Filter Summary Report: TIA simple Z3 Z4 ZL

Generated by MacAnalog-Symbolix

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	8.7	INVALID-NUMER-7 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L \right)'$.04
	8.8	INVALID-NUMER-8 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$.04
	8.9	INVALID-NUMER-9 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$.05
	8.10	INVALID-NUMER-10 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$.05
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		INVALID-NUMER-12 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$	

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10.11INVALID-ORDER-11 $Z(s) = 1$	$\left(L_1 s, \ \infty, \ c \right)$	∞, ∞, ∞	$\frac{R_L \left(L \right)}{L_L s + 1}$	$\frac{C_L s + \frac{1}{C_L s}}{R_L + \frac{1}{C_L s}}$		 	 	 	 115
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10.15INVALID-ORDER-15 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \infty, \circ\right)$	∞ , ∞ , ∞ ,	$L_L s$ -	$+\frac{1}{C_L s}$.		 	 	 	 116
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10.17INVALID-ORDER-17 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, \infty, \circ\right)$	∞ , ∞ , ∞ ,	$\frac{L_L}{C_L L_L}$	$\left(\frac{s}{s^2+1} + R_L\right)$		 	 	 	 116
10.18INVALID-ORDER-18 $Z(s) = 1$	$\left(\frac{1}{C_1s}, \ \infty, \ \circ \right)$	$\infty, \infty, \infty, \infty$	$\frac{R_L \left(L \right)}{L_L s + 1}$	$\frac{C_L s + \frac{1}{C_L s}}{-R_L + \frac{1}{C_L s}}$		 	 	 	 116
10.19INVALID-ORDER-19 $Z(s) = 0$	(- 1 - 1 - 1			/					
10.20INVALID-ORDER-20 $Z(s) = 0$	$\left\langle \frac{R_1}{C_1R_1s+1},\right\rangle$	∞ , ∞ , ∞	$, \infty, I$	$L_L s + \frac{1}{C_L s}$		 	 	 	 117
10.21INVALID-ORDER-21 $Z(s) = 0$	$\left\langle \frac{R_1}{C_1R_1s+1},\right\rangle$	∞ , ∞ , ∞	$, \infty, \overline{\alpha}$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	 117
10.22INVALID-ORDER-22 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1},\right)$	∞ , ∞ , ∞	$, \infty, I$	$L_L s + R_L +$	$-\frac{1}{C_L s}$	 	 	 	 117
10.23INVALID-ORDER-23 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1},\right)$	∞ , ∞ , ∞	$, \infty, \gamma$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_I}}$	$\left(\frac{1}{\sqrt{s}}\right)$	 	 	 	 117
10.24INVALID-ORDER-24 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1},\right)$	∞ , ∞ , ∞	$, \infty, \overline{\alpha}$	$\frac{L_L s}{C_L L_L s^2 + 1} +$	R_L) .	 	 	 	 117
10.25INVALID-ORDER-25 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1},\right)$	∞ , ∞ , ∞	$, \infty,$	$\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{\overline{s}}\right)$	 	 	 	 118
10.26INVALID-ORDER-26 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s},\right.$	∞ , ∞ , ∞	∞ , ∞ ,	$\frac{1}{C_L s}$)		 	 	 	 118
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10.28INVALID-ORDER-28 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s},\right)$	∞ , ∞ , ∞	∞ , ∞ ,	$R_L + \frac{1}{C_L s}$		 	 	 	 118
10.29INVALID-ORDER-29 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s},\right)$	∞ , ∞ , ∞	∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$)	 	 	 	 118
10.30INVALID-ORDER-30 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s}),$	∞ , ∞ , ∞	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1} \bigg)$		 	 	 	 119
10.31INVALID-ORDER-31 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s},$	∞ , ∞ , ∞	∞ , ∞ ,	$L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 	 119
10.32INVALID-ORDER-32 $Z(s) = 1$	$\left(R_1 + \frac{1}{C_1 s},\right.$	∞ , ∞ , o	o, ∞,	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\left(\frac{1}{L^s}\right)$.	 	 	 	 119

10.33 INVALID-ORDER-33 $Z(s)=\left(\right.$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.34 INVALID-ORDER-34 $Z(s)=\left(\right.$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.35INVALID-ORDER-35 $Z(s) = \langle$	$(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_Ls})$
10.36 INVALID-ORDER-36 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.37INVALID-ORDER-37 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.38INVALID-ORDER-38 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.39 INVALID-ORDER-39 $Z(s)=\left \right.$	$\left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.40 INVALID-ORDER-40 $Z(s)=\left(\right.$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.41INVALID-ORDER-41 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.42INVALID-ORDER-42 $Z(s)=\left(\right.$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.43 INVALID-ORDER-43 $Z(s)=\left(\right.$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.44INVALID-ORDER-44 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.45INVALID-ORDER-45 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.46 INVALID-ORDER-46 $Z(s)=% {\textstyle\int\limits_{s=0}^{s}} \left({{D_{s}}} \right) \left({{D_{s$	$\left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots$
10.47INVALID-ORDER-47 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots$
10.48INVALID-ORDER-48 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.49INVALID-ORDER-49 $Z(s) = ($	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.50INVALID-ORDER-50 $Z(s) = ($	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.51INVALID-ORDER-51 $Z(s)=\left(\right.$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.52INVALID-ORDER-52 $Z(s) = ($	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.53INVALID-ORDER-53 $Z(s) = 1$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $

10.55INVALID-ORDER-55 $Z(s) = ($	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.56INVALID-ORDER-56 $Z(s) = ($	$\left(\frac{1}{C_1s+\frac{1}{R_1}+\frac{1}{L_1s}}, \infty, \infty, \infty, \infty, \infty, R_L+\frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.57INVALID-ORDER-57 $Z(s) = ($	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.58INVALID-ORDER-58 $Z(s) = ($	$\left(\frac{1}{C_1s + \frac{1}{R_1} + \frac{1}{L_1s}}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.59INVALID-ORDER-59 $Z(s) = ($	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
10.60INVALID-ORDER-60 $Z(s) = ($	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.61INVALID-ORDER-61 $Z(s) = ($	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.62INVALID-ORDER-62 $Z(s) = 1$	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.63 INVALID-ORDER-63 $Z(s)=\left(\right.$	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \infty, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.64INVALID-ORDER-64 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.65INVALID-ORDER-65 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1,\ \infty,\ \infty,\ \infty,\ \infty,\ R_L+\frac{1}{C_Ls}\right)$
10.66INVALID-ORDER-66 $Z(s) = ($	$\left\langle \frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right\rangle$
10.67INVALID-ORDER-67 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)'$
10.68INVALID-ORDER-68 $Z(s) = ($	$\left\langle \frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right\rangle$
10.69INVALID-ORDER-69 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$
10.70INVALID-ORDER-70 $Z(s) = ($	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}+R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.71INVALID-ORDER-71 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \dots \qquad 12$
10.72INVALID-ORDER-72 $Z(s) = ($	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.73INVALID-ORDER-73 $Z(s) = ($	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $

10.74INVALID-ORDER-74 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right) \dots \dots \dots \dots$	 127
10.75INVALID-ORDER-75 $Z(s) =$	$\left\langle P\left(1,\alpha+1\right)\right\rangle$	 127
10.76INVALID-ORDER-76 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}\right) \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots $	 128
10.77INVALID-ORDER-77 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}+R_L\right) \dots \dots \dots \dots$	 128
10.78INVALID-ORDER-78 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	 128
10.79INVALID-ORDER-79 $Z(s) =$	$(\infty, R_2, \infty, \infty, \infty, R_L)$	 128
10.80INVALID-ORDER- $80 Z(s) =$	$\left(\infty, R_2, \infty, \infty, \infty, \frac{1}{C_{LS}}\right) \dots \dots$	 128
	$\left(\infty, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	
10.82INVALID-ORDER-82 $Z(s) =$	$\left(\infty, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	 129
10.83INVALID-ORDER-83 $Z(s) =$	$\left(\infty, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	 129
10.84INVALID-ORDER-84 $Z(s) =$	$\left(\infty, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	 129
10.85INVALID-ORDER-85 $Z(s) =$	$(\infty, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s})$	 129
10.86INVALID-ORDER-86 $Z(s) =$	$\left(\infty, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	 129
10.87INVALID-ORDER-87 $Z(s) =$	$\left(\infty, R_2, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)'$	 130
10.88INVALID-ORDER-88 $Z(s) =$	$(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_L)$	 130
10.89INVALID-ORDER-89 $Z(s) =$	$\left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	 130
10.90INVALID-ORDER-90 $Z(s) =$	$\left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	 130
10.91INVALID-ORDER-91 $Z(s) =$	$\left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	 130
10.92INVALID-ORDER-92 $Z(s) =$	$\left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	 130
10.93INVALID-ORDER-93 $Z(s) =$	$\left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	 131
10.94INVALID-ORDER-94 $Z(s) =$	$\left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots$	 131

10.95INVALID-ORDER-95 $Z(s) = (\infty,$	$\frac{R_2}{C_2R_2s+1}$, ∞ , \propto	$\infty, \ \infty, \ \frac{1}{C_I}$	$\left(\frac{L}{Ls}\right)$		 	 	 131
10.96 INVALID-ORDER-96 $Z(s)= \dot{\big(} \infty,$	$\frac{R_2}{C_2R_2s+1}$, ∞ , ∞	∞ , ∞ , R	$L + \frac{1}{C_L s}$.		 	 	 131
10.97INVALID-ORDER-97 $Z(s) = (\infty,$	$\frac{R_2}{C_2R_2s+1}$, ∞ , \propto	∞ , ∞ , L_I	$Ls + \frac{1}{C_L s}$).		 	 	 131
10.98 INVALID-ORDER-98 $Z(s)= \Big(\infty,$	$\frac{R_2}{C_2R_2s+1}$, ∞ , ∞	$\infty, \ \infty, \ \overline{C_I}$	$\frac{L_L s}{L_L L_L s^2 + 1}$.		 	 	 131
10.99INVALID-ORDER-99 $Z(s) = (\infty,$	$\frac{R_2}{C_2R_2s+1}$, ∞ , ∞	∞ , ∞ , L_I	$Ls + R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$	 	 	 132
10.10 0 NVALID-ORDER-100 $Z(s) = \left(\infty\right)$	$, \frac{R_2}{C_2R_2s+1}, \infty,$	∞ , ∞ , $\frac{1}{6}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$)	 	 	 132
10.10INVALID-ORDER-101 $Z(s) = (\infty)$	$, \frac{R_2}{C_2R_2s+1}, \infty, \infty$	$\infty, \infty, \overline{\alpha}$	$\frac{L_L s}{C_L L_L s^2 + 1} + R$	(2L)	 	 	 132
10.10 2 NVALID-ORDER-102 $Z(s) = \left(\infty\right)$	$, \frac{R_2}{C_2R_2s+1}, \infty,$	$\infty, \infty, \frac{1}{2}$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$)	 	 	 132
10.10 B NVALID-ORDER-103 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	R_L)	<i>.</i>	 	 	 132
10.104NVALID-ORDER-104 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	$\frac{1}{C_L s}$)		 	 	 133
10.10 5 NVALID-ORDER-105 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	$\frac{R_L}{C_L R_L s + 1}$.		 	 	 133
10.10 6 NVALID-ORDER-106 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	$R_L + \frac{1}{C_L s}$		 	 	 133
10.10 T NVALID-ORDER-107 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$		 	 	 133
10.10\(\text{NVALID-ORDER-108} \) $Z(s) = \left(\infty \right)$	$, R_2 + \frac{1}{C_2 s}, \infty,$	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 133
10.10 9 NVALID-ORDER-109 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	$L_L s + R_L +$	$\frac{1}{C_L s}$.	 	 	 133
10.11 © NVALID-ORDER-110 $Z(s) = \left(\infty\right)$	$, R_2 + \frac{1}{C_2 s}, \infty,$	∞ , ∞ ,	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	$\left(\frac{1}{2}\right)$	 	 	 134
10.11 I NVALID-ORDER-111 $Z(s) = (\infty)$	$R_2 + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1} + 1$	(R_L)	 	 	 134
10.112NVALID-ORDER-112 $Z(s) = \left(\infty\right)$	$, R_2 + \frac{1}{C_2 s}, \infty,$	$\infty, \ \infty,$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)$	 	 	 134
10.11 B NVALID-ORDER-113 $Z(s) = (\infty)$			`		 	 	 134
10.114NVALID-ORDER-114 $Z(s) = (\infty)$	$, L_2 s + \frac{1}{C_2 s}, \infty,$	∞ , ∞ ,	$R_L + \frac{1}{C_L s}$		 	 	 134
10.11 INVALID-ORDER-115 $Z(s) = (\infty)$	$, L_2 s + \frac{1}{C_2 s}, \infty,$	∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$		 	 	 135
10.116NVALID-ORDER-116 $Z(s) = (\infty)$	$L_2s + \frac{1}{C_2s}, \ \infty,$	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 135

10.11 T NVALID-ORDER-117 $Z(s) = ($	$\left(\infty,\ L_2s+rac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ L_Ls+R_L+rac{1}{C_Ls} ight)$	135
10.118NVALID-ORDER-118 $Z(s) = ($	$\left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	135
10.11 9 NVALID-ORDER-119 $Z(s) = 0$	$\left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots$	135
	$(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L)$	136
10.12INVALID-ORDER-121 $Z(s) = 0$	$\left(\infty,\ L_2s+R_2+rac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ rac{1}{C_Ls} ight)$	136
10.12 2 NVALID-ORDER-122 $Z(s) = ($	$\left(\infty,\ L_2s+R_2+rac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ rac{R_L}{C_LR_Ls+1} ight)$	136
10.12 3 NVALID-ORDER-123 $Z(s) = ($	$\left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$	136
10.12#NVALID-ORDER-124 $Z(s) = ($	$\left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$	136
10.125NVALID-ORDER-125 $Z(s) = ($	$\left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right) \dots \dots$	L36
10.126NVALID-ORDER-126 $Z(s) = ($	$\left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots$	L37
10.12 T NVALID-ORDER-127 $Z(s) = 1$	$\left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$	137
10.12\NVALID-ORDER-128 $Z(s) = ($	$\left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	137
10.12 9 NVALID-ORDER-129 $Z(s) = 0$	$\left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots$	137
10.13 0 NVALID-ORDER-130 $Z(s) = 0$	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$	137
10.13 I NVALID-ORDER-131 $Z(s) = ($	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$	138
10.13 2 NVALID-ORDER-132 $Z(s) = ($	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	138
10.13 3 NVALID-ORDER-133 $Z(s) = ($	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	138
10.134NVALID-ORDER-134 $Z(s) = 1$	$\left(\infty, \ \frac{L_{2s}}{C_{2}L_{2}s^{2}+1} + R_{2}, \ \infty, \ \infty, \ \infty, \ \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \ \dots \ $	138
10.135NVALID-ORDER-135 $Z(s) = 1$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \infty, R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	138
10.136NVALID-ORDER-136 $Z(s) = 1$	$\left\langle \begin{array}{ccc} L_2s + L_2 + C_{2s} \\ \end{array} \right\rangle$	139
10.13 T NVALID-ORDER-137 $Z(s) = 1$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	139

10.13 NVALID-ORDER-138 $Z(s) = \left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$. 139
10.13 9 NVALID-ORDER-139 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$. 139
10.14@NVALID-ORDER-140 $Z(s) = \left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$. 139
10.14INVALID-ORDER-141 $Z(s) = \left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$. 140
10.142NVALID-ORDER-142 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)\right)$. 140
10.14\(\text{NVALID-ORDER-143} \(Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \i	
10.14\(\text{INVALID-ORDER-144}\(Z(s) = \left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \\ \left(. 140
10.14 INVALID-ORDER-145 $Z(s) = (\infty, \infty, R_3, \infty, \infty, R_L)$. 140
10.146NVALID-ORDER-146 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{1}{C_L s}\right)$. 141
10.14TNVALID-ORDER-147 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	
10.14\(\text{NVALID-ORDER-148} \(Z(s) = \left(\infty,	. 141
10.149NVALID-ORDER-149 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	
10.15@NVALID-ORDER-150 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	
10.15INVALID-ORDER-151 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$. 141
10.152NVALID-ORDER-152 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$. 142
10.15 NVALID-ORDER-153 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$. 142
$10.154\text{NVALID-ORDER-}154\ Z(s) = \left(\infty,\ \infty,\ R_3,\ \infty,\ \infty,\ \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $. 142
10.15 INVALID-ORDER-155 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$. 142
10.15 6 NVALID-ORDER-156 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$. 142
10.15 TNVALID-ORDER-157 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$. 143
10.15 NVALID-ORDER-158 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$. 143

10.15 9 NVALID-ORDER-159 $Z(s) =$	$\left(\infty, \infty\right)$	$, \frac{1}{C_3 s}, \infty,$	∞ , $L_L s$	$+R_L + \frac{1}{C_L s}$)	 	 	 	143
10.16 ONVALID-ORDER- 160 $Z(s) =$	\			,		 	 	 	143
10.16INVALID-ORDER-161 $Z(s) =$	$\left(\infty, \infty\right)$	$, \frac{1}{C_3 s}, \infty,$	$\infty, \frac{R_L(1)}{L_L s}$	$\frac{L_L s + \frac{1}{C_L s}}{+R_L + \frac{1}{C_L s}}$		 	 	 	143
10.16 2 NVALID-ORDER-162 $Z(s) =$						 	 	 	144
10.16 3 NVALID-ORDER-163 $Z(s) =$	(∞, ∞)	$, \frac{R_3}{C_3R_3s+1},$	∞ , ∞ ,	$\frac{1}{C_L s}$)		 	 	 	144
10.16#NVALID-ORDER-164 $Z(s) =$	$\left(\infty, \infty\right)$	$, \frac{R_3}{C_3R_3s+1}$	∞ , ∞ ,	$\frac{R_L}{C_L R_L s + 1}$		 	 	 	144
10.16 NVALID-ORDER-165 $Z(s) =$	$\left(\infty, \infty\right)$	$, \frac{R_3}{C_3R_3s+1}$	∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$		 	 	 	144
10.16 C NVALID-ORDER-166 $Z(s) =$	$\left(\infty, \infty\right)$	$, \frac{R_3}{C_3 R_3 s + 1},$	∞ , ∞ ,	$L_L s + R_L +$	$-\frac{1}{C_L s}$.	 	 	 	144
10.16 T NVALID-ORDER-167 $Z(s) =$	`				. /	 	 	 	144
10.16 NVALID-ORDER-168 $Z(s) =$	$\left(\infty, \infty\right)$	$\frac{R_3}{C_3R_3s+1}$	$, \infty, \infty,$	$\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{\overline{s}}\right)$	 	 	 	145
10.16 9 NVALID-ORDER-169 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	$\frac{1}{5}$, ∞ , ∞ ,	R_L)		 	 	 	145
10.17 0 NVALID-ORDER-170 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	$\frac{1}{3}$, ∞ , ∞ ,	$\frac{1}{C_L s}$)		 	 	 	145
10.17 I NVALID-ORDER-171 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	$\frac{1}{5}$, ∞ , ∞ ,	$\frac{R_L}{C_L R_L s + 1}$		 	 	 	145
10.17 2 NVALID-ORDER-172 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	$\frac{1}{5}$, ∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$)	 	 	 	145
10.17 3 NVALID-ORDER-173 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	\bar{s} , ∞ , ∞ ,	$L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 	145
10.17#NVALID-ORDER-174 $Z(s) =$	$\left(\infty, \ \infty\right)$	$R_3 + \frac{1}{C_3 s}$	$\frac{1}{5}$, ∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1} -$	$+R_L$) .	 	 	 	146
10.17 Invalid-Order-175 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3}$	$\frac{1}{s}$, ∞ , ∞ ,	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{L}{L}s}{\frac{1}{L}s}\right)$	 	 	 	146
10.176NVALID-ORDER-176 $Z(s) =$	(∞, ∞)	$, L_3s + \frac{1}{C_3}$	$\frac{1}{2s}$, ∞ , ∞	$R_L + \frac{1}{C_L s}$	$)$ \dots	 	 	 	146
10.17 T NVALID-ORDER-177 $Z(s) =$	$\left(\infty, \infty\right)$	$, L_3s + \frac{1}{C_3}$	$\frac{1}{2s}$, ∞ , ∞	$L_L s + \frac{1}{C_L s}$	\bar{s}	 	 	 	146
10.17&NVALID-ORDER-178 $Z(s) =$	$\left(\infty, \infty\right)$	$, L_3s + \frac{1}{C_3}$	$\frac{1}{4s}$, ∞ , ∞	$, \frac{L_L s}{C_L L_L s^2 + 1}$)	 	 	 	146
10.179NVALID-ORDER-179 $Z(s) =$	$\left(\infty, \infty\right)$	$, L_3s + \frac{1}{C_3}$	$\frac{1}{s^s}$, ∞ , ∞	, $L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 	147
10.18 ONVALID-ORDER-180 $Z(s) =$	$\left(\infty, \infty\right)$	$, L_3s + \frac{1}{C_s}$	$\frac{1}{3s}$, ∞ , ∞	$\frac{1}{C_L s + \frac{1}{R_L} + }$	$\left(\frac{1}{L_L s}\right)$.	 	 	 	147

10.18INVALID-ORDER-181 $Z(s) = 0$	$\left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
10.18 2 NVALID-ORDER-182 $Z(s) =$	$\left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, R_L\right)$
10.184NVALID-ORDER-184 $Z(s)=\langle$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.18 SNVALID-ORDER-185 $Z(s) = 0$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.18 GNVALID-ORDER-186 $Z(s) = 0$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.18 T NVALID-ORDER-187 $Z(s) = 0$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.18\PNVALID-ORDER-188 $Z(s) = 0$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.18 9 NVALID-ORDER-189 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ L_Ls+R_L+\frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.19 0 NVALID-ORDER-190 $Z(s) =$	$\left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) $
10.19INVALID-ORDER-191 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.19 2 NVALID-ORDER-192 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{L_{3s}}{C_3L_3s^2+1}, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
10.19 B NVALID-ORDER-193 $Z(s) = 0$	$\left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.194NVALID-ORDER-194 $Z(s)=% {\textstyle\int\limits_{s=0}^{\infty}} \left({{D_{s}}} \right) \left({{D_{s}}} \right)$	$\left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.195NVALID-ORDER-195 $Z(s) = 0$	$\left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.196NVALID-ORDER-196 $Z(s) = 0$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
10.19 T NVALID-ORDER-197 $Z(s) =$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.19&NVALID-ORDER-198 $Z(s) = 1$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.19 9 NVALID-ORDER-199 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.20 0 NVALID-ORDER-200 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$
10.20INVALID-ORDER-201 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $

10.20 2 NVALID-ORDER-202 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}$
10.20 x NVALID-ORDER-203 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}$
10.204NVALID-ORDER-204 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}$
10.20 NVALID-ORDER-205 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.20 6 NVALID-ORDER-206 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L$
10.20 T NVALID-ORDER-207 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $
10.20\%NVALID-ORDER-208 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_{3s}}{C_3L_3s^2+1} + R_3, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}$
10.20 9 NVALID-ORDER-209 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}$
10.21 0 NVALID-ORDER-210 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_{3s}}{C_3L_3s^2+1} + R_3, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}$
10.21 I NVALID-ORDER-211 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R_3$, ∞ , ∞ , $\frac{L_Ls}{C_LL_Ls^2+1} + R_L$
10.212NVALID-ORDER-212 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_{3s}}{C_3L_{3s^2+1}} + R_3, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \ \dots \ $
10.21 B NVALID-ORDER-213 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ \infty, \ R_L$
10.21 INVALID-ORDER-214 $Z(s) = 0$	\	7
10.21 Invalid-order-215 $Z(s) = 0$	\	7
10.21 6 NVALID-ORDER-216 $Z(s) = ($	\	/
10.21 T NVALID-ORDER-217 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	\	9
10.21 NVALID-ORDER-218 $Z(s) = 0$	(/
10.21 9 NVALID-ORDER-219 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right) $

