L R_L g_m s^2 + L_L g_m s + R_L g_m s^2 + L_L g_m s^2 + C_L R_L g_m s^2$$

10.178 INVALID-ORDER-178 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{2}L_{1}s^{5} + C_{1}C_{2}L_{L}L_{3}s^{4} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{2}L_{L}s^{3} + C_{1}S_{L}L_{L}s^{3} + C_{1}S_{L}L_{L}L_{S}s^{4} + C_{2}C_{L}L_{L}L_{S}s^{4} + C_{2}C$$

10.179 INVALID-ORDER-179 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 L_L s^5 + C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 L_2 s^3 + C_1 C_2 R_L s^2 + C_1 C_L L_L s^3 + C_1 C_L L_L s^3 + C_2 C_L L_2 L_L g_m s^4 + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L L_L s^3 + C_2 C_L L_L g_m s^2 + C_2 s + C_L L_L g_m s^2 + C_L R_L g_m s^2 + C_$$

**10.180** INVALID-ORDER-180 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

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

**10.181** INVALID-ORDER-181 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + g_m}{s\left(C_1C_2C_LL_2s^3 + C_1C_2C_LR_2s^2 + C_1C_2s + C_1C_Ls + C_2C_LL_2g_ms^2 + C_2C_LR_2g_ms + C_2C_Ls + C_Lg_m\right)}$$

**10.182** INVALID-ORDER-182 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 C_L R_2 R_L s^3 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 C_L R_L s^2 + C_1 S_L R_L g_m s^3 + C_2 C_L R_2 R_L g_m s^2 + C_2 C_L R_L s^2 + C_2 R_2 g_m s + C_2 s + C_L R_L g_m s + g_m R_L \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 S_L R_L g_m s^2 + C_2 R_L$$

**10.183** INVALID-ORDER-183 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_2 s^3 + C_1 C_2 C_L R_2 s^2 + C_1 C_2 C_L R_L s^2 + C_1 C_2 s + C_1 C_L s + C_2 C_L L_2 g_m s^2 + C_2 C_L R_2 g_m s + C_2 C_L s + C_L g_m\right)}$$

10.184 INVALID-ORDER-184 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_2 s^3 + C_1 C_2 C_L L_L s^3 + C_1 C_2 C_L R_2 s^2 + C_1 C_2 s + C_1 C_L s + C_2 C_L L_2 g_m s^2 + C_2 C_L R_2 g_m s + C_2 C_L s + C_L g_m\right)}$$

10.185 INVALID-ORDER-185 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.186 INVALID-ORDER-186 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.187 INVALID-ORDER-187 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_L s^5 + C_1 C_2 C_L L_L R_2 R_L s^4 + C_1 C_2 L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2$$

10.188 INVALID-ORDER-188 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{C_{1}C_{2}C_{L}L_{L}L_{S}^{5} + C_{1}C_{2}C_{L}L_{L}R_{S}^{4} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{S}^{3} + C_{1}C_{2}R_{L}s^{2} + C_{1}C_{L}L_{L}s^{3} + C_{1}C_{L}L_{L}s^{3} + C_{2}C_{L}L_{L}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{L}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{L}R_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + C_{L}L_{L}g_{m}s^{2} + g_{m}s^{2} + C_{2}C_{L}L_{L}R_{2}g_{m}s^{2} + C_{2}C_{L}L_{L}R_{2}g_{m}s^{2} + C_{2}C_{L}L_{L}R_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + C_{L}L_{L}g_{m}s^{2} + G_{L}R_{2}g_{m}s^{2} + C_{L}R_{2}g_{m}s^{2} + C_{L}R_{2}g_{m}$$

10.189 INVALID-ORDER-189 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 L_L s^5 + C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 C_L L_L R_L s^4 + C_1 C_2 C_L R_2 R_L s^3 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 C_L L_L s^3 + C_1 C_L L_L L_L g_m s^4 + C_2 C_L L_L R_2 g_m s^3 + C_2 C_L R_2 R_2 g_m s^3 + C_2$$

**10.190** INVALID-ORDER-190 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 R_L s^3 + C_1 L_2 s^2 + C_1 R_2 s + C_1 R_L s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1}$$

10.191 INVALID-ORDER-191 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2L_2R_2g_ms^2 + C_2L_2s^2 + L_2g_ms + R_2g_m + 1}{s\left(C_1C_2C_LL_2R_2s^3 + C_1C_2L_2s^2 + C_1C_LL_2s^2 + C_1C_LR_2s + C_1 + C_2C_LL_2R_2g_ms^2 + C_2C_LL_2s^2 + C_LL_2g_ms + C_LR_2g_m + C_L\right)}$$

10.192 INVALID-ORDER-192 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_2 R_L s^4 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 R_L s^3 + C_1 C_L L_2 R_L s^3 + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L L_2 R_L g_m s^2 + C_L L_2 R_L g_m s^2 + C_L R_2 R_L$$

10.193 INVALID-ORDER-193 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L L_2 R_2 s^3 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 s^2 + C_1 C_L L_2 s^2 + C_1 C_L R_2 s + C_1 C_L R_L s + C_1 + C_2 C_L L_2 R_2 g_m s^2 + C_2 C_L L_2 s^2 + C_L L_2 g_m s + C_L R_2 g_m + C_L\right)}$$

**10.194** INVALID-ORDER-194 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L L_2 L_L s^4 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_2 s^2 + C_1 C_L L_2$$

**10.195** INVALID-ORDER-195 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 L_2 L_L s^4 + C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 L_L s^2 + C_1 L_L s^2 + C_1 L_L s^2 + C_2 L_L L_L R_2 g_m s^4 + C_2 L_L L_L R_2 g_m s^2 + C_2 L_2 L_L R_2 g_m s^3 + C_L L_L R_2 g_m s^3 + C_L L_L R_2 g_m s^3 + C_L L_L R_2 g_m s^2 + C_L L_L R_2 g_m s^4 + C_L R_2 g_m$$

**10.196** INVALID-ORDER-196 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.197 INVALID-ORDER-197  $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_L R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_L L_L R_2 R_L s^5 + C_1 C_2 L_L L_L R_2 s^4 + C_1 C_2 L_L L_L R_2 s^4 + C_1 C_L L_L L_L R_2 s^3 + C_1 L_L L_L s^3 + C_1 L_L L_L$$

10.198 INVALID-ORDER-198 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{2}L_{L}R_{2}s^{5} + C_{1}C_{2}L_{L}L_{L}s^{4} + C_{1}C_{2}L_{2}R_{2}s^{3} + C_{1}C_{L}L_{L}L_{S}s^{4} + C_{1}C_{L}L_{L}R_{2}s^{3} + C_{1}L_{L}s^{2} + C_{1}L_{L}s^{2} + C_{1}L_{L}s^{2} + C_{1}L_{L}s^{2} + C_{1}L_{L}L_{L}R_{2}s^{3} + C_{1}L_{L}R_{2}s^{3} + C_$$

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10.199 INVALID-ORDER-199 Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^3 + C_1 C_L L_2 R_2 s^3 + C_1 C_L L_L 
10.200 INVALID-ORDER-200 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                             H(s) = \frac{R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 R_L s^3 + C_1 C_2 R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1}
10.201 INVALID-ORDER-201 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                            H(s) = \frac{C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + R_2g_m + 1}{s\left(C_1C_2C_LL_2R_2s^3 + C_1C_2L_2s^2 + C_1C_2R_2s + C_1C_LR_2s + C_1 + C_2C_LL_2R_2g_ms^2 + C_2C_LL_2s^2 + C_2C_LR_2s + C_LR_2g_m + C_L\right)}
10.202 INVALID-ORDER-202 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                    H(s) = \frac{R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_2 R_L s^4 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 R_L s^3 + C_1 C_L R_2 R_L s^2 + C_1 R_2 s + C_1 R_L s + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L L_2 R_L s^3 + C_2 C_L R_2 R_L s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_L R_2 R_L g_m s^2 + C_L R_2 R_L g_m s^3 + C_L R_2 R_
10.203 INVALID-ORDER-203 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                              H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L L_2 R_2 s^3 + C_1 C_2 C_L L_2 R_L s^3 + C_1 C_2 C_L R_2 R_L s^2 + C_1 C_2 R_2 s^2 + C_1 C_2 R_2 s + C_1 C_L R_2 
10.204 INVALID-ORDER-204 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                            H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L L_2 L_2 s^3 + C_1 C_2 C_L L_2 R_2 s^3 + C_1 C_2 L_2 L_2 s^2 + C_1 C_2 R_2 s + C_1 C_L L_L s^2 + C_1 C_L L_2 s^2 + C_
10.205 INVALID-ORDER-205 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                 H(s) = \frac{L_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 L_L L_2 s^4 + C_1 C_2 L_2 R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_L R_2 s^3 + C_1 L_L R_2 s^4 + C_2 C_L L_L L_L R_2 s^4 + C_2 C_L L_L L_L R_2 s^3 + C_2 L_2 R_2 g_m s^2 
10.206 INVALID-ORDER-206 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                 H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{2} + C_{1}C_{2}L_{2}s^{2} + C_{1}C_{L}L_{2}s^{2} + C_{1}C_{L}L_{2}s
10.207 INVALID-ORDER-207 Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 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)
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 $L_L R_L s \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)$ 

10.208 INVALID-ORDER-208  $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{\left(C_{L}L_{R}L^{s^{2}} + L_{L}s + R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{2}L_{L}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}L_{2}R_{2}s^{3} + C_{1}C_{2}L_{L}R_{2}s^{3} + C_{1}C_{2}L_{L}R_{2}s^{3} + C_{1}C_{L}L_{L}R_{2}s^{3} + C_{1}C_{L}L_{L}R_{2}s^{3$ 10.209 INVALID-ORDER-209  $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^4 + C_1 C_2 L_2 R_L s^4 + C_1 C_2 L_2 R_L s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_L$ 10.210 INVALID-ORDER-210  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L\right)$  $H(s) = \frac{R_1 R_L (R_2 g_m + 1)}{C_1 R_1 R_2 s + C_1 R_1 R_L s + R_1 R_2 g_m + R_1 + R_2 + R_L}$ **10.211** INVALID-ORDER-211  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 R_1 s + C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$ **10.212** INVALID-ORDER-212  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ **10.213** INVALID-ORDER-213  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_L s + 1}$ **10.214** INVALID-ORDER-214  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_L R_1 R_L s \left(R_2 g_m + 1\right)}{C_1 C_L L_L R_1 R_2 R_L s^3 + C_1 L_L R_1 R_2 s^2 + C_1 L_L R_1 R_2 R_L s + C_L L_L R_1 R_2 R_L g_m s^2 + C_L L_L R_1 R_L s^2 + C_L L_L R_1 R_2 R_L s^2 + L_L R_1 R_2 g_m s + L_L R_1 s + L_L R_2 s + L_L R_1 s + R_1 R_2 R_L g_m + R_1 R_L + R_2 R_L g_m s^2 + C_L L_L R_1 R_2 R_L g_m s^2 + C_L L_L R_1 R_2 R_L g_m s^2 + L_L R_1 R_2 R_L g_m s + R_1 R_2 R_L$ **10.215** INVALID-ORDER-215  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_L L_L R_1 R_2 s^3 + C_1 C_L L_L R_1 R_2 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_2 s + C_1 R_1 R_L s + C_L L_L R_1 R_2 g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_2 s^2 + L_L s + R_1 R_2 g_m + R_1 + R_2 + R_L R_2 g_m + R_1 + R_2 + R_2 R_2 g_m + R_1 + R_2 R_2 g_m + R_1 + R_2 R_2 g_m + R_1 R_2 g_m + R_1$ **10.216** INVALID-ORDER-216  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_1 R_L \left( R_2 g_m + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_L L_L R_1 R_2 s^3 + C_1 C_L L_L R_1 R_2 s^2 + C_1 R_1 R_2 s + C_1 R_1 R_2 s + C_1 R_1 R_2 s + C_1 L_L R_1 R_2 g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_2 s^2 + C_L L_L R_2 s^2 + C_L R_1 R_2 R_L g_m s + C_L R_1 R_2 s + C_L R_2 R_L s + R_1 R_2 g_m + R_1 + R_2 + R_L R_2 g_m s + C_L R_2 R_2 g_m s +$ 

10.217 INVALID-ORDER-217 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 (C_2 s + g_m)}{s (C_1 C_2 R_1 s + C_1 C_L R_1 s + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L)}$$

**10.218** INVALID-ORDER-218 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_L R_L s + 1 \right)}{s \left( C_1 C_2 C_L R_1 R_L s^2 + C_1 C_2 R_1 s + C_1 C_L R_1 s + C_2 C_L R_1 s + C_2 C_L R_L s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.219** INVALID-ORDER-219 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_L L_L s^2 + 1 \right)}{s \left( C_1 C_2 C_L L_L R_1 s^3 + C_1 C_2 R_1 s + C_1 C_L R_1 s + C_2 C_L L_L s^2 + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.220** INVALID-ORDER-220 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_1 s \left(C_2 s + g_m\right)}{C_1 C_2 L_L R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_2 C_L L_L R_1 s^3 + C_2 L_L s^2 + C_2 R_1 s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

10.221 INVALID-ORDER-221 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{s \left( C_1 C_2 C_L L_L R_1 s^3 + C_1 C_2 C_L R_1 R_L s^2 + C_1 C_2 R_1 s + C_1 C_L R_1 s + C_2 C_L L_L s^2 + C_2 C_L R_1 s +$$

10.222 INVALID-ORDER-222 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_1 R_L s \left(C_2 s + g_m\right)}{C_1 C_2 L_L R_1 R_L s^3 + C_1 L_L R_1 R_2 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_L s + C_2 L_L R_1 R_L s^3 + C_2 L_L R_1 s^2 + C_2 L_L R_1 s^2 + C_2 L_L R_1 s^2 + C_2 L_L R_1 R_L s^3 + C_1 L_L R_1 R_L s^3 + C_1 L_L R_1 R_2 s^3$$

10.223 INVALID-ORDER-223  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_L s^3 + C_2 L_L s^2 + C_2 R_1 s + C_2 R_L s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

10.224 INVALID-ORDER-224 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left(C_2 s + g_m\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_2 C_L R_1 R_2 s^3 + C_$$

10.225 INVALID-ORDER-225 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L R_1 R_2 R_L s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_2 C_L R_1 R_2 s^2 + C_2 C_L R_2 R_L s^2 + C_2 R_2 R_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + C_L R_1 R_2 s + C_L R_1 R_2 s^2 + C_L R_1 R_2$$

**10.226** INVALID-ORDER-226  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 R_1 R_2 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 R_1 s + C_2 C_L L_L R_2 s^3 + C_2 C_L R_1 R_2 s^2 + C_2 R_2 s + C_L L_L s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$ 10.227 INVALID-ORDER-227  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_L R_1 s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_L R_1 R_2 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_2 s + C_2 L_L L_R R_1 R_2 s^3 + C_2 L_L R_2 s^2 + C_2 R_1 R_2 s + C_L L_L R_1 R_2 g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_1 s^2 + L_L s + R_1 R_2 g_m + R_1 + R_2 r^2 + R_1 R_2 r^2$ 10.228 INVALID-ORDER-228  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_2 R_2 s + R_2 g_m + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 C_L R_1 R_2 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_2 C_L R_1 R_2 s^3 + C_2 C_L R_1 R_2 s^2 + C_2 C_L R_2 R_L s^2 + C_L R_1 R_2 s^$ 10.229 INVALID-ORDER-229  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_L R_1 R_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_L R_1 R_2 R_L s^3 + C_1 L_L R_1 R_2 R_2 s^2 + C_1 L_L R_1 R_2 s^2 + C_1 L_L R_1 R_2 R_L s^3 + C_2 L_L R_1 R_2 s^2 + C_2 L_L R_2 R_2 s^$ 10.230 INVALID-ORDER-230  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{R_1 \left( C_2 R_2 s + R_2 g_m + 1 \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_2 C_L L_L R_1 R_2 s^3 + C_1 C_2 L_L R_1 R_2 s^3 + C_1 C_L L_L R_1 R_2 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_2 s + C_1 R_1 R_2 s + C_1 R_1 R_2 s^3 + C_2 C_L L_L R_1 R_2 s^3 + C_2 C_L L_L R_2 R_2 s^3 + C_2 C_L L_L R_2 R_2 s^3 + C_2 C_L L_R R_2 R_2 r^3 + C_2 C_L L_R R_2 R_2 r^3 + C_2 C_L L_R R_2 r^3 +$ 10.231 INVALID-ORDER-231  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{R_1 R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_L R_1 R_2 R_L s^4 + C_1 C_2 R_1 R_2 R_L s^3 + C_1 C_L L_L R_1 R_2 s^3 + C_1 C_L L_L R_1 R_2 s^3 + C_2 C_L L_L R_1 R_2 s^3 + C_2 C_L L_L R_2 R_L s^3 + C_2 C_L L_L R_2 R_L s^2 + C_2 R_1 R_2 s + C_2 R_2 R_L s + C_L L_L R_1 R_2 g_m s^2 + C_L L_L R_1 R_2 s^2 + C_L R_2 R_L s^2 + C_L R_1 R_2 s^2 + C_L R_1 R_2$ **10.232** INVALID-ORDER-232  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L R_1 R_2 s^2 + C_1 C_2 R_1 s + C_1 C_L R_1 s + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 + C_L R_1 g_m + C_L \right)}$ 

10.233 INVALID-ORDER-233 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L R_1 R_2 R_L s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_2 C_L R_1 R_2 R_L g_m s^2 + C_2 C_L R_1 R_L s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_1 s + C_2 R_2 s + C_2 R_1 R_2 g_m s + C_2 R_2 g_m s + C_$$

$$\textbf{10.234} \quad \textbf{INVALID-ORDER-234} \ \ Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$
 
$$R_1 \left(C_L R_L s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)$$
 
$$R_2 \left(C_L R_1 R_2 s^2 + C_1 C_2 C_L R_1 R_L s^2 + C_1 C_2 R_1 s + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_2 s + C_2 C_L R_1 s + C_2 C_L R_2 s + C_2 C_L R_$$

10.235 INVALID-ORDER-235 
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_1\left(C_LL_Ls^2 + 1\right)\left(C_2R_2g_ms + C_2s + g_m\right)}{s\left(C_1C_2C_LL_LR_1s^3 + C_1C_2C_LR_1R_2s^2 + C_1C_2R_1s + C_2C_LL_Ls^2 + C_2C_LR_1R_2g_ms + C_2C_LR_1s + C$$

**10.236** INVALID-ORDER-236 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_1 s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_L L_L R_1 s^3 + C_2 C_L L_L R_1 R_2 g_m s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 L_L s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_L L_L R_1 g_m s^2 + C_L L_L R_2 s^3 + C_2 R_1 R_2 g_m s + C_2 R_1 R_2 g_m s + C_2 R_2 s + C_2 R_1 R_2 g_m s + C_2 R_2 s + C_2 R_2 R_2 g_m s + C_2 R_2 R_2 g_m s + C_2 R_2 g_m s +$$

10.237 INVALID-ORDER-237 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_L R_1 s^3 + C_1 C_2 C_L R_1 R_2 s^2 + C_1 C_2 C_L R_1 R_L s^2 + C_1 C_L R_1 s + C_2 C_L L_L s^2 + C_2 C_L R_1 R_2 g_m s + C_2 C_L R_1 s$$

10.238 INVALID-ORDER-238 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

10.239 INVALID-ORDER-239  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{R_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_1 R_2 s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2$$

10.240 INVALID-ORDER-240 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_1 R_2 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_2 C_L L_L R_1 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L R_1 R_2 R_2 g_m s^2 + C_2 C_L R_1 R_2 s^2 + C_2 C_L R_2 s^2 + C_2 C_$$

10.241 INVALID-ORDER-241 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 L_2 R_1 s^3 + C_1 C_2 R_1 R_L s^2 + C_1 R_1 s + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_L s + R_1 g_m + 1}$$

**10.242** INVALID-ORDER-242 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_2 R_1 s^3 + C_1 C_2 R_1 s + C_1 C_L R_1 s + C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L \right)}$$

**10.243** INVALID-ORDER-243 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 R_1 R_L s^4 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 R_1 R_L s^2 + C_1 R_1 s + C_2 C_L L_2 R_1 R_L g_m s^3 + C_2 C_L L_2 R_1 R_L s^2 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_1 s + C_2 R_1 R_L g_m s + C_L R_1$$

10.244 INVALID-ORDER-244 
$$Z(s) = \left(\frac{R_{coloris}}{CC(Coloris)}, L_{col}s + \frac{1}{C_{col}}, \infty, \infty, \infty, R_c + \frac{1}{C_{col}}\right)$$

$$R(s) = \frac{R_{coloris}}{R_{coloris}} + C_{coloris} + C_{colori$$

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10.253 INVALID-ORDER-253 Z(s) = \left(\frac{R_1}{C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{R_1R_L\left(C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + g_m\right)}{C_1C_2C_LL_2R_1R_Ls^3 + C_1C_2L_2R_1s^3 + C_1C_2R_1R_Ls^2 + C_1C_2R_1R_Ls^2 + C_1C_LR_1R_Ls^2 + C_2C_LL_2R_1R_2g_ms^3 + C_2C_LL_2R_2R_3s^3 + C_2C_LR_1R_2R_2R_2g_ms^2 + C_2C_LR_1R_2s^2 + C_2L_2R_1g_ms^2 + C_2L_2R_1g_ms
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 $H(s) = \frac{L_L R_1 s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_1 s^5 + C_1 C_2 C_L L_L R_1 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_1 s^3 + C_2 C_L L_L R_1 g_m s^4 + C_2 C_L L_L R_1 g_m s^3 + C_2 C_L L_L R_1 s^3 +$ 

10.257 INVALID-ORDER-257  $Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$   $R_1\left(C_LL_Ls^2 + C_LR_Ls + 1\right)\left(C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + g_m\right)$   $S\left(C_1C_2C_LL_2R_1s^3 + C_1C_2C_LL_1R_1s^3 + C_1C_2C_LR_1R_2s^2 + C_1C_2C_LR_1R_2s^2 + C_1C_2R_1s + C_1C_LR_1s + C_2C_LL_2R_1g_ms^2 + C_2C_LL_2s^2 + C_2C_LL_2s^2 + C_2C_LR_1s + C_2$ 