10.22 0 NVALID-ORDER-220 $Z(s) =$	$\left(\infty,\right.$	$, \infty,$	$\frac{R_3\left(L_3s\right)}{L_3s+R_3}$	$8 + \frac{1}{C_3 s}$ $C_3 + \frac{1}{C_3 s}$	$\frac{1}{2}$, ∞	$, \infty,$	$\overline{C_L s}$	$\frac{1}{R_L}$	$+\frac{1}{L_L s}$	-	 	 	 	 	 	 	 	155
10.22INVALID-ORDER-221 $Z(s) =$	$\left(\infty,\right.$	$, \infty,$	$\frac{R_3\left(L_3s\right)}{L_3s+R_3}$	$8 + \frac{1}{C_3 s}$ $2_3 + \frac{1}{C_3 s}$	$\frac{1}{1}$, ∞	$, \infty,$	$\frac{L}{C_L L_L}$	$\frac{Ls}{Ls^2+1}$	$\frac{1}{1} + \frac{1}{2}$	R_L	 	 	 	 	 	 	 	155
10.22 2 NVALID-ORDER-222 $Z(s) =$	$\left(\infty,\right.$	$, \infty,$	$\frac{R_3\Big(L_3s}{L_3s+R_3}$	$s + \frac{1}{C_3 s}$	$\frac{1}{1}$, ∞	$, \infty,$	$\frac{R_L(1)}{L_L s}$	$\frac{L_L s +}{+R_L +}$	$\left(\frac{1}{C_L s}\right)$	$\frac{1}{2}$	 	 	 	 	 	 	 	155
10.22NVALID-ORDER- $223 Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	$, \infty,$	$R_L)$						 	 	 	 	 	 	 	155
10.224NVALID-ORDER-224 $Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	$, \infty,$	$\left(\frac{1}{C_L s}\right)$) .					 	 	 	 	 	 	 	155
10.22INVALID-ORDER- 225 $Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	∞ , ∞ ,	$\frac{R}{C_L R_I}$	$\frac{L}{Ls+1}$) .				 	 	 	 	 	 	 	156
10.22 6 NVALID-ORDER-226 $Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	$, \infty,$	R_L +	$+\frac{1}{C_L s}$	$\left(\cdot \right)$				 	 	 	 	 	 	 	156
10.22TNVALID-ORDER- $227 Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	∞ , ∞ ,	$L_L s$	$+\frac{1}{C_L}$	$\left(\frac{1}{s}\right)$				 	 	 	 	 	 	 	156
10.22NVALID-ORDER- 228 $Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	$, \infty,$	$\frac{L_{I}}{C_{L}L_{I}}$	$\frac{Ls}{Ls^2+1}$) .				 	 	 	 	 	 	 	156
10.229NVALID-ORDER-229 $Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	∞ , ∞ ,	$L_L s$	$+R_L$	$\frac{1}{C_{I}} + \frac{1}{C_{I}}$	$\left(\frac{1}{Ls}\right)$			 	 	 	 	 	 	 	156
10.23 ONVALID-ORDER- $230 Z(s) =$	$(\infty,$	$, \infty,$	∞ , R	$_{1}, \infty,$	$\overline{C_L s}$	$\frac{1}{\frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$. 	 	157
10.23 I NVALID-ORDER-231 $Z(s) =$	$(\infty,$	∞ ,	∞ , R_4	$, \infty,$	$\frac{L_{I}}{C_{L}L_{I}}$	$\frac{L^s}{L^{s^2+1}}$	$+R_{I}$	L) .			 	 	 	 	 	 	 	157
10.23 2 NVALID-ORDER-232 $Z(s) =$	$\left(\infty,\right.$	$, \infty,$	∞ , R	$_{1}, \infty,$	$\frac{R_L(I)}{L_L s}$	$\frac{L_L s + \frac{1}{2}}{+R_L + \frac{1}{2}}$	$\left(\frac{1}{C_L s}\right)$) .			 	 	 	 	 	 	 	157
10.23 NVALID-ORDER-233 $Z(s) =$	$(\infty,$	∞ ,	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, ∞	$, R_L$) .					 	 	 	 	 	 	 	157
10.234NVALID-ORDER-234 $Z(s) =$	$(\infty,$	∞ ,	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, ∞	$L_L s$	$s + \frac{1}{C}$	$\left(\frac{1}{L^s}\right)$				 	 	 	 	 	 	 	157
10.235NVALID-ORDER- 235 $Z(s) =$	$(\infty,$	∞ ,	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, ∞	$, \frac{I}{C_L L}$	$L_L s$ $L_L s^2 + 1$	$\overline{1}$				 	 	 	 	 	 	 	158
10.23 6 NVALID-ORDER-236 $Z(s) =$	$(\infty,$	∞ ,	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, ∞	$L_L s$	s + R	$L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$			 	 	 	 	 	 	 	158
10.23TNVALID-ORDER- 237 $Z(s) =$	$(\infty,$	$, \infty,$	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, ∞	$, \overline{C_L s}$	$\frac{1}{s + \frac{1}{R_L}}$	$+\frac{1}{L_L s}$) .			 	 	 	 	 	 	 	158
10.23\(\text{NVALID-ORDER-238} \(Z(s) = \)	$(\infty,$	∞ ,	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, ∞	$, \frac{I}{C_L L}$	$L_L s$ $L_L s^2 + 1$	$\frac{1}{1} + R$	(z_L)			 	 	 	 	 	 	 	158
10.23 9 NVALID-ORDER-239 $Z(s) =$	$\left(\infty,\right.$	$, \infty,$	∞ , $\frac{1}{C_4}$	$\frac{1}{2s}$, ∞	$, \frac{R_L(n_L)}{L_L s}$	$\frac{\left(L_L s + \frac{L_L s}{s + R_L s}\right)}{s + R_L s}$	$\frac{1\over C_L{}^s} + \frac{1}{C_L{}^s}$) .			 	 	 	 	 	 	 	158
10.24 ONVALID-ORDER-240 $Z(s) =$	$(\infty,$	∞ ,	∞ , $\overline{C_4}$	$\frac{R_4}{R_4s+1}$	$, \infty,$	$\frac{1}{C_L s}$) .				 	 	 	 	 	 	 	159
10.24INVALID-ORDER-241 $Z(s) =$	$(\infty,$	∞ ,	∞ , $\overline{C_4}$	$\frac{R_4}{R_4s+1}$	$, \infty,$	R_L -	$+\frac{1}{C_L s}$	$\left(\frac{1}{3}\right)$.			 	 	 	 	 	 	 	159

10.242NVALID-ORDER-242 $Z(s) = ($	$\left(\infty, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, L_Ls + \frac{1}{C_Ls}\right)$	159
10.24\(\mathbb{B}\) NVALID-ORDER-243 $Z(s) = ($	$\left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	159
10.24\Period NVALID-ORDER-244 $Z(s) = ($	$\left(\infty, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$	159
10.245NVALID-ORDER-245 $Z(s) = 1$	$\left(\infty, \ \infty, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $	159
10.246NVALID-ORDER-246 $Z(s) = ($	$\left(\infty, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	160
10.24 INVALID-ORDER-247 $Z(s) = 0$	$\left(\infty, \ \infty, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots $	160
		160
10.24 9 NVALID-ORDER-249 $Z(s) = ($	$\left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s}\right)$	160
10.25 0 NVALID-ORDER-250 $Z(s) = ($	$\left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	160
10.25INVALID-ORDER-251 $Z(s) = ($	$\left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	161
10.25 2 NVALID-ORDER-252 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	161
10.25\(\mathbb{B}\) NVALID-ORDER-253 $Z(s) = ($	$\left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	161
10.254NVALID-ORDER-254 $Z(s) = 1$	$\left(\infty, \ \infty, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $	161
10.25 Invalid-order-255 $Z(s) = ($		161
10.25 6 NVALID-ORDER-256 $Z(s) = ($	$\left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{R_L}{C_LR_Ls+1}\right)$	162
10.25 T NVALID-ORDER-257 $Z(s) = ($	$\left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, R_L + \frac{1}{C_Ls}\right) \dots \dots$	162
10.25&NVALID-ORDER-258 $Z(s) = ($	$\left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls}\right)$	162
10.25 9 NVALID-ORDER-259 $Z(s) = ($	$\left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$	162
10.26 0 NVALID-ORDER-260 $Z(s) = ($	$\left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$	162
10.26INVALID-ORDER-261 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	162
10.26 2 NVALID-ORDER-262 $Z(s) = ($	$\left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	163
10.26\mathbb{B}\mathbb{N}\mathbb{V}\mathbb{A}\mathbb{L}\mathbb{I}\mathbb{D}\mathbb{C}\mathbb{R}\mathbb{D}\mathbb{E}\mathbb{R}-263 \ Z(s) = \begin{array}{c} \limits \limits \frac{1}{2} \	$\left(\infty, \ \infty, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots $	163

10.264NVALID-ORDER-264 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	R_L)		 	 163
10.265NVALID-ORDER- 265 $Z(s) = ($	$(\infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$\frac{1}{C_L s}$)		 	 163
10.26 6 NVALID-ORDER-266 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$\frac{R_L}{C_L R_L s + 1}$		 	 163
10.26 T NVALID-ORDER- 267 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$R_L + \frac{1}{C_L s}$.		 	 164
10.26\ngraphenology NVALID-ORDER-268 $Z(s) = 1$	$(\infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$L_L s + \frac{1}{C_L s}$.		 	 164
10.26 9 NVALID-ORDER-269 $Z(s) = ($	$(\infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1}$.		 	 164
10.27 0 NVALID-ORDER-270 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$L_L s + R_L + \frac{1}{C_L}$	$\left(\frac{1}{Ls}\right)$	 	 164
10.27INVALID-ORDER-271 $Z(s) = 1$	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$)	 	 164
10.27 2 NVALID-ORDER-272 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_I$	$_{L}\Big)$	 	 165
10.27\(\mathbb{B}\) NVALID-ORDER-273 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{L_4s}{C_4L_4s^2+1}, \ \infty,$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$)	 	 165
10.27 4 NVALID-ORDER-274 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_4s + R_4 + \frac{1}{C_4}$	\bar{s} , ∞ , R_L) .		 	 165
10.27 INVALID-ORDER-275 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{1}{s}$, ∞ , $\frac{1}{C_L s}$).		 	 165
10.276NVALID-ORDER-276 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{1}{s}$, ∞ , $\frac{R_L}{C_L R_L s + 1}$	$_{\overline{1}}\Big)$	 	 165
10.27 T NVALID-ORDER-277 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{1}{s}$, ∞ , $R_L + \frac{1}{C_L}$	$\left(\frac{L}{L^s}\right)$	 	 165
10.27\(\mathbb{E}\)NVALID-ORDER-278 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{1}{s}$, ∞ , $L_L s + \frac{1}{c}$	$\left(\frac{1}{C_L s}\right)$	 	 166
10.27 9 NVALID-ORDER-279 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{L_L s}{c_L L_L s^2 + c_L L$	$\overline{-1}$)	 	 166
10.28 ONVALID-ORDER- $280 Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right)$	$L_4s + R_4 + \frac{1}{C_4}$	\bar{s} , ∞ , $L_L s + R$	$R_L + \frac{1}{C_L s}$.	 	 166
10.28INVALID-ORDER-281 $Z(s) =$	$\left(\infty, \ \infty, \ \infty, \right.$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{1}{C_L s + \frac{1}{R_L}}$	$\left(\frac{1}{1+\frac{1}{L_L s}}\right)$	 	 166
10.28 2 NVALID-ORDER-282 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{L_L s}{c_L L_L s^2 + c_L L$	$_{\overline{-1}}+R_L\Big)$.	 	 166
10.28\textbf{E}\text{NVALID-ORDER-283} $Z(s) = 1$	$\left(\infty, \ \infty, \ \infty, \right.$	$L_4s + R_4 + \frac{1}{C_4}$	$\frac{1}{4s}$, ∞ , $\frac{R_L(L_L s - L_L s + R_L)}{L_L s + R_L}$	$\left(\frac{+\frac{1}{C_L s}}{L+\frac{1}{C_L s}}\right)$	 	 167
10.284NVALID-ORDER-284 $Z(s) = 1$	/		\		 	 167
10.28 Invalid-order-285 $Z(s) = 1$	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_A s}}$	$\infty, \frac{1}{C_L s}$		 	 167

10.28 GNVALID-ORDER-286 $Z(s) = \left(\frac{1}{2}\right)^{n}$	$(\infty, \infty, \infty, \infty,$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$\frac{R_L}{C_L R_L s + 1}$		 	 	167
10.28 T NVALID-ORDER-287 $Z(s) = \left(\frac{1}{2}\right)^{-1}$	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$R_L + \frac{1}{C_L s}$		 	 	167
10.28\NVALID-ORDER-288 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$L_L s + \frac{1}{C_L s}$		 	 	168
10.28 9 NVALID-ORDER-289 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	168
10.29 0 NVALID-ORDER-290 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$L_L s + R_L +$	$\frac{1}{C_L s}$	 	 	168
10.29INVALID-ORDER-291 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	$\left(\frac{1}{s}\right)$	 	 	168
10.292NVALID-ORDER-292 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$\tfrac{L_L s}{C_L L_L s^2 + 1} +$	R_L)	 	 	168
10.29\$NVALID-ORDER-293 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \ \infty,$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\frac{)}{\bar{s}}$ \cdots	 	 	169
10.294NVALID-ORDER-294 $Z(s) = ($				·	 	 	169
10.29 INVALID-ORDER-295 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	$\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1} + R_4$, or	$\circ, \frac{1}{C_L s}$		 	 	169
10.296NVALID-ORDER-296 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	>		/		 	 	169
10.29 T NVALID-ORDER-297 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1} + R_4$, or	o, $R_L + \frac{1}{C_L s}$)	 	 	169
10.29\text{NVALID-ORDER-298} $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array} \right)$	$\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1} + R_4$, or	\circ , $L_L s + \frac{1}{C_L s}$	(169
10.29 9 NVALID-ORDER-299 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1} + R_4$, or	$C, \frac{L_L s}{C_L L_L s^2 + 1}$		 	 	170
10.30 0 NVALID-ORDER-300 $Z(s) = ($	`		,		 	 	170
10.30INVALID-ORDER-301 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	7			\ '	 	 	170
10.30 2 NVALID-ORDER-302 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1} + R_4$, or	o, $\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$)	 	 	170
10.30\$NVALID-ORDER-303 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1} + R_4$, or	$\infty, \frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{1}{L^s}\right)$ $\left(\frac{1}{C_L^s}\right)$	 	 	170
10.30#NVALID-ORDER-304 $Z(s) = ($					 	 	171
10.305NVALID-ORDER-305 $Z(s) = ($	$(\infty, \infty, \infty, \infty,$	$\frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \ \infty$	$, \frac{1}{C_L s} $ $\cdot \cdot \cdot$		 	 	171

10.30 GNVALID-ORDER-306 $Z(s) =$	\		4	,		 	 	 171
10.30 TNVALID-ORDER-307 $Z(s) =$	(-4-		/	 	 	 171
10.30 NVALID-ORDER-308 $Z(s) =$			043			 	 	 171
10.30 9 NVALID-ORDER-309 $Z(s) =$			043		/			
10.31 0 NVALID-ORDER-310 $Z(s) =$						 	 	 172
10.31INVALID-ORDER-311 $Z(s) =$	$\left(\infty, \infty, \infty\right)$	$\infty, \frac{R_4 \left(L_4 s + L_4 s + R_4 \right)}{L_4 s + R_4}$	$\frac{+\frac{1}{C_4s}}{1+\frac{1}{C_4s}}, \ \infty,$	$\frac{1}{C_L s + \frac{1}{R_L} + \cdots}$	$\frac{1}{L_L s}$.	 	 	 172
10.31 2 NVALID-ORDER-312 $Z(s) =$	$\left(\infty, \infty, \infty\right)$	$\infty, \ \frac{R_4 \left(L_4 s + L_4 s + R_4 \right)}{L_4 s + R_4}$	$\frac{+\frac{1}{C_4s}}{1+\frac{1}{C_4s}}, \ \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$	 	 	 172
10.31 3 NVALID-ORDER-313 $Z(s) =$	\		043					
10.314NVALID-ORDER- 314 $Z(s) =$	$(\stackrel{`}{\infty}, \infty, \infty)$	∞ , ∞ , R_4 ,	R_L)			 	 	 173
10.31 INVALID-ORDER-315 $Z(s) =$	(∞, ∞, ∞)	∞ , ∞ , R_4 ,	$\left(\frac{1}{C_{LS}}\right)$.			 	 	 173
10.316NVALID-ORDER-316 $Z(s) =$	>		· · · · · ·	\				
10.31 T NVALID-ORDER-317 $Z(s) =$	(∞, ∞, ∞)	∞, ∞, R_4	$R_L + \frac{1}{C_1}$	$\left(\frac{1}{2}\right)$		 	 	 173
10.31&NVALID-ORDER-318 $Z(s) =$	>			- /				
10.31 9 NVALID-ORDER-319 $Z(s) =$	(∞, ∞, ∞)	∞ , ∞ , R_4 ,	$\frac{L_L s}{C_L L_L s^2 + 1}$	$_{\overline{1}})^{'}$		 	 	 173
10.32 0 NVALID-ORDER-320 $Z(s) =$	(∞, ∞, ∞)	∞ , ∞ , R_4	$L_L s + R_L$	$L + \frac{1}{C_L s}$		 	 	 174
10.32INVALID-ORDER-321 $Z(s) =$	(∞, ∞, ∞)	∞ , ∞ , R_4	$, \frac{1}{C_L s + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$.		 	 	 174
10.32 2 NVALID-ORDER-322 $Z(s) =$	(∞, ∞, ∞)	∞ , ∞ , R_4	$\frac{L_L s}{C_L L_L s^2 + 1}$	$\left(1 + R_L\right)$.		 	 	 174
10.32 3 NVALID-ORDER-323 $Z(s) =$	(∞, ∞, ∞)	∞ , ∞ , R_4	$, R_L \left(L_L s + \frac{L_L s + R_L + L_L s + R_L $	$\left(\frac{1}{C_L s}\right)$ $\left(\frac{1}{C_L s}\right)$		 	 	 174
10.32 4 NVALID-ORDER-324 $Z(s) =$	(∞, ∞, ∞)	$0, \infty, \frac{1}{C_4 s}$	$\left(\frac{1}{C_L s} \right)$.			 	 	 174
10.32 INVALID-ORDER-325 $Z(s) =$	(∞, ∞, ∞)	$\circ, \ \infty, \ \frac{1}{C_4 s}$	$, \frac{\overset{'}{R_L}}{C_L R_L s + 1}$	$\bar{1}$)		 	 	 175

10.326NVALID-ORDER- 326 $Z(s) =$	$\left(\infty, \circ\right)$	∞ , ∞ ,	$\infty, \frac{1}{C_4}$	\overline{s} , R_L -	$+\frac{1}{C_L s}$			 	 	 	 	 	175
10.32TNVALID-ORDER- 327 $Z(s) =$	(∞, \circ)	∞, ∞, ∞	$\infty, \frac{1}{C_4}$	$\frac{1}{\sqrt{s}}$, $L_L s$	$+\frac{1}{C_L s}$			 	 	 	 	 	175
10.32\nstantantantantantantantantantantantantant	(∞, \circ)	∞ , ∞ ,	$\infty, \frac{1}{C_4}$	$\frac{L}{C_L L}$	$\left(\frac{Ls}{Ls^2+1}\right)$			 	 	 	 	 	175
10.32 9 NVALID-ORDER-329 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	$\infty, \frac{1}{C_4}$	$\frac{1}{s}$, $L_L s$	$+R_{L}+$	$\left(\frac{1}{C_L s}\right)$		 	 	 	 	 	175
10.33©NVALID-ORDER-330 $Z(s) =$	$\left(\infty,\right)$	$\infty, \infty,$	∞ , $\frac{1}{C}$	$\frac{1}{1s}$, $\overline{C_L s}$	$\frac{1}{+\frac{1}{R_L}+\frac{1}{L_L}}$	$\left(\frac{1}{s}\right)$.		 	 	 	 	 	176
10.33INVALID-ORDER-331 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	$\infty, \frac{1}{C_4}$	$\frac{L}{cs}$, $\frac{L}{C_L L}$	$\frac{c_L s}{L s^2 + 1} +$	R_L		 	 	 	 	 	176
10.332NVALID-ORDER-332 $Z(s) =$	$\left(\infty,\right)$	$\infty, \infty,$	∞ , $\frac{1}{C_2}$	$\frac{1}{4s}$, $\frac{R_L(}{L_L s}$	$\frac{L_L s + \frac{1}{C_L}s}{+R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{s}\right)$.		 	 	 	 	 	176
10.33\(\textbf{N}\) VALID-ORDER-333 $Z(s) =$	(∞, \circ)	∞, ∞, ∞	$\infty, \ \overline{C_4}$	$\frac{R_4}{R_4s+1}$,	R_L			 	 	 	 	 	176
10.334NVALID-ORDER-334 $Z(s) =$	(∞, \circ)	∞, ∞, ∞	$\infty, \ \overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$\frac{1}{C_L s}$			 	 	 	 	 	176
10.33 5 NVALID-ORDER-335 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , $\overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$\frac{R_L}{C_L R_L s +}$	$\overline{-1}$) .		 	 	 	 	 	177
10.336NVALID-ORDER-336 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	$\infty, \ \overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$R_L + \overline{C}$	$\left(\frac{1}{r_L s}\right)$.		 	 	 	 	 	177
10.33 T NVALID-ORDER-337 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , $\overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$L_L s + \frac{1}{6}$	$\frac{1}{C_L s}$		 	 	 	 	 	177
10.33\NVALID-ORDER-338 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	$\infty, \ \overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{+1}$.		 	 	 	 	 	177
10.33 9 NVALID-ORDER-339 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , $\overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$L_L s + L_L s$	$R_L + \overline{\epsilon}$	$\left(\frac{1}{C_L s}\right)$	 	 	 	 	 	177
10.340NVALID-ORDER-340 $Z(s) =$	$\left(\infty,\right)$	$\infty, \infty,$	∞ , \overline{C}	$\frac{R_4}{{}_4R_4s+1},$	$\frac{1}{C_L s + \frac{1}{R_I}}$	$\frac{1}{L+\frac{1}{L_L s}}$) .	 	 	 	 	 	178
10.34INVALID-ORDER-341 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	$\infty, \ \overline{C_4}$	$\frac{R_4}{R_4s+1}$,	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{1} + R$	R_L	 	 	 	 	 	178
10.34 2 NVALID-ORDER- 342 $Z(s) =$	$\left(\infty,\right)$	∞ , ∞ ,	∞ , \overline{C}	$\frac{R_4}{{}_1R_4s+1},$	$\frac{R_L \left(L_L s}{L_L s + R}\right)$	$\frac{s + \frac{1}{C_L s}}{L + \frac{1}{C_L s}}$		 	 	 	 	 	178
10.34 NVALID-ORDER-343 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , R_{4}	$\frac{1}{C_4s}$	R_L			 	 	 	 	 	178
10.34INVALID-ORDER-344 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , R_{4}	$\frac{1}{C_4s}$	$\frac{1}{C_L s}$			 	 	 	 	 	178
10.345NVALID-ORDER- 345 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , R_{4}	$\frac{1}{C_4s}$	$\frac{\overset{'}{R_L}}{C_L R_L s}$	$\frac{1}{+1}$).		 	 	 	 	 	179
10.346NVALID-ORDER-346 $Z(s) =$	(∞, \circ)	∞ , ∞ ,	∞ , R_{4}	$\frac{1}{C_4s}$	$R_L + \epsilon$	$\frac{1}{C_L s}$		 	 	 	 	 	179
10.34 TNVALID-ORDER- 347 $Z(s) =$	(∞, \circ)	∞, ∞, ∞	∞ , R_{4}	$\frac{1}{C_4 s}$	$L_L s +$	$\frac{1}{C_L s}$		 	 	 	 	 	179

10.348NVALID-ORDER-348 $Z(s) =$	$\left(\infty, \infty\right)$	∞ , ∞ , ∞	$R_4 + \frac{1}{C_4 s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$)	 	 	 	 179
10.34 9 NVALID-ORDER-349 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$R_4 + \frac{1}{C_4 s}$	$L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 	 179
10.35 ONVALID-ORDER- $350 Z(s) =$	$\left(\infty, \infty\right)$	∞ , ∞ , ∞	$R_4 + \frac{1}{C_4 s}$	$, \frac{1}{C_L s + \frac{1}{R_L} +}$	$\frac{1}{L_L s}$.	 	 	 	 180
10.35INVALID-ORDER- 351 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$R_4 + \frac{1}{C_4 s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+ \stackrel{\frown}{R_L}$	 	 	 	 180
10.35 2 NVALID-ORDER-352 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$R_4 + \frac{1}{C_4 s}$	$, \frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{1}{C_L s}\right)$ $\left(\frac{1}{C_L s}\right)$.	 	 	 	 180
10.358NVALID-ORDER- 353 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	(R_L) .		 	 	 	 180
10.35 INVALID-ORDER- 354 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$\left(\frac{1}{C_L s}\right)$.		 	 	 	 180
10.355NVALID-ORDER- $355 Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$\frac{R_L}{C_L R_L s + 1}$)	 	 	 	 181
10.356NVALID-ORDER- 356 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$R_L + \frac{1}{C_L s}$	$\left(\frac{1}{8}\right)$	 	 	 	 181
10.35 T NVALID-ORDER- 357 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$\frac{1}{C_L}$, $L_L s + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$	 	 	 	 181
10.358NVALID-ORDER- 358 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$\left[\right]$	 	 	 	 181
10.359NVALID-ORDER- 359 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$L_L s + R_L$	$L + \frac{1}{C_L s}$	 	 	 	 181
10.36 ONVALID-ORDER- $360 Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$\frac{1}{C_L s + \frac{1}{R_L}}$	$+\frac{1}{L_L s}$	 	 	 	 182
10.36INVALID-ORDER- 361 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$L_4s + \frac{1}{C_4s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$\left(1 + R_L\right)$	 	 	 	 182
10.362NVALID-ORDER-362 $Z(s) =$	(∞, ∞)	∞, ∞, ∞	$L_4s + \frac{1}{C_4}$	$R_L(L_L s + L_L s + R_L $	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 	 	 182
10.36 Invalid-order-363 $Z(s) =$						 	 	 	 182
10.364NVALID-ORDER- $364 Z(s) =$	$\left(\infty, \infty\right)$	∞ , ∞ , ∞	$\frac{L_4s}{C_4L_4s^2+1}$,	$\frac{1}{C_L s}$)		 	 	 	 182
10.365NVALID-ORDER- $365 Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$\frac{L_4s}{C_4L_4s^2+1}$,	$\frac{R_L}{C_L R_L s + 1}$		 	 	 	 183
10.36 6 NVALID-ORDER-366 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$\frac{L_4s}{C_4L_4s^2+1}$,	$R_L + \frac{1}{C_L s}$)	 	 	 	 183
10.36 T NVALID-ORDER- 367 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$\frac{L_4s}{C_4L_4s^2+1},$	$L_L s + \frac{1}{C_L s}$	$\left(\frac{1}{5}\right)$	 	 	 	 183
10.368NVALID-ORDER- 368 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$\frac{L_4s}{C_4L_4s^2+1}$,	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	 183
10.36 9 NVALID-ORDER- 369 $Z(s) =$	(∞, ∞)	∞ , ∞ , ∞	$\frac{L_4s}{C_4L_4s^2+1}$,	$L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 	 183

10.370NVALID-ORDER-370 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \ \infty, \ \infty, \right.$	$\frac{L_4s}{C_4L_4s^2+1},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$		 	 	184
10.37INVALID-ORDER-371 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$\frac{L_4s}{C_4L_4s^2+1}, \overline{}$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_L$	<i>a</i>)	 	 	184
10.372NVALID-ORDER-372 $Z(s) = 1$	$\left(\infty, \ \infty, \ \infty, \ \infty, \ \infty, \right.$	$\tfrac{L_4s}{C_4L_4s^2+1},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 	184
10.37 3 NVALID-ORDER-373 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$-\frac{1}{C_4s}, R_L$).		 	 	184
10.37 4 NVALID-ORDER-374 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$-\frac{1}{C_4s}, \frac{1}{C_Ls}$		 	 	184
10.37 5 NVALID-ORDER-375 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$-\frac{1}{C_4s}$, $\frac{R_L}{C_LR_Ls+1}$	<u>,</u>)	 	 	185
10.376NVALID-ORDER-376 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$\frac{1}{C_4 s}, \ R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$	 	 	185
10.37 NVALID-ORDER-377 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$\frac{1}{C_4 s}$, $L_L s + \frac{1}{C}$	$\left(\frac{1}{L^s}\right)$	 	 	185
10.37\nablaNVALID-ORDER-378 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$-\frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+}$	$_{\overline{1}})^{'}$	 	 	185
10.37 9 NVALID-ORDER-379 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$\frac{1}{C_4 s}$, $L_L s + R$	$C_L + \frac{1}{C_L s}$	 	 	185
10.38©NVALID-ORDER-380 $Z(s) = \langle$	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$-\frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L}}$	$\frac{1}{+\frac{1}{L_L s}}$	 	 	186
10.38 I NVALID-ORDER-381 $Z(s) = ($	$(\infty, \infty, \infty, \infty, \infty,$	$L_4s + R_4 +$	$-\frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+}$	$_{\overline{1}}+R_{L}\Big)$	 	 	186
10.382NVALID-ORDER-382 $Z(s) = 0$	$(\infty, \infty, \infty$	$L_4s + R_4 +$	$-\frac{1}{C_4 s}, \frac{R_L \left(L_L s + \frac{1}{L_L s + R_L}\right)}{L_L s + R_L}$	$\left(+ \frac{1}{C_L s} \right) + \frac{1}{C_L s} $	 	 	186
10.38 E NVALID-ORDER-383 $Z(s) = ($	$\bigg(\infty,\ \infty,\ \infty,\ \infty,$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4}}$	$\overline{\overline{s}}, R_L$)		 	 	186
10.384NVALID-ORDER-384 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4}}$	$\frac{1}{\overline{s}}, \frac{1}{C_L s}$		 	 	186
10.38 NVALID-ORDER-385 $Z(s) = 0$	$\left(\infty, \ \infty, \ \infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4}}$	$\frac{R_L}{C_L R_L s + 1}$		 	 	187
10.38 NVALID-ORDER-386 $Z(s) = 0$	\		,		 	 	187
10.38 T NVALID-ORDER-387 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \ \infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4}}$	$\frac{1}{\overline{s}}, L_L s + \frac{1}{C_L s}$)	 	 	187
10.38\PNVALID-ORDER-388 $Z(s) = \left(\frac{1}{2} \right)$	>		,		 	 	187
10.38¶NVALID-ORDER-389 $Z(s) = ($	$\left(\infty, \ \infty, \ \infty, \ \infty, \ \infty, \right.$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4}}$	$\frac{1}{s}$, $L_L s + R_L +$	$+\frac{1}{C_L s}$.	 	 	187

10.39 ONVALID-ORDER- $390 Z(s) =$	$\left(\infty, \infty, \right.$	∞ , ∞ ,	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	$\Big)$	 	 	 188
10.39INVALID-ORDER-391 $Z(s) =$	\		7 7		/		 	 188
10.392NVALID-ORDER-392 $Z(s) =$	$\left(\infty, \infty, \right.$	$\infty, \ \infty,$	$\frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 	 188
10.39 B NVALID-ORDER-393 $Z(s) =$							 	 188
10.394NVALID-ORDER-394 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$\left(4, \frac{1}{C_L s}\right)$		 	 	 188
10.39 NVALID-ORDER-395 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$\left(4, \frac{R_L}{C_L R_L s + 1}\right)$		 	 	 189
10.39 GNVALID-ORDER-396 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$R_4, R_L + \frac{1}{C_L s}$		 	 	 189
10.39 T NVALID-ORDER-397 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$L_4, L_L s + \frac{1}{C_L s}$)	 	 	 189
10.39&NVALID-ORDER-398 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$\left(4, \frac{L_L s}{C_L L_L s^2 + 1}\right)$		 	 	 189
10.39 9 NVALID-ORDER-399 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$L_4, L_L s + R_L +$	$-\frac{1}{C_L s}$	 	 	 189
10.40 0 NVALID-ORDER- 400 $Z(s) =$	$\left(\infty, \infty, \right.$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$C_{L_{s}}, \frac{1}{C_{L_{s}} + \frac{1}{R_{L_{s}}} + \frac{1}{L_{L_{s}}}}$	$_{\overline{\underline{L}^s}}$)	 	 	 190
10.40INVALID-ORDER-401 $Z(s) =$	$(\infty, \infty,$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$\frac{L_L s}{C_L L_L s^2 + 1} +$	$-R_L$) .	 	 	 190
10.40 2 NVALID-ORDER- 402 $Z(s) =$	$\left(\infty, \ \infty, \right.$	∞ , ∞ ,	$\frac{L_4s}{C_4L_4s^2+1} + R$	$\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{L}\right)$	 	 	 190
10.408NVALID-ORDER- 403 $Z(s) =$	\		- C4s	/		 	 	 190
10.404NVALID-ORDER-404 $Z(s) =$						 	 	 190
10.405NVALID-ORDER-405 $Z(s) =$						 	 	 191
10.406NVALID-ORDER- 406 $Z(s) =$						 	 	 191
10.40TNVALID-ORDER- 407 $Z(s) =$	\			/		 	 	 191
10.40\%NVALID-ORDER-408 $Z(s) =$	$\left(\infty, \ \infty, \right.$	∞ , ∞ ,	$\frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}},$	$\left(\frac{L_L s}{C_L L_L s^2 + 1}\right)$		 	 	 191

10.40 9 NVALID-ORDER-409 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	91
10.41 0 NVALID-ORDER-410 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$	92
10.41INVALID-ORDER-411 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	92
10.412NVALID-ORDER-412 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$	92
10.41\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
10.41 INVALID-ORDER-415 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	
10.416NVALID-ORDER-416 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	93
$10.41 \text{ TNVALID-ORDER-} 417 \ Z(s) = \left(R_1, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	93
10.41 NVALID-ORDER-418 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	93
10.41 NVALID-ORDER-419 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	93
10.42 0 NVALID-ORDER-420 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	94
$10.42 \text{INVALID-ORDER-} 421 \ Z(s) = \left(R_1, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	94
10.422NVALID-ORDER-422 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	94
$10.42 \text{ NVALID-ORDER-} 423 \ Z(s) = \left(R_1, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	94
10.424NVALID-ORDER-424 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$	94
10.42 INVALID-ORDER-425 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	95
10.426NVALID-ORDER-426 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	95
10.42TNVALID-ORDER-427 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)^{-1}$	95
10.42 NVALID-ORDER-428 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	95
10.42 9 NVALID-ORDER-429 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	95

10.43 0 NVALID-ORDER-430 $Z(s)=0$	$\left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.43 INVALID-ORDER-431 $\boldsymbol{Z}(s) = ($	$\left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.43 2 NVALID-ORDER-432 $Z(s) = 0$	$\left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
	$\left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.434NVALID-ORDER-434 $Z(s) = 1$	$\left(R_{1}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right) \dots \dots$
10.43 NVALID-ORDER-435 $Z(s) = 0$	$\left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.43 6 NVALID-ORDER-436 $Z(s) = 0$	$\left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.43 T NVALID-ORDER-437 $Z(s) = 0$	$\left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
	$\left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.43 9 NVALID-ORDER-439 $Z(s) = 1$	$\left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
	$(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L)$
10.44INVALID-ORDER-441 $Z(s) = 0$	$(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls})$
10.442NVALID-ORDER-442 $Z(s) = 0$	$\left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)$
10.44 B NVALID-ORDER-443 $Z(s) = 0$	$\left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.44\PVALID-ORDER-444 $Z(s) = 0$	$\left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.44 5 NVALID-ORDER-445 $Z(s) = 0$	$\left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
10.44 6 NVALID-ORDER-446 $Z(s) = 0$	$\left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.44 T NVALID-ORDER-447 $Z(s) = 1$	$\left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
10.44&NVALID-ORDER-448 $Z(s) = 0$	$(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$
10.44 9 NVALID-ORDER-449 $Z(s) = 1$	$\left(R_{1}, L_{2}s + \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots$
10.45 0 NVALID-ORDER-450 $Z(s) = 0$	$(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L)$
10.45INVALID-ORDER-451 $Z(s) = 0$	$(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls})$

10.45 2 NVALID-ORDER-452 $Z(s)=$	$\left(R_{1}, L_{2}s + R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{R_{L}}{C_{L}R_{L}s + 1}\right)$
10.45 B NVALID-ORDER-453 $Z(s)=\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.454NVALID-ORDER-454 $Z(s) = ($	$(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls})$
10.45 Invalid-order-455 $Z(s) = 0$	$(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1})$
10.45 6 NVALID-ORDER-456 $Z(s) = ($	$(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls})$
10.45 T NVALID-ORDER-457 $Z(s) = 1$	$\binom{R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}$
	$(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$
10.45 9 NVALID-ORDER-459 $Z(s) = 1$	$\left(R_{1}, L_{2}s + R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}} \right) \dots $
10.46 0 NVALID-ORDER-460 $Z(s) = 0$	$(R_1, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls})$
10.46INVALID-ORDER-461 $Z(s) = \langle$	$R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}$
10.46 2 NVALID-ORDER-462 $Z(s) = ($	$\left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.46 B NVALID-ORDER-463 $Z(s) = ($	$\left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.464NVALID-ORDER-464 $Z(s)=\langle$	$\left(R_{1}, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \infty, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$
10.46 5 NVALID-ORDER-465 $Z(s)=($	$\left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots$
10.466NVALID-ORDER-466 $Z(s) = 1$	$\left(R_1, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
10.46 T NVALID-ORDER-467 $Z(s) = 1$	
10.46\&NVALID-ORDER-468 $Z(s) = 1$	$\left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.46 9 NVALID-ORDER-469 $Z(s) = 1$	$\left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$
10.470NVALID-ORDER-470 $Z(s) = 1$	$\left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.47INVALID-ORDER-471 $Z(s) = 1$	$\binom{R_1}{R_1}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}$

10.472NVALID-ORDER-472 $Z(s) = 1$						 	 	 	204
10.47 8 NVALID-ORDER-473 $Z(s) = 1$						 	 	 	204
10.47 INVALID-ORDER-474 $Z(s) = 1$	\	_			- /	 	 	 	204
10.47 NVALID-ORDER-475 $Z(s) = 1$	\	- 4			/	 	 	 	204
10.476NVALID-ORDER-476 $Z(s) = 1$	$\left(R_1,\right.$	$\frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty,$	$\infty, \infty, \frac{I}{I}$	$\frac{R_L \left(L_L s + \frac{1}{C} \right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{1}{L^s}\right) \over T_{L^s}$	 	 	 	204
10.47 T NVALID-ORDER-477 $Z(s) = 0$	$(L_1s,$	$R_2, \infty, \infty, \infty, R$	$R_L + \frac{1}{C_L s}$)		 	 	 	205
10.47\$NVALID-ORDER-478 $Z(s) = ($	$(L_1s,$	$R_2, \infty, \infty, \infty, I$	$c_L s + \frac{1}{C_L s}$			 	 	 	205
10.47 9 NVALID-ORDER-479 $Z(s) = 0$	L_1s	$R_2, \infty, \infty, \infty, I$	$c_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	205
10.48 0 NVALID-ORDER-480 $Z(s) = ($	>		-	\'		 	 	 	205
10.48INVALID-ORDER-481 $Z(s) = 1$	`.		,	· · · /		 	 	 	205
10.48 2 NVALID-ORDER-482 $Z(s) = ($	$(L_1s,$	$\frac{1}{C_2s}$, ∞ , ∞ , ∞ ,	R_L)			 	 	 	206
10.48 3 NVALID-ORDER-483 $Z(s) = ($	L_1s	$\frac{1}{C_2s}$, ∞ , ∞ , ∞ ,	$\frac{1}{C_L s}$)			 	 	 	206
10.484NVALID-ORDER-484 $Z(s) = ($	L_1s	$\frac{1}{C_2s}$, ∞ , ∞ , ∞ ,	$\frac{R_L}{C_L R_L s+1}$)		 	 	 	206
10.48 INVALID-ORDER-485 $Z(s) = 0$	>	-	,	\		 	 	 	206
10.486NVALID-ORDER-486 $Z(s) = 1$	>	-		′\		 	 	 	206
10.48 T NVALID-ORDER-487 $Z(s) = ($	>	-	_	\'		 	 	 	206
10.48\(\text{NVALID-ORDER-488} \(Z(s) = (>	-		/		 	 	 	207
10.48 9 NVALID-ORDER-489 $Z(s) = 1$	>			\ ′		 	 	 	207
10.49 0 NVALID-ORDER-490 $Z(s) = 0$	$(L_1s,$	$\frac{1}{C_2s}$, ∞ , ∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$		 	 	 	207
10.49INVALID-ORDER-491 $Z(s) = 1$	`	-		\ , '		 	 	 	207
10.49 2 NVALID-ORDER-492 $Z(s) = 0$	$(L_1s,$	$\frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty,$	∞ , R_L			 	 	 	207

10.49 \$ NVALID-ORDER-49	3 Z(s) = (I	L_1s , \overline{C}	$\frac{R_2}{{}^{\prime}_2R_2s+1},$	∞ , c	∞ , ∞ ,	$\frac{1}{C_L s}$. 208
10.49 4 NVALID-ORDER-49	4 Z(s) = (I	$L_1s, \ \overline{C}$	$\frac{R_2}{r_2R_2s+1}$,	∞ , c	$\infty, \infty,$	$\frac{R_L}{C_L R_L s +}$	$\overline{+1}$. 208
10.495NVALID-ORDER-49	5 Z(s) = (I	$L_1s, \ \overline{C}$	$\frac{R_2}{{}^{\prime}_2R_2s+1},$	∞ , c	$\infty, \infty,$	$R_L + \overline{\epsilon}$	$\left(\frac{1}{C_L s}\right)$. 208
10.49 6 NVALID-ORDER-49	6 Z(s) = (I	L_1s , \overline{C}	$\frac{R_2}{{}'_2R_2s+1},$	∞ , c	$\infty, \infty,$	$L_L s +$	$\frac{1}{C_L s}$. 208
10.49 T NVALID-ORDER-49	$7 Z(s) = \left(I\right)$	L_1s , \overline{C}	$\frac{R_2}{{}'_2R_2s+1},$	∞ , c	$\infty, \ \infty,$	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{+1}$. 208
10.498NVALID-ORDER-49	$8 Z(s) = \left(I\right)$	$L_1s, \ \overline{C}$	$\frac{R_2}{{}'_2R_2s+1},$	∞ , c	∞ , ∞ ,	$L_L s + 1$	$R_L + \frac{1}{6}$	$\frac{1}{C_L s}$. 208
10.49 9 NVALID-ORDER-49	$9 Z(s) = \left(1\right)$	L_1s , \overline{C}	$\frac{R_2}{C_2R_2s+1},$	∞ ,	$\infty, \ \infty,$	$\frac{1}{C_L s + \frac{1}{R}}$	$\frac{1}{L} + \frac{1}{L_L s}$	\cdot)	 	 	 	 	 	 . 209
10.50 0 NVALID-ORDER-50	0 Z(s) = (I	L_1s , \overline{C}	$\frac{R_2}{{}'_2R_2s+1},$	∞ , c	$\infty, \ \infty,$	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{1} + I$	R_L .	 	 	 	 	 	 . 209
10.50 I NVALID-ORDER-50	$1 Z(s) = \left(I \right)$	$L_1s, \ \overline{C}$	$\frac{R_2}{C_2R_2s+1},$	∞ ,	∞ , ∞ ,	$\frac{R_L \left(L_L s}{L_L s + R}\right)$	$\frac{s + \frac{1}{C_L s}}{C_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)$.	 	 	 	 	 	 . 209
10.502NVALID-ORDER-50	2 Z(s) = (I	L_1s, R	$C_2 + \frac{1}{C_2 s}$	∞ ,	∞ , ∞ ,	$\frac{1}{C_L s}$. 209
10.50 k NVALID-ORDER-50	3 Z(s) = (I	L_1s, R	$C_2 + \frac{1}{C_2 s}$	∞ ,	∞ , ∞ ,	$\frac{R_L}{C_L R_L s}$	$\overline{s+1}$. 209
10.504NVALID-ORDER-50	4 Z(s) = (I	L_1s, R	$C_2 + \frac{1}{C_2 s}$	∞ ,	∞ , ∞ ,	$R_L +$	$\frac{1}{C_L s}$. 210
10.50 5 NVALID-ORDER-50	$5 Z(s) = \Big(I$	L_1s, R	$C_2 + \frac{1}{C_2 s}$	∞ ,	∞ , ∞ ,	$L_L s +$	$-\frac{1}{C_L s}$. 210
10.50 6 NVALID-ORDER-50	$6 Z(s) = \left(I \right)$	L_1s, R	$C_2 + \frac{1}{C_2 s}$	∞ ,	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s}$	$\left(\frac{s}{s^2+1}\right)$. 210
10.50 T NVALID-ORDER-50	7 Z(s) = (I	L_1s, R	$C_2 + \frac{1}{C_2 s}$	∞ ,	∞ , ∞ ,	$L_L s +$	$R_L +$	$\frac{1}{C_L s}$. 210
10.50 & NVALID-ORDER-50	$8 Z(s) = \left(1\right)$	L_1s , R	$R_2 + \frac{1}{C_2 s},$	∞ ,	∞ , ∞	$, \overline{C_L s + \frac{1}{2}}$	$\frac{1}{\frac{1}{R_L} + \frac{1}{L_L}}$	$\frac{1}{s}$.	 	 	 	 	 	 . 210
10.509NVALID-ORDER-50									 	 	 	 	 	 . 211
10.51 0 NVALID-ORDER-51	$0 \ Z(s) = \left(I \right)$	L_1s, R	$R_2 + \frac{1}{C_2 s},$	∞ ,	∞ , ∞	$, \frac{R_L \left(L_L + \frac{1}{L_L s + \frac{1}{L_L s}}\right)}{L_L s + \frac{1}{L_L s + \frac{1}{L_L s}}}$	$\frac{Ls + \frac{1}{C_Ls}}{R_L + \frac{1}{C_L}}$	$\left(\frac{1}{s}\right)$.	 	 	 	 	 	 . 211
10.51INVALID-ORDER-51	$1 \ Z(s) = (I$	L_1s, L_1	$_2s + \frac{1}{C_2s}$	$, \infty,$	∞ , ∞	(R_L)			 	 	 	 	 	 . 211
10.51 2 NVALID-ORDER-51	2 Z(s) = (I	L_1s, L_1	$2s + \frac{1}{C_2 s}$	$, \infty,$	∞ , ∞	$\left(\frac{1}{C_L s}\right)$. 211
10.51 B NVALID-ORDER-51	$3 Z(s) = \Big(I$	L_1s, L_1	$_2s + \frac{1}{C_2s}$	$, \infty,$	∞ , ∞	$, \frac{R_L}{C_L R_L}$	$\left(\frac{s}{s+1}\right)$. 211
10.51 4 NVALID-ORDER-51	4 Z(s) = (I	L_1s, L_1	$2s + \frac{1}{C_2s}$	$, \infty,$	∞ , \propto	$R_L +$	$-\frac{1}{C_L s}$. 212