10.258 INVALID-ORDER-258  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{L_L R_1 R_L s}{C_1 C_2 C_L L_2 L_L R_1 R_L s^5 + C_1 C_2 C_L L_L R_1 R_2 R_L s^4 + C_1 C_2 L_2 L_L R_1 R_L s^3 + C_1 C_2 L_L R_1 R_L s^3$ 

10.259 INVALID-ORDER-259  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

 $H(s) = \frac{R_1 \left( C_L L_L R_L s^2 + L_L s + R_L \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_L R_1 s^5 + C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 R_1 R_2 s^2 + C_2 C_L L_L R_1 R_2 s^4 + C_2 C_L L_L R_1 R_2 g_m s^3 + C_2 C_L L_L R_1 R_2 s^3 + C_2 C_L L_L R_1 R_2 s^4 + C_2 C_L L_L R_1$ 

10.260 INVALID-ORDER-260  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{K_1 K_L \left( C_L L_L S^2 + C_1 C_2 C_L L_2 L_1 R_1 S^5 + C_1 C_2 C_L L_2 R_1 R_L S^4 + C_1 C_2 C_L L_L R_1 R_2 S^4 + C_1 C_2 C_L L_L R_1 R_2 S^3 + C_1 C_2 R_1 R_2 S^2 + C_1 C_2 R_1 R_2 S^2 + C_1 C_2 R_1 R_L S^3 + C_1 C_L L_L R_1 S^3 + C_1 C_L R_1 R_L S^3$ 

**10.261** INVALID-ORDER-261  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_2 R_1 R_2 s^3 + C_1 C_2 L_2 R_1 R_L s^3 + C_1 L_2 R_1 s^2 + C_1 R_1 R_2 s + C_1 R_1 R_L s + C_2 L_2 R_1 R_2 g_m s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_L s^2 + L_2 R_1 g_m s + L_2 s + R_1 R_2 g_m + R_1 + R_2 + R_L R_2 g_m + R_1 R_2 g_$ 

10.262 INVALID-ORDER-262  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 s^3 + C_1 C_L L_2 R_1 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 R_1 s + C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 L_2 s^2 + C_L L_2 R_1 g_m s^2 + C_L L_2 s^2 + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$ **10.263** INVALID-ORDER-263  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_1 R_2 s^3 + C_1 C_2 L_2 R_1 R_2 s^3 + C_1 C_L L_2 R_1 R_L s^3 + C_1 C_L L_2 R_1 R_2 s^2 + C_1 L_2 R_1 s^2 + C_1 L_2 R_1 R_2 s + C_1 R_$ **10.264** INVALID-ORDER-264  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 s^3 + C_1 C_L L_2 R_1 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^3 + C_2 C_L L_2 R_1 s^3 +$ **10.265** INVALID-ORDER-265  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 R_1 s^3 + C_1 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_1 s^3$ **10.266** INVALID-ORDER-266  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $\frac{L_L R_1 s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_2 L_L R_1 s^4 + C_1 C_2 L_2 L_L R_1 s^4 + C_1 C_L L_L R_1 s^3 + C_1 L_L R_1 s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_1 s^4 + C_2 C_L L_L R_2 s^4 + C_2 C_L R_1 s^4 + C_2 C_L R_2 s$ 10.267 INVALID-ORDER-267  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 s^3 + C_1 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 +$ 10.268 INVALID-ORDER-268  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{1}{C_1C_2C_LL_2L_LR_1R_2R_Ls^5 + C_1C_2L_2L_LR_1R_2s^4 + C_1C_2L_2L_LR_1R_Ls^4 + C_1C_LL_2L_LR_1R_Ls^4 + C_1C_LL_LR_1R_2s^4 + C_1L_LR_1R_2s^4 + C$ **10.269** INVALID-ORDER-269  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $R_1 \left( C_L L_L R_L s^2 + L_L s + R_L \right) \left( C_2 L_2 R_2 g_m \right)$  $H(s) = \frac{1 + (C_L L_L L_L R_1 R_2 s^5 + C_1 C_2 L_L L_L R_1 R_2 s^5 + C_1 C_2 L_L L_L R_1 R_2 s^3 + C_1 C_L L_L R_1 R_2$ 

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 $H(s) = \frac{1}{C_1 C_2 C_L L_2 L_L R_1 R_2 s^5 + C_1 C_2 C_L L_2 L_L R_1 R_2 s^5 + C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 R_2 s^3 + C_1 C_L L_$ 

10.270 INVALID-ORDER-270  $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

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10.271 INVALID-ORDER-271 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty\right)
                                                                                                                                10.272 INVALID-ORDER-272 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                 H(s) = \frac{R_1 \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 R_1 s + C_2 C_L L_2 R_1 R_2 g_m s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L L_2 R_2 s^2 + C_2 L_2 s^2 + C_2 
10.273 INVALID-ORDER-273 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_1 R_L \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_1 R_2 R_L s^3 + C_1 C_2 L_2 R_1 R_2 s^3 + C_1 C_2 R_1 R_2 R_L s^2 + C_1 R_1 R_2 s + C_
10.274 INVALID-ORDER-274 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
10.275 INVALID-ORDER-275 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_2 C_L L_2 R_1 s^3 + C_2 C_L L_2 R_2 s^3 + C_2 C_L L_2 
10.276 INVALID-ORDER-276 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.277 INVALID-ORDER-277 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 L_L L_R R_2 s^4 + C_1 C_2 C_L L_R R_1 R_2 s^4 + C_1 C_2 C_L L_R R_2 s^3 + C_1 C_2 L_R R_
10.278 INVALID-ORDER-278 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 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{1}{C_1 C_2 C_L L_2 L_L R_1 R_2 R_L s^5 + C_1 C_2 L_2 L_L R_1 R_2 s^4 + C_1 C_2 L_2 L_L R_1 R_2 s^3 + C_1 C_2 L_L R_1 R_2 R_L s^3 + C_1 C_L L_L R_1 R_2 R_L s^3 + C_1 L_L R_1 R_2 R_L s^3 + C_1 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 L_L R_1 R_2 R_L s^4 + C_2 C_L L_2 R_1 R_2 R_L s^
10.279 INVALID-ORDER-279 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{1}{C_1C_2C_LL_2L_LR_1R_2s^5 + C_1C_2C_LL_2L_RR_1R_2s^5 + C_1C_2C_LL_LR_1R_2s^4 + C_1C_2L_2L_RR_1s^4 + C_1C_2L_2R_1R_2s^3 + C_1C_2L_2R_1R_2s^3 + C_1C_2L_LR_1R_2s^3 + C
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10.280 INVALID-ORDER-280 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_{1}C_{2}C_{L}L_{2}L_{L}R_{1}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{2}L_{L}R_{1}R_{2}s^{4} + C_{1}C_{2}C_{L}L_{2}R_{1}R_{2}s^{4} + C_{1}C_{2}L_{2}R_{1}R_{2}s^{3} + C_{1}C_{2}L_{2}R_{1}R_{2}s^{3} + C_{1}C_{L}L_{L}R_{1}R_{2}s^{3} + C_{1}C_{L}L_{L}R_{1}R_{2}s^$ 

**10.281** INVALID-ORDER-281  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 R_1 s + 1 \right)}{C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + R_2 g_m + 1}$$

**10.282** INVALID-ORDER-282  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$ 

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

**10.283** INVALID-ORDER-283  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

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

**10.284** INVALID-ORDER-284  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 R_1 s + 1\right) \left(C_L L_L s^2 + 1\right)}{s \left(C_1 C_L L_L s^2 + C_1 C_L R_1 R_2 q_m s + C_1 C_L R_1 s + C_1 C_L R_2 s + C_1 + C_L R_2 q_m + C_L\right)}$$

**10.285** INVALID-ORDER-285  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L s \left(R_2 g_m + 1\right) \left(C_1 R_1 s + 1\right)}{C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$$

**10.286** INVALID-ORDER-286  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{(R_2 g_m + 1) (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 C_L L_L s^2 + C_1 C_L R_1 R_2 g_m s + C_1 C_L R_1 s + C_1 C_L R_2 s + C_1 C_L R_1 s + C_1 C_L R_2 g_m + C_L)}$$

10.287 INVALID-ORDER-287  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_L R_L s \left(R_2 g_m + 1\right) \left(C_1 R_1 s + 1\right)}{C_1 C_L L_L R_1 R_2 R_L g_m s^3 + C_1 C_L L_L R_1 R_2 s^3 + C_1 L_L R_1 s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_2 s^2 + C_1$$

10.288 INVALID-ORDER-288  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

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

10.289 INVALID-ORDER-289 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 R_1 s + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L R_1 R_2 R_L g_m s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_1 R_2 s + C_1 R_2 R_L g_m s^2 + C_L L_L s^2 + C_L R_2 R_L g_m s + C_L R_$$

10.290 INVALID-ORDER-290 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_2s + g_m)(C_1R_1s + 1)}{s(C_1C_2C_LR_1s^2 + C_1C_2s + C_1C_LR_1g_ms + C_1C_Ls + C_2C_Ls + C_Lg_m)}$$

10.291 INVALID-ORDER-291 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

**10.292** INVALID-ORDER-292 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

**10.293** INVALID-ORDER-293 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

10.294 INVALID-ORDER-294 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 s + g_m\right) \left(C_1 R_1 s + 1\right)}{C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 L_L s^3 + C_1 C_2 R_1 s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 R_1 g_m s + C_1 s + C_2 C_L L_L s^3 + C_2 s + C_L L_L g_m s^2 + g_m}$$

**10.295** INVALID-ORDER-295 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.296 INVALID-ORDER-296 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 s + g_m\right) \left(C_1 R_1 s + 1\right)}{C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_L L_L R_1 R_L g_m s^3 + C_1 L_L R_1 g_m s^3 + C_1 L_L R_1 g_m s^2 + C_1 L_L s^2 + C_1 R_1 R_L g_m s + C_1 R_L s + C_2 C_L L_L R_1 s^3 + C_2 L_L s^2 + C_2 R_L s + C_L L_L R_1 g_m s^2 + L_L g_m s + R_L g_m s^2 + L_L g_m s + R_L g_m s^2 + C_1 R_L g_m s^2 +$$

10.297 INVALID-ORDER-297 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{2}s + g_{m}\right)\left(C_{1}R_{1}s + 1\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}R_{1}s^{4} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{2}R_{1}s^{2} + C_{1}C_{2}R_{L}s^{2} + C_{1}C_{L}L_{L}R_{1}q_{m}s^{3} + C_{1}C_{L}L_{L}s^{3} + C_{1}s + C_{2}C_{L}L_{L}s^{3} + C_{2}s + C_{L}L_{L}q_{m}s^{2} + q_{m}s^{2} + C_{1}C_{L}L_{L}s^{3} + C_{1}C_{L}s^{3} + C_{1}C_$$

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10.298 INVALID-ORDER-298 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 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{R_L \left( C_2 s + g_m \right) \left( C_1 R_1 s + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 R_1 s^2 + C_1 C_2 R_L s^2 + C_1 C_L L_L R_3 s^3 + C_1 C_L L_L s^3 + C_1 C_
10.299 INVALID-ORDER-299 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                  H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}R_{1}R_{2}s^{2}+C_{1}C_{2}R_{2}s+C_{1}C_{L}R_{1}R_{2}q_{m}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{2}s+C_{1}+C_{2}C_{L}R_{2}s+C_{L}R_{2}q_{m}+C_{L}\right)}
10.300 INVALID-ORDER-300 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                         H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L R_1 R_2 R_L s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_L R_1 R_2 R_L g_m s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_2 R_L s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_2 C_L R_2 R_L s^2 + C_2 R_2 s + C_L R_2 R_L g_m s + C_L R_L s + R_2 g_m + 1}
10.301 INVALID-ORDER-301 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                 H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}R_{1}R_{2}s^{2}+C_{1}C_{2}R_{L}s^{2}+C_{1}C_{2}R_{2}s+C_{1}C_{L}R_{1}R_{2}g_{m}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_
10.302 INVALID-ORDER-302 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                              H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{L}R_{2}s^{3}+C_{1}C_{2}L_{R}1R_{2}s^{2}+C_{1}C_{L}L_{L}s^{2}+C_{1}C_{L}R_{1}R_{2}g_{m}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{2}s+C_{1}+C_{2}C_{L}R_{2}s+C_{L}R_{2}g_{m}+C_{L}\right)}
10.303 INVALID-ORDER-303 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                      H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_L R_1 R_2 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_L s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_2 C_L L_L R_2 s^3 + C_2 R_2 s + C_L L_L R_2 g_m s^2 + C_L R_2 g_m s^2 
10.304 INVALID-ORDER-304 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                            H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)}{s\left(C_{1}C_{2}C_{L}L_{L}R_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}s^{2}+C_{1}C_{2}R_{2}s+C_{1}C_{L}L_{L}s^{2}+C_{1}C_{L}R_{1}R_{2}g_{m}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C_{L}R_{2}s+C_{1}C
10.305 INVALID-ORDER-305 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 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)
10.306 INVALID-ORDER-306 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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 $H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}R_{1}R_{2}s^{4}+C_{1}C_{2}L_{L}R_{2}s^{3}+C_{1}C_{2}R_{1}R_{2}s^{2}+C_{1}C_{2}R_{2}R_{L}s^{2}+C_{1}C_{L}L_{L}R_{1}R_{2}q_{m}s^{3}+C_{1}C_{L}L_{L}R_{2}s^{3}+C_{1}C_{L}L_{L}R_{2}s^{3}+C_{1}C_{L}L_{L}R_{2}s^{3}+C_{1}R_{L}s^{2}+C_{1}R_{1}s+C_{1}R_{2}s+C_{1}R_{1}s+C_{$ 

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10.307 INVALID-ORDER-307 Z(s) = \left( R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 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{R_L \left( C_1 R_1 s + 1 \right) \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 C_L L_R R_2 R_L s^3 + C_1 C_L L_L R_1 R_2 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_R R_2 R_L s^2 + C_1 C_L R_2 R_L 
10.308 INVALID-ORDER-308 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                          H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}R_{1}R_{2}q_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}s+C_{1}C_{L}R_{1}q_{m}s+C_{1}C_{L}s+C_{2}C_{L}R_{2}q_{m}s+C_{2}C_{L}s+C_{L}q_{m}\right)}
10.309 INVALID-ORDER-309 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
                  H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L R_1 R_2 g_m s^3 + C_1 C_2 C_L R_1 R_L s^3 + C_1 C_2 R_1 R_2 g_m s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_2 R_L g_m s^2 + C_2 C_L R_2 R_L g_m 
10.310 INVALID-ORDER-310 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                       H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}R_{1}g_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{L}s^{2}+C_{1}C_{2}s+C_{1}C_{L}R_{1}g_{m}s+C_{1}C_{L}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}s+C_{L}g_{m}\right)}
10.311 INVALID-ORDER-311 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                       H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{L}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}q_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}s+C_{1}C_{L}R_{1}q_{m}s+C_{1}C_{L}s+C_{2}C_{L}R_{2}q_{m}s+C_{2}C_{L}s+C_{L}q_{m}\right)}
10.312 INVALID-ORDER-312 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                   H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_1 g_m s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 L_L s^3 + C_1 C_2 R_1 R_2 g_m s^2 + C_1 C_2 R_2 s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L S^3 + C_1 C_L L_L S^3 + C_2 C_L L_L S^3 
10.313 INVALID-ORDER-313 Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
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$$H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{L}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}q_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{L}s^{2}+C_{1}C_{2}s+C_{1}C_{L}R_{1}q_{m}s+C_{1}C_{L}s+C_{2}C_{L}R_{2}q_{m}s+C_{2}C_{L}s+C_{L}q_{m}\right)}$$

**10.314** INVALID-ORDER-314 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_1 R_1 s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 g_m s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_$$

10.315 INVALID-ORDER-315 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}R_{1}s^{4}+C_{1}C_{2}C_{L}L_{L}R_{2}s^{4}+C_{1}C_{2}L_{L}S^{3}+C_{1}C_{2}R_{1}s^{2}+C_{1}C_{2}R_{1}s^{2}+C_{1}C_{2}R_{2}s^{2}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}$$

10.316 INVALID-ORDER-316  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 C_L R_1 R_2 R_2 g_m s^3 + C_1 C_2 C_L R_1 R_2 s^3 + C_1 C_2 R_1 R_2 g_m s^3 + C_1 C_2 R_2 g_m s^3 + C_1 C_$ 

10.317 INVALID-ORDER-317  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_1 s^2 + C_1 C_2 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_2 L_2 g_m s^2 + C_2 s + g_m}$ 

**10.318** INVALID-ORDER-318  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$ 

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

**10.319** INVALID-ORDER-319  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 R_1 R_L g_m s^4 + C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_L s^2 + C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 R_L g_m s^3 + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L R_L s^2 + C_2 R_L g_m s^3 + C_2 C_L R_L g_m s^2 + C_2 R_L g_m s^3 + C_2 C_L R_L g_m s^3 + C_2$$

**10.320** INVALID-ORDER-320  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

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

10.321 INVALID-ORDER-321  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

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

10.322 INVALID-ORDER-322  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_2 L_L R_1 g_m s^5 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 L_L s^3 + C_1 C_2 L_L s^3 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L R_1 g_m s^4 + C_2 C_L L_L L_L g_m s^4 + C_2 C_L L_L L_L g_m s^2 + C_2 s + C_L L_L L_L g_m s^2 + G_2 C_L L_L R_1 g_m s^3 + C_1 C_2 R_1 g_m s^4 + C_2 C_L R_2 g_m s^$$

**10.323** INVALID-ORDER-323  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

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

10.324 INVALID-ORDER-324  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_L R_L s \left(C_1 R_1 s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_L R_1 R_L g_m s^5 + C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 L_L R_1 g_m s^4 + C_1 C_2 L_L R_1 R_L g_m s^3 + C_1 C_2 L_L R_1 s^3 + C_1$$

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10.325 INVALID-ORDER-325 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}s+g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}R_{1}g_{m}s^{5}+C_{1}C_{2}C_{L}L_{L}R_{1}s^{4}+C_{1}C_{2}L_{L}R_{1}s^{4}+C_{1}C_{2}L_{2}R_{1}g_{m}s^{3}+C_{1}C_{2}L_{2}s^{3}+C_{1}C_{2}L_{L}s^{3}+C_{1}C_{2}L_{L}s^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_{L}S^{3}+C_{1}C_{L}L_
10.326 INVALID-ORDER-326 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 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{R_L \left( C_1 R_1 s + 1 \right) \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 L_L R_1 g_m s^5 + C_1 C_2 C_L L_2 R_1 R_L g_m s^4 + C_1 C_2 C_L L_2 R_1 g_m s^3 + C_1 C_2 R_1 s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_1 s^3 + C_1 C_2 R_1 s^
10.327 INVALID-ORDER-327 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)
                                                                                                                                                                                                                                                                               H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_1 R_2 g_m s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m r^2}
10.328 INVALID-ORDER-328 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                            H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{1}g_{m}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}g_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}s+C_{1}C_{L}R_{1}g_{m}s+C_{1}C_{L}s+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}S+C_{L}g_{m}\right)}
10.329 INVALID-ORDER-329 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_2 R_1 R_L g_m s^4 + C_1 C_2 C_L R_1 R_2 R_L g_m s^3 + C_1 C_2 C_L R_1 R_L s^3 + C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 R_2 R_2 s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_2 s^2 + C_1 C_2 
10.330 INVALID-ORDER-330 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                  H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{1}g_{m}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}g_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}S+C_{1}C_{2}S+C_{1}C_{2}S+C_{1}C_{2}S+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C
10.331 INVALID-ORDER-331 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                   H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{3}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}g_{m}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}s+C_{1}C_{L}R_{1}g_{m}s+C_{1}C_{L}s+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{
10.332 INVALID-ORDER-332 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L L_R 1 g_m s^5 + C_1 C_2 C_L L_L R_1 R_2 g_m s^4 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_1 g_m s^3 + C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 R_1 R_2 g_m s^3 + C_1 C_2 R_2 
10.333 INVALID-ORDER-333 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{2}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{2}s+C_{1}C_{L}R_{2}g_{m}s+C_{2}C_{L}R_{2}g_{m}s+C$ 

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10.334 INVALID-ORDER-334 Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \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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 $H(s) = \frac{1}{C_1 C_2 C_L L_2 L_L R_1 R_L g_m s^5 + C_1 C_2 C_L L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L R_1 R_2 g_m s^3 + C_1 C_2 L_L R_1 R_2 g_m s^3 + C_1 C_2 L_L R_1 R_2 g_m s^4 + C_1 C_2$ 

**10.335** INVALID-ORDER-335  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

 $H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{C_{1}C_{2}C_{L}L_{L}R_{1}g_{m}s^{5}+C_{1}C_{2}C_{L}L_{L}R_{1}s^{4}+C_{1}C_{2}C_{L}L_{L}R_{2}s^{4}+C_{1}C_{2}L_{L}R_{1}s^{4}+C_{1}C_$ 

10.336 INVALID-ORDER-336  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L(c)}{C_1C_2C_LL_2L_LR_1g_ms^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2R_1g_ms^4 + C_1C_2C_LL_2R_1s^4 + C_1C_2C_LR_1s^4 + C_1C_2C_LR_1s^$ 

10.337 INVALID-ORDER-337  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_2 R_1 R_2 g_m s^3 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 R_L s^3 + C_1 L_2 R_1 g_m s^2 + C_1 L_2 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1}$ 

10.338 INVALID-ORDER-338  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

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

10.339 INVALID-ORDER-339  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^4 + C_1 C_2 L_2 R_1 R_2 g_m s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_$ 

10.340 INVALID-ORDER-340  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

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

10.341 INVALID-ORDER-341  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

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

10.342 INVALID-ORDER-342  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 L_L L_L R_1 s^5 + C_1 C_2 L_L L_L R_2 s^5 + C_1 C_2 L_L L_L R_2 s^3 + C_1 C_L L_L R_1 g_m s^4 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_$ 

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10.343 INVALID-ORDER-343 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_1 s + R_1 + \frac{1}{C_1 s}\right)
H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}L_{2}R_{2}s^{3}+C_{1}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C
10.344 INVALID-ORDER-344 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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_1C_2C_LL_2L_LR_1R_2R_Lg_ms^5 + C_1C_2L_LL_RR_1R_Ls^5 + C_1C_2L_LL_RR_1R_2g_ms^4 + C_1C_2L_LL_Rr_1s^4 + C_1C_2L_LL_Rr_2s^4 + C_1C_2L_LR_1s^4 + C_1C_2L_2R_1s^4 + C_1C_2L_2R_1s^4 + C_1C_2L_2R_1s^4 + C_1C_2L_2R_1s^4 + C_1C_2L_2R_1s^4 + C_1C_2L_2R_1s^4 
10.345 INVALID-ORDER-345 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{L}s^{2}+L_{L}s+R_{L}s+R_{L}\right)\left(C_{2}L_{L}s^{2}+L_{L}s+R_{L}s+R_{L}\right)\left(C_{2}L_{L}s^{2}+L_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}s+R_{L}
10.346 INVALID-ORDER-346 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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{1}{C_1 C_2 C_L L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_2 R_1 R_2 g_m s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 L_2 R_2 R_1 s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 L_2 R_2 R_2 R_1 
10.347 INVALID-ORDER-347 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)
                                                                                                                                                  H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 L_2 R_1 R_2 g_m s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_2 R_L s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1}
10.348 INVALID-ORDER-348 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                 H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}R_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{2}s+C_{1}+C_{2}C_{L}L_{2}R_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}s^{2}+C_{2}C_{L}R_{2}s+C_{L}R_{2}g_{m}+C_{L}\right)}
10.349 INVALID-ORDER-349 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                     R_{L}\left(C_{1}R_{1}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)\\ -C_{1}C_{2}C_{L}L_{2}R_{1}R_{2}R_{L}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{2}R_{1}R_{2}s^{4}+C_{1}C_{2}L_{2}R_{1}R_{2}s^{3}+C_{1}C_{2}L_{2}R_{1}S^{3}+C_{1}C_{2}L_{2}R_{1}S^{3}+C_{1}C_{2}L_{2}R_{1}S^{3}+C_{1}C_{2}L_{2}R_{1}S^{3}+C_{1}C_{2}L_{2}R_{1}S^{3}+C_{1}C_{2}L_{2}R_{1}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R_{2}S^{2}+C_{1}C_{L}R_{1}R
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 $H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{2}R_{1}R_{2}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{$ 

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

10.350 INVALID-ORDER-350  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

10.351 INVALID-ORDER-351  $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

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10.352 INVALID-ORDER-352 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
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 $H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_L L_R R_2 g_m s^5 + C_1 C_2 L_L L_R R_2 s^4 + C_1 C_2 L_L L_R R_2 s^4 + C_1 C_2 L_L L_R R_2 s^3 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_L R_1 R_2 g_m s^3 + C_1 C_2 L_L R_2 g_m s^3 + C_1 C_2 L_L$ 

**10.353** INVALID-ORDER-353 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.354 INVALID-ORDER-354 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_2 L_L R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 R_L s^5 + C_1 C_2 C_L L_L R_1 R_2 R_L s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L L_R R_1 R_2 g_m s^4 + C_1 C_2 L_L R_1 R_2 g_m s^$ 

10.355 INVALID-ORDER-355 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.356 INVALID-ORDER-356 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_$ 

**10.357** INVALID-ORDER-357  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{(R_2 g_m + 1) (C_1 L_1 s^2 + 1)}{s (C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_2 s + C_1 + C_L R_2 g_m + C_L)}$$

10.358 INVALID-ORDER-358  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right)}{C_1 C_L L_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_2 R_L s^2 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_2 s + C_1 R_L s + C_L R_2 R_L g_m s + C_L R_L s + R_2 g_m + 1}$$

**10.359** INVALID-ORDER-359  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L R_L s + 1\right)}{s \left(C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_2 s + C_1 C_L R_L s + C_1 + C_L R_2 g_m + C_L\right)}$$

**10.360** INVALID-ORDER-360  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{s \left(C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_L s^2 + C_1 C_L R_2 s + C_1 + C_L R_2 g_m + C_L\right)}$$

10.361 INVALID-ORDER-361 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_L L_1 L_L R_2 g_m s^4 + C_1 C_L L_L L_2 s^4 + C_1 C_L L_L R_2 s^3 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 L_L s^2 + C_1 L_L s^2 + C_1 L_L R_2 g_m s^2 + C_L R_2$$

**10.362** INVALID-ORDER-362 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{s \left(C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_L s^2 + C_1 C_L R_2 s + C_1 C_L R_L s + C_1 + C_L R_2 g_m + C_L\right)}$$

10.363 INVALID-ORDER-363 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_L L_1 L_L R_2 R_L g_m s^4 + C_1 C_L L_L L_L R_2 R_L s^3 + C_1 L_1 L_L R_2 g_m s^3 + C_1 L_1 L_L R_2 s^2 + C_1 L_L R_2 s^2 + C_1$$

**10.364** INVALID-ORDER-364 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_1 C_L L_1 L_L R_2 g_m s^4 + C_1 C_L L_L L_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 L_L s^2 + C_1 R_2 s + C_1 R_L s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$$

10.365 INVALID-ORDER-365 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_L L_1 L_L R_2 g_m s^4 + C_1 C_L L_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_R R_2 s^3 + C_1 C_L R_2 R_L s^2 + C_1 L_1 R_2 r_m s^2 + C_1 L_1 r_s^2 + C_1 R_2 r_s r_s^2 + C_1 L_1 r_s^2 + C_1 R_2 r_s r_s^2 + C_1 R_2 r_s r_s^2 + C_1 R_2 r_s^2 + C_1$$

10.366 INVALID-ORDER-366  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_L (C_2 s + g_m) (C_1 L_1 s^2 + 1)}{C_1 C_2 L_1 s^3 + C_1 C_2 R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + C_2 s + g_m}$$

**10.367** INVALID-ORDER-367  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{(C_2s + g_m)(C_1L_1s^2 + 1)}{s(C_1C_2C_LL_1s^3 + C_1C_2s + C_1C_LL_1g_ms^2 + C_1C_Ls + C_2C_Ls + C_Lg_m)}$$

**10.368** INVALID-ORDER-368  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

**10.369** INVALID-ORDER-369  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

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

**10.370** INVALID-ORDER-370 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

10.371 INVALID-ORDER-371 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L s^5 + C_1 C_2 L_1 s^3 + C_1 C_2 L_L s^3 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_L s^3 + C_1 L_1 g_m s^2 + C_1 s + C_2 C_L L_L s^3 + C_2 s + C_L L_L g_m s^2 + g_m}$$

**10.372** INVALID-ORDER-372 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.373 INVALID-ORDER-373 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_L s^5 + C_1 C_2 L_1 L_L s^4 + C_1 C_2 L_1 R_L s^3 + C_1 C_L L_1 L_L R_L g_m s^4 + C_1 C_L L_L L_L R_L s^3 + C_1 L_1 L_L g_m s^3 + C_1 L_1 L_L g_m s^3 + C_1 L_1 L_L g_m s^3 + C_1 L_L R_L s^3 + C_2 L_L R_$$

10.374 INVALID-ORDER-374 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{2}s + g_{m}\right)\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}s^{5} + C_{1}C_{2}L_{L}L_{3}^{3} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{2}R_{L}s^{2} + C_{1}C_{L}L_{1}L_{L}g_{m}s^{4} + C_{1}C_{L}L_{L}s^{3} + C_{1}s + C_{2}C_{L}L_{L}s^{3} + C_{2}s + C_{L}L_{L}g_{m}s^{2} + g_{m}}$$

10.375 INVALID-ORDER-375 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_2 s + g_m \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_2 C_L L_1 L_L s^5 + C_1 C_2 C_L L_1 R_L s^4 + C_1 C_2 L_1 s^3 + C_1 C_2 R_L s^2 + C_1 C_L L_1 R_L g_m s^4 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L L_L s^3 + C_1 C_L L_L s^3 + C_2 C_L L_L g_m s^2 + C_L R_L g_m s^2 + C_L R_L g_m s^3 + C_L R_$$

10.376 INVALID-ORDER-376  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$ 

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_2 s^3 + C_1 C_2 R_2 R_L s^2 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_2 s + C_1 R_L s + C_2 R_2 s + R_2 g_m + 1}$$

10.377 INVALID-ORDER-377  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

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

**10.378** INVALID-ORDER-378  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 R_2 R_L s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 R_2 R_L s^2 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1$$

10.370 INVALID-ORDER-379 
$$Z(s) = \left(L_1s + \frac{1}{C_{22}}, \frac{R_{12}}{R_{12}R_{12}R_{12}R_{12}} \times \infty, \infty, \infty, R_2 + \frac{1}{C_{22}}\right)$$

$$E(s) = \frac{(C_1L_2s^2 + 1)(C_2R_2s +$$

10.387 INVALID-ORDER-387 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$
 
$$\frac{\left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_1 R_2 g_m s^3 + C_1 C_2 C_L L_1 s^3 + C_1 C_2 C_L R_2 s^2 + C_1 C_2 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_2 C_L R_2 g_m s + C_2 C_L s + C_L g_m\right)}$$

10.388 INVALID-ORDER-388  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_1 R_L s^4 + C_1 C_2 C_L R_2 R_L s^3 + C_1 C_2 L_1 s^3 + C_1 C_2 L_1 s^3 + C_1 C_2 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_L s^2 + C_1 L_1 g_m s^3 + C_1 C_L R_L s^2 + C_1 C_L R_L g_m s^2 + C_1 S_L R_L g_m s^2 + C_2 C_L R_L g_m$ **10.389** INVALID-ORDER-389  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}R_{L}s + 1\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{2}q_{m}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}R_{2}s^{2} + C_{1}C_{2}C_{L}R_{L}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}q_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}R_{2}q_{m}s + C_{2}C_{L}s + C_{L}q_{m}\right)}$ 10.390 INVALID-ORDER-390  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}L_{L}s^{2} + 1\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{2}g_{m}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}R_{2}g_{m}s + C_{2}C_{L}s + C_{L}g_{m}\right)}$ 10.391 INVALID-ORDER-391  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_L R_2 g_m s^5 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_L s^3 +$ 10.392 INVALID-ORDER-392  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{L}s^{3} + C_{1}C_{2}C_{L}R_{2}s^{2} + C_{1}C_{2}C_{L}R_{L}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}R_{2}g_{m}s + C_{2}C_{L}s + C_{L}g_{m}\right)}$ 10.393 INVALID-ORDER-393  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_L R_L s \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L L_L R_2 g_m s^5 + C_1 C_2 L_L L_L R_2 g_m s^4 + C_1 C_2 L_1 R_2 g_m s^4 + C_1 C_$ **10.394** INVALID-ORDER-394  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}s^{5}+C_{1}C_{2}C_{L}L_{L}R_{2}s^{4}+C_{1}C_{2}L_{L}R_{2}s^{4}+C_{1}C_{2}L_{L}R_{3}s^{3}+C_{1}C_{2}L_{L}s^{3}+C_{1}C_{2}L_{L}s^{3}+C_{1}C_{2}R_{L}s^{2}+C_{1}C_{L}L_{L}L_{L}s^{3}+C_{1}L_{L}L_{L}s^$ 10.395 INVALID-ORDER-395  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_L R_2 g_m s^5 + C_1 C_2 C_L L_1 R_2 R_4 + C_1 C_2 C_L L_1 R_2 s^4 + C_1 C_2 C_L L_1 R_2$ **10.396** INVALID-ORDER-396  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$ 

 $H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 q_m s^4 + C_1 C_2 L_1 s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_L s^2 + C_1 L_1 q_m s^2 + C_1 s + C_2 L_2 q_m s^2 + C_2 s + g_m}$ 

10.397 INVALID-ORDER-397  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}s + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}L_{2}g_{m}s^{2} + C_{2}C_{L}s + C_{L}g_{m}\right)}$$

**10.398** INVALID-ORDER-398  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 L_1 L_2 g_m s^4 + C_1 C_2 L_1 s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_L s^2 + C_1 L_1 g_m s^3 + C_1 C_L R_L s^2 + C_1 L_1 g_m s^3 + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L R_L s^2 + C_2 L_2 g_m s^2 + C_2 s + C_2 R_L g_m s^3 + C_2 C_L R_L s^2 + C_2 R_L g_m s^3 + C_2 C_L R_L g_m s^3 + C_2$ 

**10.399** INVALID-ORDER-399  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}R_{L}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}L_{2}g_{m}s^{2} + C_{2}C_{L}s + C_{L}g_{m}\right)}$$

**10.400** INVALID-ORDER-400  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}L_{L}s^{2} + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}q_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}s + C_{1}C_{L}L_{1}q_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}L_{2}q_{m}s^{2} + C$$

10.401 INVALID-ORDER-401  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_2 g_m s^6 + C_1 C_2 C_L L_2 L_2 s^5 + C_1 C_2 L_1 L_2 g_m s^4 + C_1 C_2 L_2 s^3 + C_1 C_2 L_2 L_2 g_m s^4 + C_2 C_2 L_$$

10.402 INVALID-ORDER-402  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$ 

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

10.403 INVALID-ORDER-403  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_L R_L s \left(C_1 L_1 s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_L R_L g_m s^6 + C_1 C_2 L_L L_L R_L s^5 + C_1 C_2 L_L L_L R_L g_m s^5 + C_1 C_2 L_1 L_L R_L g_m s^4 + C_1 C_2 L_1 L_L R_L s^3 + C_1 C_2 L_L R_L R_L g_m s^4 + C_1 C_2 L_L R_L g_$$

**10.404** INVALID-ORDER-404  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}g_{m}s^{6} + C_{1}C_{2}C_{L}L_{2}L_{2}s^{5} + C_{1}C_{2}C_{L}L_{L}R_{L}s^{4} + C_{1}C_{2}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}L_{1}s^{3} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{L}L_{2}s^{3} + C_{1}C_{L}L_{2}$$

10.405 INVALID-ORDER-405  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 L_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 s^5 + C_1 C_2 C_L L_1 L_2 s^5 + C_1 C_2 C_L L_2 L_2 s^4 + C_1 C_2 L_2 L_2 s^4 + C_1 C_2 L_2 L_2 s^3 + C_1 C_2 L_2$$

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10.406 INVALID-ORDER-406 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)
                                                                                                                                                                                                                                                                                                                                                         H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 g_m s^4 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_1 s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m C_2 R_2 g_m s^2 + C_1 R_2 g_m s^2 + C_2 R_2 g_m s^
10.407 INVALID-ORDER-407 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                               H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}L_{2}g_{m}s^{2} + C_{2}C_{L}R_{2}g_{m}s + C_{2}C_{L}R_{
10.408 INVALID-ORDER-408 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R_L (C_1 L_1 s^2 + 1) (C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m)
H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 C_L L_1 R_L s^4 + C_1 C_2 C_L L_2 R_L s^4 + C_1 C_2 L_1 L_2 g_m s^4 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_2 s^2 + C_1 C_2 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_2 R_L g_m s^4 + C_1 C_2 L_1 R_2 g_m s^
10.409 INVALID-ORDER-409 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                           H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}R_{2}s^{2} + C_{1}C_{2}C_{L}R_{2}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}s + C_{2}C_{L}L_{2}g_{m}s^{2} + C_{2}C_{L}R_{2}g_{m}s + C_{2}C_{L}R_{2
10.410 INVALID-ORDER-410 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                           H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{2}+C_{1}C_{2}s+C_{1}C_{L}L_{1}g_{m}s^{2}+C_{1}C_{L}s+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L}S+C_{L
10.411 INVALID-ORDER-411 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_2 g_m s^6 + C_1 C_2 C_L L_1 L_L s^5 + C_1 C_2 C_L L_L L_2 s^4 + C_1 C_2 L_L L_2 g_m s^4 + C_1 C_2 L_1 s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 L_2 L_3 s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 L_2 L_3 s^3 + C_1 C_2 L_
10.412 INVALID-ORDER-412 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                     H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{L}L_{1}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{2}q_{m}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}R_{2}s^{2} + C_{1}C_{2}C_{L}R_{2}s^{2} + C_{1}C_{L}L_{1}q_{m}s^{2} + C_{1}C_{L}L_{2}q_{m}s^{2} + C_{2}C_{L}L_{2}q_{m}s^{2} + C_{2}C_{L}L_{2}q_{m}s^{2
10.413 INVALID-ORDER-413 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \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_1 C_2 C_L L_1 L_2 L_L R_L g_m s^6 + C_1 C_2 C_L L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_L R_L s^5 + C_1 C_2 C_L L_2 L_L R_L s^5 + C_1 C_2 C_L L_2 L_L R_2 R_L s^4 + C_1 C_2 L_1 L_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 L_L R_2 R_L g_m s^5 + C_1 C_2 L_L R_2 R_L g_m s^5 + C_1
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 $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}g_{m}s^{6}+C_{1}C_{2}C_{L}L_{1}L_{2}s^{5}+C_{1}C_{2}C_{L}L_{2}L_{2}s^{5}+C_{1}C_{2}C_{L}L_{2}L_{2}s^{4}+C_{1}C_{2}L_{L}L_{2}s^{4}+C_{1}C_{2}L_{1}L_{2}g_{m}s^{4}+C_{1}C_{2}L_{1}s^{3}+C_{1}C_{2}L_{2}s^{3}+C_{1}C_{2}L_{2}s^{3}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}L_{2}s^{4}+C_{1}C_{2}L_{2}L_{2}s^{4}+C_{1}C_{2}L_{2}L_{2}s^{3}+C_{1}C_{2}L_{2}L_{2}s^{3}+C_{1}C_{2}L_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}L_{2}s^{4}+C_{1}C_{$ 

10.414 INVALID-ORDER-414  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

**10.416** INVALID-ORDER-416  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$  $H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_2 g_m s^4 + C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_2 R_2 s^3 + C_1 L_1 L_2 g_m s^3 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 L_2 s^2 + C_1 R_2 s + C_1 R_2 s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1}$ 10.417 INVALID-ORDER-417  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_1 s}\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}L_{L}L_{2}R_{2}s^{3}+C_{1}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{L}L_{1}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L$ 10.418 INVALID-ORDER-418  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $R_L (C_1 L_1 s^2 + 1) (C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1)$  $H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 L_L L_2 R_L g_m s^4 + C_1 C_2 L_1 L_2 R_2 g_m s^4 + C_1 C_2 L_2 R_2 g_m$ **10.419** INVALID-ORDER-419  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}L_{2}R_{2}s^{3}+C_{1}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{L}L_{1}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{$ **10.420** INVALID-ORDER-420  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}C_{L}L_{2}L_{2}s^{4}+C_{1}C_{2}L_{2}L_{2}s^{3}+C_{1}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{2$ 10.421 INVALID-ORDER-421  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 L_L L_2 S^5 + C_1 C_2 L_1 L_2 S^4 + C_1 C_2 L_2 L_2 S^4 + C_1 C_$ 10.422 INVALID-ORDER-422  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $\frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{2}L_{2}s^{4}+C_{1}C_{2}L_{2}L_{2}s^{3}+C_{1}C_{2}L_{2}R_{2}s^{3}+C_{1}C_{2}L_{2}R_{2}s^{3}+C_{1}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}$ 10.423 INVALID-ORDER-423  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

10.415 INVALID-ORDER-415  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{1}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{2}R_{L}q_{m}s^{6} + C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{2}s^{6} + C_{1}C_{2}L_{L}L_{L}R_{2}s^{6} + C_{1}C_{2}L_{L}L_{L}R_$ 

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H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{L}s+R_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+L_{
10.425 INVALID-ORDER-425 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_2 R_2 s^5 + C_1 C_2 C_
10.426 INVALID-ORDER-426 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)
                                                                                                                                                           H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_2 g_m s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 L_2 R_L s^3 + C_1 C_2 R_2 R_L s^2 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_2 s + C_1 R_L s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1}
10.427 INVALID-ORDER-427 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                     H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}R_{2}s+C_{1}C_{L}L_{1}R_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C
10.428 INVALID-ORDER-428 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 L_2 R_2 g_m s^5 + C_1 C_2 L_L L_2 R_2 g_m s^4 + C_1 C_2 L_L L_2 R_2 g_m s^4 + C_1 C_2 L_1 L_2 g_m s^4 + C_1 C_2 L_2 R_2 g_m s^4 + C_
10.429 INVALID-ORDER-429 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}
10.430 INVALID-ORDER-430 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}L_{2}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2}s^{2}+C_{1}C_{L}L_{2
10.431 INVALID-ORDER-431 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.432 INVALID-ORDER-432 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                           \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}S^{3}+C_{1}C_{2}C_{L}L_{2}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S^{2}+C_{1}C_{L}L_{2}S
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10.424 INVALID-ORDER-424  $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

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10.433 INVALID-ORDER-433 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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)
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10.434 INVALID-ORDER-434 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.435 INVALID-ORDER-435 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_2 L_2 R_$ 

**10.436** INVALID-ORDER-436 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 s \left( R_2 g_m + 1 \right)}{C_1 C_L L_1 R_2 s^3 + C_1 L_1 s^2 + C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L R_2 s + 1}$$

**10.437** INVALID-ORDER-437 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(R_2 g_m + 1\right)}{C_1 C_L L_1 R_2 R_L s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^2 + C_L L_1 R_2 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L R_2 R_L g_m s^2 + C_L R_2 R_L g_m s + L_1 R_2 R_L g_$$

**10.438** INVALID-ORDER-438 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

**10.439** INVALID-ORDER-439 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_{1}s\left(R_{2}g_{m}+1\right)\left(C_{L}L_{L}s^{2}+1\right)}{C_{1}C_{L}L_{1}L_{L}s^{4}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}L_{1}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{L}s^{2}+C_{L}R_{2}s+1}$$