10.51 NVALID-ORDER-515 $Z(s) =$	$\left(L_1s, \ L_2s + \frac{1}{C_2s},\right.$	∞ , ∞ , ∞ , L	$Ls + \frac{1}{C_L s}$.		 	212
10.516NVALID-ORDER- 516 $Z(s) =$	$(L_1s, L_2s + \frac{1}{C_2s},$	∞ , ∞ , ∞ , \overline{C}	$\frac{L_L s}{L_L L_L s^2 + 1}$		 	212
10.51 T NVALID-ORDER- 517 $Z(s) =$	$(L_1s, L_2s + \frac{1}{C_2s},$	∞ , ∞ , ∞ , L	$Ls + R_L + \frac{1}{C_L s}$)	 	212
10.51 NVALID-ORDER-518 $Z(s) =$	$\left(L_1s, L_2s + \frac{1}{C_2s}\right)$	$\infty, \infty, \infty, \overline{C}$	$\left(\frac{1}{Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$		 	212
10.51 9 NVALID-ORDER-519 $Z(s) =$	$(L_1s, L_2s + \frac{1}{C_2s},$	∞ , ∞ , ∞ , \overline{C}	$\frac{L_L s}{L_L L_L s^2 + 1} + R_L$		 	213
10.52 ONVALID-ORDER- $520 Z(s) =$	$\left(L_1 s, \ L_2 s + \frac{1}{C_2 s}\right)$	$\infty, \infty, \infty, \frac{R}{I}$	$\left(\frac{C_L\left(L_L s + \frac{1}{C_L s}\right)}{C_L s + R_L + \frac{1}{C_L s}}\right)$		 	213
10.52INVALID-ORDER- 521 $Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	∞ , R_L)		 	213
10.52 2 NVALID-ORDER- $522 Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	$\infty, \frac{1}{C_L s}$)		 	213
10.52 Invalid-order- 523 $Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	$\infty, \frac{R_L}{C_L R_L s + 1}$		 	213
10.524NVALID-ORDER- 524 $Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	∞ , $R_L + \frac{1}{C_L s}$		 	214
10.525NVALID-ORDER- 525 $Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	∞ , $L_L s + \frac{1}{C_L s}$)	 	214
10.52 6 NVALID-ORDER-526 $Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	$\infty, \frac{L_L s}{C_L L_L s^2 + 1}$		 	214
10.52TNVALID-ORDER- 527 $Z(s) =$	$(L_1s, L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	∞ , $L_L s + R_L +$	$+\frac{1}{C_L s}$)	 	214
10.52\&NVALID-ORDER-528 $Z(s) =$	$\left(L_1s, \ L_2s + R_2 - \right)$	$+\frac{1}{C_2s}, \ \infty, \ \infty,$	∞ , $\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\left(\frac{1}{L^s}\right)$	 	214
10.529NVALID-ORDER- 529 $Z(s) =$	$\Big(L_1s, \ L_2s + R_2 +$	$-\frac{1}{C_2s}$, ∞ , ∞ ,	∞ , $\frac{L_L s}{C_L L_L s^2 + 1}$ +	$-R_L$)	 	215
10.53 ONVALID-ORDER- 530 $Z(s) =$	$\left(L_1s, \ L_2s + R_2 - \right)$	$+\frac{1}{C_2s}, \ \infty, \ \infty,$	∞ , $\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{s}\right)$ \ldots $\left(\frac{1}{L^s}\right)$	 	215
10.53INVALID-ORDER-531 $Z(s) =$					 	215
10.53 2 NVALID-ORDER- 532 $Z(s) =$	$(L_1s, \frac{L_2s}{C_2L_2s^2+1} +$	$R_2, \infty, \infty, \infty$	$\circ, \frac{1}{C_L s}$)		 	215
10.53 NVALID-ORDER- 533 $Z(s) =$	$(L_1s, \frac{L_2s}{C_2L_2s^2+1} +$	$R_2, \infty, \infty, \infty$	$C, \frac{R_L}{C_L R_L s + 1}$		 	215
10.534NVALID-ORDER-534 $Z(s) =$	$\left(L_{1}s, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + \right.$	$R_2, \infty, \infty, \infty$	$c, R_L + \frac{1}{C_L s}$		 	216
10.535NVALID-ORDER- 535 $Z(s) =$	$\left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + \right)$	$R_2, \infty, \infty, \infty$	(c) , $L_L s + \frac{1}{C_L s}$		 	216
10.53 6 NVALID-ORDER-536 $Z(s) =$	$\left(L_{1}s, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + \right.$	$R_2, \infty, \infty, \infty$	$C, \frac{L_L s}{C_L L_L s^2 + 1}$		 	216

10.53TNVALID-ORDER- $537 Z(s) = 0$	$\left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$	216
10.53\NVALID-ORDER-538 $Z(s) = 1$	$\left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	216
10.53 NVALID-ORDER- 539 $Z(s) = ($	$(L_1s, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L)$	217
$10.54 \text{@NVALID-ORDER-}540 \ Z(s) = 0.0000000000000000000000000000000000$	$\left(L_{1}s, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots$	217
	$\left(\begin{array}{c} R_{2}\left(L_{2}s+\frac{1}{L_{2}}\right) \end{array}\right)$	217
10.542NVALID-ORDER-542 $Z(s) = 1$	$\left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	217
10.548NVALID-ORDER-543 $Z(s) = 1$	$\left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	217
10.54#NVALID-ORDER-544 $Z(s) = 1$	$\left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$	218
10.545NVALID-ORDER-545 $Z(s) = 1$	$\left(L_{1}s, \frac{R_{2}\left(L_{2}s+\frac{1}{C_{2}s}\right)}{L_{2}s+R_{2}+\frac{1}{C_{2}s}}, \infty, \infty, \infty, \infty, L_{L}s+\frac{1}{C_{L}s}\right) \dots \dots$	218
10.546NVALID-ORDER-546 $Z(s) = 1$	$\left(L_{1}s, \frac{R_{2}\left(L_{2}s+\frac{1}{C_{2}s}\right)}{L_{2}s+R_{2}+\frac{1}{C_{2}s}}, \infty, \infty, \infty, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right) \dots \dots$	218
	$\left(\begin{array}{ccc} E_2 v + i c_2 s \end{array}\right)$	218
10.54&NVALID-ORDER-548 $Z(s) = 1$	$\left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots$	218
10.549NVALID-ORDER-549 $Z(s) = 1$	$\left(L_{1}s, \frac{R_{2}\left(L_{2}s+\frac{1}{C_{2}s}\right)}{L_{2}s+R_{2}+\frac{1}{C_{2}s}}, \infty, \infty, \infty, \infty, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}+R_{L}\right) \dots \dots$	219
10.55 ©NVALID-ORDER- $550 Z(s) = 10.55$	$\left(L_{1}s, \frac{R_{2}\left(L_{2}s+\frac{1}{C_{2}s}\right)}{L_{2}s+R_{2}+\frac{1}{C_{2}s}}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right) \dots \dots$	219
10.55INVALID-ORDER- $551 Z(s) = 0$	$\left(\frac{1}{C_1s},\ R_2,\ \infty,\ \infty,\ \infty,\ R_L\right)$	219
10.55 2 NVALID-ORDER- $552 Z(s) = 0$	$\left(\frac{1}{C_1s},\ R_2,\ \infty,\ \infty,\ \infty,\ \frac{1}{C_Ls}\right)$	219
10.558NVALID-ORDER- $553 Z(s) = 0$	$\left(\frac{1}{C_1s},\ R_2,\ \infty,\ \infty,\ \infty,\ \frac{R_L}{C_LR_Ls+1}\right)$	219
10.554NVALID-ORDER- $554 Z(s) = 0$	$\left(\frac{1}{C_1s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$	220
10.55 INVALID-ORDER-555 $Z(s) = 0$	$\left(\frac{1}{C_1s}, R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$	220

10.55©NVALID-ORDER-556 $Z(s)=0$	$\left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.55 T NVALID-ORDER-557 $Z(s) = 0$	$\left(\frac{1}{C_1s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.55&NVALID-ORDER-558 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots$
10.55 9 NVALID-ORDER-559 $Z(s) = 0$	$\left(\frac{1}{C_1s}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.56 0 NVALID-ORDER-560 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \qquad \dots \qquad 221$
10.56INVALID-ORDER-561 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L\right)$
10.56 2 NVALID-ORDER-562 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.56 B NVALID-ORDER-563 $Z(s)=($	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.564NVALID-ORDER-564 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.565NVALID-ORDER-565 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
$10.56 \text{ ENVALID-ORDER-} 566 \ Z(s) = ($	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.567NVALID-ORDER-567 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.56&NVALID-ORDER-568 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.56 9 NVALID-ORDER-569 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.570NVALID-ORDER-570 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.57INVALID-ORDER-571 $\boldsymbol{Z}(s) = (s)$	
10.57 2 NVALID-ORDER-572 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.57 B NVALID-ORDER-573 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.574NVALID-ORDER-574 $Z(s)=\langle$	$\left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$
10.57 NVALID-ORDER-575 $Z(s) = 0$	$\left(\frac{1}{C_1s}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.576NVALID-ORDER-576 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2+1}\right)$
10.57 T NVALID-ORDER-577 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$

10.57&NVALID-ORDER-578 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots$
10.57 9 NVALID-ORDER-579 $Z(s) = ($	$\left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s+1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.580NVALID-ORDER-580 $Z(s) = 1$	$\left(\frac{1}{C_{1}s}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right) \dots $
10.58INVALID-ORDER-581 $Z(s)=\langle$	$\left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)$
10.58 2 NVALID-ORDER-582 $Z(s) = ($	$\left(\frac{1}{C_{1}s}, R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{1}{C_{L}s}\right)$
10.58 B NVALID-ORDER-583 $Z(s) = ($	$\left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.584NVALID-ORDER-584 $Z(s)=($	$\left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.58 INVALID-ORDER-585 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.586NVALID-ORDER-586 $Z(s) = ($	$\left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.58 T NVALID-ORDER-587 $Z(s) = ($	$\left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
10.58&NVALID-ORDER-588 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.58 9 NVALID-ORDER-589 $Z(s) = ($	$\left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.590NVALID-ORDER-590 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $
10.59INVALID-ORDER-591 $Z(s)=\langle$	$\left(\frac{1}{C_1s},\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ \infty,\ R_L\right)$
10.592NVALID-ORDER-592 $Z(s) = 0$	$\left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.59 B NVALID-ORDER-593 $Z(s)=($	$\left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.594NVALID-ORDER-594 $Z(s) = ($	$\left(\frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$
10.595NVALID-ORDER-595 $Z(s)=\langle$	$\left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.596NVALID-ORDER-596 $Z(s) = ($	$\left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.59 T NVALID-ORDER-597 $Z(s) = ($	$\left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.59&NVALID-ORDER-598 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.59 9 NVALID-ORDER-599 $Z(s) = ($	$\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) \ \dots \ $

10.60 0 NVALID-ORDER-600 $Z(s) = 1$	$\left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.60INVALID-ORDER-601 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 229
10.60 2 NVALID-ORDER-602 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.60 & NVALID-ORDER-603 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.604NVALID-ORDER-604 $Z(s) = 0$	$\left(\frac{1}{C_{1}s}, L_{2}s + R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \infty, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} + R_{L}\right)$
10.60 NVALID-ORDER-605 $Z(s) = 1$	$\left(\frac{1}{C_{1}s}, L_{2}s + R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.60 6 NVALID-ORDER-606 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.60TNVALID-ORDER- 607 $Z(s) = ($	$\left(\frac{1}{C_{1}s}, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \infty, L_{L}s + \frac{1}{C_{L}s}\right) \dots \dots$
10.60\bigselentrian NVALID-ORDER-608 $Z(s) = 0$	$\left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
	$\left(\frac{1}{C_{1s}}, \frac{L_{2s}}{C_{2}L_{2s}^{2}+1} + R_{2}, \infty, \infty, \infty, \frac{L_{Ls}}{C_{L}L_{Ls}^{2}+1} + R_{L}\right)$
10.61 Q NVALID-ORDER-610 $Z(s) = 0$	$\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(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.61INVALID-ORDER-611 $Z(s) = 1$	$\left(\begin{array}{ccc}C_1s&E_2s+I_2+C_2s\end{array}\right)$
10.612NVALID-ORDER-612 $Z(s) = 1$	$\left(\frac{1}{C_{1}s}, \frac{R_{2}\left(L_{2}s + \frac{1}{C_{2}s}\right)}{L_{2}s + R_{2} + \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 $
10.61\(\mathbb{B}\)NVALID-ORDER-613 $Z(s) = 0$	$\begin{pmatrix} c_1c & L_2s + L_2 + C_2s \\ & & \end{pmatrix}$
10.61#NVALID-ORDER-614 $Z(s) = 0$	$\left(\frac{1}{C_{1}s}, \frac{R_{2}\left(L_{2}s + \frac{1}{C_{2}s}\right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \infty, \infty, \infty, \infty, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots \dots$
10.61 INVALID-ORDER-615 $Z(s) = 0$	$\left(\frac{1}{C_{1}s}, \frac{R_{2}\left(L_{2}s + \frac{1}{C_{2}s}\right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots$
10.61 6 NVALID-ORDER-616 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1},\ R_2,\ \infty,\ \infty,\ \infty,\ R_L\right)$
10.61 T NVALID-ORDER-617 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right) \dots \dots$
10.61\(\text{NVALID-ORDER-618} \) $Z(s) = ($	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.61 9 NVALID-ORDER-619 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.62 ONVALID-ORDER- 620 $Z(s) = ($	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right) \dots \dots$

10.62INVALID-ORDER-621 $Z(s)=\langle$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots$
10.62 2 NVALID-ORDER-622 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots$
10.62\$NVALID-ORDER-623 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$
10.624NVALID-ORDER-624 $Z(s)=\langle$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.625NVALID-ORDER-625 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, R_2, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
10.62 6 NVALID-ORDER-626 $Z(s)=\langle$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L\right)$
10.62TNVALID-ORDER-627 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.62&NVALID-ORDER-628 $Z(s)=\langle$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.62 9 NVALID-ORDER-629 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.63 0 NVALID-ORDER-630 $Z(s)=($	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.63INVALID-ORDER-631 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.63 2 NVALID-ORDER-632 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.63\$NVALID-ORDER-633 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$
10.634NVALID-ORDER-634 $Z(s)=\langle$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.63\$NVALID-ORDER-635 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
10.63 6 NVALID-ORDER-636 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.63 T NVALID-ORDER-637 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.63\NVALID-ORDER-638 $Z(s)=($	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.63 9 NVALID-ORDER-639 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.640NVALID-ORDER-640 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
10.64 INVALID-ORDER-64 1 $\boldsymbol{Z}(s) = (s)$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L\right)$
10.642NVALID-ORDER-642 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$

10.64 B NVALID-ORDER-643 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.64INVALID-ORDER- 644 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.645NVALID-ORDER- 645 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.64 6 NVALID-ORDER-646 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.64TNVALID-ORDER- 647 $Z(s) = 10.64$ TNVALID-ORDER	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.64\&NVALID-ORDER-648 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
10.64 9 NVALID-ORDER-649 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.65 ONVALID-ORDER- 650 $Z(s) =$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.65INVALID-ORDER- 651 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.65 2 NVALID-ORDER-652 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.65 NVALID-ORDER- 653 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.654NVALID-ORDER-654 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.65 NVALID-ORDER-655 $Z(s) =$	$\left(\frac{R_1}{C_1 R_1 s+1}, \ L_2 s+\frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s+\frac{1}{C_L s}\right)}{L_L s+R_L +\frac{1}{C_L s}}\right) \ \dots \ $
10.656NVALID-ORDER- 656 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)$
10.65 T NVALID-ORDER-657 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.65\newline\node NVALID-ORDER-658 $Z(s) = 10.65$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.65 9 NVALID-ORDER-659 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, R_L+\frac{1}{C_Ls}\right)$
10.66 ONVALID-ORDER-660 $Z(s) = 10.66$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, L_Ls+\frac{1}{C_Ls}\right)$
10.66INVALID-ORDER-661 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
10.66 2 NVALID-ORDER- $662 Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}\right)$
10.66RNVALID-ORDER-663 $Z(s) =$	$\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 + \frac{1}{R_L} + \frac{1}{L_L s}}\right) $
10.664NVALID-ORDER-664 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}+R_L\right)$

10.66 \$NVALID-ORDER-665 $Z(s)=\left(\right.$	$\left(\frac{R_1}{C_1R_1s+1}, L_2s+R_2+\frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
10.666NVALID-ORDER-666 $Z(s)=\left(\rule{0mm}{2.5mm}\right.$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L\right)$
10.66 T NVALID-ORDER-667 $Z(s) = ($	$\left(\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.66&NVALID-ORDER-668 $Z(s) = ($	$\left(\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.66 9 NVALID-ORDER-669 $Z(s) = ($	$\left\{\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right\}$
10.67 © NVALID-ORDER-670 $Z(s) = ($	$\left(\frac{R_1}{C_1 R_1 s+1}, \frac{L_2 s}{C_2 L_2 s^2+1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.67INVALID-ORDER-671 $Z(s) = ($	$\left(\frac{R_1}{C_1 R_1 s+1}, \frac{L_2 s}{C_2 L_2 s^2+1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2+1}\right) \dots \dots$
10.672NVALID-ORDER-672 $Z(s) = ($	$\frac{R_1}{C_1 R_1 s + 1}$, $\frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2$, ∞ , ∞ , ∞ , $L_L s + R_L + \frac{1}{C_L s}$)
10.67 & NVALID-ORDER-673 $Z(s) = 0$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
10.674NVALID-ORDER-674 $Z(s)=\left(\right.$	$\frac{R_1}{C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L$
10.67 INVALID-ORDER-675 $Z(s) = 1$	$\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, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots $
10.676NVALID-ORDER-676 $Z(s)=\left(\begin{array}{cccc} & & & \\ & & & \end{array}\right)$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2\left(L_2s+\frac{1}{C_2s}\right)}{L_2s+R_2+\frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.67 INVALID-ORDER-677 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2\left(L_2s+\frac{1}{C_2s}\right)}{L_2s+R_2+\frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.67&NVALID-ORDER-678 $Z(s) = 1$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$ 244
10.67 9 NVALID-ORDER-679 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2\left(L_2s+\frac{1}{C_2s}\right)}{L_2s+R_2+\frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls+\frac{1}{C_Ls}\right)$
10.68 0 NVALID-ORDER-680 $Z(s) = 1$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
10.68 INVALID-ORDER-68 1 $Z(s)=\left(\right.$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2\left(L_2s+\frac{1}{C_2s}\right)}{L_2s+R_2+\frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls+R_L+\frac{1}{C_Ls}\right)$
10.68 2 NVALID-ORDER-682 $Z(s) = 1$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $
10.68\$NVALID-ORDER-683 $Z(s) = 1$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $

10.684NVALID-ORDER-684 $Z(s) = 1$	$\left(\frac{R_1}{C_1R_1s+1}, \frac{R_2\left(L_2s+\frac{1}{C_2s}\right)}{L_2s+R_2+\frac{1}{C_2s}}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
10.68 NVALID-ORDER-685 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L)$
10.686NVALID-ORDER-686 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s})$
10.68 T NVALID-ORDER-687 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1})$
10.68\bigselenvalid-order-688 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s})$
10.68 9 NVALID-ORDER-689 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.69©NVALID-ORDER-690 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
10.69INVALID-ORDER-691 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
10.692NVALID-ORDER-692 $Z(s)=1$	$\left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_L s}}\right) \dots \dots$
10.69 & NVALID-ORDER-693 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots$
10.694NVALID-ORDER-694 $Z(s) = 1$	$(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L(L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}})$
10.695NVALID-ORDER-695 $Z(s) = 0$	
10.696NVALID-ORDER-696 $Z(s) = 0$	$R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}$
10.69 T NVALID-ORDER-697 $Z(s) = 0$	$(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1})$
10.69&NVALID-ORDER-698 $Z(s)=\langle$	$(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s})$
10.69 9 NVALID-ORDER-699 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.70 0 NVALID-ORDER-700 $Z(s) = 0$	$\left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.70INVALID-ORDER-701 $\boldsymbol{Z}(s) = ($	$\left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$
10.702NVALID-ORDER-702 $Z(s)=1$	$\left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.70\$NVALID-ORDER-703 $Z(s)=0$	$(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L)$
10.704NVALID-ORDER-704 $Z(s) = 1$	$\left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.70\$NVALID-ORDER-705 $Z(s) = ($	$(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L)$

10.70 6 NVALID-ORDER-706 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$\frac{1}{C_L s}$)			 	 	 	 249
10.70TNVALID-ORDER- $707 Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	 250
10.70\nnvalid-Order-708 $Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$R_L + \frac{1}{C_L s}$)		 	 	 	 250
10.70 9 NVALID-ORDER-709 $Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$L_L s + \frac{1}{C_L}$	$\left(\frac{1}{s}\right)$		 	 	 	 250
10.71 0 NVALID-ORDER-710 $Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$)		 	 	 	 250
10.71 I NVALID-ORDER-711 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$L_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	 250
10.712NVALID-ORDER-712 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞	$, \infty,$	$\frac{1}{C_L s + \frac{1}{R_L} +}$	$\frac{1}{L_L s}$		 	 	 	 251
10.713NVALID-ORDER-713 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞ ,	∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$		 	 	 	 251
10.714NVALID-ORDER-714 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$\frac{R_2}{C_2R_2s+1},$	∞ , ∞	$, \infty,$	$\frac{R_L \left(L_L s + \frac{1}{C} L_L s + \frac{1}{C} + \frac{1}{C} L_L s + \frac{1}{C} + \frac{1}{C} L_L s + \frac{1}{C} $	$\left(\frac{1}{C_L s}\right) \over \frac{1}{C_L s}$		 	 	 	 251
10.71 5 NVALID-ORDER-715 $Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	R_L)			 	 	 	 251
10.716NVALID-ORDER-716 $Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$\frac{1}{C_L s}$)			 	 	 	 251
10.71 T NVALID-ORDER-717 $Z(s) =$	$(R_1 + \frac{1}{C_1 s},$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$\frac{R_L}{C_L R_L s + 1}$)		 	 	 	 252
10.71\nstantantantantantantantantantantantantant	$(R_1 + \frac{1}{C_1 s},$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$R_L + \frac{1}{C_L}$	$\left(\frac{1}{s}\right)$		 	 	 	 252
10.71 9 NVALID-ORDER-719 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$R_2 + \frac{1}{C_2 s},$	$, \infty, \infty$	∞ , ∞ ,	$L_L s + \frac{1}{C_I}$	$\left(\frac{1}{\sqrt{s}}\right)$		 	 	 	 252
10.72 ONVALID-ORDER-720 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$	$(\overline{1})$		 	 	 	 252
10.72 I NVALID-ORDER-721 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$L_L s + R_s$	$L + \frac{1}{C_L s}$) .	 	 	 	 252
10.72 2 NVALID-ORDER-722 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$\frac{1}{C_L s + \frac{1}{R_L}}$	$\frac{1}{L_L s}$		 	 	 	 253
10.72 Invalid-order-723 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$	$\left(1 + R_L \right)$		 	 	 	 253
10.724NVALID-ORDER-724 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$R_2 + \frac{1}{C_2 s}$	$, \infty, \infty$	∞ , ∞ ,	$R_L \left(L_L s + L_L s + R_L - L_L s + R_L s + R_$	$\left(\frac{1}{C_L s}\right)$ $\left(\frac{1}{C_L s}\right)$		 	 	 	 253
10.72 INVALID-ORDER-725 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$L_2s + \frac{1}{C_2s}$, ∞, c	∞ , ∞	$, R_L$)			 	 	 	 253
10.72 6 NVALID-ORDER-726 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$L_2s + \frac{1}{C_2s}$	∞ , ∞ , o	∞ , ∞	$, \frac{1}{C_L s}$			 	 	 	 253
10.72TNVALID-ORDER-727 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s},\right.$	$L_2s + \frac{1}{C_2s}$	$\frac{1}{2}$, ∞ , o	∞ , ∞	$, \frac{R_L}{C_L R_L s + 1}$	$_{\overline{1}}$)		 	 	 	 254

10.72&NVALID-ORDER-728 $Z(s) = \displaystyle$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$
10.72 9 NVALID-ORDER-729 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$
10.73©NVALID-ORDER-730 $Z(s) =$	$(R_1 + \frac{1}{C_{1s}}, L_2s + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1})$
10.73INVALID-ORDER-731 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$
10.732NVALID-ORDER-732 $Z(s) = \displaystyle$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.73 B NVALID-ORDER-733 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots$
10.734NVALID-ORDER-734 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots $
	$\left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$
10.736NVALID-ORDER-736 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$
10.73 T NVALID-ORDER-737 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$
10.73\%NVALID-ORDER-738 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right) \dots \dots$
10.73 9 NVALID-ORDER-739 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$
10.74©NVALID-ORDER-740 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
10.74 INVALID-ORDER-74 1 $Z(s) = \displaystyle$	$\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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.742NVALID-ORDER-742 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.74 B NVALID-ORDER-743 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.744NVALID-ORDER-744 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$
10.746NVALID-ORDER-746 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$
10.74 T NVALID-ORDER-747 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots$
10.74\%NVALID-ORDER-748 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$
10.74 9 NVALID-ORDER-749 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right) \dots \dots$

$$\begin{array}{lll} 10.75 \& NVALID-ORDER-750 & Z(s) = \left(R_1 + \frac{1}{c_1s}, \frac{L_2s}{c_2s_2s_+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{c_Ls^2s_+1}\right) & 258 \\ 10.75 \& NVALID-ORDER-751 & Z(s) = \left(R_1 + \frac{1}{c_1s}, \frac{L_2s}{c_2s_2s_+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{c_1s}\right) & 258 \\ 10.75 \& NVALID-ORDER-752 & Z(s) = \left(R_1 + \frac{1}{c_1s}, \frac{L_2s}{c_2s_2s_+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{c_Ls^2s_+1} + R_L\right) & 259 \\ 10.75 \& NVALID-ORDER-753 & Z(s) = \left(R_1 + \frac{1}{c_1s}, \frac{L_2s}{c_2s_2s_+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{c_Ls^2s_+1} + R_L\right) & 259 \\ 10.75 \& NVALID-ORDER-754 & Z(s) = \left(R_1 + \frac{1}{c_1s}, \frac{L_2s}{c_2s_2s_+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{c_Ls^2s_+1} + R_L\right) & 259 \\ 10.75 \& NVALID-ORDER-755 & Z(s) = \left(R_1 + \frac{1}{c_1s}, \frac{L_2s}{c_2s_2s_+1} + R_2, \infty, \infty, \infty, \frac{R_L(L_1s+c_Ls)}{c_2s_+1}\right) & 259 \\ 10.75 \& NVALID-ORDER-756 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + R_2, \infty, \infty, \infty, \frac{R_L}{c_Ls}\right) & 259 \\ 10.75 \& NVALID-ORDER-756 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + \frac{R_2}{c_2s}\right) & \infty, \infty, \infty, \frac{L_Ls}{c_Ls} & 259 \\ 10.75 \& NVALID-ORDER-756 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + \frac{R_2}{c_2s}\right) & \infty, \infty, \infty, \frac{L_Ls}{c_Ls} & 259 \\ 10.75 \& NVALID-ORDER-758 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + \frac{R_2}{c_2s}\right) & \infty, \infty, \infty, \frac{L_Ls}{c_Ls} & 260 \\ 10.75 \& NVALID-ORDER-758 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + \frac{R_2}{c_2s}\right) & \infty, \infty, \infty, \frac{L_Ls}{c_Ls} & 260 \\ 10.75 \& NVALID-ORDER-750 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + \frac{R_2}{c_2s}\right) & \infty, \infty, \infty, \frac{L_Ls}{c_Ls} & 260 \\ 10.76 \& NVALID-ORDER-761 & Z(s) & \left(R_1 + \frac{1}{c_1s}, \frac{R_L(L_2s+c_Ls)}{l_2s_2s_+1} + \frac{R_Ls}{c_2s}\right) & \infty, \infty, \infty, \frac{L_Ls}{c_Ls} & \frac{1}{c_Ls} & \frac{$$

10.76 9 NVALID-OF	RDER-769 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$R_2, \infty,$	∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$)		 	 	 	262
10.77 0 NVALID-OF	RDER-770 $Z(s) =$	$(L_1s + \frac{1}{C_1s},$	$R_2, \infty,$	$\infty, \ \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	262
10.77 I NVALID-OF	RDER-771 $Z(s) =$	$(L_1s + \frac{1}{C_1s},$	$R_2, \infty,$	∞ , ∞ ,	$L_L s + R_L$ -	$+\frac{1}{C_L s}$		 	 	 	262
10.772NVALID-OF	RDER-772 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$R_2, \infty,$	$\infty, \ \infty,$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\left(\frac{1}{L^s}\right)$.		 	 	 	263
10.77 8 NVALID-OF	RDER-773 $Z(s) =$	$(L_1s + \frac{1}{C_1s},$	$R_2, \infty,$	$\infty, \ \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1} +$	$+R_L$		 	 	 	263
10.774NVALID-OF	RDER-774 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$R_2, \infty,$	$\infty, \ \infty,$	$\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{L_s}{L_s}\right)$		 	 	 	263
10.77 5 NVALID-OF	RDER-775 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2 s}$, ∞ ,	$\infty, \infty,$	$\frac{1}{C_L s}$)			 	 	 	263
10.77 6 NVALID-OF	RDER-776 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2 s}$, ∞ ,	∞ , ∞ ,	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	263
10.77 T NVALID-OF	RDER-777 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2 s}$, ∞ ,	∞ , ∞ ,	$R_L + \frac{1}{C_L s}$)		 	 	 	264
10.778NVALID-OF	RDER-778 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2 s}$, ∞ ,	∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$	<u>,</u>		 	 	 	264
10.77 9 NVALID-OF	RDER-779 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2s}$, ∞ ,	$\infty, \infty,$	$\frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	264
10.78 0 NVALID-OF	RDER-780 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2s}$, ∞ ,	∞ , ∞ ,	$L_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	264
10.78INVALID-OF	RDER-781 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2s}$, ∞	$, \infty, \infty, \infty$	$C_L s + \frac{1}{R_L} + \frac{1}{R_L}$	$\left(\frac{1}{L_L s}\right)$.		 	 	 	264
10.78 2 NVALID-OF	RDER-782 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2 s}$, ∞ ,	∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$		 	 	 	265
10.78 B NVALID-OF	RDER-783 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{1}{C_2s}$, ∞	$, \infty, \infty, \infty,$	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$		 	 	 	265
10.78 4 NVALID-OF	RDER-784 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{R_2}{C_2R_2s+1}$	$, \infty, \infty$	$, \infty, R_L$			 	 	 	265
10.785NVALID-OF	RDER-785 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\tfrac{R_2}{C_2R_2s+1}$	$, \infty, \infty$	$, \infty, \frac{1}{C_L s}$			 	 	 	265
10.78 6 NVALID-OF	RDER-786 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\tfrac{R_2}{C_2R_2s+1}$	$, \infty, \infty$	$, \infty, \frac{R_L}{C_L R_L s}$	$\overline{s+1}$) .		 	 	 	265
10.78 7 NVALID-OF	RDER-787 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{R_2}{C_2R_2s+1}$	$, \infty, \infty$	$, \infty, R_L +$	$\frac{1}{C_L s}$		 	 	 	266
10.78 & NVALID-OF	RDER-788 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{R_2}{C_2R_2s+1}$	$, \infty, \infty$	$, \infty, L_L s +$	$-\frac{1}{C_L s}$		 	 	 	266
10.78 9 NVALID-OF	RDER-789 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s},\right.$	$\frac{R_2}{C_2R_2s+1}$	$, \infty, \infty$	$, \infty, \frac{L_L}{C_L L_L s}$	$\left(\frac{s}{s^2+1}\right)$		 	 	 	266
10.79 0 NVALID-OF		<i>)</i>	_			,	$\left(\frac{1}{C_L s}\right)$	 	 	 	266

10.79INVALID-ORDER-791 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2}{C_2R_2s + 1}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.79 2 NVALID-ORDER-792 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2}{C_2R_2s + 1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
10.79\$NVALID-ORDER-793 $Z(s) = 1$	$\left(L_{1}s + \frac{1}{C_{1}s}, \frac{R_{2}}{C_{2}R_{2}s + 1}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots$
10.794NVALID-ORDER-794 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L\right) \dots \dots$
10.795NVALID-ORDER-795 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$
10.796NVALID-ORDER-796 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls + 1}\right)$
10.79 T NVALID-ORDER-797 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right) \dots \dots$
10.79&NVALID-ORDER-798 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$
10.79 9 NVALID-ORDER-799 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
10.80 ONVALID-ORDER-800 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.80 INVALID-ORDER-801 $Z(s)=\left \right.$	$\left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
10.802NVALID-ORDER-802 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right) \dots \dots$
10.80\$NVALID-ORDER-803 $Z(s) = 1$	$\left(L_{1}s + \frac{1}{C_{1}s}, R_{2} + \frac{1}{C_{2}s}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots \dots$
10.804NVALID-ORDER-804 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$
10.80 INVALID-ORDER-805 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right) \ \dots \ $
10.806NVALID-ORDER-806 $Z(s) = \langle$	$\left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right)$
10.80 T NVALID-ORDER-807 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$
10.80\&NVALID-ORDER-808 $Z(s)=\langle$	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.80 9 NVALID-ORDER-809 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
10.81©NVALID-ORDER-810 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.81INVALID-ORDER-811 $Z(s) = 1$	$\left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
10.812NVALID-ORDER-812 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

10.81 B NVALID-ORDER-813 $Z(s) = 1$	$\left(L_1s + \frac{1}{C_1s}, \ L_2s\right)$	$s + \frac{1}{C_2 s}, \ \infty,$	∞ , ∞ , $\frac{R_L}{L_L}$	$\frac{\left(L_L s + \frac{1}{C_L s}\right)}{s + R_L + \frac{1}{C_L s}}$)	 	 	271
10.814NVALID-ORDER-814 $Z(s) = 0$	$(L_1s + \frac{1}{C_1s}, L_2s)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	(R_L) .		 	 	271
10.815NVALID-ORDER-815 $Z(s) = 0$	$(L_1s + \frac{1}{C_1s}, L_2s)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$\left(\frac{1}{C_L s} \right)$.		 	 	271
10.81 6 NVALID-ORDER-816 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$\frac{R_L}{C_L R_L s + 1}$)	 	 	271
10.81 T NVALID-ORDER-817 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$, R_L + \frac{1}{C_L s}$	$\left(\frac{1}{3}\right)$	 	 	272
10.81&NVALID-ORDER-818 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$, L_L s + \frac{1}{C_L}$	\overline{s} \cdots	 	 	272
10.819NVALID-ORDER-819 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$, \frac{L_L s}{C_L L_L s^2 + 1}$	$\left(\cdot \right) = \left(\cdot \right)$	 	 	272
10.82 ONVALID-ORDER- 820 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$, L_L s + R_L$	$\left(1 + \frac{1}{C_L s}\right)$	 	 	272
10.82INVALID-ORDER-821 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$\frac{1}{2}$, ∞ , ∞ , ∞	$C, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$.	 	 	272
10.82 2 NVALID-ORDER-822 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$, \infty, \infty, \infty$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$	 	 	273
10.82\SNVALID-ORDER-823 $Z(s) = 1$	$\left(L_1s + \frac{1}{C_1s}, \ L_2s\right)$	$s + R_2 + \frac{1}{C_2 s}$	$\frac{1}{2}$, ∞ , ∞ , ∞	$0, \frac{R_L \left(L_L s + \frac{1}{L_L s + R_L + R_L + \frac{1}{L_L s + R_L + \frac{1}{L_L s + R_L + \frac{1}{L_L s + R_L + \frac{1}{$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 	273
10.824NVALID-ORDER-824 $Z(s) = 0$	$\left(L_1 s + \frac{1}{C_1 s}, \ \frac{1}{C_2 I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	R_L)		 	 	273
10.825NVALID-ORDER- 825 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$\frac{1}{C_L s}$)		 	 	273
10.82 CONVALID-ORDER-826 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$\frac{R_L}{C_L R_L s + 1}$		 	 	273
10.82TNVALID-ORDER- 827 $Z(s) = ($	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$R_L + \frac{1}{C_L s}$)	 	 	274
10.82\(\text{NVALID-ORDER-828} \(Z(s) = 1 \)	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$L_L s + \frac{1}{C_L s}$	$\left(\cdot \right) $	 	 	274
10.82 9 NVALID-ORDER-829 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	274
10.83 ONVALID-ORDER-830 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	274
10.83INVALID-ORDER-831 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \frac{1}{C_2s}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞	$, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$.	 	 	274
10.83 2 NVALID-ORDER-832 $Z(s) = 0$	$\left(L_1s + \frac{1}{C_1s}, \frac{1}{C_2I}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞ ,	$\frac{L_L s}{C_L L_L s^2 + 1} \cdot$	$+R_L$).	 	 	275
10.83\(\textbf{S}\) NVALID-ORDER-833 $Z(s) = 1$	$\left(L_1s + \frac{1}{C_1s}, \ \frac{1}{C_2s}\right)$	$\frac{L_2s}{L_2s^2+1} + R_2,$	∞ , ∞ , ∞	$, \frac{R_L \left(L_L s + \frac{C}{C}\right)}{L_L s + R_L + \frac{C}{C}}$	$\left(\frac{1}{L^s}\right)$ $\left(\frac{1}{C_L^s}\right)$.	 	 	275
10.834NVALID-ORDER-834 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{L_2}\right)$	$\frac{\left(L_{2}s + \frac{1}{C_{2}s}\right)}{s + R_{2} + \frac{1}{C_{2}s}},$	$\infty, \infty, \infty, \infty$	R_L)		 	 	275

10.83 NVALID-ORDER-835 $Z(s) = 1$	$\left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right) \dots \dots$
10.836NVALID-ORDER-836 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls + 1}\right) \dots \dots$
10.83 T NVALID-ORDER-837 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.83\NVALID-ORDER-838 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right) \dots \dots$
10.83 9 NVALID-ORDER-839 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right) \dots $
10.84 ONVALID-ORDER-840 $Z(s) = 10.84$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots$
10.84INVALID-ORDER-841 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \dots $
10.842NVALID-ORDER-842 $Z(s) = 1$	$\left(L_1s + \frac{1}{C_1s}, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.848NVALID-ORDER-843 $Z(s) = 1$	$\left(L_{1}s + \frac{1}{C_{1}s}, \frac{R_{2}\left(L_{2}s + \frac{1}{C_{2}s}\right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)\right) \qquad \dots $
10.84INVALID-ORDER-844 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, R_L\right)$
10.845NVALID-ORDER- 845 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$
10.846NVALID-ORDER-846 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$
10.84TNVALID-ORDER-847 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$
10.84\(\mathbb{R}\) NVALID-ORDER-848 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$
10.84 9 NVALID-ORDER-849 $Z(s) = 0$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)'$
10.85 ONVALID-ORDER- 850 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.85INVALID-ORDER-851 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$
10.85 2 NVALID-ORDER-852 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots$
10.85 & NVALID-ORDER-853 $Z(s) = 1$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, R_{2}, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right)^{\prime} \dots \dots$
10.854NVALID-ORDER-854 $Z(s) = 1$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)$

$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \right)$	$\left(0, \frac{1}{C_L s}\right)$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \right)$	$\left(\frac{R_L}{C_L R_L s + 1} \right)$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty, \right)$	$(R_L + \frac{1}{C_L s})$
\	(x) , $L_L s + \frac{1}{C_L s}$ (x)
$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \right)$	$\left(\frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \right)$), $L_L s + R_L + \frac{1}{C_L s}$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty\right)$	$(0, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}})$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \frac{1}{C_2s}, \ \infty, \ \infty, \ \infty, \right)$	$, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \Big) \qquad \dots \qquad $
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{1}{C_2s}, \infty, \infty, \infty\right)$	$\supset, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}} $
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$(0, \ \infty, \ R_L)$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$(0, \infty, \frac{1}{C_L s})$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	o, ∞ , $\frac{R_L}{C_L R_L s + 1}$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$(0, \infty, R_L + \frac{1}{C_L s})$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$(0, \infty, L_L s + \frac{1}{C_L s})$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$\circ, \infty, rac{L_L s}{C_L L_L s^2 + 1} \Big) \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots $
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$\circ, \infty, L_L s + R_L + \frac{1}{C_L s}$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$\infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$\circ, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L$
$\left(\frac{L_1s}{C_1L_1s^2+1}, \frac{R_2}{C_2R_2s+1}, \infty, \infty\right)$	$\infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \qquad 283$
	$ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{1}{C_{2}s}, & \infty, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, & \frac{R_{2}}{C_{2}R_{2}s+1}, & \infty, & \infty \\ \end{pmatrix} \begin{pmatrix} L$

1 Examined
$$H(z)$$
 for TIA simple Z3 Z4 ZL: $\frac{Z_3Z_4Z_Lg_m}{Z_3Z_4g_m+2Z_3Z_Lg_m+Z_4Z_Lg_m}$

$$H(z) = \frac{Z_3 Z_4 Z_L g_m}{Z_3 Z_4 g_m + 2 Z_3 Z_L g_m + Z_4 Z_L g_m}$$

- 2 HP
- 3 BP

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

$$H(s) = \frac{L_L R_3 R_4 s}{C_L L_L R_3 R_4 s^2 + 2L_L R_3 s + L_L R_4 s + R_3 R_4}$$

Q:
$$\frac{C_L R_3 R_4 \sqrt{\frac{1}{C_L L_L}}}{2R_3 + R_4}$$
wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
bandwidth:
$$\frac{2R_3 + R_4}{C_L R_3 R_4}$$
K-LP: 0
K-HP: 0
K-BP:
$$\frac{R_3 R_4}{2R_3 + R_4}$$
Qz: 0
Wz: None

3.2 BP-2
$$Z(s) = \left(R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_4 R_L s}{C_L L_L R_3 R_4 R_L s^2 + L_L R_3 R_4 s + 2L_L R_3 R_L s + L_L R_4 R_L s + R_3 R_4 R_L}$$

Q:
$$\frac{C_L R_3 R_4 R_L \sqrt{\frac{1}{C_L L_L}}}{R_3 R_4 + 2 R_3 R_L + R_4 R_L}$$
 wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
 bandwidth:
$$\frac{R_3 R_4 + 2 R_3 R_L + R_4 R_L}{C_L R_3 R_4 R_L}$$
 K-LP: 0
K-HP: 0
K-BP:
$$\frac{R_3 R_4 R_L}{R_3 R_4 + 2 R_3 R_L + R_4 R_L}$$
 Qz: 0
Wz: None

3.3 BP-3
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s}{2C_4 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3}$$

Q:
$$R_3\sqrt{\frac{1}{L_L(2C_4+C_L)}}$$
 (2 C_4+C_L)
wo: $\sqrt{\frac{1}{L_L(2C_4+C_L)}}$
bandwidth: $\frac{1}{R_3(2C_4+C_L)}$
K-LP: 0
K-HP: 0
K-BP: R_3
Qz: 0
Wz: None

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

$$H(s) = \frac{L_L R_3 R_L s}{2C_4 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L}$$

Q:
$$\frac{R_3 R_L \sqrt{\frac{1}{L_L(2C_4 + C_L)}} (2C_4 + C_L)}{R_3 + R_L}$$

wo:
$$\sqrt{\frac{1}{L_L(2C_4+C_L)}}$$
 bandwidth: $\frac{R_3+R_L}{R_3R_L(2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: $\frac{R_3R_L}{R_3+R_L}$ Qz: 0 Wz: None

3.5 BP-5
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 R_4 s}{2C_4 L_L R_3 R_4 s^2 + C_L L_L R_3 R_4 s^2 + 2L_L R_3 s + L_L R_4 s + R_3 R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4\sqrt{\frac{1}{L_L(2C_4+C_L)}}(2C_4+C_L)}{2R_3+R_4}\\ \text{wo:} \ \sqrt{\frac{1}{L_L(2C_4+C_L)}}\\ \text{bandwidth:} \ \frac{2R_3+R_4}{R_3R_4(2C_4+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.6 BP-6
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_4 R_L s}{2 C_4 L_L R_3 R_4 R_L s^2 + C_L L_L R_3 R_4 R_L s^2 + L_L R_3 R_4 s + 2 L_L R_3 R_L s + L_L R_4 R_L s + R_3 R_4 R_L s}$$

Q:
$$\frac{R_3 R_4 R_L \sqrt{\frac{1}{L_L (2C_4 + C_L)}} (2C_4 + C_L)}{R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

wo:
$$\sqrt{\frac{1}{L_L(2C_4+C_L)}}$$

bandwidth: $\frac{R_3R_4 + 2R_3R_L + R_4R_L}{R_3R_4R_L(2C_4 + C_L)}$

K-LP: 0 K-HP: 0

K-BP: $\frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L}$ Qz: 0

Wz: None

3.7 BP-7
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_3 R_L s}{2C_4 L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2R_3 R_L}$$

Parameters:

Q:
$$\frac{2C_4R_3R_L\sqrt{\frac{1}{C_4L_4}}}{\frac{R_3+R_L}{1}}$$

wo: $\sqrt{\frac{1}{C_4 L_4}}$

bandwidth: $\frac{R_3 + R_L}{2C_4 R_3 R_L}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_3R_L}{R_3+R_L}$ Qz: 0