**10.440** INVALID-ORDER-440 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_1 L_L s^2 \left(R_2 g_m + 1\right)}{C_1 C_L L_1 L_L R_2 s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_2 s^2 + C_L L_1 L_L R_2 g_m s^3 + C_L L_1 L_L s^3 + C_L L_L R_2 s^2 + L_1 R_2 g_m s + L_1 s + L_L s + R_2}$$

**10.441** INVALID-ORDER-441 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_{1}s\left(R_{2}g_{m}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)}{C_{1}C_{L}L_{1}L_{L}s^{4}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}L_{1}s^{2}+C_{L}L_{1}R_{2}q_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}R_{2}s+C_{L}R_{L}s+1}$$

**10.442** INVALID-ORDER-442 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 \left(R_2 g_m + 1\right)}{C_1 C_L L_1 L_L R_2 s^4 + C_1 L_1 L_L R_2 s^3 + C_1 L_1 L_L R_2 s^2 + C_L L_1 L_L R_2 R_L g_m s^3 + C_L L_1 L_L R_2 s^3 + C_L L_L L_R R_2 R_L s^2 + L_1 L_L R_2 r_L s^2 + L_1 L_L r_2 r_L s^2 + L_1 R_2 r_L r_2 r_$$

**10.443** INVALID-ORDER-443 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

**10.444** INVALID-ORDER-444 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(R_2 g_m + 1\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_L L_1 L_L R_2 s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^2 + C_L L_1 L_L R_2 g_m s^3 + C_L L_1 L_L s^3 + C_L L_1 R_2 s^2 + C_L L_L R_2 s^2 + C_L L_$$

10.445 INVALID-ORDER-445  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 s + g_m\right)}{C_1 C_2 L_1 R_L s^3 + C_1 L_1 s^2 + C_2 L_1 s^2 + C_2 R_L s + L_1 g_m s + 1}$$

**10.446** INVALID-ORDER-446  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 s + g_m\right)}{C_1 C_2 L_1 R_L s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_2 C_L L_1 R_L s^3 + C_2 L_1 s^2 + C_2 R_L s + C_L L_1 R_L g_m s^2 + C_L R_L s + L_1 g_m s + 1}$$

**10.447** INVALID-ORDER-447  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_2 s + g_m \right) \left( C_L R_L s + 1 \right)}{C_1 C_2 C_L L_1 R_L s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 s^2 + C_2 C_L R_L s + C_2 + C_L L_1 g_m s + C_L}$$

**10.448** INVALID-ORDER-448  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

**10.449** INVALID-ORDER-449  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$H(s) = \frac{L_1 L_L s^2 \left(C_2 s + g_m\right)}{C_1 C_2 L_1 L_L s^4 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_2 C_L L_1 L_L s^4 + C_2 L_1 s^2 + C_2 L_L s^2 + C_L L_1 L_L g_m s^3 + C_L L_L s^2 + L_1 g_m s + 1}$$

**10.450** INVALID-ORDER-450  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 \left( C_2 s + g_m \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_1 C_2 C_L L_1 L_L s^4 + C_1 C_2 C_L L_1 R_L s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_L s^2 +$$

10.451 INVALID-ORDER-451 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 \left(C_2 s + g_m\right)}{C_1 C_2 L_1 L_L R_L s^4 + C_1 L_L L_L S^3 + C_1 L_1 R_L s^2 + C_2 C_L L_1 L_L R_L s^4 + C_2 L_1 L_L s^3 + C_2 L_1 R_L s^2 + C_2 L_L R_L s^2 + C_L L_1 L_L R_L s^3 + C_L L_L R_L s^2 + L_1 L_L g_m s^3 + L_L s + R_L R_L s^4 + C_1 L_1 R_L s^4 + C_1 R_L s^$$

**10.452** INVALID-ORDER-452 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_{1}s\left(C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}s^{5} + C_{1}C_{2}L_{1}L_{L}s^{4} + C_{1}C_{2}L_{1}L_{L}s^{4} + C_{1}C_{L}L_{1}L_{L}s^{4} + C_{1}L_{1}s^{2} + C_{2}C_{L}L_{1}L_{L}s^{4} + C_{2}C_{L}L_{L}R_{L}s^{3} + C_{2}L_{1}s^{2} + C_{2}L_{L}s^{2} + C_{2}L_{L}s^{$$

10.453 INVALID-ORDER-453 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_2 s + g_m\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_2 C_L L_1 L_L s^3 + C_2 C_L L_1 R_L s^3 + C_2 L_1 s^2 + C_2 R_L s + C_L L_1 L_L g_m s^3 + C_L L_1 R_L g_m s^2 + C_L L_L s^2 + C_L R_L s + L_1 g_m s + 1}$$

**10.454** INVALID-ORDER-454  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$ 

**10.455** INVALID-ORDER-455  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_1 s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 L_1 s^2 + C_2 C_L L_1 R_2 s^3 + C_2 R_2 s + C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L R_2 s + 1}$$

**10.456** INVALID-ORDER-456  $Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, \frac{R_{L}}{C_{L}R_{L}s+1}\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_2 R_L s^3 + C_1 C_L L_1 R_2 R_L s^3 + C_1 L_1 R_2 s^2 + C_2 C_L L_1 R_2 R_L s^3 + C_2 L_1 R_2 s^2 + C_2 R_2 R_L s + C_L L_1 R_2 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L R_2 R_L s + C_2 R_2 R_L s +$$

**10.457** INVALID-ORDER-457  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

$$H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)}{C_{1}C_{2}C_{L}L_{1}R_{2}s^{4}+C_{1}C_{2}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}L_{1}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}R_{2}R_{L}s^{2}+C_{2}R_{2}s+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}R_{2}s+C_{L}R_{L}s+1}$$

**10.458** INVALID-ORDER-458  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

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

10.459 INVALID-ORDER-459  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

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10.460 INVALID-ORDER-460 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                 H(s) = \frac{L_{1}s\left(C_{2}R_{2}s + R_{2}g_{m} + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{5} + C_{1}C_{2}L_{L}R_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{2}C_{L}L_{1}R_{2}s^{3} + C_{2}C_{L}L_{1}R
10.461 INVALID-ORDER-461 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 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{L_1 L_L R_2 s^2 \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_L R_2 R_L s^4 + C_1 L_L L_L R_2 s^3 + C_1 L_1 L_L R_2 s^3 + C_1 L_1 L_L R_2 s^3 + C_2 L_L L_L R_2 R_L s^4 + C_2 L_L L_L R_2 R_L s^2 + C_2 L_L R_2 R_L s^2 + C_2 L_L R_2 R_L s^2 + C_2 L_L R_2 R_L s^3 + C_L L_L R_2 R_
10.462 INVALID-ORDER-462 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{L_{1}s\left(C_{2}R_{2}s + R_{2}g_{m} + 1\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{4} + C_{1}C_{2}L_{1}R_{2}R_{L}s^{3} + C_{1}C_{L}L_{L}L_{L}R_{2}s^{4} + C_{1}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{L}L_{L}L_{L}R_{2}s^{4} + C_{1}C_
10.463 INVALID-ORDER-463 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 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{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_L R_2 R_L s^3 + C_1 C_L L_1 L_L R_2 s^4 + C_1 C_L L_1 L_L R_2 s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^3 + C_1 L_1 R_2 s^4 + C_2 C_L L_1 L_L R_2 s^4 + C_2 C_L L_1 R_2 R_L s^3 + C_2 L_1 R_2 s^2 + C_2 R_2 R_L s + C_L L_1 L_L R_2 g_m s^3 + C_L L_1 L_L R_2 R_L s^3 + C_L L_1 R_2 R_L s^3 + C_L 
10.464 INVALID-ORDER-464 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{L_1 R_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_L s^3 + C_1 L_1 s^2 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 R_2 s + C_2 R_L s + L_1 g_m s + 1}
10.465 INVALID-ORDER-465 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       H(s) = \frac{L_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L R_2 s + C_2 + C_L L_1 g_m s + C_L R_2 g_m s^2 + C_2 C_L R_2 s + C_2 C_L R_2 g_m s^2 + C_2 C_L R_2 g_
10.466 INVALID-ORDER-466 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                         H(s) = \frac{L_1 R_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 R_2 R_L s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_L s^3 + C_1 L_1 s^2 + C_2 C_L L_1 R_2 R_L g_m s^3 + C_2 C_L L_1 R_L s^3 + C_2 C_L L_1 R_2 s^3 + C_2 
10.467 INVALID-ORDER-467 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                              H(s) = \frac{L_1 \left( C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_L s^3 + C_1 C_2 L_1 s^2 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L 
10.468 INVALID-ORDER-468 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                             H(s) = \frac{L_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_L s^4 + C_1 C_2 L_L L_1 R_2 s^3 + C_1 C_2 L_1 s^2 + C_2 C_L L_1 R_2 q_m s^2 + C_2 C_L L_1 s^2 + C_2 C_
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**10.469** INVALID-ORDER-469  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$  $H(s) = \frac{L_1 L_L s^2 \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 L_1 L_L s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 L_L R_2 g_m s^4 + C_2 C_L L_1 L_L R_2 s^3 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 L_1 L_L g_m s^3 + C_L L_L s^2 + L_1 g_m s + 1}$ **10.470** INVALID-ORDER-470  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{L_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_L s^4 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2$ 10.471 INVALID-ORDER-471  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_1 L_L R_L s^2 \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_L R_2 s^4 + C_1 C_2 L_1 L_L R_2 s^4 + C_2 C_L L_1 L_L R_2 s^4 + C_2 C_$ 10.472 INVALID-ORDER-472  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{L_{1}s\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{5} + C_{1}C_{2}L_{1}L_{L}s^{4} + C_{1}C_{2}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}L_{L}s^{4} + C_{1}L_{1}L_{2}s^{4} + C_{1}L_{1}L_{2}s^{4} + C_{1}L_{1}L_{2}s^{4} + C_{2}L_{L}L_{L}R_{2}s^{3} + C_{2}L_{L}L_{L}R_{2}s^{3} + C_{2}L_{L}R_{2}s^{3} +$ 10.473 INVALID-ORDER-473  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_1 L_L R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 L_L s^4 + C_2 C_L L_1 L_L R_2 s^4 + C_2 C_L L_1 R_L s^3 + C_2 C_L L_1 R_L$ **10.474** INVALID-ORDER-474  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$  $H(s) = \frac{L_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_1 R_L s^3 + C_1 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_L s + L_1 g_m s + 1}$ **10.475** INVALID-ORDER-475  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{L_1 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 + C_L L_1 g_m s + C_L L_1 g_m s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_2 g_m s^3 + C_2 C_L$ **10.476** INVALID-ORDER-476  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{L_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_1 R_L s^3 + C_1 L_1 s^2 + C_2 C_L L_1 L_2 R_L g_m s^4 + C_2 C_L L_1 R_L s^3 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_L s + C_L L_1 R_L g_m s^2 + C_L R_L s + L_1 g_m s + 1 C_L R_L g_m s^2 + C_L R_L s + C_L R_L g_m s^2 + C_L R_L s + C_L R_L g_m s^2 + C_L R_L s + C_L R_L g_m s^2 + C_L R_L s + C_L R_L g_m s^2 +$$

10.479 INVALID-ORDER-479  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L_1 L_L s^2 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 L_2 s^6 + C_1 C_2 L_1 L_2 s^4 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_2 C_L L_1 L_2 L_L g_m s^5 + C_2 C_L L_1 L_L s^4 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 g_m s^3 + C_2 L_2 g_m s^3 + C_2 L_2 g_m s^3 + C_2 L_2 g_m s^$ 

**10.480** INVALID-ORDER-480  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{L_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_L s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L L_$ 

10.481 INVALID-ORDER-481  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

**10.482** INVALID-ORDER-482  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

 $H(s) = \frac{L_{1}s\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{5}s^{6} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}L_{L}s^{4} + C_{1}C_{2}L_{1}L_{L}s^{4} + C_{1}C_{1}L_{2}L_{2}g_{m}s^{5} + C_{2}C_{L}L_{1}L_{L}s^{4} + C_{2}C_{L}L_{1}L_{1}s^{4} + C_{2}C_{L}L_{1}L_{1}s^{4} + C_{2}C_{L}L_{1}L_{1}s^{4} + C_{2}C_{L}L_{1}L_{1}s^{4} + C_{2}C_{L}L_{1}L_{1}s^{4}$ 

10.483 INVALID-ORDER-483  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

10.484 INVALID-ORDER-484  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{L_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_2 R_L s + L_1 g_m s + 1}$ 

**10.485** INVALID-ORDER-485  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{L_1 \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_1 s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_$ 

**10.486** INVALID-ORDER-486  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{L_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 R_2 R_4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_2 C_L L_1 L_2 R_L g_m s^4 + C_2 C_L L_1 R_L s^3 + C_2 C_L L_2 R_L s^3 + C_2$ 

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10.487 INVALID-ORDER-487 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                  H(s) = \frac{L_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 L_1 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_2 s + C_
10.488 INVALID-ORDER-488 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                               H(s) = \frac{L_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 L_2 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^2 
10.489 INVALID-ORDER-489 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_1 L_1 s^2 + 1}\right)
H(s) = \frac{L_1 L_1 s^2 \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 L_2 s^6 + C_1 C_2 L_1 L_2 s^4 + C_2 C_L L_1 L_2 s^4 + C_2 C_L L_1 L_2 s^4 + C_2 C_L L_2 L_2 s^4 + C_2 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L_1L_Ls^2\left(C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + g_m\right)
10.490 INVALID-ORDER-490 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                      H(s) = \frac{L_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1 L_2 g_m s^3 + C_2 C_L L_1 R_2 g_m s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_2 s^
10.491 INVALID-ORDER-491 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \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{L_1L_2L_2L_3R_4 + C_1C_2L_1L_2L_3R_4 + C_1C_2L_1L_2R_3R_4 + C_1C_2L_1R_3R_4 + C_1C
10.492 INVALID-ORDER-492 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.493 INVALID-ORDER-493 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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{L_1 R_L s}{C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 L_L R_L s^5 + C_1 C_2 C_L L_1 L_L R_L s^5 + C_1 C_2 C_L L_1 L_L R_L s^4 + C_1 C_2 L_1 L_2 S^4 + C_1 C_2 L_1 L_L S^4 + C_1 C_L L_1 L_L S^4 + C_1 
10.494 INVALID-ORDER-494 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                  H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 L_1 L_2 s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^2 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_2 R_2 s^2 + L_1 L_2 g_m s^2 + L_1 R_2 g_m s + L_1 s + L_2 s + R_2 + R_L R_2 g_m s^2 + L_1 R_2 
10.495 INVALID-ORDER-495 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                          H(s) = \frac{L_{1}s\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}L_{1}s^{2} + C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{L}L_{1}R_{2}g_{m}s^{3} + C_{L}L_{1}R_{2}g_{m}s^{2} + C_{L}L_{1}s^{2} + C_{L}L_{2}s^{2} + C_{L}L_{1}s^{2} +
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L_1R_Ls\left(C_2L_2R_2g_ms^2+C_2L_2s^2+L_2g_ms+R_2g_m+1\right)
H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_2 R_2 R_L s^5 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_L L_1 L_2 R_L s^4 + C_1 C_L L_1 L_2 R_L s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_2 L_1 L_2 R_2 R_L s^3 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_2 R_2 g_m s^3 + C_
10.497 INVALID-ORDER-497 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}s^{5}+C_{1}C_{2}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{L}L_{1}L_{2}g_{m}s^{3}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_{L}L_{2}s^{2}+C_
10.498 INVALID-ORDER-498 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}s^{6}+C_{1}C_{2}L_{L}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_
10.499 INVALID-ORDER-499 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.500 INVALID-ORDER-500 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}s^{6} + C_{1}C_{2}L_{L}L_{2}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{1}L_{2}S^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{2}L_{2}s^{4} + C_{2}C_{L}L_{2}L_{2}s
10.501 INVALID-ORDER-501 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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_1C_2C_LL_1L_2L_LR_2s^6 + C_1C_2L_1L_2L_LR_2s^5 + C_1C_2L_1L_2L_LR_2s^5 + C_1C_2L_1L_2L_LR_2s^5 + C_1C_LL_1L_2L_LR_2s^5 + C_1C_LL_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L_1L_2L
10.502 INVALID-ORDER-502 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.503 INVALID-ORDER-503 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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{1}{C_1C_2C_LL_1L_2L_LR_2s^6 + C_1C_2C_LL_1L_2L_LR_2s^6 + C_1C_2C_LL_1L_2R_2s^4 + C_1C_2L_1L_2R_2s^4 + C_1C_LL_1L_2L_2s^5 + C_1C_LL_1L_2R_2s^4 + C
10.504 INVALID-ORDER-504 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)
                                                                                                                                         H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_1 L_2 R_L s^4 + C_1 C_2 L_1 R_2 R_L s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^2 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_2 s^2 + C_2 L_2 R_L s^2 + C_2 R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_2 + R_L R_2 g_m s^2 + C_2 R_2 R_2 R_2 r^2 + C_2 R_2 R_2 R_2 r^2 + C_2 R_2 R_2 R_2 r^2 + C_2 R_2 R_2 r^2
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**10.496** INVALID-ORDER-496  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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10.506 INVALID-ORDER-506 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_2 R_2 R_L s^5 + C_1 C_2 L_1 L_2 R_L s^4 + C_1 C_2 L_1 R_2 R_L s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_2 L_1 L_2 R_L s^4 + C_2 C_L L_1 L_2 R_L s^3 + C_2 L_1 L_2 R_2 s^4 + C_2 C_L L_1 R_2 R_L s^3 + C_2 L_1 L_2 R_L s^3 + C_2 L_2 R_
10.507 INVALID-ORDER-507 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}R_{2}R_{L}s^{4}+C_{1}C_{2}L_{1}L_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}L_{1}L_{2}s^{4}+C_{2}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^{3}+C_{2}C_{L}L_{2}R_{2}s^
10.508 INVALID-ORDER-508 Z(s) = \left(\frac{L_{1s}}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}(C_{2}L_{2}s^{2}+1)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \infty, \infty, \infty, L_{L}s + \frac{1}{C_{L}s}\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{5}s^{6}+C_{1}C_{2}C_{L}L_{1}L_{2}S^{5}+C_{1}C_{2}L_{1}L_{2}S^{4}+C_{1}C_{2}L_{1}L_{2}S^{3}+C_{1}C_{L}L_{1}L_{2}S^{4}+C_{1}C_{L}L_{1}L_{2}S^{4}+C_{1}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{4}+C_{2}C_{L}L_{1}L_{2}S^{
10.509 INVALID-ORDER-509 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.510 INVALID-ORDER-510 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}s^{6} + C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{1}L_{2
10.511 INVALID-ORDER-511 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 R_L s^6 + C_1 C_2 L_1 L_2 L_L R_2 s^5 + C_1 C_2 L_1 L_2 L_L R_L s^5 + C_1 C_2 L_1 L_2 R_L s^4 + C_1 C_2 L_1 L_L R_2 R_L s^4 + C_1 C_L L_1 L_L R_2 R_L s^4 + C_1 L_1 L_1 R_2 R_L s^4 + C_
10.512 INVALID-ORDER-512 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{L_1 s \left( \cup_L L_L R_L s + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 L_1 L_2 L_L R_2 s^4 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_2 R_2 s^4 + C_1 C_2 L_2 R_2 s^4 + C_1 C_2 L_2 R_2 s^4 + 
10.513 INVALID-ORDER-513 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 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{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 R_2 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^4 + C_1 C_2 L_2 L_2 R_2 s^4 + C_
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 $H(s) = \frac{L_{1}s\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}s^{5} + C_{1}C_{2}L_{1}L_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}L_{1}s^{2} + C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + C_{L}L_{1}R_{2}g_{m}s^{2} + C_{L}L_{1}s^{2} + C_{L}L_{1}s^{2} + C_{L}L_{1}R_{2}s^{3} + C_{L}L_{1}R_{2}s^{3$ 

10.505 INVALID-ORDER-505  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

10.514 INVALID-ORDER-514 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(R_2 g_m + 1) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{s \left(C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_2 g_m s + C_1 C_L R_1 s + C_1 C_L R_2 s + C_1 + C_L R_2 g_m + C_L\right)}$$
10.515 INVALID-ORDER-515  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right)}{C_1 C_L L_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_2 R_L g_m s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_2 R_L s^2 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_2 s + C_1 R_2 R_2 g_m s + C_$$

**10.516** INVALID-ORDER-516 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

**10.517** INVALID-ORDER-517 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

**10.518** INVALID-ORDER-518 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{C_1 C_L L_1 L_L R_2 g_m s^4 + C_1 C_L L_L R_1 R_2 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_2 s^3 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 L_1 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_L L_L R_2 g_m s^2 + C_L R_2 g_m s^2$$

10.519 INVALID-ORDER-519 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{s \left(C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_2 g_m s + C_1 C_L R_1 s + C_1 C_L R_2 s + C_1 C_L$$

10.520 INVALID-ORDER-520 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{C_1 C_L L_L L_L R_2 R_L g_m s^4 + C_1 C_L L_L R_1 R_2 R_L g_m s^3 + C_1 L_L L_R R_2 R_L g_m s^3 + C_1 L_L R_1 R_2 R_$$

10.521 INVALID-ORDER-521 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(R_{2}g_{m}+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{C_{1}C_{L}L_{1}L_{2}g_{m}s^{4}+C_{1}C_{L}L_{L}R_{1}R_{2}g_{m}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{2}s^{3}+C_{1}C_{L}L_{L}R_{2}s^{3}+C_{1}L_{L}R_{2}s^$$

10.522 INVALID-ORDER-522 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_L L_L s^2 + 1 \right) \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right)}{C_1 C_L L_1 L_2 g_m s^4 + C_1 C_L L_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_2 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L L_L R_2 s^3 + C_1 C_L R_1 R_2 R_L g_m s^2 + C_1 C_L$$

**10.523** INVALID-ORDER-523 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{C_1 C_2 L_1 s^3 + C_1 C_2 R_1 s^2 + C_1 C_2 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_2 s + g_m}$$

**10.524** INVALID-ORDER-524 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

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

10.525 INVALID-ORDER-525 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left( C_2 s + g_m \right) \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right)}{C_1 C_2 C_L L_1 R_L s^4 + C_1 C_2 L_1 s^3 + C_1 C_2 R_1 s^2 + C_1 C_2 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_2 C_L R_1 s^2 + C_2 s + C_L R_L g_m s + g_m r^2 + C_1 r^2 R_1 r^2 + C_$$