Wz: None

3.8 BP-8
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s}{2 C_4 L_4 R_3 s^2 + C_L L_4 R_3 s^2 + L_4 s + 2 R_3}$$

Q:
$$\sqrt{2}R_3\sqrt{\frac{1}{L_4(2C_4+C_L)}}\left(2C_4+C_L\right)$$

wo: $\sqrt{2}\sqrt{\frac{1}{L_4(2C_4+C_L)}}$

bandwidth:
$$\frac{1}{R_3(2C_4+C_L)}$$
 K-LP: 0
K-HP: 0
K-BP: R_3
Qz: 0
Wz: None

3.9 BP-9
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_3 R_L s}{2C_4 L_4 R_3 R_L s^2 + C_L L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2R_3 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_{3}R_{L}\sqrt{\frac{1}{L_{4}(2C_{4}+C_{L})}}(2C_{4}+C_{L})}{R_{3}+R_{L}} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{1}{L_{4}(2C_{4}+C_{L})}} \\ \text{bandwidth:} \ \frac{R_{3}+R_{L}}{R_{3}R_{L}(2C_{4}+C_{L})} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_{3}R_{L}}{R_{3}+R_{L}} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.10 BP-10
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_4 L_L R_3 s}{2C_4 L_4 L_L R_3 s^2 + C_L L_4 L_L R_3 s^2 + L_4 L_L s + L_4 R_3 + 2L_L R_3}$$

Q:
$$R_3 \sqrt{\frac{L_4 + 2L_L}{L_4 L_L (2C_4 + C_L)}} \left(2C_4 + C_L \right)$$

wo: $\sqrt{\frac{L_4 + 2L_L}{L_4 L_L (2C_4 + C_L)}}$
bandwidth: $\frac{1}{R_3 (2C_4 + C_L)}$

K-LP: 0 K-HP: 0 K-BP: R_3 Qz: 0 Wz: None

3.11 BP-11
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_3 R_L s}{2C_4 L_4 L_L R_3 R_L s^2 + C_L L_4 L_L R_3 R_L s^2 + L_4 L_L R_3 s + L_4 L_L R_3 R_L + 2L_L R_3 R_L}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}}}{R_3+R_L}(2C_4+C_L)} \\ \text{wo:} \ \sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.12 BP-12
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty\right)$$

$$H(s) = \frac{L_4 R_3 R_4 R_L s}{2 C_4 L_4 R_3 R_4 R_L s^2 + L_4 R_3 R_4 s + 2 L_4 R_3 R_L s + L_4 R_4 R_L s + 2 R_3 R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{2C_4R_3R_4R_L\sqrt{\frac{1}{C_4L_4}}}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_4L_4}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{2C_4R_3R_4R_L} \end{array}$$

K-LP: 0 K-HP: 0

K-BP: $\frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L}$ Qz: 0

Qz: 0 Wz: None

3.13 BP-13
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s}{2C_4 L_4 R_3 R_4 s^2 + C_L L_4 R_3 R_4 s^2 + 2L_4 R_3 s + L_4 R_4 s + 2R_3 R_4}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_{3}R_{4}\sqrt{\frac{1}{L_{4}(2C_{4}+C_{L})}}(2C_{4}+C_{L})}{2R_{3}+R_{4}} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{1}{L_{4}(2C_{4}+C_{L})}} \\ \text{bandwidth:} \ \frac{2R_{3}+R_{4}}{R_{3}R_{4}(2C_{4}+C_{L})} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_{3}R_{4}}{2R_{3}+R_{4}} \\ \text{Qz:} \ 0 \end{array}$$

Wz: None

3.14 BP-14
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 R_L s}{2C_4 L_4 R_3 R_4 R_L s^2 + C_L L_4 R_3 R_4 R_L s^2 + L_4 R_3 R_4 s + 2L_4 R_3 R_L s + L_4 R_4 R_L s + 2R_3 R_4 R_L s}$$

Q:
$$\frac{\sqrt{2}R_{3}R_{4}R_{L}\sqrt{\frac{1}{L_{4}(2C_{4}+C_{L})}}(2C_{4}+C_{L})}{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{L_{4}(2C_{4}+C_{L})}}$$
 bandwidth:
$$\frac{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}}{R_{3}R_{4}R_{L}(2C_{4}+C_{L})}$$
 K-LP: 0

K-HP: 0

K-BP: $\frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L}$ Qz: 0

Wz: None

3.15 BP-15
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_4 L_L R_3 R_4 s}{2 C_4 L_4 L_L R_3 R_4 s^2 + C_L L_4 L_L R_3 R_4 s^2 + 2 L_4 L_L R_3 s + L_4 L_L R_4 s + L_4 R_3 R_4 + 2 L_L R_3 R_4 s^2}$$

Parameters:

Q:
$$\frac{R_3R_4\sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}}(2C_4+C_L)}{2R_3+R_4}$$
 wo:
$$\sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}}$$
 bandwidth:
$$\frac{2R_3+R_4}{R_3R_4(2C_4+C_L)}$$

K-LP: 0 K-HP: 0

K-BP: $\frac{R_3 R_4}{2R_3 + R_4}$

Qz: 0 Wz: None

3.16 BP-16
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4L_LR_3R_4R_Ls}{2C_4L_4L_LR_3R_4R_Ls^2 + C_LL_4L_LR_3R_4R_Ls^2 + L_4L_LR_3R_4s + 2L_4L_LR_3R_Ls + L_4L_LR_4R_Ls + L_4R_3R_4R_L + 2L_LR_3R_4R_Ls}$$

Parameters:

Q:
$$\frac{R_3 R_4 R_L \sqrt{\frac{L_4 + 2L_L}{L_4 L_L (2C_4 + C_L)}}}{R_3 R_4 + 2R_3 R_L + R_4 R_L}$$
 wo:
$$\sqrt{\frac{L_4 + 2L_L}{L_4 L_L (2C_4 + C_L)}}$$
 bandwidth:
$$\frac{R_3 R_4 + 2R_3 R_L + R_4 R_L}{R_3 R_4 R_L (2C_4 + C_L)}$$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L}$ Qz: 0

Wz: None

3.17 BP-17
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{L_LR_4s}{C_3L_LR_4s^2 + C_LL_LR_4s^2 + 2L_Ls + R_4}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{R_4\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3+C_L)}{2} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{2}{R_4(C_3+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4}{2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.18 BP-18
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_LR_4R_Ls}{C_3L_LR_4R_Ls^2 + C_LL_LR_4R_Ls^2 + L_LR_4s + 2L_LR_Ls + R_4R_Ls}$$

Q:
$$\frac{R_4 R_L \sqrt{\frac{1}{L_L (C_3 + C_L)}} (C_3 + C_L)}{R_4 + 2R_L}$$
 wo:
$$\sqrt{\frac{1}{L_L (C_3 + C_L)}}$$
 bandwidth:
$$\frac{R_4 + 2R_L}{R_4 R_L (C_3 + C_L)}$$
 K-LP: 0

K-HP: 0 K-BP: $\frac{R_4R_L}{R_4+2R_L}$ Qz: 0

Wz: None

3.19 BP-19
$$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s}{C_3 L_L R_L s^2 + 2C_4 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L}$$

Parameters:

Q:
$$R_L \sqrt{\frac{1}{L_L(C_3 + 2C_4 + C_L)}} (C_3 + 2C_4 + C_L)$$

wo: $\sqrt{\frac{1}{L_L(C_3 + 2C_4 + C_L)}}$

bandwidth: $\frac{1}{R_L(C_3+2C_4+C_1)}$

K-LP: 0

K-HP: 0

K-BP: R_L

Qz: 0

Wz: None

3.20 BP-20
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_4 s}{C_3 L_L R_4 s^2 + 2 C_4 L_L R_4 s^2 + C_L L_L R_4 s^2 + 2 L_L s + R_4}$$

Parameters:

Q:
$$\frac{R_4\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2}$$
 wo:
$$\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}$$

bandwidth: $\frac{2}{R_4(C_3+2C_4+C_L)}$

K-LP: 0 K-HP: 0

K-BP:
$$\frac{R_4}{2}$$
 Qz: 0 Wz: None

3.21 BP-21
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_4 R_L s}{C_3 L_L R_4 R_L s^2 + 2 C_4 L_L R_4 R_L s^2 + C_L L_L R_4 R_L s^2 + L_L R_4 s + 2 L_L R_L s + R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4R_L\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_4+2R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_4+2R_L}{R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.22 BP-22
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_L s}{C_3 L_4 R_L s^2 + 2C_4 L_4 R_L s^2 + L_4 s + 2R_L}$$

Q:
$$\sqrt{2}R_L\sqrt{\frac{1}{L_4(C_3+2C_4)}}$$
 (C_3+2C_4) wo: $\sqrt{2}\sqrt{\frac{1}{L_4(C_3+2C_4)}}$ bandwidth: $\frac{1}{R_L(C_3+2C_4)}$ K-LP: 0 K-HP: 0 K-BP: R_L

Qz: 0 Wz: None

3.23 BP-23
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_L s}{C_3 L_4 R_L s^2 + 2C_4 L_4 R_L s^2 + C_L L_4 R_L s^2 + L_4 s + 2R_L}$$

Parameters:

Q:
$$\sqrt{2}R_L\sqrt{\frac{1}{L_4(C_3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$) wo: $\sqrt{2}\sqrt{\frac{1}{L_4(C_3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_L(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_L Qz: 0 Wz: None

3.24 BP-24
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_L s}{C_3 L_4 L_L R_L s^2 + 2 C_4 L_4 L_L R_L s^2 + C_L L_4 L_L R_L s^2 + L_4 L_L s + L_4 R_L + 2 L_L R_L}$$

$$\begin{array}{l} {\rm Q:}\; R_L \sqrt{\frac{L_4 + 2L_L}{L_4 L_L (C_3 + 2C_4 + C_L)}} \left(C_3 + 2C_4 + C_L\right) \\ {\rm wo:}\; \sqrt{\frac{L_4 + 2L_L}{L_4 L_L (C_3 + 2C_4 + C_L)}} \\ {\rm bandwidth:}\; \frac{1}{R_L (C_3 + 2C_4 + C_L)} \\ {\rm K-LP:}\; 0 \\ {\rm K-HP:}\; 0 \\ {\rm K-BP:}\; R_L \\ {\rm Qz:}\; 0 \end{array}$$

Wz: None

3.25 BP-25
$$Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_4 R_L s}{C_3 L_4 R_4 R_L s^2 + 2C_4 L_4 R_4 R_L s^2 + L_4 R_4 s + 2L_4 R_L s + 2R_4 R_L}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_4R_L\sqrt{\frac{1}{L_4(C_3+2C_4)}}(C_3+2C_4)}{R_4+2R_L}\\ \text{wo:} \ \sqrt{2}\sqrt{\frac{1}{L_4(C_3+2C_4)}}\\ \text{bandwidth:} \ \frac{R_4+2R_L}{R_4R_L(C_3+2C_4)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_4R_L}{R_4+2R_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.26 BP-26
$$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_4 s}{C_3 L_4 R_4 s^2 + 2C_4 L_4 R_4 s^2 + C_L L_4 R_4 s^2 + 2L_4 s + 2R_4}$$

Q:
$$\frac{\sqrt{2}R_4\sqrt{\frac{1}{L_4(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{L_4(C_3+2C_4+C_L)}}$$
 bandwidth:
$$\frac{2}{R_4(C_3+2C_4+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_4}{2}$$
 Qz: 0 Wz: None

3.27 BP-27
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_4 R_4 R_L s}{C_3 L_4 R_4 R_L s^2 + 2 C_4 L_4 R_4 R_L s^2 + C_L L_4 R_4 R_L s^2 + L_4 R_4 s + 2 L_4 R_L s + 2 R_4 R_L}$$

Q:
$$\frac{\sqrt{2}R_{4}R_{L}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}(C_{3}+2C_{4}+C_{L})}}{R_{4}+2R_{L}}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}$$
 bandwidth:
$$\frac{R_{4}+2R_{L}}{R_{4}R_{L}(C_{3}+2C_{4}+C_{L})}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_{4}R_{L}}{R_{4}+2R_{L}}$$
 Qz: 0 Wz: None

3.28 BP-28
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_4 L_L R_4 s}{C_3 L_4 L_L R_4 s^2 + 2 C_4 L_4 L_L R_4 s^2 + C_L L_4 L_L R_4 s^2 + 2 L_4 L_L s + L_4 R_4 + 2 L_L R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2} \\ \text{wo:} \ \sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{2}{R_4(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4}{2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.29 BP-29
$$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_4 R_L s}{C_3 L_4 L_L R_4 R_L s^2 + 2 C_4 L_4 L_L R_4 R_L s^2 + C_L L_4 L_L R_4 R_L s^2 + L_4 L_L R_4 s + 2 L_4 L_L R_4 R_L s + L_4 R_4 R_L + 2 L_L R_4 R_L s}$$

$$Q: \frac{R_4R_L\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_4+2R_L}$$
 wo: $\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}$ bandwidth: $\frac{R_4+2R_L}{R_4R_L(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: $\frac{R_4R_L}{R_4+2R_L}$ Qz: 0 Wz: None

3.30 BP-30
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 R_4 s}{C_3 L_L R_3 R_4 s^2 + C_L L_L R_3 R_4 s^2 + 2L_L R_3 s + L_L R_4 s + R_3 R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3+C_L)}{2R_3+R_4}\\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}}\\ \text{bandwidth:} \ \frac{2R_3+R_4}{R_3R_4(C_3+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.31 BP-31
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_4 R_L s}{C_3 L_L R_3 R_4 R_L s^2 + C_L L_L R_3 R_4 R_L s^2 + L_L R_3 R_4 s + 2L_L R_3 R_L s + L_L R_4 R_L s + R_3 R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.32 BP-32
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$L_L R_3 s$$

$$H(s) = \frac{L_L R_3 s}{C_3 L_L R_3 s^2 + 2 C_4 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3}$$

Q:
$$R_3\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$)
wo: $\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}$
bandwidth: $\frac{1}{R_3(C_3+2C_4+C_L)}$
K-LP: 0
K-HP: 0
K-BP: R_3
Qz: 0
Wz: None

3.33 BP-33
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s}{C_3 L_L R_3 R_L s^2 + 2C_4 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.34 BP-34
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 R_4 s}{C_3 L_L R_3 R_4 s^2 + 2 C_4 L_L R_3 R_4 s^2 + C_L L_L R_3 R_4 s^2 + 2 L_L R_3 s + L_L R_4 s + R_3 R_4}$$

Q:
$$\frac{R_3R_4\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2R_3+R_4}$$
 wo:
$$\sqrt{\frac{1}{L_L(C_3+2C_4+C_L)}}$$
 bandwidth:
$$\frac{2R_3+R_4}{R_3R_4(C_3+2C_4+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3R_4}{2R_3+R_4}$$
 Qz: 0 Wz: None

3.35 BP-35
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_4 R_L s}{C_3 L_L R_3 R_4 R_L s^2 + 2 C_4 L_L R_3 R_4 R_L s^2 + C_L L_L R_3 R_4 R_L s^2 + L_L R_3 R_4 s + 2 L_L R_3 R_L s + L_L R_4 R_L s + R_3 R_4 R_L s}$$

3.36 BP-36
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_3 R_L s}{C_3 L_4 R_3 R_L s^2 + 2 C_4 L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L}$$

Q:
$$\frac{\sqrt{2}R_{3}R_{L}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4})}}(C_{3}+2C_{4})}{R_{3}+R_{L}}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4})}}$$
 bandwidth:
$$\frac{R_{3}+R_{L}}{R_{3}R_{L}(C_{3}+2C_{4})}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
 Qz: 0 Wz: None

3.37 BP-37
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s}{C_3 L_4 R_3 s^2 + 2C_4 L_4 R_3 s^2 + C_L L_4 R_3 s^2 + L_4 s + 2R_3}$$

Q:
$$\sqrt{2}R_3\sqrt{\frac{1}{L_4(C_3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$) wo: $\sqrt{2}\sqrt{\frac{1}{L_4(C_3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_3(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_3 Qz: 0 Wz: None

3.38 BP-38
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_3 R_L s}{C_3 L_4 R_3 R_L s^2 + 2 C_4 L_4 R_3 R_L s^2 + C_L L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L}$$

Q:
$$\frac{\sqrt{2}R_{3}R_{L}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}(C_{3}+2C_{4}+C_{L})}{R_{3}+R_{L}}}{\text{wo: }\sqrt{2}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}}$$
 bandwidth:
$$\frac{R_{3}+R_{L}}{R_{3}R_{L}(C_{3}+2C_{4}+C_{L})}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
 Qz: 0 Wz: None

3.39 BP-39
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_4 L_L R_3 s}{C_3 L_4 L_L R_3 s^2 + 2C_4 L_4 L_L R_3 s^2 + C_L L_4 L_L R_3 s^2 + L_4 L_L s + L_4 R_3 + 2L_L R_3}$$

$$\begin{array}{l} \text{Q: } R_3\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}\left(C_3+2C_4+C_L\right) \\ \text{wo: } \sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth: } \frac{1}{R_3(C_3+2C_4+C_L)} \\ \text{K-LP: 0} \\ \text{K-HP: 0} \\ \text{K-BP: } R_3 \\ \text{Qz: 0} \\ \text{Wz: None} \end{array}$$

3.40 BP-40
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_3 R_L s}{C_3 L_4 L_L R_3 R_L s^2 + 2C_4 L_4 L_L R_3 R_L s^2 + C_L L_4 L_L R_3 R_L s^2 + L_4 L_L R_3 s + L_4 L_L R_3 R_L s + L_4 R_3 R_L + 2L_L R_3 R_L s^2 + L_4 L_L R_3 R_L s^2 + L_4 L_L R_3 R_L s + L_4 R_3 R_L s$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}}{R_3+R_L}(C_3+2C_4+C_L)} \\ \text{wo:} \ \sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.41 BP-41
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_3 R_4 R_L s}{C_3 L_4 R_3 R_4 R_L s^2 + 2 C_4 L_4 R_3 R_4 R_L s^2 + L_4 R_3 R_4 s + 2 L_4 R_3 R_L s + L_4 R_4 R_L s + 2 R_3 R_4 R_L}$$

$$Q \colon \frac{\sqrt{2}R_{3}R_{4}R_{L}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4})}}(C_{3}+2C_{4})}{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}}$$
 wo: $\sqrt{2}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4})}}$ bandwidth: $\frac{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}}{R_{3}R_{4}R_{L}(C_{3}+2C_{4})}$ K-LP: 0 K-HP: 0 K-BP: $\frac{R_{3}R_{4}R_{L}}{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}}$ Qz: 0 Wz: None

3.42 BP-42
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s}{C_3 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_4 s^2 + C_L L_4 R_3 R_4 s^2 + 2 L_4 R_3 s + L_4 R_4 s + 2 R_3 R_4}$$

Q:
$$\frac{\sqrt{2}R_{3}R_{4}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}(C_{3}+2C_{4}+C_{L})}{2R_{3}+R_{4}}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}$$
 bandwidth:
$$\frac{2R_{3}+R_{4}}{R_{3}R_{4}(C_{3}+2C_{4}+C_{L})}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_{3}R_{4}}{2R_{3}+R_{4}}$$
 Qz: 0 Wz: None

3.43 BP-43
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 R_L s}{C_3 L_4 R_3 R_4 R_L s^2 + 2 C_4 L_4 R_3 R_4 R_L s^2 + C_L L_4 R_3 R_4 R_L s^2 + L_4 R_3 R_4 s + 2 L_4 R_3 R_L s + L_4 R_4 R_L s + 2 R_3 R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_{3}R_{4}R_{L}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}}(C_{3}+2C_{4}+C_{L})}{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{1}{L_{4}(C_{3}+2C_{4}+C_{L})}} \\ \text{bandwidth:} \ \frac{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}}{R_{3}R_{4}R_{L}(C_{3}+2C_{4}+C_{L})} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_{3}R_{4}R_{L}}{R_{3}R_{4}+2R_{3}R_{L}+R_{4}R_{L}} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.44 BP-44
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_4 L_L R_3 R_4 s}{C_3 L_4 L_L R_3 R_4 s^2 + 2 C_4 L_4 L_L R_3 R_4 s^2 + C_L L_4 L_L R_3 R_4 s^2 + 2 L_4 L_L R_3 s + L_4 L_L R_4 s + L_4 R_3 R_4 + 2 L_L R_3 R_4 s^2}$$

$$\begin{array}{c} \text{Q:} & \frac{R_3R_4\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2R_3+R_4}\\ \text{Wo:} & \sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}\\ \text{bandwidth:} & \frac{2R_3+R_4}{R_3R_4(C_3+2C_4+C_L)}\\ \text{K-LP:} & 0\\ \text{K-HP:} & 0\\ \text{K-BP:} & \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} & 0\\ \text{Wz:} & \text{None} \end{array}$$

$$\begin{aligned} \textbf{3.45} \quad \mathbf{BP-45} \ \ Z(s) &= \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ \infty, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right) \\ H(s) &= \frac{L_4L_LR_3R_4R_Ls}{C_3L_4L_LR_3R_4R_Ls^2 + 2C_4L_4L_LR_3R_4R_Ls^2 + L_4L_LR_3R_4R_Ls + 2L_4L_LR_3R_4s + L_4L_LR_3R_4R_L + 2L_LR_3R_4R_Ls} \end{aligned}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Wo:} \ \sqrt{\frac{L_4+2L_L}{L_4L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.46 BP-46
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_4 R_L s}{C_3 L_3 R_4 R_L s^2 + L_3 R_4 s + 2L_3 R_L s + R_4 R_L}$$

Q:
$$\frac{C_3R_4R_L\sqrt{\frac{1}{C_3L_3}}}{R_4+2R_L}$$

wo: $\sqrt{\frac{1}{C_3L_3}}$
bandwidth: $\frac{R_4+2R_L}{C_3R_4R_L}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_4R_L}{R_4+2R_L}$
Qz: 0
Wz: None

3.47 BP-47
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4 s}{C_3 L_3 R_4 s^2 + C_L L_3 R_4 s^2 + 2L_3 s + R_4}$$

Q:
$$\frac{R_4\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3+C_L)}{2}$$
 wo:
$$\sqrt{\frac{1}{L_3(C_3+C_L)}}$$
 bandwidth:
$$\frac{2}{R_4(C_3+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_4}{2}$$
 Qz: 0 Wz: None

3.48 BP-48
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_4 R_L s}{C_3 L_3 R_4 R_L s^2 + C_L L_3 R_4 R_L s^2 + L_3 R_4 s + 2 L_3 R_L s + R_4 R_L}$$

$$Q \colon \frac{R_4 R_L \sqrt{\frac{1}{L_3(C_3 + C_L)}}(C_3 + C_L)}{R_4 + 2R_L}$$
wo: $\sqrt{\frac{1}{L_3(C_3 + C_L)}}$
bandwidth: $\frac{R_4 + 2R_L}{R_4 R_L(C_3 + C_L)}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_4 R_L}{R_4 + 2R_L}$
Qz: 0
Wz: None

3.49 BP-49
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_4 s}{C_3 L_3 L_L R_4 s^2 + C_L L_3 L_L R_4 s^2 + 2L_3 L_L s + L_3 R_4 + L_L R_4}$$

$$Q: \frac{\frac{R_4\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3+C_L)}{2}}{\text{wo: } \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}}$$
 bandwidth: $\frac{2}{R_4(C_3+C_L)}$ K-LP: 0
K-HP: 0
K-BP: $\frac{R_4}{2}$ Qz: 0
Wz: None

3.50 BP-50
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_4 R_L s}{C_3 L_3 L_L R_4 R_L s^2 + C_L L_3 L_L R_4 R_L s^2 + L_3 L_L R_4 s + 2 L_3 L_L R_4 R_L s + L_4 R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3+C_L)}{R_4+2R_L} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_4+2R_L}{R_4R_L(C_3+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.51 BP-51
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_L s}{C_3 L_3 R_L s^2 + 2C_4 L_3 R_L s^2 + L_3 s + R_L}$$

Q:
$$R_L \sqrt{\frac{1}{L_3(C_3+2C_4)}} (C_3 + 2C_4)$$

wo: $\sqrt{\frac{1}{L_3(C_3+2C_4)}}$
bandwidth: $\frac{1}{R_L(C_3+2C_4)}$
K-LP: 0
K-HP: 0
K-BP: R_L
Qz: 0
Wz: None

3.52 BP-52
$$Z(s) = \left(R_1, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_3 R_L s}{C_3 L_3 R_L s^2 + 2C_4 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L}$$

Q:
$$R_L \sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}$$
 ($C_3 + 2C_4 + C_L$)
wo: $\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}$
bandwidth: $\frac{1}{R_L(C_3+2C_4+C_L)}$
K-LP: 0
K-HP: 0
K-BP: R_L
Qz: 0
Wz: None

3.53 BP-53
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_L s}{C_3 L_3 L_L R_L s^2 + 2 C_4 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L}$$

Q:
$$R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}$$
 $(C_3+2C_4+C_L)$ wo: $\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_L(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_L Qz: 0 Wz: None

3.54 BP-54
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_4 R_L s}{C_3 L_3 R_4 R_L s^2 + 2C_4 L_3 R_4 R_L s^2 + L_3 R_4 s + 2L_3 R_L s + R_4 R_L}$$

Q:
$$\frac{R_4R_L\sqrt{\frac{1}{L_3(C_3+2C_4)}}(C_3+2C_4)}{R_4+2R_L}$$
wo:
$$\sqrt{\frac{1}{L_3(C_3+2C_4)}}$$
bandwidth:
$$\frac{R_4+2R_L}{R_4R_L(C_3+2C_4)}$$
K-LP: 0
K-HP: 0
K-BP:
$$\frac{R_4R_L}{R_4+2R_L}$$
Qz: 0
Wz: None

3.55 BP-55
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4 s}{C_3 L_3 R_4 s^2 + 2C_4 L_3 R_4 s^2 + C_L L_3 R_4 s^2 + 2L_3 s + R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{2}{R_4(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4}{2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.56 BP-56
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_4 R_L s}{C_3 L_3 R_4 R_L s^2 + 2 C_4 L_3 R_4 R_L s^2 + C_L L_3 R_4 R_L s^2 + L_3 R_4 s + 2 L_3 R_L s + R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4R_L\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_4+2R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_4+2R_L}{R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.57 BP-57
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_4 s}{C_3 L_3 L_L R_4 s^2 + 2 C_4 L_3 L_L R_4 s^2 + C_L L_3 L_L R_4 s^2 + 2 L_3 L_L s + L_3 R_4 + L_L R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{2}{R_4(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4}{2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.58 BP-58
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_4 R_L s}{C_3 L_3 L_L R_4 R_L s^2 + 2 C_4 L_3 L_L R_4 R_L s^2 + C_L L_3 L_L R_4 R_L s^2 + L_3 L_L R_4 s + 2 L_3 L_L R_4 s + L_3 R_4 R_L + L_L R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_4+2R_L} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_4+2R_L}{R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.59 BP-59
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 L_4 R_L s}{C_3 L_3 L_4 R_L s^2 + 2C_4 L_3 L_4 R_L s^2 + L_3 L_4 s + 2L_3 R_L + L_4 R_L}$$

Q:
$$R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}}$$
 (C_3+2C_4)
wo: $\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}}$
bandwidth: $\frac{1}{R_L(C_3+2C_4)}$
K-LP: 0
K-HP: 0
K-BP: R_L
Qz: 0
Wz: None

3.60 BP-60
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_3 L_4 R_L s}{C_3 L_3 L_4 R_L s^2 + 2 C_4 L_3 L_4 R_L s^2 + C_L L_3 L_4 R_L s^2 + L_3 L_4 s + 2 L_3 R_L + L_4 R_L}$$

Q:
$$R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}$$
 $(C_3+2C_4+C_L)$ wo: $\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_L(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_L Qz: 0 Wz: None

3.61 BP-61
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_3L_4L_LR_Ls}{C_3L_3L_4L_LR_Ls^2 + 2C_4L_3L_4L_LR_Ls^2 + C_LL_3L_4L_LR_Ls^2 + L_3L_4L_Ls + L_3L_4R_L + 2L_3L_LR_L + L_4L_LR_L}$$

Q:
$$R_L\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$) wo: $\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_L(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_L Qz: 0 Wz: None

3.62 BP-62 $Z(s) = (L_1 s, R_2, \infty, \infty, \infty, R_L)$

$$H(s) = \frac{L_3 L_4 R_4 R_L s}{C_3 L_3 L_4 R_4 R_L s^2 + 2 C_4 L_3 L_4 R_4 R_L s^2 + L_3 L_4 R_4 s + 2 L_3 L_4 R_L s + 2 L_3 R_4 R_L + L_4 R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}}(C_3+2C_4)}{R_4+2R_L} \\ \text{wo:} \ \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}} \\ \text{bandwidth:} \ \frac{R_4+2R_L}{R_4R_L(C_3+2C_4)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.63 BP-63
$$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 L_4 R_4 s}{C_3 L_3 L_4 R_4 s^2 + 2 C_4 L_3 L_4 R_4 s^2 + C_L L_3 L_4 R_4 s^2 + 2 L_3 L_4 s + 2 L_3 R_4 + L_4 R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2} \\ \text{wo:} \ \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{2}{R_4(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4}{2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.64 BP-64
$$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3L_4R_4R_Ls}{C_3L_3L_4R_4R_Ls^2 + 2C_4L_3L_4R_4R_Ls^2 + C_LL_3L_4R_4R_Ls^2 + L_3L_4R_4s + 2L_3L_4R_Ls + 2L_3R_4R_L + L_4R_4R_Ls^2 + L_3L_4R_4s + 2L_3L_4R_4s + 2L_3L_4R_4s$$

$$\begin{array}{l} \text{Q:} & \frac{R_4R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_4+2R_L} \\ \text{Wo:} & \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}} \\ \text{bandwidth:} & \frac{R_4+2R_L}{R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

3.65 BP-65
$$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_4L_LR_4s}{C_3L_3L_4L_LR_4s^2 + 2C_4L_3L_4L_LR_4s^2 + C_LL_3L_4L_LR_4s^2 + 2L_3L_4L_Ls + L_3L_4R_4 + 2L_3L_LR_4 + L_4L_LR_4s^2}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_4\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}}}(C_3+2C_4+C_L)}{2} \\ \text{wo:} \ \sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{2}{R_4(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_4}{2} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

$$H(s) = \frac{L_3L_4L_LR_4R_Ls}{C_3L_3L_4L_LR_4R_Ls^2 + 2C_4L_3L_4L_LR_4R_Ls^2 + C_LL_3L_4L_LR_4R_Ls^2 + L_3L_4L_LR_4s + 2L_3L_4L_LR_4s + L_3L_4R_4R_L + 2L_3L_LR_4R_L + L_4L_LR_4R_Ls}$$

$$\begin{array}{l} \text{Q:} & \frac{R_4R_L\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(C_3+2C_4+C_L)}}}{R_4+2R_L} (C_3+2C_4+C_L)} \\ \text{Wo:} & \frac{R_4+2R_L}{L_3L_4+2L_3L_L+L_4L_L} \\ \text{wo:} & \sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(C_3+2C_4+C_L)}} \\ \text{bandwidth:} & \frac{R_4+2R_L}{R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_4R_L}{R_4+2R_L} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

3.67 BP-67
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s}{C_3 L_3 R_3 R_4 R_L s^2 + L_3 R_3 R_4 s + 2L_3 R_3 R_L s + L_3 R_4 R_L s + R_3 R_4 R_L}$$

Q:
$$\frac{C_3R_3R_4R_L\sqrt{\frac{1}{C_3L_3}}}{R_3R_4+2R_3R_L+R_4R_L}$$
 wo:
$$\sqrt{\frac{1}{C_3L_3}}$$
 bandwidth:
$$\frac{R_3R_4+2R_3R_L+R_4R_L}{C_3R_3R_4R_L}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L}$$
 Qz: 0 Wz: None

3.68 BP-68
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s}{C_3 L_3 R_3 R_4 s^2 + C_L L_3 R_3 R_4 s^2 + 2L_3 R_3 s + L_3 R_4 s + R_3 R_4}$$

Q:
$$\frac{R_3R_4\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3+C_L)}{2R_3+R_4}$$
 wo:
$$\sqrt{\frac{1}{L_3(C_3+C_L)}}$$
 bandwidth:
$$\frac{2R_3+R_4}{R_3R_4(C_3+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3R_4}{2R_3+R_4}$$
 Qz: 0 Wz: None

3.69 BP-69
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s}{C_3 L_3 R_3 R_4 R_L s^2 + C_L L_3 R_3 R_4 R_L s^2 + L_3 R_3 R_4 s + 2L_3 R_3 R_L s + L_3 R_4 R_L s + R_3 R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.70 BP-70
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_4 s}{C_3 L_3 L_L R_3 R_4 s^2 + C_L L_3 L_L R_3 R_4 s^2 + 2L_3 L_L R_3 s + L_3 L_L R_4 s + L_3 R_3 R_4 + L_L R_3 R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3+C_L)}{2R_3+R_4}\\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}\\ \text{bandwidth:} \ \frac{2R_3+R_4}{R_3R_4(C_3+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.71 BP-71
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_4 R_L s}{C_3 L_3 L_L R_3 R_4 R_L s^2 + C_L L_3 L_L R_3 R_4 R_L s^2 + L_3 L_L R_3 R_4 s + 2 L_3 L_L R_3 R_L s + L_3 L_L R_4 R_L s + L_3 R_3 R_4 R_L + L_L R_3 R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.72 BP-72
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s}{C_3 L_3 R_3 R_L s^2 + 2C_4 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{1}{L_3(C_3+2C_4)}}(C_3+2C_4)}{R_3+R_L}\\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4)}}\\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.73 BP-73
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + 2 C_4 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3}$$

Q:
$$R_3\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$)
wo: $\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}$
bandwidth: $\frac{1}{R_3(C_3+2C_4+C_L)}$
K-LP: 0
K-HP: 0
K-BP: R_3
Qz: 0
Wz: None

3.74 BP-74
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s}{C_3 L_3 R_3 R_L s^2 + 2 C_4 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.75 BP-75
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_3 s}{C_3 L_3 L_L R_3 s^2 + 2 C_4 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3}$$

$$\begin{array}{l} \text{Q: } R_3\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}\left(C_3+2C_4+C_L\right) \\ \text{wo: } \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth: } \frac{1}{R_3(C_3+2C_4+C_L)} \\ \text{K-LP: 0} \\ \text{K-HP: 0} \\ \text{K-BP: } R_3 \\ \text{Qz: 0} \\ \text{Wz: None} \end{array}$$

3.76 BP-76
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_L s}{C_3 L_3 L_L R_3 R_L s^2 + 2 C_4 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_1 s + L_3 R_3 R_L + L_L R_3 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}}{R_3+L_L}(C_3+2C_4+C_L)} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.77 BP-77
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s}{C_3 L_3 R_3 R_4 R_L s^2 + 2 C_4 L_3 R_3 R_4 R_L s^2 + L_3 R_3 R_4 s + 2 L_3 R_3 R_L s + L_3 R_4 R_L s + R_3 R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{1}{L_3(C_3+2C_4)}}(C_3+2C_4)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.78 BP-78
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s}{C_3 L_3 R_3 R_4 s^2 + 2C_4 L_3 R_3 R_4 s^2 + C_L L_3 R_3 R_4 s^2 + 2L_3 R_3 s + L_3 R_4 s + R_3 R_4}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2R_3+R_4}\\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}\\ \text{bandwidth:} \ \frac{2R_3+R_4}{R_3R_4(C_3+2C_4+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.79 BP-79
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s}{C_3 L_3 R_3 R_4 R_L s^2 + 2 C_4 L_3 R_3 R_4 R_L s^2 + C_L L_3 R_3 R_4 R_L s^2 + L_3 R_3 R_4 s + 2 L_3 R_3 R_L s + L_3 R_4 R_L s + R_3 R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.80 BP-80
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_4 s}{C_3 L_3 L_L R_3 R_4 s^2 + 2 C_4 L_3 L_L R_3 R_4 s^2 + C_L L_3 L_L R_3 R_4 s^2 + 2 L_3 L_L R_3 s + L_3 L_L R_4 s + L_3 R_3 R_4 + L_L R_3 R_4}$$

$$\begin{array}{c} \text{Q:} \ \frac{R_3R_4\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2R_3+R_4}\\ \text{Wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}\\ \text{bandwidth:} \ \frac{2R_3+R_4}{R_3R_4(C_3+2C_4+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

$$\textbf{3.81} \quad \textbf{BP-81} \ \ Z(s) = \left(\frac{1}{C_1 s}, \ \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_4 R_L s}{C_3 L_3 L_L R_3 R_4 R_L s^2 + 2 C_4 L_3 L_L R_3 R_4 R_L s^2 + C_L L_3 L_L R_3 R_4 R_L s^2 + L_3 L_L R_3 R_4 s + 2 L_3 L_L R_3 R_L s + L_3 L_L R_4 R_L s + L_3 R_3 R_4 R_L + L_L R_3 R_4 R_L s}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.82 BP-82
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 L_4 R_3 R_L s}{C_3 L_3 L_4 R_3 R_L s^2 + 2 C_4 L_3 L_4 R_3 R_L s^2 + L_3 L_4 R_3 s + L_3 L_4 R_L s + 2 L_3 R_3 R_L + L_4 R_3 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}}(C_3+2C_4)}{R_3+R_L}\\ \text{wo:} \ \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}}\\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.83 BP-83
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 L_4 R_3 s}{C_3 L_3 L_4 R_3 s^2 + 2 C_4 L_3 L_4 R_3 s^2 + C_L L_3 L_4 R_3 s^2 + L_3 L_4 s + 2 L_3 R_3 + L_4 R_3}$$

Q:
$$R_3\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$) wo: $\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_3(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_3 Qz: 0 Wz: None

3.84 BP-84
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3L_4R_3R_Ls}{C_3L_3L_4R_3R_Ls^2 + 2C_4L_3L_4R_3R_Ls^2 + C_LL_3L_4R_3R_Ls^2 + L_3L_4R_3s + L_3L_4R_Ls + 2L_3R_3R_L + L_4R_3R_Ls^2}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3+R_L}\\ \text{wo:} \ \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}\\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.85 BP-85
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_4 L_L R_3 s}{C_3 L_3 L_4 L_L R_3 s^2 + 2 C_4 L_3 L_4 L_L R_3 s^2 + C_L L_3 L_4 L_L R_3 s^2 + L_3 L_4 L_L s + L_3 L_4 R_3 + 2 L_3 L_L R_3 + L_4 L_L R_3}$$

Q:
$$R_3\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(3+2C_4+C_L)}}$$
 ($C_3+2C_4+C_L$) wo: $\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(C_3+2C_4+C_L)}}$ bandwidth: $\frac{1}{R_3(C_3+2C_4+C_L)}$ K-LP: 0 K-HP: 0 K-BP: R_3 Qz: 0 Wz: None

$$\textbf{3.86} \quad \textbf{BP-86} \ \ Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_3L_4L_LR_3R_Ls}{C_3L_3L_4L_LR_3R_Ls^2 + 2C_4L_3L_4L_LR_3R_Ls^2 + C_LL_3L_4L_RR_3R_Ls^2 + L_3L_4L_RR_3s + L_3L_4L_RR_3R_L + 2L_3L_RR_3R_L + L_4L_RR_3R_Ls}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3+R_L} \\ \text{wo:} \ \sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3+R_L}{R_3R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.87 BP-87
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3L_4R_3R_4R_Ls}{C_3L_3L_4R_3R_4R_Ls^2 + 2C_4L_3L_4R_3R_4R_Ls^2 + L_3L_4R_3R_4s + 2L_3L_4R_3R_Ls + L_3L_4R_4R_Ls + 2L_3R_3R_4R_L + L_4R_3R_4R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}}(C_3+2C_4)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.88 BP-88
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 L_4 R_3 R_4 s}{C_3 L_3 L_4 R_3 R_4 s^2 + 2 C_4 L_3 L_4 R_3 R_4 s^2 + C_L L_3 L_4 R_3 R_4 s^2 + 2 L_3 L_4 R_3 s + L_3 L_4 R_4 s + 2 L_3 R_3 R_4 + L_4 R_3 R_4}$$

$$\begin{array}{l} \text{Q:} & \frac{R_3R_4\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{2R_3+R_4}\\ \text{wo:} & \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}\\ \text{bandwidth:} & \frac{2R_3+R_4}{R_3R_4(C_3+2C_4+C_L)}\\ \text{K-LP:} & 0\\ \text{K-HP:} & 0\\ \text{K-BP:} & \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} & 0\\ \end{array}$$

3.89 BP-89
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4R_L\sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{2L_3+L_4}{L_3L_4(C_3+2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.90 BP-90
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_4L_LR_3R_4s}{C_3L_3L_4L_LR_3R_4s^2 + 2C_4L_3L_4L_LR_3R_4s^2 + C_LL_3L_4L_LR_3R_4s^2 + 2L_3L_4L_LR_3s + L_3L_4L_LR_4s + L_3L_4R_3R_4 + 2L_3L_LR_3R_4 + L_4L_LR_3R_4s^2 + 2L_3L_4L_LR_3s + L_3L_4L_LR_3s + L_3L_4L_LR_3s + L_3L_4L_LR_3s + L_3L_4R_3s + L_3$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_4\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}}{2R_3+R_4}\\ \text{wo:} \ \sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}}\\ \text{bandwidth:} \ \frac{2R_3+R_4}{R_3R_4(C_3+2C_4+C_L)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_4}{2R_3+R_4}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

3.91 BP-91
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $H(s) = \frac{L_3L_4L_LR_3R_4R_Ls}{C_3L_3L_4L_LR_3R_4R_Ls^2 + 2C_4L_3L_4L_R3R_4R_Ls^2 + C_LL_3L_4L_R3R_4R_Ls^2 + L_3L_4L_R3R_4s + 2L_3L_4L_R3R_4s + L_3L_4L_R3R_4s + L_3L_4L_R3R_4s$

Parameters:

$$\begin{array}{l} \text{Q:} & \frac{R_3R_4R_L\sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_L(C_3+2C_4+C_L)}}(C_3+2C_4+C_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} & \sqrt{\frac{L_3L_4+2L_3L_L+L_4L_L}{L_3L_4L_C(C_3+2C_4+C_L)}} \\ \text{bandwidth:} & \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4R_L(C_3+2C_4+C_L)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

4 LP

5 BS

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

$$H(s) = \frac{R_3 R_4 \left(C_L L_L s^2 + 1 \right)}{2 C_L L_L R_3 s^2 + C_L L_L R_4 s^2 + C_L R_3 R_4 s + 2 R_3 + R_4}$$

Q:
$$\frac{L_L \sqrt{\frac{1}{C_L L_L}} (2R_3 + R_4)}{R_3 R_4}$$

wo: $\sqrt{\frac{1}{C_L L_L}}$
bandwidth: $\frac{R_3 R_4}{L_L (2R_3 + R_4)}$

K-LP:
$$\frac{R_3R_4}{2R_3+R_4}$$

K-HP: $\frac{R_3R_4}{2R_3+R_4}$
K-BP: 0
Qz: None
Wz: $\sqrt{\frac{1}{C_LL_L}}$

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

$$H(s) = \frac{R_3 R_4 R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L R_3 R_4 s^2 + 2C_L L_L R_3 R_L s^2 + C_L L_L R_4 R_L s^2 + C_L R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}}{R_3R_4+2R_3R_L+R_4R_L)} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{R_3R_4R_L}{L_L(R_3R_4+2R_3R_L+R_4R_L)} \\ \text{K-LP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{K-HP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{array}$$

5.3 BS-3
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 R_3 s^2 + C_4 L_4 R_L s^2 + 2C_4 R_3 R_L s + R_3 + R_L}$$

Q:
$$\frac{L_4\sqrt{\frac{1}{C_4L_4}}(R_3+R_L)}{2R_3R_L}$$
 wo:
$$\sqrt{\frac{1}{C_4L_4}}$$

bandwidth: $\frac{2R_3R_L}{L_4(R_3+R_L)}$ K-LP: $\frac{R_3R_L}{R_3+R_L}$ K-HP: $\frac{R_3R_L}{R_3+R_L}$ K-BP: 0 Qz: None Wz: $\sqrt{\frac{1}{C_4L_4}}$

5.4 BS-4
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_L s^2 + C_4 L_4 R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_4\sqrt{\frac{1}{C_4L_4}}(R_3R_4 + 2R_3R_L + R_4R_L)}{2R_3R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_4L_4}} \\ \text{bandwidth:} \ \frac{2R_3R_4R_L}{L_4(R_3R_4 + 2R_3R_L + R_4R_L)} \\ \text{K-LP:} \ \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \\ \text{K-HP:} \ \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_4L_4}} \end{array}$$

5.5 BS-5
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, R_L\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 R_4 R_L s + R_4 + 2 R_L}$$

${\bf Parameters:}$

Q:
$$\frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_4+2R_L)}{\frac{R_4}{C_3L_3}}$$
 wo: $\sqrt{\frac{1}{C_3L_3}}$

bandwidth: $\frac{R_4R_L}{L_3(R_4+2R_L)}$ K-LP: $\frac{R_4R_L}{R_4+2R_L}$ K-HP: $\frac{R_4R_L}{R_4+2R_L}$ K-BP: 0 Qz: None Wz: $\sqrt{\frac{1}{C_3L_3}}$

5.6 BS-6
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_3R_4 + 2R_3R_L + R_4R_L)}{R_3R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{R_3R_4R_L}{L_3(R_3R_4 + 2R_3R_L + R_4R_L)} \\ \text{K-LP:} \ \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \\ \text{K-HP:} \ \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_3L_3}} \end{array}$$

6 GE

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

$$H(s) = \frac{R_3 R_4 \left(C_L L_L s^2 + C_L R_L s + 1\right)}{2C_L L_L R_3 s^2 + C_L L_L R_4 s^2 + C_L R_3 R_4 s + 2C_L R_3 R_L s + C_L R_4 R_L s + 2R_3 + R_4}$$

$$\begin{aligned} &\text{Q: } \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_3 R_4 + 2 R_3 R_L + R_4 R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_L L_L}} \\ &\text{bandwidth: } \frac{R_3 R_4 + 2 R_3 R_L + R_4 R_L}{L_L (2 R_3 + R_4)} \\ &\text{K-LP: } \frac{R_3 R_4}{2 R_3 + R_4} \\ &\text{K-HP: } \frac{R_3 R_4}{2 R_3 + R_4} \\ &\text{K-BP: } \frac{R_3 R_4 R_L}{R_3 R_4 + 2 R_3 R_L + R_4 R_L} \\ &\text{Qz: } \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L} \\ &\text{Wz: } \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