**10.526** INVALID-ORDER-526 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

**10.527** INVALID-ORDER-527 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

10.528 INVALID-ORDER-528 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{C_1 C_2 C_L L_L L_L s^5 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 L_L s^3 + C_1 C_2 R_1 s^2 + C_1 C_L L_L L_L g_m s^4 + C_1 C_L L_L R_1 g_m s^3 + C_1 L_L g_m s^2 + C_1 R_1 g_m s + C_1 s + C_2 C_L L_L s^3 + C_2 s + C_L L_L g_m s^2 + g_m R_1 s + C_1 C_2 R_1 s^2 + C_1 R_1 g_m s^$$

**10.529** INVALID-ORDER-529 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.530 INVALID-ORDER-530 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{C_1 C_2 C_L L_L R_L R_L s^5 + C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 L_L R_L s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_L R_L s^3 + C_1 C_L L_L R_L g_m s^4 + C_1 C_L L_L R_L g_m s^3 + C_1 L_L L_L g_m s^3 + C_1 L_L R_L g_m$$

10.531 INVALID-ORDER-531 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{2}s + g_{m}\right)\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}L_{S}^{5} + C_{1}C_{2}L_{L}L_{S}^{4} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{2}L_{L}s^{3} + C_{1}C_{L}L_{L}S^{2} + C_{1}C_{L}L_{L}S^{3} + C_{1}C_{L}L_{L}$$

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10.532 INVALID-ORDER-532 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 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{R_L \left( C_2 s + g_m \right) \left( C_L L_L s^2 + 1 \right) \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right)}{C_1 C_2 C_L L_L L_L s^5 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L R_1 R_L s^3 + C_1 C_2 R_1 s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_1 s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L R_1 R_2 g_m s^3 + C_1 
10.533 INVALID-ORDER-533 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                   H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_2 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_2 R_L s^2 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_L s + C_2 R_2 s + R_2 q_m + 1}
10.534 INVALID-ORDER-534 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                         H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{2} + C_{1}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{1}C_{L}R_{1}s + C_{1}C_{L}R_{1}s + C_{1}C_{L}R_{2}s + C_{1} + C_{2}C_{L}R_{2}s + C_{L}R_{2}g_{m} + C_{L}\right)}
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10.535 INVALID-ORDER-535  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

$$H(s) = \frac{R_L \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 R_2 R_L s^4 + C_1 C_2 C_L R_1 R_2 R_L s^3 + C_1 C_2 L_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_$$

**10.536** INVALID-ORDER-536  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{s \left(C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L R_1 R_2 s^2 + C_1 C_2 C_L R_2 R_L s^2 + C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s + C_1 C_L R_1 s + C_1 C_L R_2 s + C_1 C_$ 

$$H(s) = \frac{(C_L R_L s + 1)(C_1 R_1 s + C_1 R_1 s + 1)(C_2 R_2 s + R_2 g_m + 1)}{s(C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L R_1 R_2 s^2 + C_1 C_2 R_2 R_L s^2 + C_1 C_L L_1 R_2 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_2 g_m s + C_1 C_L R_1 s + C_1 C_L R_2 s$$

10.537 INVALID-ORDER-537  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

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

10.538 INVALID-ORDER-538  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

$$L_{LS}\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)\\ =\frac{L_{LS}\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{5}+C_{1}C_{2}L_{L}R_{2}s^{3}+C_{1}C_{2}L_{L}R_{2}s^{3}+C_{1}C_{L}L_{L}L_{2}s^{4}+C_{1}C_{L}L_{L}L_{2}s^{4}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{2}s^{3}+C_{1}L_{1}s^{2}+C_{1}L_{1}s^{2}+C_{1}R_{1}s^{2}$$

10.539 INVALID-ORDER-539  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

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

10.540 INVALID-ORDER-540  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

$$H(s) = \frac{L_L R_L s \left(C_1 L_1 s^2 + L_L R_2 R_L s^3 + C_1 C_2 L_L L_R R_2 R_L s^4 + C_1 C_2 L_1 L_L R_2 s^4 + C_1 C_2 L_L R_1 R_2 s^3 + C_1 C_2 L_L R_2 R_L s^3 + C_1 C_2 L_L R_1 R_2 R_L s^3 + C_1 C_2 L_L R_2 R_L s^3 + C_1 C_2$$

10.543 INVALID-ORDER-543  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$   $H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_1 s^3 + C_1 C_2 R_1 R_2 g_m s^2 + C_1 C_2 R_1 s^2 + C_1 C_2 R_2 s^2 + C_1 C_2 R_2 s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_2 R_2 g_m s + C_2 s + g_m}$ 

10.544 INVALID-ORDER-544  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$   $\frac{\left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{s \left(C_1 C_2 C_L L_1 R_2 g_m s^3 + C_1 C_2 C_L L_1 s^3 + C_1 C_2 C_L R_1 R_2 g_m s^2 + C_1 C_2 C_L R_2 s^2 + C_1 C_2 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s + C_1 C_L s + C_2 C_L R_2 g_m s + C_2 C_L s + C_L g_m\right)}$ 

10.545 INVALID-ORDER-545  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_1 R_L s^4 + C_1 C_2 C_L R_1 R_2 R_L g_m s^3 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 R_1 R_2 g_m s^3 + C_1 C_2 R_2$ 

**10.546** INVALID-ORDER-546  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

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

10.547 INVALID-ORDER-547  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

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

10.548 INVALID-ORDER-548  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L_L s \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_L L_L R_2 g_m s^5 + C_1 C_2 C_L L_L R_1 R_2 g_m s^4 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 L_L R_2 s^3 + C_1 C_2 L_L R_2 s^4 + C_1 C_2 L_L R_2$ 

**10.549** INVALID-ORDER-549  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

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

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10.550 INVALID-ORDER-550 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \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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 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 C_L L_L L_R L_s s^5 + C_1 C_2 C_L L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 L_L L_R L_s s^4 + C_$ 

10.551 INVALID-ORDER-551  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

 $H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}g_{m}s^{5} + C_{1}C_{2}C_{L}L_{L}R_{1}s^{4} + C_{1}C_{2}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}L_{L}R_{2}s^{4} + C_{1}C_{2}L_{L}R_$ 

10.552 INVALID-ORDER-552  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L}{C_1 C_2 C_L L_1 L_L R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L s^5 + C_1 C_2 C_L L_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_1 s^4 + C_1 C_2 C_L L_L R_2 s^4 + C_1 C_2 C_L R_2 R_2 s^4 + C_1 C_2 C_L$ 

**10.553** INVALID-ORDER-553  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$ 

 $H(s) = \frac{R_L \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 g_m s^4 + C_1 C_2 L_1 s^3 + C_1 C_2 L_2 R_1 g_m s^3 + C_1 C_2 L_2 s^3 + C_1 C_2 R_1 s^2 + C_1 C_2 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_2 L_2 g_m s^2 + C_2 s + g_m r^2}$ 

10.554 INVALID-ORDER-554  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}q_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{1}q_{m}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}R_{1}s^{2} + C_{1}C_{2}s + C_{1}C_{L}L_{1}q_{m}s^{2} + C_{1}C_{L}R_{1}q_{m}s + C_{1}C_{L}s + C_{2}C_{L}L_{2}q_{m}s^{2} + C_{2$ 

10.555 INVALID-ORDER-555  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$ 

**10.556** INVALID-ORDER-556  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{2}S^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}s+C_{1}C_{L}L_{1}g_{m}s^{2}+C_{1}C_{L}R_{1}g_{m}s+C_{1}C_{L}S+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}S+C_{L}g_{m}}\right)}$ 

10.557 INVALID-ORDER-557  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{L}L_{L}s^{2} + 1\right)\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}$ 

10.558 INVALID-ORDER-558  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L_L s \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_2 g_m s^6 + C_1 C_2 C_L L_2 L_L R_1 g_m s^5 + C_1 C_2 C_L L_L L_1 s^5 + C_1 C_2 L_L L_2 S^5 + C_1 C_2 L_2 L_2 L_2 S^5 + C_1 C_2 L_2 L_2 L_2 S^5 + C_1 C_2 L_2 L_2 L_2 S^5 + C_1 C_2$ 

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H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{L}L_{s}^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{L}L_{2}s^{3} +
10.560 INVALID-ORDER-560 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \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_1C_2C_LL_1L_2L_RL_gms^6 + C_1C_2C_LL_1L_LR_Ls^5 + C_1C_2C_LL_2L_RR_Lgms^5 + C_1C_2C_LL_2L_RR_Ls^5 + C_1C_2C_LL_RR_Lgms^5 + C_1C_2L_1L_2R_Lgms^5 + C_1C_2L_1L_Ls^4 + C_1C_2L_1L_Ls^4 + C_1C_2L_1L_Ls^4 + C_1C_2L_1L_Rs^5 + C_1C_2L_2L_RR_Lgms^5 + C_1C_2L_1L_RR_Lgms^5 + C_1C_2L_1L_Rr_Lgms
10.561 INVALID-ORDER-561 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (C_1L_1s^2 + C_1R_1s + 1)(C_2L_2g_ms^2 + C_2s + g_m)(C_LL_LR_Ls^2 + L_Ls + R_L)
H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{2}C_{L}L_{L}L_{2}g_{m}s^{6} + C_{1}C_{2}C_{L}L_{L}L_{1}s^{5} + C_{1}C_{2}C_{L}L_{L}L_{1}s^{4} + C_{1}C_{2}L_{L}L_{1}s^{4} + C_{1}C_{2}L_{L}L_{2}s^{3} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{1}s^{2} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}L_{2}s^{3} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{2}s^{3} + C_{1}C_{2}L_{1}s^{2} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{2}L_{2}s^{4} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}
10.562 INVALID-ORDER-562 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 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{RL}{C_1C_2C_LL_1L_2L_Lg_ms^6 + C_1C_2C_LL_1L_2R_Lg_ms^5 + C_1C_2C_LL_1L_Ls^5 + C_1C_2C_LL_2L_Rg_ms^5 + C_1C_2C_LL_2L_Ls^5 + C_1C_2C_LL_2L_Ls^5 + C_1C_2C_LL_2R_Ls^4 + 
10.563 INVALID-ORDER-563 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)
                                                                                                                                  H(s) = \frac{R_L \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 q_m s^4 + C_1 C_2 L_1 g_3 + C_1 C_2 L_1 g^3 + C_1 C_2 L_2 g_3 + C_1 C_2 R_1 g_2 g_3 + C_1 C_2 R_1 g^2 + C_1 R_1 g_m g^2 + C_1 R_
10.564 INVALID-ORDER-564 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_1 s}\right)
H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}s^{3} + C_{1}C_{2}C_{L}R_{1}g_{m}s^{2} + C_{1}C_{2}C_{L}R_{1}s^{2} + C_{1}C_{2}C_{L}R_{1}g_{m}s^{2} + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}L_{1}g_{m}s^{2} + C_{1}C_{L}L_{2}g_{m}s^{2} + C_{2}C_{L}L_{2}g_{m}s^{2} + C_{2}C_{L}R_{2}g_{m}s + C_{2}C_{L}R_{1}g_{m}s + C_{2}C_{L}R_{
10.565 INVALID-ORDER-565 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{10L_1(C_1L_1L_2R_Lg_ms^5 + C_1C_2L_LR_2R_Lg_ms^4 + C_1C_2L_LR_2R_Lg
10.566 INVALID-ORDER-566 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{2}C_{L}R_{2}s^{2}+C_{1}C_{L}L_{1}g_{m}s^{2}+C_{1}C_{L}L_{1}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}g_{
10.567 INVALID-ORDER-567 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_T s}\right)
H(s) = \frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}s^{3}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{1}s^{2}+C_{1}C_{2}C_{L}R_{1}g_{m}s+C_{1}C_{L}L_{1}g_{m}s+C_{1}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s+C_{2}C_{L}
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10.559 INVALID-ORDER-559  $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

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10.568 INVALID-ORDER-568 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
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$$L_L s \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 L_2 g_m s^2 + C_1 R_1 s + 1 \right)$$

**10.569** INVALID-ORDER-569 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.570 INVALID-ORDER-570 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_L g_m s^6 + C_1 C_2 C_L L_1 L_L R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 R_L g_m s^5 + C_1 C_2 C_L L_L R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 C_L R_1 R_L s^4 + C_1 C_2 C_L R_1 R_L s^4 + C_1 C_2 C_L R_1 R_L s^4 + C_$$

10.571 INVALID-ORDER-571 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{L}L_{L}R_{2}s^{2} + C_{1}C_{2}C_{L}L_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}C_{L}L_{L}R_{2}s^{4} + C_{1}C_{2}L_{L}L_{R}s^{4} + C_{1}C_{2}L_{L}L$$

10.572 INVALID-ORDER-572 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_L R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_2 g_m s^4 + C_1 C_2 C_L L_1 R_L R_2 g_m s^4 + C_1 C_2 C_L L_2 L_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 g_m s^4 + C_1 C_2 C_L L_2 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_2 R_$$

10.573 INVALID-ORDER-573 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_2 g_m s^4 + C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_2 R_1 R_2 g_m s^3 + C_1 C_2 L_2 R_2 s^3 + C_1 L_1 L_2 g_m s^3 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 L_2 s^2 + C_1 R_1 R_2 g_m s + C_1 R_1 s + C_1 R_2 s + C_1 R_1 s + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m s^2 + C_1 L_2 s^2 + C_1 R_1 R_2 g_m s + C_1 R_2 s + C_1 R_$$

10.574 INVALID-ORDER-574 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{s\left(C_{1}L_{2}R_{2}g_{m}s^{4} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}R_{2}g_{m}s^{3} + C_{1}C_{2}L_{2}R_{2}s^{3} + C_{1}C_{2}L_{2}R_{2}s^{3} + C_{1}C_{2}L_{2}R_{2}s^{3} + C_{1}C_{2}L_{2}R_{2}g_{m}s^{4} + C_{1}C_{2}L_{2}R_{2}g_{m}s$$

10.575 INVALID-ORDER-575 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1C_2C_LL_1L_2R_2R_Lg_ms^5 + C_1C_2C_LL_1L_2R_Ls^5 + C_1C_2C_LL_2R_1R_2R_Lg_ms^4 + C_1C_2L_LR_2R_Ls^4 + C_1C_2L_1L_2R_2g_ms^4 + C_1C_2L_2R_1R_2g_ms^3 + C_1C_2L_2R_1s^3 + C_1C_2L_2R_2s^3 + C_1C_2L$$

**10.576** INVALID-ORDER-576 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{1}C_{2}L_{L}L_{2}R_{1}R_{2}g_{m}s^{3}+C_{1}C_{2}L_{L}R_{1}s^{3}+C_{1}C_{2}L_{L}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}g_{m}s^{3}+C_{1}C_{L}L_{1}R_{2}g_{m}s^{2}+C_{1}C_{L}L_{2}R_{1}g_{m}s^{2}+C_{1}C_{L}L_{2}R_{2}g_{m}s+C_{1}C_{L}R_{1}R_{2}g_{m}s+C_{1}C_{L$$

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10.577 INVALID-ORDER-577 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
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$$H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+L_{2}g_{m}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{1}C_{2}L_{L}L_{2}s^{4}+C_{1}C_{2}L_{L}L_{2}s^{4}+C_{1}C_{2}L_{L}L_{2}s^{4}+C_{1}C_{2}L_{L}R_{1}s^{3}+C_{1}C_{2}L_{L}R_{1}s^{3}+C_{1}C_{2}L_{L}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}g_{m}s^{2}+C_{1}C_{L}L_{1}s^{2}+C_{1}C_{L}L_{2}s^{2$$

10.578 INVALID-ORDER-578 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 L_L L_L R_1 s^5 + C_1 C_2 L_L L_L R_2 s^5 + C_1 C_2 L_L L_L R_2 s^5 + C_1 C_2 L_L L_L R_2 s^4 + C_1 C_2 L_L L_L R_2 s^4 + C_1 C_2 L_L R_$$

10.579 INVALID-ORDER-579 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}g_{m}s^{4} + C_{1}C_{2}L_{L}L_{2}s^{4} + C_{1}C_{2}L_{L}L_{2}s^{4} + C_{1}C_{2}L_{L}L_{2}s^{3} + C_{1}C_{2}L_{L}R_{2}s^{3} + C_{1}C_{L}L_{2}s^{2} + C_{1}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{1}C_{L}L_{2}s^{2} + C_{1}C_{L}L_{2}s$$

10.580 INVALID-ORDER-580 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 R_2 S^5 + C_1 C_2 L_L L_L R_1 R_2 S^5 + C_1 C_2 L_L L_L R_2 R_L S^5 + C_1 C_2 L_L R_2 R_L S^5 +$$

10.581 INVALID-ORDER-581 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 L_2 L_L$$

10.582 INVALID-ORDER-582 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 L_2 R_1 s^5 + C_1 C_2 C_L L_$$

**10.583** INVALID-ORDER-583 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left( C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_2 g_m s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_2 R_1 R_2 g_m s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 L_2 R_2 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 L_1 R_2 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_1 R_2 s + C_1 R_1 s + C_1 R_2 s + C_1 R_$$

10.584 INVALID-ORDER-584 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}S^{4} + C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{1}S^{3} + C_{1}C_{2}C_{L}L_{2}R_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{2} + C_{1}C_{2}L_{2}S^{2} + C_{1}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{1}C_{L}L_{1}S^{2} + C_{1}$$

10.585 INVALID-ORDER-585 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 R_2 R_L s^4 + C_1 C_2 C_L L_2 R_1 R_2 R_L s^$$

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10.586 INVALID-ORDER-586 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{2}S^{2}+C_{1}C_{2}L_{
10.587 INVALID-ORDER-587 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{1}L_{1}s^{2}+C_{1}R_{1}s+1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}s+R_{2}g_{m}+1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{2}R_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2}L_{2}s^{2}+C_{1}C_{2
10.588 INVALID-ORDER-588 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_2 s^6 + C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_L R_1 s^5 + C_1 C_2 C_L L_2 L_L R_2 s^5 + C_1 C_2 L_2 L_L R_2 s^5 + C_1 C_2 C_L L_2 L_
10.589 INVALID-ORDER-589 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{1}s^{3} + C_{1}C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{2}
10.590 INVALID-ORDER-590 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 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{1}{C_1C_2C_LL_1L_2L_LR_2R_Lg_ms^6 + C_1C_2C_LL_1L_2L_LR_2s^6 + C_1C_2C_LL_1L_2R_2s^5 + C_1C_2C_LL_2L_RR_2R_2s^5 + C_1C_2C_LL_2L_2R_2R_2s^5 + C_1C_2C_LL_2L_2R_2R_2s^5 + C_1C_2C_LL_2L_2R_2R_2s^5 + C_1C_2C_LL_2L_2R_2R_2s^5 + C_1C_2C_LL_2R_2R_2s^5 + C_1C_2C_LL_2R_2s^5 + C_1C_2C_LL_2R_2s^5 + C_1C_2C_LL_2R_2s^5 + C_1C_2C
10.591 INVALID-ORDER-591 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_2g_ms^6 + C_1C_2C_LL_1L_2L_Ls^6 + C_1C_2C_LL_1L_LR_2s^5 + C_1C_2C_LL_2L_LR_1s^5 + C_1C_2C_LL_2L_LR_2s^5 + C_1C_2C_LL_2L_2L_2s^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2L_2L_2s^5 + C_1C_2C_LL_2L_2L_2s^5 + C_1C_2C_LL_2L_2L_2s^5 + C_1C_2C_LL_2L_2L_2s^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2L_2s^5 + C_1C_2C_LL_2s^5 + C_1C
10.592 INVALID-ORDER-592 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \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}\right)
H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L R_2 R_2 R_L g_m s^5 + C_1 C_2 C_L R_2 R_2 R_L g_m s^5 + C_1 C_2 C_L R_2 R_2 R_L g_m s^5 + C_1 C_2 C_L R_2 R_2 R_L g_m s^5 + C_1 C_2 C_L R_2 R_L g_m s^5 + C_1 C_2 C_L R_2 R_L g_m s^5 + C_1 
10.593 INVALID-ORDER-593 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             H(s) = \frac{L_1 R_1 s \left(R_2 g_m + 1\right)}{C_1 C_L L_1 R_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_L L_1 R_1 R_2 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_2 s^2 + C_L R_1 R_2 s + L_1 s + R_1 R_2 s^2 + C_L R_1 R_2 s + L_1 s + 
10.594 INVALID-ORDER-594 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
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10.595 INVALID-ORDER-595 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                            H(s) = \frac{L_1 R_1 s \left(R_2 g_m + 1\right) \left(C_L R_L s + 1\right)}{C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 R_2 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_2 s^2 + C_L L_1 R_L s^2 + C_L R_1 R_2 s + C_L R_1 R_L s + L_1 s + R_1 R_2 g_m s^2 + C_L R_1 R_2 s^2 + C_L R_1 R_2 s^2 + C_L R_1 R_2 s + C_L 
10.596 INVALID-ORDER-596 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                           H(s) = \frac{L_1 R_1 s \left(R_2 g_m + 1\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_L L_1 L_L s^3 + C_L L_1 R_1 R_2 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_2 s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_2 s + L_1 s + R_1 R_2 s + L_1 R_1 R_2 R_1 R_2 s + L_1 R_1 R_2 R_1 R_2 R_1 R_2 R_1 R_2 R_1 R_2 R_1 R_2 R_1 R_1 R_1 R_2 R_1 R_1 R_1 R_2 R_1 R_1 R_2 
10.597 INVALID-ORDER-597 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                  H(s) = \frac{L_1 L_L R_1 s^2 \left(R_2 g_m + 1\right)}{C_1 C_L L_1 L_L R_1 R_2 s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_1 R_2 g_m s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_2 s^3 + C_L L_L R_1 R_2 s^2 + L_1 L_L s^2 + L_1 R_1 R_2 g_m s + L_1 R_1 s + L_1 R_2 s + L_L R_1 s + R_1 R_2 g_m s + L_1 R_1 s + L_1 R_2 s + L_1 R_1 s + L_1 
10.598 INVALID-ORDER-598 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                           H(s) = \frac{L_1 R_1 s \left(R_2 g_m + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 s^2 + C_L L_1 L_L s^3 + C_L L_1 R_1 R_2 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_2 s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_1 s^2 + C_L R_1 R_2 s + C_L R_1 R_
10.599 INVALID-ORDER-599 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_1 L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_1 L_L R_1 R_L s^2 \left(R_2 g_m + 1\right)}{C_1 C_L L_1 L_L R_1 R_2 R_L s^3 + C_1 L_1 L_L R_1 R_2 s^3 + C_1 L_1 L_L R_1 R_2 R_L s^3 + C_L L_1 R_1 R_2 R_L s^3 
10.600 INVALID-ORDER-600 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{L_1 R_1 s \left(R_2 g_m + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_1 C_L L_1 L_L R_1 R_2 s^4 + C_1 C_L L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^2 + C_L L_1 L_L R_1 R_2 s^3 + C_L L_1 L_L R_1 R_2 s^2 + C_L L_1 R_1 R_2 s^2 + L_1 R_1 R_2 s^2 + L_1 R_1 R_2 s^3 + C_L L_1 R_
10.601 INVALID-ORDER-601 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \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{L_1 R_1 R_L s \left(R_2 g_m + 1\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_L L_1 L_L R_1 R_2 s^4 + C_1 C_L L_1 L_L R_1 R_2 s^3 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 R_1 R_2 s^2 + C_L L_1 R_
10.602 INVALID-ORDER-602 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   H(s) = \frac{L_1 R_1 R_L s \left(C_2 s + g_m\right)}{C_1 C_2 L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_2 L_1 R_1 s^2 + C_2 L_1 R_L s^2 + C_2 R_1 R_L s + L_1 R_1 g_m s + L_1 s + R_1}
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 $H(s) = \frac{L_1 R_1 R_L s \left(C_2 s + g_m\right)}{C_1 C_2 L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_2 C_L L_1 R_1 R_L s^3 + C_2 L_1 R_1 s^2 + C_2 L_1 R_L s^2 + C_2 L_1 R_L s^2 + C_L L_1 R_1 R_L s^3 + C_L L_1 R_$ 

**10.603** INVALID-ORDER-603  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

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10.604 INVALID-ORDER-604 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                H(s) = \frac{L_1 R_1 \left(C_2 s + g_m\right) \left(C_L R_L s + 1\right)}{C_1 C_2 C_L L_1 R_1 R_2^3 + C_1 C_2 L_1 R_1 s^2 + C_2 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_L s^2 + C_2 C_L R_1 R_L s + C_2 L_1 s + C_2 R_1 + C_L L_1 R_1 g_m s + C_L L_1 s + C_L R_1 R_1 g_m s + C_L L_1 R_1 g_m s + C_L 
 10.605 INVALID-ORDER-605 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                              H(s) = \frac{L_1 R_1 \left(C_2 s + g_m\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 L_L s^3 + C_2 C_L L_1 R_1 s^2 + C_
 10.606 INVALID-ORDER-606 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                     H(s) = \frac{L_1 L_L R_1 s^2 \left(C_2 s + g_m\right)}{C_1 C_2 L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_1 s^2 + C_2 C_L L_1 L_L R_1 s^4 + C_2 L_1 L_L s^3 + C_2 L_1 R_1 s^2 + C_2 L_L R_1 s^2 + C_2 L_L L_L R_1 g_m s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_1 g_m s + L_1 s + R_1 R_1 R_1 g_m s^3 + C_1 L_1 L_1 R_1 g_m s^3 + C_1 L_1 R_1 g_m s + L_1 R_1 g_m s + L_1 R_1 R_1 g_m s^3 + C_1 L_1 R_1 g_m s^3 + C_1 R_1 R_1 
 10.607 INVALID-ORDER-607 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                           H(s) = \frac{L_1 R_1 \left(C_2 s + g_m\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 L_L s^3 + C_2 C_L L_1 R_L s^2 + C_2 C_L 
 10.608 INVALID-ORDER-608 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \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{L_1 L_L R_1 R_L s^2 \left(C_2 s + g_m\right)}{C_1 C_2 L_1 L_L R_1 R_L s^4 + C_1 L_L L_L R_1 R_L s^3 + C_1 L_1 R_L R_2 s^4 + C_2 L_L L_L R_1 R_L s^3 + C_2 L_1 R_1 R_L s^3 + C_2 
 10.609 INVALID-ORDER-609 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{L_1 R_1 s \left(C_2 s + g_m\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 L_1 R_L R_1 s^4 + C_1 L_1 R_1 s^4 + C_1 L_1 R_1 s^4 + C_2 C_L L_1 L_L R_1 s^3 + C_2 L_1 R_1 s^2 + C_2 L_1 R_1 s^2 + C_2 L_1 R_1 s^2 + C_2 L_1 R_1 s^3 
 10.610 INVALID-ORDER-610 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \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{L_1 R_1 R_L s \left(C_2 s + g_m\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^4 + C_2 C_L L_1 L_L R_1 s^4 + C_2 C_L L_1 L_L R_1 s^4 + C_2 C_L L_1 R_1 R_L s^3 + C_2 L_1 R_1 R_2 s^3 + C_2 L_1 R_2 
 10.611 INVALID-ORDER-611 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                                    H(s) = \frac{L_1 R_1 R_L s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_1 R_2 R_L s^3 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^2 + C_2 L_1 R_1 R_2 s^2 + C_2 L_1 R_2 R_L s^2 + C_2 R_1 R_2 R_L s + L_1 R_1 R_2 g_m s + L_1 R_1 s + L_1 R_2 s + L_1 R_1 R_2 s + R_1 R_2 + R_1 R_2 r + R_1 R_2 
 10.612 INVALID-ORDER-612 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
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 $H(s) = \frac{L_1 R_1 s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_2 C_L L_1 R_1 R_2 s^3 + C_2 L_1 R_2 s^2 + C_2 R_1 R_2 s + C_L L_1 R_1 R_2 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_2 s^2 + C_L R_1 R_2 s + L_1 s + R_1 R_2 s^2 + C_1 R_1 R_2 s^2 + C_$ 

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10.613 INVALID-ORDER-613 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_1 R_1 R_2 s \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 R_1 R_2 R_L s^3 + C_1 L_L R_1 R_2 R_L s^3 + C_1 L_1 R_1 R_2 s^2 + C_2 L_L R_1 R_2 R_L s^3 + C_2 L_1 R_1 R_2 s^2 + C_2 L_1 R_1 R_2 s^2 + C_2 L_1 R_1 R_2 R_L s^3 
10.614 INVALID-ORDER-614 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_1 R_1 s \left(C_L R_L s + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 R_1 R_2 R_L s^4 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_2 C_L L_1 R_1 R_2 s^3 + C_2 C_L L_1 R_2 R_L s^3 + C_2 C_L L_1 R_2 R_2 s^2 + C_2 L_1 R_2 s^2 + C_2 L_1 R_2 s^2 + C_2 L_1 R_2 s^2 + C_L L_1 R_1 R_2 s^3 + C_L L_1 R_1 R_2 s^
10.615 INVALID-ORDER-615 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{L_1 R_1 s \left(C_L L_L s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 R_2 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 L_L R_1 s^2 + C_2 C_L L_1 L_L R_2 s^4 + C_2 C_L L_1 R_1 R_2 s^3 + C_2 L_1 R_2 s^3 + C_2 L_1 R_2 s^3 + C_2 L_1 R_1 R_2 s^3 + C_2 L_1 R_2 R_2 s^3 + C_
10.616 INVALID-ORDER-616 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_1 L_L R_1 s^2 \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_L R_1 R_2 s^4 + C_1 L_L L_L R_1 s^3 + C_1 L_1 L_L R_1 s^3 + C_2 L_1 L_L R_1 R_2 s^4 + C_2 L_1 L_L R_1 R_2 s^3 + C_2 L_1 R_1 R_2 s^2 + C_2 L_L L_L L_L R_1 R_2 s^3 + C_L L_1 L_L R_1 R_
10.617 INVALID-ORDER-617 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_1 R_1 s \left(C_2 R_2 s + R_2 g_m + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 R_2 s^5 + C_1 C_2 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_2 C_L L_1 R_2 R_2 s^3 + C_
10.618 INVALID-ORDER-618 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 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{L_1 L_L R_1 R_2 S^2 \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 L_L L_L R_1 R_2 S^3 + C_1 L_1 L_L R_1 R_2 S^3 + C_1 L_1 L_L R_1 R_2 S^3 + C_2 L_1 L_L R_1 R_2 S^3 + C_2 L_1 L_L R_1 R_2 R_L S^3 + C_2 L_1 R_1 R_2 R_L S^3 
10.619 INVALID-ORDER-619 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.620 INVALID-ORDER-620 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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{\frac{L_1 R_1 R_2 S_2 + C_1 C_1 L_1 L_1 R_2 R_2 S_3 + C_1 C_2 L_1 R_1 R_2 R_2 S_3 + C_1 C_2 L_1 L_1 R_1 R_2 S_4 + C_1 C_2 L_1 L_1 R_1 R_2 S_4 + C_1 C_2 L_1 L_1 R_1 R_2 S_4 + C_2 C_2 L_1 R_1 R_2 R_2 S_4 + C_2 C_2 L_1 R_2 R_2 S
10.621 INVALID-ORDER-621 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
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10.622 INVALID-ORDER-622 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                               H(s) = \frac{L_1 R_1 \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_1 R_2 s^3 + C_1 C_2 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_2 s^2 + C_2 
10.623 INVALID-ORDER-623 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_1 R_1 R_L s \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 R_1 R_2 R_L s^4 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_2 
10.624 INVALID-ORDER-624 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                               H(s) = \frac{L_1 R_1 \left( C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_1 R_2 s^3 + C_1 C_2 L_L R_1 R_2 s^3 + C_1 C_2 L_1 R_1 s^2 + C_2 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_2 s^2 + C_2 C_L L_1 R_2 s^2 + C_2 C_L L_1 R_2 s^2 + C_2 C_L R_1 R_2 s + C_2 
10.625 INVALID-ORDER-625 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                              H(s) = \frac{L_1 R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 L_L s^3 + C_2 C_L L_1 R_1 s^2 + 
10.626 INVALID-ORDER-626 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_1 L_L R_1 s^2 \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_L R_1 s^2 + C_1 C_2 L_1 L_L R_1 s^4 + C_1 C_2 L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_2 C_
10.627 INVALID-ORDER-627 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{L_1 R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 C_L L_1 R_1 R_2 s^3 + C_1 C_2 L_L R_1 s^2 + C_2 C_L L_1 R_1 s^2 + C_2 C_$ 

10.628 INVALID-ORDER-628  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{L_1 L_L R_1}{C_1 C_2 C_L L_1 L_L R_1 R_2 R_L s^5 + C_1 C_2 L_1 L_L R_1 R_2 s^4 + C_1$ 

10.629 INVALID-ORDER-629  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

 $H(s) = \frac{L_1 R_1 s \left(C_2 R_2 g_m s + C_2 s + g_m\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_1 C_2 C_L L_1 L_L R_1 R_2 s^5 + C_1 C_2 L_L L_L R_1 s^4 + C_1 C_L L_L L_R R_2 s^3 + C_1 C_2 L_1 L_L R_1 s^4 + C_2 C_L L_L R_1$ 

10.630 INVALID-ORDER-630  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{L}{C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2C_LL_1R_1R_2s^3 + C_1C_2L_1R_1R_2s^3 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_1s^4 + C_2C_LL_1L_LR_1s^4 + C_2C_LL_1L_1L_1s^4 + C_2C_LL_1L_1s^4 + C_2C_LL_1L_1s^4 + C_2C_LL_1s^4 + C_2C_LL_1s$ 

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10.631 INVALID-ORDER-631 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                                   H(s) = \frac{L_1 R_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 L_1 R_1 s^2 + C_2 L_1 L_2 R_1 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_1 s^2 + C_2 L_1 R_L s^2 + C_2 L_2 R_1 s^2 + C_2 R_1 R_L s + L_1 R_1 g_m s + L_1 s + R_1 R_1 g_m s + L_1 g_m s + L_
 10.632 INVALID-ORDER-632 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                   H(s) = \frac{L_1 R_1 \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_2 L_1 R_1 s^2 + C_2 C_L L_1 L_2 R_1 g_m s^3 + C_2 C_L L_1 L_2 s^3 + C_2 C_L L_1 R_1 s^2 + C_2 L_1 R_1 s^2 + C_2 L_1 s + C_2 R_1 + C_L L_1 R_1 g_m s + C_L L_1 s + C_L R_1 g_m s^2 + C_2 R_1 g_
10.633 INVALID-ORDER-633 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L_1 R_1 R_L s \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)
H(s) = \frac{L_1 R_1 R_L s \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 R_L s^5 + C_1 C_2 L_1 L_2 R_1 R_L s^3 + C_1 L_L R_1 R_L s^3 + C_1 L_L R_1 R_L s^3 + C_2 L_L L_2 R_1 R_L s^3 + C_2 L_L L_2 R_1 R_L s^3 + C_2 L_L L_2 R_1 R_L s^3 + C_2 L_L R_1 R_L 
10.634 INVALID-ORDER-634 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
                                                                                H(s) = \frac{L_1 R_1 \left(C_L R_L s + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_2 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 L_2 R_1 g_m s^3 + C_2 C_L L_1 L_2 s^3 + C_2 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_1 s^
10.635 INVALID-ORDER-635 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
                                                                               H(s) = \frac{L_1 R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_2 C_L L_1 L_2 R_1 g_m s^3 + C_2 C_L L_1 L_2 s^3 + C_2 C_L L_1 L_1 s^3 + C_2 C_L L_2 R_1 s^2 + C_2 C_L L_2 
10.636 INVALID-ORDER-636 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_1 L_L R_1 s^2 \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_L R_1 s^4 + C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_1 s^4 + C_2 C_L L_1 L_2 L_2 R_1 s^4 + C_2 C_L L_1 L_2 R_1 s^4 + C_2 L_2 R_
10.637 INVALID-ORDER-637 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_1 R_1 \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_2 C_L L_1 R_1 R_L s^3 + C_1 C_2 L_1 R_1 s^2 + C_2 C_L L_1 L_2 R_1 g_m s^3 + C_2 C_L L_1 L_2 s^3 + C_2 C_L L_1 R_1 s^2 + C_2 C_L L_1 R_1 s^
10.638 INVALID-ORDER-638 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \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{L_1 L_L R_1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_L s^6 + C_1 C_2 L_1 L_2 L_L R_1 s^5 + C_1 C_2 L_1 L_2 R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_L L_L R_1 R_L s^4 + C_1 L_L L_L R_1 R_L s^4 + C_1 L_L L_L R_1 R_L s^4 + C_2 L_L 
10.639 INVALID-ORDER-639 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   L_1R_1s\left(C_2L_2g_ms^2+C_2s+g_m\right)\left(C_LL_LR_Ls^2+L_Ls+R_L\right)
H(s) = \frac{L_1 R_1 s \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 L_L L_L R_1 s^4 + C_1 C_2 L_1 L_L R_1 s^4 + C_1 C_L L_L L_L R_1 s^4 + C_1 C_L L_L L_L R_1 s^4 + C_2 C_L R_1 R_1
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10.640 INVALID-ORDER-640 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \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{L_1}{C_1C_2C_LL_1L_2L_LR_1s^6 + C_1C_2C_LL_1L_2R_1R_Ls^5 + C_1C_2L_1L_2R_1s^4 + C_1C_2L_1L_2R_1s^4 + C_1C_LL_1L_1R_1s^3 + C_1L_1R_1s^3 + C_1L_1R_1s^3 + C_1L_1R_1s^3 + C_2C_LL_1L_2L_LR_1s^5 + C_2C_LL_1L_2L_1R_1s^4 + C_2C_LL_1L_2R_1s^4 + C_2C_LL_1L_2R_
10.641 INVALID-ORDER-641 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
                                                                                   H(s) = \frac{L_1 R_1 R_L s \left(C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 L_2 R_1 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_1 g_m s^2 + C_2 L_1 R_1 s^2 + C_2 L_1 R_2 s^2 + C_
10.642 INVALID-ORDER-642 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                       \frac{L_{1}R_{1}\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}s^{4}+C_{1}C_{2}L_{L}R_{1}s^{2}+C_{1}C_{L}L_{1}R_{1}s^{2}+C_{2}C_{L}L_{1}L_{2}R_{1}g_{m}s^{3}+C_{2}C_{L}L_{1}R_{1}R_{2}s^{3}+C_{2}C_{L}L_{1}R_{1}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}R_{2}s^{2}+C
10.643 INVALID-ORDER-643 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
10.644 INVALID-ORDER-644 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_1 R_1 \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_2 L_L L_1 R_1 R_2 s^3 + C_1 C_2 L_L R_1 R_2 s^2 + C_2 C_L L_1 R_1 R_2 s^3 + C_2 C_L L_1 R_1 R_2 s^2 + C_2 C_L L_1 R_1 R_2 s^
10.645 INVALID-ORDER-645 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{L_1 R_1 \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_2 C_L L_1 R_1 R_2 s^3 + C_1 C_2 L_1 R_1 s^2 + C_2 C_L L_1 L_2 R_1 g_m s^3 + C_2 C_L L_1 L_2 R_3 s^3 + C_2 C_L L_1 R_1 R_2 g_m s^2 + C_2 C_L L_1 R_1 R_2 s^2 + C_2 C_L L_1 R_1 s^2 
10.646 INVALID-ORDER-646 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_1 L_L R_1 s^5 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_2 R_2 g_m s + C_2 s + C_2 R_2 g_m s +
10.647 INVALID-ORDER-647 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
                                         \frac{L_{1}R_{1}\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}s^{4}+C_{1}C_{2}L_{L}L_{1}R_{1}s^{3}+C_{1}C_{2}L_{1}R_{1}R_{2}s^{3}+C_{1}C_{2}L_{1}R_{1}R_{2}s^{3}+C_{1}C_{2}L_{1}R_{1}R_{2}s^{3}+C_{1}C_{2}L_{1}R_{1}R_{2}s^{3}+C_{2}C_{L}L_{1}L_{2}R_{1}g_{m}s^{3}+C_{2}C_{L}L_{1}L_{2}S^{3}+C_{2}C_{L}L_{1}R_{1}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+C_{2}C_{L}L_{1}R_{2}S^{2}+
10.648 INVALID-ORDER-648 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \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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 $H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1R_Ls^6 + C_1C_2C_LL_1L_LR_1R_2R_Ls^5 + C_1C_2L_1L_2L_Rs^5 + C_1C_2L_1L_2R_1R_Ls^4 + C_1C_2L_1L_LR_1R_2s^4 + C_1C_2L_1L_2L_1R_1R_2s^4 + C_1C_2L_1L_2L_1R_1R_2s^4 + C_1C_2L_1L_2L_1R_1R_2s^4 + C_1C_2L_1L_2L_1R_1R_2s^4 + C_1C_2L_1L_2L_1R_1R_2s^4 + C_1C_2L_1L_2L_1R_1R_2s^4 + C_1C_2L_1L_2R_1R_2s^4 + C_1C_2L_1L_2R$ 

**10.649** INVALID-ORDER-649  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ 

 $H(s) = \frac{L}{C_1C_2C_LL_1L_2L_LR_1s^6 + C_1C_2C_LL_1L_LR_1s^5 + C_1C_2L_LL_LR_1s^4 + C_1C_2L_1L_LR_1s^4 + C_1C_2L_1L_LR_1s^3 + C_1C_LL_LL_LR_1s^4 + C_1C_LL_LR_1s^4 + C$ 

10.650 INVALID-ORDER-650  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1s^6 + C_1C_2C_LL_1L_2R_1R_Ls^5 + C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2C_LL_1L_2R_1s^4 + C_1C_2L_1R_1R_2s^3 + C_1C_2L_1R_1R_2s^3 + C_1C_2L_1L_2R_1s^4 + C_1C_2L_1R_1R_2s^3 + C_1C_2L_1L_2R_1s^4 + C_1C_2L_1R_1R_2s^3 + C_1C_2L_1R$ 

**10.651** INVALID-ORDER-651  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{L_1 R_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_2 L_1 L_2 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^2 + C_2 L_1 L_2 R_1 R_2 s^3 + C_2 L_1 L_2 R_1 s^3 +$ 

10.652 INVALID-ORDER-652  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

10.653 INVALID-ORDER-653  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{I}{C_1C_2C_LL_1L_2R_1R_2R_Ls^5 + C_1C_2L_1L_2R_1R_2s^4 + C_1C_LL_1L_2R_1R_Ls^4 + C_1C_LL_1R_1R_2R_Ls^3 + C_1L_1R_1R_2s^2 + C_1L_1R_1R_2s^2 + C_1L_1R_1R_2s^2 + C_2C_LL_1L_2R_1R_2R_Ls^4 + C_2C_LL_1L_2R_1R_2s^4 + C$ 

10.654 INVALID-ORDER-654  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

10.655 INVALID-ORDER-655  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{L_1 R_1 s \left(C_L L_L s^2 + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 R_1 s^4 + C_1 C_L L_1 L_2 R_1 s^4 + C_2 C_L L_2 R_$ 

**10.656** INVALID-ORDER-656  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ 

 $H(s) = \frac{L}{C_1C_2C_LL_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_RR_1s^5 + C_1C_LL_1L_2L_RR_1s^5 + C_1C_LL_1L_2L_2R_1s^5 + C_1C_LL_1L_2L_2R_1s^5 + C_1C_LL_1L_2R_1s^5 + C_1C_LL_1L_2R_1s^5 + C_1C_LL_1L_2R_1s^5 + C_1C_LL_1L_2R_1s^5 + C_1C_LL_1L_2R_1s^5 + C_1C$ 

10.657 INVALID-ORDER-657  $Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{L_1 R_1 s \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L R_L s^2 + C_L R_L s + 1\right) \left(C_L R_L s + 1\right) \left(C$ 

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10.658 INVALID-ORDER-658 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \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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 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L s^6 + C_1 C_2 L_1 L_2 L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_2 L_L R_1 R_L s^5 + C_1 C_2 L_1 L_2 L_L R_1 R_L s^5 + C_1 C_L L_1 L_L L_L R_1 R_2 R_L s^4 + C_1 L_1 L_L R_1 R_2$ 

10.659 INVALID-ORDER-659 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 s^6 + C_1 C_2 L_1 L_2 L_L R_1 s^5 + C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_L L_1 L_L R_1 R_2 s^4 + C_1 C_L L_1 L_L R_1 R_2 s^4 + C_1 L_1 L_1 R_1 R_2 s^4 + C_1 L_1 L_1$ 

10.660 INVALID-ORDER-660 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^4 + C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_L L_1 L_2 R_1 R_2 s^4 + C_$ 

**10.661** INVALID-ORDER-661 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

 $H(s) = \frac{L_1 R_1 R_L s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_2 L_1 R_2 R_2 s^3 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 R_2 s^3 + C_2 L_1 L_2 R_1 s^3 + C_2 L_1 R_2 s^2 + C_2 L_2 R_1 R_2 s^2 + C_2 L_2 R_2 R_2 s^2 + C_2 L_2 R_2$ 

**10.662** INVALID-ORDER-662 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{L_1 R_1 s \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_2 C_L L_1 L_2 R_1 R_2 g_m s^4 + C_2 C_L L_1 L_2 R_1 s^4 + C_2 C_L L_1 L_2 R_1 R_2 s^3 + C_2 L_1 L_2 R_1 s^3 + C_2 L_2 R_2 s^$ 

10.663 INVALID-ORDER-663 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.664 INVALID-ORDER-664 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{L_1 R_1 s \left(C_L R_L s + 1\right) \left(C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 R_2 g_m s^2 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 R_2 R_2 g$ 

10.665 INVALID-ORDER-665 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.666 INVALID-ORDER-666 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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10.667 INVALID-ORDER-667 Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
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 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_$ 

10.668 INVALID-ORDER-668 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L s^6 + C_1 C_2 L_1 L_2 L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_2 L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_2 R_1 R_2 R_L s^4 + C_1 C_L L_L L_L R_1 R_2 R_L s^4 + C_1 L_L R_1 R_2 R_L$ 

10.669 INVALID-ORDER-669 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1R_2s^6 + C_1C_2C_LL_1L_2L_RR_1s^6 + C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2L_1L_2L_RR_1s^5 + C_1C_2L_1L_2R_1R_2s^4 + C_1C_2L_2R_1R_2s^4 + C_1C_2L_2R_1R_2s^4 + C_1C_2L_2R_1R_2s^4 + C_1C_2L_2R_1R$ 

10.670 INVALID-ORDER-670 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 R_L s^5 + C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_2 L_2 R_1 R_$ 

**10.671** INVALID-ORDER-671 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(R_2 g_m + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_L L_1 R_1 g^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 L_1 s^2 + C_L L_1 R_2 g_m s^2 + C_L L_1 s^2 + C_L L_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}$$

**10.672** INVALID-ORDER-672 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

**10.673** INVALID-ORDER-673 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

**10.674** INVALID-ORDER-674 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(R_{2}g_{m}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)}{C_{1}C_{L}L_{1}L_{L}s^{4}+C_{1}C_{L}L_{1}R_{1}g_{m}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}L_{1}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}$$

**10.675** INVALID-ORDER-675 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(R_2 g_m + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_2 s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_L L_1 L_L R_2 s^3 + C_L L_1 L_L R_3 s^2 + C_L L_L R_1 R_2 g_m s^3 + C_L R_1 R_2$$

**10.676** INVALID-ORDER-676  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(R_{2}g_{m}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)}{C_{1}C_{L}L_{1}L_{1}s^{4}+C_{1}C_{L}L_{1}R_{1}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}L_{L}L_{1}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}R_{1}s+C_{L}R_{2}s+C_{L}R_{2}s+C_{L}R_{1}s+C_{L}R_{1}s+$ 10.677 INVALID-ORDER-677  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$  $H(s) = \frac{L_L R_L s \left(R_2 g_m + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_L L_1 L_L R_1 R_2 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 R_2 g_m s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_2 s^3 + C_1 L_1 L_$ 10.678 INVALID-ORDER-678  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$  $H(s) = \frac{\left(R_{2}g_{m}+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{C_{1}C_{L}L_{1}L_{L}R_{1}s^{4}+C_{1}C_{L}L_{1}L_{L}R_{2}s^{4}+C_{1}L_{1}L_{L}s^{3}+C_{1}L_{1}R_{1}s^{2}+C_{1}L_{1}R_{2}s^{2}+C_{1}L_{1}R_{2}s^{2}+C_{1}L_{1}R_{2}s^{2}+C_{L}L_{1}L_{L}R_{2}s^{3}+C_{L}L_{L}R_{1}s^{2}+C_{L}L_{L}R_{2}s^{2}+C_{L}L_$ 10.679 INVALID-ORDER-679  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$  $H(s) = \frac{R_L \left( R_2 g_m + 1 \right) \left( C_L L_L s^2 + 1 \right) \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_2 s^4 + C_1 C_L L_1 L_L R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 L_L R_2 s^3 + C_1 L_1 L_L R_2 s^3 + C_1 L_1 R_2 R_2 s^3 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^3 + C_$ **10.680** INVALID-ORDER-680  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$  $H(s) = \frac{R_L \left(C_2 s + g_m\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_2 L_1 s^2 + C_2 R_1 s + C_2 R_1 s + L_1 g_m s + R_1 g_m + 1}$ **10.681** INVALID-ORDER-681  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$  $H(s) = \frac{\left(C_{2}s + g_{m}\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{1}s^{3} + C_{1}C_{L}L_{1}s^{2} + C_{1}C_{L}L_{1}R_{2}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s + C_{2}C_{L}L_{1}g_{m}s + C_{L}R_{1}g_{m} + C_{L}\right)}$ **10.682** INVALID-ORDER-682  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$  $H(s) = \frac{R_L \left( C_2 s + g_m \right) \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 C_2 C_L L_1 R_1 R_L s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_2 C_L L_1 R_L s^3 + C_2 C_L R_1 R_L s^2 + C_2 R_1 s + C_2 R_1 s + C_2 R_L s + C_L R_1 R_L g_m s^2 + C_L R_1 R_L g_$ **10.683** INVALID-ORDER-683  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

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

10.684 INVALID-ORDER-684 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L s}\right)$$

$$H(s) = \frac{(C_2 s + g_m) \left(C_L L_L s^2 + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{s \left(C_1 C_2 C_L L_1 L_L s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 R_1 q_m s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_1$$

10.689 INVALID-ORDER-689  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L \left( C_2 s + g_m \right) \left( C_L L_L s^2 + 1 \right) \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 C_L L_1 L_L R_1 s^3 +$ 

10.690 INVALID-ORDER-690  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{R_L \left( C_2 R_2 s + R_2 g_m + 1 \right) \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 C_2 L_1 R_1 R_2 s^3 + C_1 C_2 L_1 R_2 R_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_L s^2 + C_2 L_1 R_2 s^2 + C_2 R_1 R_2 s + C_2 R_2 R_L s + L_1 R_2 g_m s + L_1 s + R_1 R_2 g_m + R_1 + R_2 + R_L R_2 g_m s + R_1 R_2 g_m + R_$ 

**10.691** INVALID-ORDER-691  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_2R_2s + R_2g_m + 1\right)\left(C_1L_1R_1s^2 + L_1s + R_1\right)}{C_1C_2C_LL_1R_1R_2s^4 + C_1C_2L_1R_2s^3 + C_1C_LL_1R_1s^3 + C_1C_LL_1R_2s^3 + C_1L_1s^2 + C_2C_LL_1R_2s^3 + C_2C_LR_1R_2s^2 + C_2R_2s + C_LL_1R_2g_ms^2 + C_LL_1s^2 + C_LR_1R_2g_ms + C_LR_1s + C_LR_2s + 1}$ 

10.692 INVALID-ORDER-692  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$ 

 $H(s) = \frac{R_L \left( C_2 R_2 s + R_2 g_m + 1 \right) \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 C_2 C_L L_1 R_1 R_2 R_L s^3 + C_1 C_L L_1 R_2 R_L s^3 + C_1 C_L L_1 R_1 R_2 R_L s^3 + C_1 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_L L_1 R_2 R_L s^3 + C_1 C_L L_1$ 

**10.693** INVALID-ORDER-693  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}s+R_{2}g_{m}+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)}{C_{1}C_{2}C_{L}L_{1}R_{2}s^{4}+C_{1}C_{2}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{1}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{3}+C_{2}C_{L}R_{1}R_{2}s^{2}+C_{2}C_{L}R_{2}R_{L}s^{2}+C_{2}C_{L}R_{2}R_{L}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}s^{2}+C_{L}R_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}L_{1}R_{2}g_{m}s^{2}+C_{L}R$ 

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10.694 INVALID-ORDER-694 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_L L_1 R_2 s^3 + C_2 C_L L_1 R_2 s^
10.695 INVALID-ORDER-695 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_L s \left(C_2 R_2 s + R_2 g_m + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_2 C_L L_1 L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_L R_2 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_2 s^4 + C_1 L_1 L_L R_3 s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^3 + C_2 L_1 L_L R_2 s^3 + C_2 L_1 R_
10.696 INVALID-ORDER-696 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{2}R_{2}s + R_{2}g_{m} + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)}{C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{5} + C_{1}C_{2}L_{L}R_{2}R_{2}s^{4} + C_{1}C_{2}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{2}C_{L}L_{1}R_{2}s^{3} + C_{2
10.697 INVALID-ORDER-697 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 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)
10.698 INVALID-ORDER-698 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{(C_2K_2s + K_2g_m + 1)(C_1L_1K_1s^2 + L_1s_2s_1)}{C_1C_2C_LL_1L_LR_1s_2s_1^2 + C_1C_2L_1L_LR_2s_1^3 + C_1C_2L_1L_LR_2s_1^4 + C_1C_LL_1L_LR_1s_1^4 + C_1C_LL_1L_LR_2s_1^4 + C_1C_LL_1L_LR_2s_1^4 + C_1L_1L_Ls_1^3 + C_1L_1R_1s_2^3 + C_1L_1R_2s_1^2 + C_1L_
10.699 INVALID-ORDER-699 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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{1}{C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2C_LL_1L_LR_2R_Ls^5 + C_1C_2C_LL_1R_1R_2R_Ls^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_1R_1s^4 + C_1C_LL_1R_1s^4 + C_1C_LL_1R
10.700 INVALID-ORDER-700 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                          H(s) = \frac{R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 L_1 R_1 g_m s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_2 L_1 R_2 g_m s^2 + C_2 L_1 s^2 + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + L_1 g_m s + R_1 g_m + 1}
10.701 INVALID-ORDER-701 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                           H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{1}g_{m}s^{3} + C_{1}C_{2}L_{L}R_{2}s^{3} + C_{1}C_{2}L_{1}s^{2} + C_{1}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}R_{1}s + C_{2}C_{L}R_{1}s + C_{2}C_{L}R_{2}s + C_{2}C_{L}R_{1}s + C_{2}C_{L}R_{2}s + C_{2}C_{L}R_{1}s + C_{2}C_{L}R_{2}s + C_{2}C_{L}R_{1}s + C_{2}C_{L}R_{2}s 
10.702 INVALID-ORDER-702 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
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 $H(s) = \frac{n_L \left( \cup_1 L_1 n_1 s^- + L_1 s + n_1 \right) \left( \cup_2 n_2 y_m s + \cup_2 s + y_m \right)}{C_1 C_2 C_L L_1 R_1 R_2 R_L q_m s^4 + C_1 C_2 C_L L_1 R_2 R_L s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_$ 

 $R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)$ 

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10.703 INVALID-ORDER-703 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)
  H(s) = \frac{\left(C_{L}R_{L}s + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{1}s^{3} + C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}R_{1}s + C_{
10.704 INVALID-ORDER-704 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}L_{L}s^{2} + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{1}R_{2}g_{m}s^{3} + C_{1}C_{2}L_{L}R_{1}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{3} + C_{1}C_{2}L_{1}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{
10.705 INVALID-ORDER-705 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L_{LS}\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)\left(C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)
H(s) = \frac{L_L s \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_L R_1 g_m s^5 + C_1 C_2 L_L L_L R_2 s^5 + C_1 C_2 L_L L_L R_3 s^4 + C_1 C_2 L_1 R_1 g_m s^3 + C_1 C_2 L_1 L_L R_2 g_m s^4 + C_1 C_2 L_1 L_L R_2 g_m s^4 + C_2 C_L L_L R_2 g_m s^4 + C_
10.706 INVALID-ORDER-706 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}R_{1}R_{2}g_{m}s^{3} + C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{2} + C_{1}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s
10.707 INVALID-ORDER-707 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \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_1C_2C_LL_1L_LR_1R_2R_Lg_ms^5 + C_1C_2C_LL_1L_LR_1R_Ls^5 + C_1C_2L_1L_LR_1R_2g_ms^4 + C_1C_2L_1L_LR_1s^4 + C_1C_2L_1L_LR_2s^4 + C_1C_2L_1L_LR_1s^4 + C_1C_2L_1L_LR_2s^4 + C_1C_2L_1L_LR_2s^4 + C_1C_2L_1R_1R_2s^4 + C_1C_2L_1R_1R_2s^3 + C_1C_2L_1R_2s^3 + C_1C_2L_1R_2s
10.708 INVALID-ORDER-708 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{(C_1L_1R_1s^3 + L_1s + R_1)(C_2R_2g_ms + C_2s + g_m)}{C_1C_2C_LL_1L_LR_1s^5 + C_1C_2C_LL_1L_LR_2s^5 + C_1C_2L_1L_Ls^4 + C_1C_2L_1R_1s^3 + C_1C_2L_1R_2s^3 + C_1C_2L_1R_2s^3 + C_1C_2L_1R_2s^3 + C_1C_2L_1R_2s^3 + C_1C_2L_1L_LR_2s^4 + C_1L_1R_2g_ms^4 + C_1L
10.709 INVALID-ORDER-709 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \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{1}{C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_1 R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_L s^4 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 R_2 s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 g_m s^4 + C_1 C_2 C_L L_1 R_2 g_
10.710 INVALID-ORDER-710 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                H(s) = \frac{R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 L_2 R_1 g_m s^2 + C_1 L_1 s^2 + C_2 L_1 L_2 g_m s^3 + C_2 L_1 s^2 + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_1 s + L_1 g_m s + R_1 g_m + 1}
10.711 INVALID-ORDER-711 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
                                                                                     H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{1}s^{3} + C_{1}C_{2}L_{1}s^{2} + C_{1}C_{L}L_{1}R_{2}s^{2} + C_{2}C_{L}L_{1}L_{2}g_{m}s^{3} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{2}s^{2} + C_{2
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10.712 INVALID-ORDER-712 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)
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 $H(s) = \frac{R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 C_L L_1 R_1 g_m s^3 + C_1 C_L L_1 R_1 g_m s^3 + C_1 L_1 R_1 g_m s^4 + C_2 C_L L_1 L_2 R_1 g_m s^4 + C_2 C_L L_1 R_1 g_m s^4 + C_2$ 

**10.713** INVALID-ORDER-713  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{1}s^{3}+C_{1}C_{2}L_{1}R_{1}s^{3}+C_{1}C_{2}L_{1}R_{1}s^{3}+C_{1}C_{2}L_{1}R_{1}s^{2}+C_{1}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{2}C_{L}L_{2}R_{1}g_{m}s^{2}+C_{2}C_{L}L_{2}s^{2}+C_{2}C_{L}L_{1}s^{2}+C_{2}C_{L}L_{1}S^{2}+C_{2}C_{L}$ 

**10.714** INVALID-ORDER-714  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{L}L_{L}s^{2} + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{1}s^{3} + C_{1}C_{2}L_{1}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{2}s^{2} + C_{2}C_{L$ 

10.715 INVALID-ORDER-715  $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$ 

 $H(s) = \frac{L_L s \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_L R_1 g_m s^4 + C_1 C_2 L_1 L_L s^4 + C_1 C_2 L_1 L_L s^4 + C_1 C_L L_1 L_L s^$ 

**10.716** INVALID-ORDER-716  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$ 

 $H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{1}s^{3} + C_{1}C_{2}L_{1}R_{1}s^{3} + C_{1}C_{2}L_{1}R_{2}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{2}C_{L}L_{1}s^{2} + C_{2}C_{L$ 

10.717 INVALID-ORDER-717  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ 

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_L R_1 R_L s^5 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^4 + C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^4 + C_1 C_2 L_1 R_1 R_L g_$ 

10.718 INVALID-ORDER-718  $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$ 

 $H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}s + g_{m}\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}g_{m}s^{6} + C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{2}L_{1}L_{2}R_{1}g_{m}s^{4} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2}L_{2}S^{4} + C_{1}C_{2}L_{1}L_{2$ 

10.719 INVALID-ORDER-719  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ 

 $H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1g_ms^6 + C_1C_2C_LL_1L_2L_Ls^6 + C_1C_2C_LL_1L_2R_1g_ms^5 + C_1C_2C_LL_1L_2R_1s^5 + C_1C_2C_LL_1L_LR_1s^5 + C_1C_2C_LL_1L_2R_1s^5 + C_1C_2C$ 

10.720 INVALID-ORDER-720  $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$ 

 $H(s) = \frac{R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 L_1 R_2 g_m s^3 + C_1 L_1 R_2 g_m s^3 + C_2 L_1 R_2 g_m$ 

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10.721 INVALID-ORDER-721 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)
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$$H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{1}R_{2}g_{m}s^{3} + C_{1}C_{2}L_{L}R_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{2}C_{L}L_{1}R_{2}g_{m}s^{2} + C_{2}$$

10.722 INVALID-ORDER-722 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 R_1 R_2 g_m s^3 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_$$

10.723 INVALID-ORDER-723 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{1}s^{3}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}g_{m}s^{2}+C_{2}C_{L}L_{1}R_{2}g_{m}s$$

10.724 INVALID-ORDER-724 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{1}L_{1}R_{1}s^{2}+L_{1}s+R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}g_{m}s^{4}+C_{1}C_{2}C_{L}L_{1}L_{2}s^{4}+C_{1}C_{2}C_{L}L_{1}R_{1}R_{2}g_{m}s^{3}+C_{1}C_{2}C_{L}L_{1}R_{2}s^{3}+C_{1}C_{2}L_{1}R_{2}s^{3}+C_{1}C_{L}L_{1}R_{2}s^{2}+C_{2}C_{L}L_{1}L_{2}g_{m}s^{3}+C_{2}C_{L}L_{1}R_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}R_$$

10.725 INVALID-ORDER-725 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_2 s^6 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 L_1 L_L R_1 s^5 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_2 L_2 s^4 + C_1 C_2 L_2 L_2 s^4 + C_1 C_2 L_2 L_$$

10.726 INVALID-ORDER-726 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}g_{m}s^{2} + C_{2}R_{2}g_{m}s + C_{2}s + g_{m}\right)}{s\left(C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{2}s^{3} + C_{2}C_{L}L_{1}R_{2}s^{3} + C_{2}C_{L}L_{1}R_{2}s^$$

10.727 INVALID-ORDER-727 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_L R_1 R_2 R_L g_m s^5 + C_1 C_2 L_L L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_L R_1 R_2$$

10.728 INVALID-ORDER-728 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_L L_1 s^6 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 L_1 L_L$$

10.729 INVALID-ORDER-729 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5$$

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10.730 INVALID-ORDER-730 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)
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$$H(s) = \frac{R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_1 L_2 R_1 s^3 + C_1 L_1 L_2 s^3 + C_1 L_1 R_1 s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_2 L_1 L_2 R_3 s^3 + C_2 L_1 L_2 s^3 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_$$

10.731 INVALID-ORDER-731 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + L_{2}g_{m}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}s^{5} + C_{1}C_{2}L_{L}L_{2}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}R_{1}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}L_{1}s^{2} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{2}R_{1}s^{3} + C_{2}C_{L}L_{2}R_{2}s^{3} + C_{2}$$

10.732 INVALID-ORDER-732 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_L s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 g_m s^4 + C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_1$$

10.733 INVALID-ORDER-733 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

**10.734** INVALID-ORDER-734 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

10.735 INVALID-ORDER-735 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 L_1 L_2 L_L R_3 s^4 + C_1 C_2 L_1 L_2 R_1 R_2 g_m s^4 + C_1 C_2 L_1 L_2 R_1 R_2 g_m s^4 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_L L_1 L_2 L_L R_1 g_m s^5 + C_1 C_L L_1 L_2 L_L R_1 g_m s^4 + C_1 C_L L_1 L_2 L_L R_1 g_m s^4 + C_1 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_1 g_m s^6 + C_1 C_L L_1 L_2 L_2 R_$$

10.736 INVALID-ORDER-736 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.737 INVALID-ORDER-737 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_L s^6 + C_1 C_2 L_1 L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 L_1 L_2 L_L R_1 s^5 + C_1 C_2 L_1 L_2 L_L R_2 s^5 + C_1 C_2 L_1 L_2 L_L$$

10.738 INVALID-ORDER-738 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 L_L L_2 L_L R_2 s^6 + C_1 C_2 L_1 L_2 L_L R_2 s^6 + C_1 C_2 L_1 L_2 L_L R_1 s^6 + C_1 C_2 L_1 L_2 L_1 R_1 s^6 + C_$$

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10.739 INVALID-ORDER-739 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \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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 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 R_$ 

**10.740** INVALID-ORDER-740 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

 $H(s) = \frac{R_L \left( C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_2 L_1 L_2 R_2 g_m s^3 + C_2 L_1 L_2 s^3 + C_2 L_1 R_2 s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_1 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_$ 

10.741 INVALID-ORDER-741 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{2}L_{2}R_{2}g_{m}s^{2} + C_{2}L_{2}s^{2} + C_{2}R_{2}s + R_{2}g_{m} + 1\right)}{C_{1}C_{2}C_{L}L_{1}L_{2}R_{1}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{2}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{2}s^{4} + C_{1}C_{2}L_{1}L_{2}s^{4} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}R_{2}s^{3} + C_{1}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{1}L_{2}s^{4} + C_{2}C_{L}L_{$ 

10.742 INVALID-ORDER-742 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_L s^5 + C_1 C_2 C_L L_1 L_2 R_2 R_L s^5 + C_1 C_2 C_L L_1 R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_2 R_1 R_2 g_m s^4 + C_1 C_2 L_1 L_2 R_1 R_2 s^4 + C_1 C_2 L_1 L_2 R_1 R_2 s^3 + C_1 C_2 L_1 R_2 R_L s^3 +$ 

10.743 INVALID-ORDER-743 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.744 INVALID-ORDER-744 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

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

10.745 INVALID-ORDER-745 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 L_1 L_2 L_L R_2 s^5 + C_1 C_2 L_1 L_2 L_L R_2 s^5 + C_1 C_2 L_1 L_2 L_2 R_1 R_2 g_m s^4 + C_1 C_2 L_1 R_2 R_2$ 

10.746 INVALID-ORDER-746 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{( \cup_L \cup_L s )}{C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^5 + C_$ 

10.747 INVALID-ORDER-747 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

 $H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1R_2R_Lg_ms^6 + C_1C_2C_LL_1L_2L_LR_1R_Ls^6 + C_1C_2C_LL_1L_2L_LR_2R_Ls^6 + C_1C_2L_1L_2L_LR_1R_2g_ms^5 + C_1C_2L_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_LR_1s^5 + C_1C_2L_1L_2L_Rs^5 + C$ 

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10.748 INVALID-ORDER-748 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
10.749 INVALID-ORDER-749 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \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{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 s^5 + C_1 C_2 C_L L_1 R_2 R_2 s^
10.750 INVALID-ORDER-750 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                               H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right)}{C_1 C_L L_1 R_1 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_L R_1 R_2 g_m s + C_L R_1 s + C_L R_2 s + 1}
10.751 INVALID-ORDER-751 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                   H(s) = \frac{R_1 R_L \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_L L_1 R_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_2 R_L s^3 + C_1 C_L R_1 R_2 R_L s^2 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2 s + C_1 R_1 R_2 s 
10.752 INVALID-ORDER-752 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                            H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L R_L s + 1 \right)}{C_1 C_L L_1 R_1 g_m s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 C_L R_1 R_2 s^2 + C_1 R_1 R_2 
10.753 INVALID-ORDER-753 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
                                                                                                                                                                                           H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + 1 \right)}{C_1 C_L L_1 L_2 s^4 + C_1 C_L L_1 R_1 R_2 q_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_2 s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_L L_1 s^2 + C_L R_1 R_2 q_m s + C_L R_1 s + C_L R_2 s + 1}
10.754 INVALID-ORDER-754 Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)
                           H(s) = \frac{L_L R_1 s \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_L R_1 R_2 s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_L R_1 
10.755 INVALID-ORDER-755 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                        H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_1 s^3
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10.756 INVALID-ORDER-756  $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

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10.757 INVALID-ORDER-757 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
H(s) = \frac{R_1 \left( R_2 g_m + 1 \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_L L_1 L_L R_1 R_2 g_m s^4 + C_1 C_L L_1 L_L R_2 s^4 + C_1 C_L L_L L_R R_2 s^3 + C_1 C_L L_L R_1 R_2 s^3 + C_1 L_L R_1 R_2 s^3 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_
10.758 INVALID-ORDER-758 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
H(s) = \frac{R_1 R_L \left(R_2 g_m + 1\right) \left(C_1 L_1 s^2 + 1\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_L L_1 L_L R_1 R_2 g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_
10.759 INVALID-ORDER-759 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                                                                                                                            H(s) = \frac{R_1 R_L \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_L s^3 + C_1 C_2 R_1 R_L s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_2 R_1 s + C_2 R_L s + R_1 g_m + 1}
10.760 INVALID-ORDER-760 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                   H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_1 L_1 s^2 + 1 \right)}{s \left( C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 L_1 s^2 + C_1 C_2 R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s + C_2 C_L R_1 s + C_2 + C_L R_1 g_m + C_L \right)}
10.761 INVALID-ORDER-761 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
                                       H(s) = \frac{R_1 R_L \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 R_1 R_L s^2 + C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L R_1 R_L s^2 + C_1 L_1 R_2 s^2 + C_1 L_
10.762 INVALID-ORDER-762 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                          H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L R_L s + 1 \right)}{s \left( C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_L s^3 + C_1 C_2 L_1 R_L s^2 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_1 s + C_2 C_L R_1 s + C_2 C_L R_1 s + C_2 C_L R_1 g_m + C_L \right)}
10.763 INVALID-ORDER-763 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, 1 + \frac{1}{C_Ls}\right)
                                                                                                                                                          H(s) = \frac{R_1 \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{s \left(C_1 C_2 C_L L_1 L_L s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C_L L_L s^2 + C_2 C_L L_1 s^2 + C_2 C_L L_1 s^2 + C_1 C_L L_1 s^2 
10.764 INVALID-ORDER-764 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                    H(s) = \frac{L_L R_1 s \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 L_1 L_L s^4 + C_1 C_2 L_L R_1 s^3 + C_1 C_L L_L L_R g_m s^4 + C_1 C_L L_L L_L s^4 + C_1 C_L L_L R_1 s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_2 C_L L_L R_1 s^3 + C_2 L_L s^2 + C_2 R_1 s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}
10.765 INVALID-ORDER-765 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
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 $H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_1 s^2 + C_L R_L s + 1 \right)}{s \left( C_1 C_2 C_L L_1 L_1 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C$ 

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H(s) = \frac{L_L R_1 R_L s \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 s^4 + C_1 C_2 L_1 L_L R_1 s^4 + C_1 C_2 L_1 R_1 R_L s^3 + C_1 C_L L_L L_R R_1 R_L s^4 + C_1 C_L L_L L_R R_1 R_L s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 s^3 
10.767 INVALID-ORDER-767 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
H(s) = \frac{R_1 \left( C_2 s + g_m \right) \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_L R_1 R_L s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_L s^3 + C_1 C_2 L_L R_1 s^3 + C_
10.768 INVALID-ORDER-768 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
H(s) = \frac{R_1 R_L \left(C_2 s + g_m\right) \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 R_1 R_L s^4 + C_1 C_2 L_1 R_1 R_L s^4 + C_1 C_2 L_1 R_1 R_L s^3 + C_1 C_2 L_1 R_1 R_L s^3 + C_1 C_2 L_1 R_1 R_L s^3 + C_1 C_2 L_1 R_1 R_L s^4 + C_1 C_2 L_1 R_1 R_L s^3 + C_1 C_2 L_1 R_1 R_L s^4 + C_1 C_2 L_1 
10.769 INVALID-ORDER-769 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                           10.770 INVALID-ORDER-770 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                  H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 R_1 R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 q_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L R_1 R_2 s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_2 C_L R_1 R_2 s^2 + C_2 R_2 s + C_L R_1 R_2 q_m s + C_L R_1 s + C_L R_2 s + 1}{C_1 C_2 C_L L_1 R_1 R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L R_1 R_2 s
10.771 INVALID-ORDER-771 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
  H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 R_1 R_2 R_L s^3 + C_1 C_2 L_1 R_2 R_L s^3 + C_1 C_L L_1 R_1 R_2 R_L g_m s^3 + C_1 C_L L_1 R_1 R_2 R_L 
10.772 INVALID-ORDER-772 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 R_2 s^4 + C_1 C_2 C_L L_1 R_2 R_L s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + 
10.773 INVALID-ORDER-773 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, 1 + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 L_L s^4 + C_1 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^
10.774 INVALID-ORDER-774 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{L_L R_1 s \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 s + R_2 g_m + 1\right)}{C_1 C_2 C_L L_1 L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_L R_2 s^4 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 L_L L_L R_1 R_2 s^4 + C_1 C_L L_L L_L R_1 R_2 s^4 + C_1 C_L L_L L_L R_1 R_2 s^4 + C_1 C_L L_L R_1 R_2 s^4 + C_1 L_L R_1 R_
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10.766 INVALID-ORDER-766  $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$ 

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10.775 INVALID-ORDER-775 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 s + R_2 g_m + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right)}{C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 L_L R_1 R_2 s^4 + C_1 C_2 C_L L_L R_1 R_2 s^4 + C_1 C_2 L_L R_1 R_2 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_2 s^3 + C_1 C_
10.776 INVALID-ORDER-776 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{1}{C_1 C_2 C_L L_1 L_L R_1 R_2 R_L s^5 + C_1 C_2 L_1 L_L R_1 R_2 s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L L_L L_L R_1 R_2 R_L s^3 + C_1 C_L R_1 R_2 R_L 
10.777 INVALID-ORDER-777 Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
10.778 INVALID-ORDER-778 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+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}{C_1C_2C_LL_1L_LR_1R_2s^5 + C_1C_2C_LL_1L_LR_2R_Ls^5 + C_1C_2C_LL_1R_1R_2R_Ls^4 + C_1C_2L_1R_1R_2R_Ls^4 + C_1C_2L_1R_1R_2s^3 + C_1C_2L_1R_2R_Ls^3 + C_1C_2L_1R_2R_Ls^3 + C_1C_2L_1L_LR_1R_2g_ms^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_2s^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_1R_1s^4 + C_1C_LL_1R_1s^4 + C
10.779 INVALID-ORDER-779 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                               H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 L_1 R_1 R_2 g_m s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 R_1 R_2 s^2 + C_1 C_2 R_1 R_2 s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_2 R_1 R_2 g_m s + C_2 R_1 s + C_2 R_2 s + C_2 R_L s + R_1 g_m + 1}
10.780 INVALID-ORDER-780 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                               H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 R_1 g_m s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_2 s^2 + C_1 C_2 L_1 s^2 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s + C_2 C_L R_1 s +
10.781 INVALID-ORDER-781 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{R_1 R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_1 R_2 R_L s^4 + C_1 C_2 C_L L_1 R_2 R_L s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_2 s^3 + C_
10.782 INVALID-ORDER-782 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L R_1 R_2 s^2 + C_1 C_2 L_1 s^2 + C_1 C_2 L_1 s^2 + C_1 C_2 L_1 s^2 + C_1 C_L L
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 $H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_L s^4 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L L_1 R_2 s^2 + C_1 C_2 L_1 s^2 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_1 s^2 + C_2 C$ 

10.783 INVALID-ORDER-783  $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$ 

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10.784 INVALID-ORDER-784 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
 H(s) = \frac{L_L R_1 s \left(C_1 L_1 s^2 + 1\right) \left(C_2 R_2 g_m s + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 L_L L_R s^4 + C_1 C_2 L_1 L_L s^4 + C_1 C_2 L_1 L_L s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_L R_1 s^3 + C_1 C_2 L_1 
 10.785 INVALID-ORDER-785 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_2 C_L L_1 R_1 s^3 + C_1
 10.786 INVALID-ORDER-786 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
 H(s) = \frac{1}{C_1 C_2 C_L L_1 L_L R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_L s^5 + C_1 C_2 C_L L_1 L_L R_2 R_L s^5 + C_1 C_2 C_L L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 g_m s^4 + C_1 C_2 L_1 L_L R_1 R_2 s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_L R_1 R_2 R_L s^4 + C_1 C_2 L_1 R_1 R_2 R_L 
 10.787 INVALID-ORDER-787 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
 H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 R_2 g_m s + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_L R_2 s^5 + C_1 C_2 C_L L_L L_L R_2 s^5 + C_1 C_2 C_L L_L L_L R_2 s^4 + C_1 C_2 L_L L_L R_1 R_2 s^4 + C_1 C_2 L_L R_1 R_2 
 10.788 INVALID-ORDER-788 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                  \overline{C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}g_{m}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{1}L_{L}R_{2}s^{5} + C_{1}C_{2}C_{L}L_{1}R_{1}R_{2}g_{m}s^{4} + C_{1}C_{2}C_{L}L_{1}R_{1}R_{2}s^{4} + C_{1}C_{2}C_{
 10.789 INVALID-ORDER-789 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)
                                                                                                                                                                                    H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 s^4 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 R_1 R_L s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_2 L_2 R_1 g_m s^2 + C_2 L_2 s^2 + C_2 R_1 s + C_2 R_
 10.790 INVALID-ORDER-790 Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)
                                                                                                   H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 R_1 g_m s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_2 R_1 s^3 + C_1 C_2 L_1 s^2 + C_1 C_L R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L R_1 s + C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L L_2 s^2 + C_2 C_L R_1 s + C_2 C_L L_2 R_1 g_m s^2 + C_2 C_L R_1 s + C_2 C_L
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10.791 INVALID-ORDER-791 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

 $H(s) = \frac{R_1 R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{C_1 C_2 C_L L_1 L_2 R_1 R_L g^5 + C_1 C_2 C_L L_1 R_1 R_L s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 R_1 s^3 + C_1$ 

10.792 INVALID-ORDER-792 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_1 \left( C_1 L_1 s + 1 \right) \left( C_2 L_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_2 R_1 s^3 + C_1 C_2 C_L L_2 R_1 s^2 + C_1 C_2 L_1 s^2 + C_1 C_L L_1 s^2 + C_1 C$ 

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10.793 INVALID-ORDER-793 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_2 R_1 s^3 + C_1 C_2 L_2 R_1 s^3 + C_1 C_2 L_1 R_1
10.794 INVALID-ORDER-794 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{L_L R_1 s \left(C_1 L_1 s^2 + 1\right) \left(C_2 L_2 g_m s^2 + C_2 s + g_m\right)}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 L_L L_L R_1 s^5 + C_1 C_2 L_L L_L R_1 s^4 + C_1 C_2 L_1 L_L s^4 + C_1 C_2 L_L R_1 s^3 + C_
10.795 INVALID-ORDER-795 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 L_1 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_2 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^2 + C_1 C_2 L
10.796 INVALID-ORDER-796 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_L R_1 R_L s^5 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_2 L_1 L_2 L_L R_1 g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 L_1 R_1 
10.797 INVALID-ORDER-797 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
                                            \frac{n_1 \left( \cup_1 L_1 s^- + 1 \right) \left( \cup_2 L_1 L_2 L_1 R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_1 s^6 + C_1 C_2 C_L L_1 L_1 R_1 s^5 + C_1 C_2 C_L L_2 L_1 R_1 s^5 + C_1 C_2 L_2 L_2 L_2 R_1 s^5 + C_1 C_2 L_2 L_2 L_2 R_1 s^5 + C
10.798 INVALID-ORDER-798 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
  H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 s^5 + C_1 C_2 C_L L_2 R_1 R_L s^4 + C_1 C_
10.799 INVALID-ORDER-799 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)
H(s) = \frac{R_1 R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 R_2 g_m s^3 + C_1 C_2 L_1 R_1 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 
10.800 INVALID-ORDER-800 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 R_1 g_m s^4 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^3 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L
10.801 INVALID-ORDER-801 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
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 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_L s^5 + C_1 C_2 C_L L_1 R_1 R_2 R_L g_m s^4 + C_1 C_2 C_L L_1 R_1 R_L s^4 + C_1 C_2 C_L L_1 R_2 R_L s^4 + C_1 C_2 C_L L_2 R_1 R_L s^4 + C_1 C_2 C_L L_2 R_1 R_2 R_L s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 L_2 R_1 g_m s^4 + C_1 C_2 L_1 R_1 R_2 R_L s^4 + C_$ 

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H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2
10.803 INVALID-ORDER-803 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C
10.804 INVALID-ORDER-804 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_2 s^6 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_2 R_1 s^5 + C_1 C_2 C_L L_
10.805 INVALID-ORDER-805 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)
H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_L L_L s^2 + C_L R_L s + 1 \right) \left( C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + g_m \right)}{s \left( C_1 C_2 C_L L_1 L_2 R_1 g_m s^4 + C_1 C_2 C_L L_1 L_2 s^4 + C_1 C_2 C_L L_1 R_1 s^3 + C_1 C_2 C_L L_1 R_2 s^3 + C_1 C_2 C_L
10.806 INVALID-ORDER-806 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                            \overline{C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{L}g_{m}s^{6}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}s^{6}+C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{L}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{1}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{2}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}L_{2}R_{2}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}L_{2}R_{2}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{1}L_{2}L_{2}R_{2}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{2}L_{2}L_{2}R_{2}R_{2}s^{5}+C_{1}C_{2}C_{L}L_{2}L_{2}L_{2}R_{2}R_{
10.807 INVALID-ORDER-807 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
 H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_2 s^6 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 s^5 + C_1 C_2 C_L L_1 L_1 R_1 s^5 + C_1 C_2 C_L L_1 R_1 R_1 s^5 + C_1 C_
10.808 INVALID-ORDER-808 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_L g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_L R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 R_2 g_m s^5 + C_1 C_2 C_L 
10.809 INVALID-ORDER-809 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L\right)
H(s) = \frac{R_1 R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + L_2 g_m s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_2 R_1 R_2 s^3 + C_1 L_1 L_2 s^3 + C_1 L_1 L_2 s^3 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_
10.810 INVALID-ORDER-810 Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right)
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10.802 INVALID-ORDER-802  $Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$ 

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10.811 INVALID-ORDER-811 Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)
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 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 R_1 R_2 R_L g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_L s^5 + C_1 C_2 C_L L_1 L_2 R_1 R_2 g_m s^4 + C_1 C_2 L_1 L_$ 

10.812 INVALID-ORDER-812 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

10.813 INVALID-ORDER-813 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

10.814 INVALID-ORDER-814 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.815 INVALID-ORDER-815 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.816 INVALID-ORDER-816 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_L s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L s^5 + C_1 C_2 L_1 L_2 L_L R_1 R_2 g_m s^5 + C_1 C_2 L_1 L_2 L_L R_1 s^5 + C_1 C_2 L_1 L_2 L_L R_1 s^5 + C_1 C_2 L_1 L_2 L_L R_1 R_2 R_L s^6 + C_1 C_2 L_1 L_2 L_1 R_1 R_2 R_L s^6 + C_1 C_2 L_1 L_2 L_1 R_1 R_2 R_L s^6 + C_1 C_2 L_1 L_2 L_1 R_$ 

10.817 INVALID-ORDER-817 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

 $H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 s^6 + C_1 C_2 C_L L_1 L_2 L_L R_2 s^6 + C_1 C_2 C_L L_2 L_L R_1 R_2 s^5 + C_1 C_2 L_1 L_2 L_1 R_2 s^5 + C_1$ 

10.818 INVALID-ORDER-818 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

 $H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1R_2g_ms^6 + C_1C_2C_LL_1L_2L_LR_1s^6 + C_1C_2C_LL_1L_2L_LR_2s^6 + C_1C_2C_LL_1L_2R_1R_2s^6 + C_1C_2C_LL_1L_2R_1R_2s^5 + C_1C_2C_LL_1R_2R_1R_2s^5 + C_1C_2C_LL_1R_2R_1R_2R_1R_2s^5 + C_1C_2C_LL_1R_2R_1R_2s^5 + C_1C_2C_LL_1R_2R$ 

**10.819** INVALID-ORDER-819 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L\right)$$

 $H(s) = \frac{R_1 R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 L_1 L_2 R_1 s^4 + C_1 C_2 L_1 L_2 R_2 s^4 + C_1 C_2 L_1 R_1 R_2 s^3 + C_1 C_2 L_1 R_2 R_2 s^3 + C_1 C_2 L_2 R_1 R_2 s^3 + C_1 C_2 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_2 s^2 + C_1 L_1 R_2$ 

10.820 INVALID-ORDER-820 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + R_2 g_m + 1 \right)}{C_1 C_2 C_L L_1 L_2 R_1 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^5 + C_1 C_2 L_L R_1 R_2 s^4 + C_1 C_2 L_1 R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^4 + C_1 C_2 L_1 R_2 s^3 + C_1 C_L L_1 R_1 R_2 s^3 +$$

10.821 INVALID-ORDER-821 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_1C_2C_LL_1L_2R_1R_2R_Lg_ms^5 + C_1C_2C_LL_1L_2R_1R_Ls^5 + C_1C_2C_LL_1L_2R_2R_Ls^5 + C_1C_2C_LL_1R_1R_2R_Ls^4 + C_1C_2L_1L_2R_1R_2g_ms^4 + C_1C_2L_1L_2R_1s^4 + C$$

10.822 INVALID-ORDER-822 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_1 \left( C_1 L_1 s^2 + 1 \right) \left( C_2 L_1 L_2 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^5 + C_1 C_2 C_L L_1 R_2 R_2 s^4 + C_1 C_2 C_L L_1 R_2 R_2 s^4 + C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 C_L L_2 R_2 s^4 + C_1 C_$$

10.823 INVALID-ORDER-823 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

10.824 INVALID-ORDER-824 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.825 INVALID-ORDER-825 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L s^6 + C_1 C_2 C_L L_1 L_2 R_1 R_2 g_m s^5 + C_1 C_2 C_L L_1 L_2 R_1 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^5 + C_1 C_2 C_L L_1 L_2 R_2 s^5 + C_1 C_2 C_L L_1 R_1 R_2 s^4 + C_1 C_2 C_L L_1 R_1 R_2 s^4 + C_1 C_2 C_L L_2 R_1 R_2 s^4 + C_1 C_2 C_L L_$$

10.826 INVALID-ORDER-826 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \infty, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

$$H(s) = \frac{1}{C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L g_m s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_L s^6 + C_1 C_2 C_L L_1 L_2 L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L L_L R_1 R_2 R_L s^5 + C_1 C_2 L_L R_1 R_2 R_L s^5 +$$

10.827 INVALID-ORDER-827 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.828 INVALID-ORDER-828 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_1C_2C_LL_1L_2L_LR_1R_2g_ms^6 + C_1C_2C_LL_1L_2L_LR_1s^6 + C_1C_2C_LL_1L_2L_LR_2s^6 + C_1C_2C_LL_1L_2R_1R_2R_Lg_ms^5 + C_1C_2C_LL_1L_2R_1R_2s^5 + C_1C_2C_LL_1R_2R_2s^5 + C_1C_2C_LL_1R_2s^5 + C$$

## 11 PolynomialError