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

$$\begin{aligned} & \text{Q:} \ \frac{C_L \sqrt{\frac{1}{C_L L_L}}}{2R_3 + R_4} (R_3 R_4 + 2R_3 R_L + R_4 R_L) \\ & \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ & \text{bandwidth:} \ \frac{2R_3 + R_4}{C_L (R_3 R_4 + 2R_3 R_L + R_4 R_L)} \\ & \text{K-LP:} \ \frac{R_3 R_4 R_L}{R_3 R_4 + 2R_3 R_L + R_4 R_L} \\ & \text{K-HP:} \ \frac{R_3 R_4}{R_3 R_4 + 2R_3 R_L + R_4 R_L} \\ & \text{K-BP:} \ \frac{R_3 R_4}{2R_3 + R_4} \\ & \text{Qz:} \ C_L R_L \sqrt{\frac{1}{C_L L_L}} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

6.3 GE-3
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_4 L_4 R_3 s^2 + C_4 L_4 R_L s^2 + C_4 R_3 R_4 s + 2 C_4 R_3 R_L s + C_4 R_4 R_L s + R_3 + R_L}$$

$$\begin{array}{l} \text{Q: } \frac{L_4\sqrt{\frac{1}{C_4L_4}}(R_3 + R_L)}{R_3R_4 + 2R_3R_L + R_4R_L} \\ \text{wo: } \sqrt{\frac{1}{C_4L_4}} \\ \text{bandwidth: } \frac{R_3R_4 + 2R_3R_L + R_4R_L}{L_4(R_3 + R_L)} \\ \text{K-LP: } \frac{R_3R_L}{R_3 + R_L} \\ \text{K-HP: } \frac{R_3R_L}{R_3 + R_L} \\ \text{K-BP: } \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \\ \text{Qz: } \frac{L_4\sqrt{\frac{1}{C_4L_4}}}{R_4} \\ \text{Wz: } \sqrt{\frac{1}{C_4L_4}} \end{array}$$

6.4 GE-4
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_L s^2 + C_4 L_4 R_4 R_L s^2 + L_4 R_3 s + L_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + L_4 R_4$$

$$\begin{aligned} & \text{Q:} \ \frac{C_4\sqrt{\frac{1}{C_4L_4}}}{R_3+L_4}(R_3R_4+2R_3R_L+R_4R_L)} \\ & \text{wo:} \ \sqrt{\frac{1}{C_4L_4}} \\ & \text{bandwidth:} \ \frac{R_3+R_L}{C_4(R_3R_4+2R_3R_L+R_4R_L)} \\ & \text{K-LP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ & \text{K-HP:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ & \text{K-BP:} \ \frac{R_3R_L}{R_3+R_L} \\ & \text{Qz:} \ C_4R_4\sqrt{\frac{1}{C_4L_4}} \end{aligned}$$

Wz:
$$\sqrt{\frac{1}{C_4L_4}}$$

6.5 GE-5
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 R_3 R_4 s + 2 C_3 R_3 R_L s + C_3 R_4 R_L s + R_4 + 2 R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_4+2R_L)}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{R_3R_4+2R_3R_L+R_4R_L}{L_3(R_4+2R_L)} \\ \text{K-LP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{K-HP:} \ \frac{R_4R_L}{R_4+2R_L} \\ \text{K-BP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ \text{Qz:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_3} \\ \text{Wz:} \ \sqrt{\frac{1}{C_3L_3}} \end{array}$$

$$\textbf{6.6} \quad \textbf{GE-6} \ \ Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ \frac{R_2\left(L_2s+\frac{1}{C_2s}\right)}{L_2s+R_2+\frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

$$H(s) = \frac{R_4R_L\left(C_3L_3R_3s^2+L_3s+R_3\right)}{C_3L_3R_3R_4s^2+2C_3L_3R_3R_Ls^2+C_3L_3R_4R_Ls^2+L_3R_4s+2L_3R_Ls+R_3R_4+2R_3R_L+R_4R_L\right)}$$

$$\begin{aligned} & \text{Q:} \ \frac{C_3\sqrt{\frac{1}{C_3L_3}}(R_3R_4 + 2R_3R_L + R_4R_L)}{R_4 + 2R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ & \text{bandwidth:} \ \frac{R_4 + 2R_L}{C_3(R_3R_4 + 2R_3R_L + R_4R_L)} \\ & \text{K-LP:} \ \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \\ & \text{K-HP:} \ \frac{R_3R_4R_L}{R_3R_4 + 2R_3R_L + R_4R_L} \end{aligned}$$

K-BP:
$$\frac{R_4 R_L}{R_4 + 2R_L}$$

Qz: $C_3 R_3 \sqrt{\frac{1}{C_3 L_3}}$
Wz: $\sqrt{\frac{1}{C_3 L_3}}$

AP

INVALID-NUMER

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

$$H(s) = \frac{R_3 (C_L R_L s + 1)}{2C_4 C_L R_3 R_L s^2 + 2C_4 R_3 s + C_L R_3 s + C_L R_L s + 1}$$

Parameters:

Q:
$$\frac{\sqrt{2}C_{4}C_{L}R_{3}R_{L}\sqrt{\frac{1}{C_{4}C_{L}R_{3}R_{L}}}}{\frac{2C_{4}R_{3}+C_{L}R_{3}}{2}+C_{L}R_{L}}$$
wo:
$$\frac{\sqrt{2}\sqrt{\frac{1}{C_{4}C_{L}R_{3}R_{L}}}}{\frac{2}{2}}$$
bandwidth:
$$\frac{2C_{4}R_{3}+C_{L}R_{3}+C_{L}R_{L}}{2C_{4}C_{L}R_{3}R_{L}}$$

K-LP: R_3 K-HP: 0

K-BP: $\frac{C_L R_3 R_L}{2C_4 R_3 + C_L R_3 + C_L R_L}$ Qz: 0

Wz: None

8.2 INVALID-NUMER-2 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 R_4 \left(C_L R_L s + 1 \right)}{2 C_4 C_L R_3 R_4 R_L s^2 + 2 C_4 R_3 R_4 s + C_L R_3 R_4 s + 2 C_L R_3 R_L s + C_L R_4 R_L s + 2 R_3 + R_4}$$

$$\begin{array}{l} \text{Q: } \frac{\sqrt{2}C_4C_LR_3R_4R_L\sqrt{\frac{2R_3+R_4}{C_4C_LR_3R_4R_L}}}{2C_4R_3R_4+C_LR_3R_4+2C_LR_3R_L+C_LR_4R_L} \\ \text{wo: } \sqrt{\frac{R_3+\frac{R_4}{2}}{C_4C_LR_3R_4R_L}} \\ \text{bandwidth: } \frac{\sqrt{2}\sqrt{\frac{R_3+\frac{R_4}{2}}{C_4C_LR_3R_4R_L}}(2C_4R_3R_4+C_LR_3R_4+2C_LR_3R_L+C_LR_4R_L)}{2C_4C_LR_3R_4R_L\sqrt{\frac{2R_3+R_4}{C_4C_LR_3R_4R_L}}} \\ \text{K-LP: } \frac{R_3R_4}{2R_3+R_4} \\ \text{K-HP: 0} \\ \text{K-BP: } \frac{C_LR_3R_4R_L}{2C_4R_3R_4+C_LR_3R_L+C_LR_4R_L} \\ \text{Qz: 0} \end{array}$$

Wz: None

8.3 INVALID-NUMER-3 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 (C_4 R_4 s + 1)}{C_4 C_L R_3 R_4 s^2 + 2C_4 R_3 s + C_4 R_4 s + C_L R_3 s + 1}$$

Q:
$$\frac{C_4C_LR_3R_4\sqrt{\frac{1}{C_4C_LR_3R_4}}}{2C_4R_3+C_4R_4+C_LR_3}$$
 wo:
$$\sqrt{\frac{1}{C_4C_LR_3R_4}}$$
 bandwidth:
$$\frac{2C_4R_3+C_4R_4+C_LR_3}{C_4C_LR_3R_4}$$
 K-LP: R_3 K-HP: 0 K-BP:
$$\frac{C_4R_3R_4}{2C_4R_3+C_4R_4+C_LR_3}$$
 Qz: 0 Wz: None

8.4 INVALID-NUMER-4
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 R_4 s + 1 \right)}{C_4 C_L R_3 R_4 R_L s^2 + C_4 R_3 R_4 s + 2 C_4 R_3 R_L s + C_4 R_4 R_L s + C_L R_3 R_L s + R_3 + R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_4C_LR_3R_4R_L\sqrt{\frac{R_3+R_L}{C_4C_LR_3R_4R_L}}}{C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L+C_LR_3R_L} \\ \text{wo:} \ \sqrt{\frac{R_3+R_L}{C_4C_LR_3R_4R_L}} \\ \text{bandwidth:} \ \frac{C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L+C_LR_3R_L}{C_4C_LR_3R_4R_L} \\ \text{K-LP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_4R_3R_4R_L}{C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L+C_LR_3R_L} \\ \text{Qz:} \ 0 \end{array}$$

8.5 INVALID-NUMER-5
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_4\left(C_LR_Ls + 1\right)}{C_3C_LR_4R_Ls^2 + C_3R_4s + C_LR_4s + 2C_LR_Ls + 2}$$

Parameters:

Wz: None

Q:
$$\frac{\sqrt{2}C_{3}C_{L}R_{4}R_{L}\sqrt{\frac{1}{C_{3}C_{L}R_{4}R_{L}}}}{C_{3}R_{4}+C_{L}R_{4}+2C_{L}R_{L}}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{C_{3}C_{L}R_{4}R_{L}}}$$
 bandwidth:
$$\frac{C_{3}R_{4}+C_{L}R_{4}+2C_{L}R_{L}}{C_{3}C_{L}R_{4}R_{L}}$$
 K-LP:
$$\frac{R_{4}}{2}$$
 K-HP: 0
K-BP:
$$\frac{C_{L}R_{4}R_{L}}{C_{3}R_{4}+C_{L}R_{4}+2C_{L}R_{L}}$$
 Qz: 0
Wz: None

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

$$H(s) = \frac{R_4 \left(C_L R_L s + 1\right)}{C_3 C_L R_4 R_L s^2 + C_3 R_4 s + 2 C_4 C_L R_4 R_L s^2 + 2 C_4 R_4 s + C_L R_4 s + 2 C_L R_L s + 2}$$

Q:
$$\frac{\sqrt{2}C_L R_4 R_L \sqrt{\frac{1}{C_L R_4 R_L (C_3 + 2C_4)}} (C_3 + 2C_4)}{C_3 R_4 + 2C_4 R_4 + C_L R_4 + 2C_L R_L}$$
wo:
$$\sqrt{2} \sqrt{\frac{1}{C_L R_4 R_L (C_3 + 2C_4)}}$$
bandwidth:
$$\frac{C_3 R_4 + 2C_4 R_4 + C_L R_4 + 2C_L R_L}{C_L R_4 R_L (C_3 + 2C_4)}$$
K-LP:
$$\frac{R_4}{2}$$

K-LP: $\frac{R_4}{2}$ K-HP: 0

K-BP: $\frac{C_L R_4 R_L}{C_3 R_4 + 2 C_4 R_4 + C_L R_4 + 2 C_L R_L}$ Qz: 0

Wz: None

8.7 INVALID-NUMER-7 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_L (C_4 R_4 s + 1)}{C_3 C_4 R_4 R_L s^2 + C_3 R_L s + C_4 R_4 s + 2C_4 R_L s + 1}$$

Parameters:

$$\begin{aligned} &\text{Q: } \frac{C_3C_4R_4R_L\sqrt{\frac{1}{C_3C_4R_4R_L}}}{C_3R_L+C_4R_4+2C_4R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_3C_4R_4R_L}} \\ &\text{bandwidth: } \frac{C_3R_L+C_4R_4+2C_4R_L}{C_3C_4R_4R_L} \\ &\text{K-LP: } R_L \\ &\text{K-HP: } 0 \end{aligned}$$

K-BP: $\frac{C_4 R_4 R_L}{C_3 R_L + C_4 R_4 + 2 C_4 R_L}$ Qz: 0

Wz: None

8.8 INVALID-NUMER-8
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_L (C_4 R_4 s + 1)}{C_3 C_4 R_4 R_L s^2 + C_3 R_L s + C_4 C_L R_4 R_L s^2 + C_4 R_4 s + 2 C_4 R_L s + C_L R_L s + 1}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_4R_4R_L\sqrt{\frac{1}{C_4R_4R_L(C_3+C_L)}}(C_3+C_L)}{C_3R_L+C_4R_4+2C_4R_L+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_4R_4R_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{C_3R_L+C_4R_4+2C_4R_L+C_LR_L}{C_4R_4R_L(C_3+C_L)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_4R_4R_L}{C_3R_L+C_4R_4+2C_4R_L+C_LR_L} \\ \text{Qz:} \ 0 \end{array}$$

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

$$H(s) = \frac{R_3 R_4 \left(C_L R_L s + 1 \right)}{C_3 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + C_L R_3 R_4 s + 2 C_L R_3 R_L s + C_L R_4 R_L s + 2 R_3 + R_4}$$

Parameters:

Wz: None

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_LR_3R_4R_L\sqrt{\frac{2R_3+R_4}{C_3C_LR_3R_4R_L}}}{C_3R_1R_4+C_LR_3R_4+2C_LR_3R_L+C_LR_4R_L} \\ \text{wo:} \ \sqrt{\frac{2R_3+R_4}{C_3C_LR_3R_4R_L}} \\ \text{bandwidth:} \ \frac{C_3R_3R_4+C_LR_3R_4+2C_LR_3R_L+C_LR_4R_L}{C_3C_LR_3R_4R_L} \\ \text{K-LP:} \ \frac{R_3R_4}{2R_3+R_4} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_LR_3R_4R_L}{C_3R_3R_4+C_LR_3R_4+2C_LR_3R_L+C_LR_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 (C_L R_L s + 1)}{C_3 C_L R_3 R_L s^2 + C_3 R_3 s + 2 C_4 C_L R_3 R_L s^2 + 2 C_4 R_3 s + C_L R_3 s + C_L R_L s + 1}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_L R_3 R_L \sqrt{\frac{1}{C_L R_3 R_L (C_3 + 2C_4)}} (C_3 + 2C_4)}{C_3 R_3 + 2C_4 R_3 + C_L R_3 + C_L R_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_L R_3 R_L (C_3 + 2C_4)}} \\ \text{bandwidth:} \ \frac{C_3 R_3 + 2C_4 R_3 + C_L R_3 + C_L R_L}{C_L R_3 R_L (C_3 + 2C_4)} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_L R_3 R_L}{C_3 R_3 + 2C_4 R_3 + C_L R_3 + C_L R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.11 INVALID-NUMER-11 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 R_4 \left(C_L R_L s + 1\right)}{C_3 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + 2 C_4 C_L R_3 R_4 R_L s^2 + 2 C_4 R_3 R_4 s + C_L R_3 R_4 s + 2 C_L R_3 R_L s + C_L R_4 R_L s + 2 R_3 + R_4}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_L R_3 R_4 R_L \sqrt{\frac{2 R_3 + R_4}{C_L R_3 R_4 R_L (C_3 + 2 C_4)}}}{C_3 R_3 R_4 + 2 C_4 R_3 R_4 + C_L R_3 R_4 + 2 C_L R_3 R_L + C_L R_4 R_L}} \\ \text{wo:} \ \sqrt{\frac{2 R_3 + R_4}{C_L R_3 R_4 R_L (C_3 + 2 C_4)}} \\ \text{bandwidth:} \ \frac{C_3 R_3 R_4 + 2 C_4 R_3 R_4 + C_L R_3 R_4 + 2 C_L R_3 R_L + C_L R_4 R_L}}{C_L R_3 R_4 R_L (C_3 + 2 C_4)} \\ \text{K-LP:} \ \frac{R_3 R_4}{2 R_3 + R_4} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_L R_3 R_4 R_L}{C_3 R_3 R_4 + 2 C_4 R_3 R_4 + 2 C_L R_3 R_L + C_L R_4 R_L}} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_3 R_L \left(C_4 R_4 s + 1 \right)}{C_3 C_4 R_3 R_4 R_L s^2 + C_3 R_3 R_L s + C_4 R_3 R_4 s + 2 C_4 R_3 R_L s + C_4 R_4 R_L s + R_3 + R_L}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_4R_3R_4R_L\sqrt{\frac{R_3+R_L}{C_3C_4R_3R_4R_L}}}{C_3R_3R_L+C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L} \\ \text{wo:} \ \sqrt{\frac{R_3+R_L}{C_3C_4R_3R_4R_L}} \\ \text{bandwidth:} \ \frac{C_3R_3R_L+C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L}{C_3C_4R_3R_4R_L} \\ \text{K-LP:} \ \frac{R_3R_L}{R_3+R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_4R_3R_4R_L}{C_3R_3R_L+C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 (C_4 R_4 s + 1)}{C_3 C_4 R_3 R_4 s^2 + C_3 R_3 s + C_4 C_L R_3 R_4 s^2 + 2C_4 R_3 s + C_4 R_4 s + C_L R_3 s + 1}$$

Parameters:

Q:
$$\frac{C_4R_3R_4\sqrt{\frac{1}{C_4R_3R_4(C_3+C_L)}}(C_3+C_L)}{C_3R_3+2C_4R_3+C_4R_4+C_LR_3}$$
 wo:
$$\sqrt{\frac{1}{C_4R_3R_4(C_3+C_L)}}$$
 bandwidth:
$$\frac{C_3R_3+2C_4R_3+C_4R_4+C_LR_3}{C_4R_3R_4(C_3+C_L)}$$
 K-LP: R_3 K-HP: 0
K-BP:
$$\frac{C_4R_3R_4}{C_3R_3+2C_4R_3+C_4R_4+C_LR_3}$$
 Qz: 0
Wz: None

8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$\begin{array}{l} Q\colon \frac{C_4R_3R_4R_L\sqrt{\frac{R_3+R_L}{C_4R_3R_4R_L(C_3+C_L)}}(C_3+C_L)}{C_3R_3R_L+C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L+C_LR_3R_L}\\ \text{Wo: } \sqrt{\frac{R_3+R_L}{C_4R_3R_4R_L(C_3+C_L)}}\\ \text{bandwidth: } \frac{C_3R_3R_L+C_4R_3R_4+2C_4R_3R_L+C_4R_4R_L+C_LR_3R_L}{C_4R_3R_4R_L(C_3+C_L)}\\ \text{K-LP: } \frac{R_3R_L}{R_3+R_L}\\ \text{K-HP: } 0\\ \text{K-BP: } \frac{C_4R_3R_4R_L}{C_3R_3R_L+C_4R_3R_L+C_4R_4R_L+C_LR_3R_L}\\ \text{Qz: } 0\\ \text{Wz: None} \end{array}$$

8.15 INVALID-NUMER-15 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 (C_3 R_3 s + 1)}{C_3 C_L R_3 R_4 s^2 + 2C_3 R_3 s + C_3 R_4 s + C_L R_4 s + 2}$$

Q:
$$\frac{\sqrt{2}C_{3}C_{L}R_{3}R_{4}\sqrt{\frac{1}{C_{3}C_{L}R_{3}R_{4}}}}{2C_{3}R_{3}+C_{3}R_{4}+C_{L}R_{4}}$$
 wo:
$$\sqrt{2}\sqrt{\frac{1}{C_{3}C_{L}R_{3}R_{4}}}$$
 bandwidth:
$$\frac{2C_{3}R_{3}+C_{3}R_{4}+C_{L}R_{4}}{C_{3}C_{L}R_{3}R_{4}}$$
 K-LP:
$$\frac{R_{4}}{2}$$
 K-HP:
$$0$$
 K-BP:
$$\frac{C_{3}R_{3}R_{4}}{2C_{3}R_{3}+C_{3}R_{4}+C_{L}R_{4}}$$
 Qz:
$$0$$
 Wz: None

8.16 INVALID-NUMER-16
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

Q:
$$\frac{C_3C_LR_3R_4R_L\sqrt{\frac{R_4+2R_L}{C_3C_LR_3R_4R_L}}}{C_3R_3R_4+2C_3R_3R_L+C_3R_4R_L+C_LR_4R_L}$$
 wo:
$$\sqrt{\frac{R_4+2R_L}{C_3C_LR_3R_4R_L}}$$
 bandwidth:
$$\frac{C_3R_3R_4+2C_3R_3R_L+C_3R_4R_L+C_LR_4R_L}{C_3C_LR_3R_4R_L}$$

K-BP: $\frac{C_3R_3R_4R_L}{C_3R_3R_4+2C_3R_3R_L+C_3R_4R_L+C_LR_4R_L}$ Qz: 0

Wz: None

8.17 INVALID-NUMER-17 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L\right)$

$$H(s) = \frac{R_L (C_3 R_3 s + 1)}{2C_3 C_4 R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + 2C_4 R_L s + 1}$$

Parameters:

Q:
$$\frac{\sqrt{2}C_{3}C_{4}R_{3}R_{L}\sqrt{\frac{1}{C_{3}C_{4}R_{3}R_{L}}}}{C_{3}R_{3}+C_{3}R_{L}+2C_{4}R_{L}}$$
wo:
$$\frac{\sqrt{2}\sqrt{\frac{1}{C_{3}C_{4}R_{3}R_{L}}}}{\frac{2}{2}}$$

wo: $\frac{\sqrt{2}\sqrt{\frac{1}{C_3C_4R_3R_L}}}{2}$ bandwidth: $\frac{C_3R_3+C_3R_L+2C_4R_L}{2C_3C_4R_3R_L}$

K-LP: R_L K-HP: 0

K-BP: $\frac{C_3 R_3 R_L}{C_3 R_3 + C_3 R_L + 2C_4 R_L}$ Qz: 0

Wz: None

8.18 INVALID-NUMER-18
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L (C_3 R_3 s + 1)}{2C_3 C_4 R_3 R_L s^2 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + 2C_4 R_L s + C_L R_L s + 1}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_3R_3R_L\sqrt{\frac{1}{C_3R_3R_L(2C_4+C_L)}}(2C_4+C_L)}{C_3R_3+C_3R_L+2C_4R_L+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{1}{C_3R_3R_L(2C_4+C_L)}} \\ \text{bandwidth:} \ \frac{C_3R_3+C_3R_L+2C_4R_L+C_LR_L}{C_3R_3R_L(2C_4+C_L)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_3R_3R_L}{C_3R_3+C_3R_L+2C_4R_L+C_LR_L} \\ \text{Qz:} \ 0 \end{array}$$

8.19 INVALID-NUMER-19 $Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L\right)$

$$H(s) = \frac{R_4 R_L \left(C_3 R_3 s + 1 \right)}{2 C_3 C_4 R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + 2 C_3 R_3 R_L s + C_3 R_4 R_L s + 2 C_4 R_4 R_L s + R_4 + 2 R_L}$$

Parameters:

Wz: None

Q:
$$\frac{\sqrt{2}C_{3}C_{4}R_{3}R_{4}R_{L}\sqrt{\frac{R_{4}+2R_{L}}{C_{3}C_{4}R_{3}R_{4}R_{L}}}}{C_{3}R_{3}R_{4}+2C_{3}R_{3}R_{L}+C_{3}R_{4}R_{L}+2C_{4}R_{4}R_{L}}$$
wo:
$$\sqrt{\frac{\frac{R_{4}}{2}+R_{L}}{C_{3}C_{4}R_{3}R_{4}R_{L}}}$$
bandwidth:
$$\frac{\sqrt{2}\sqrt{\frac{\frac{R_{4}}{2}+R_{L}}{C_{3}C_{4}R_{3}R_{4}R_{L}}}(C_{3}R_{3}R_{4}+2C_{3}R_{3}R_{L}+C_{3}R_{4}R_{L}+2C_{4}R_{4}R_{L}})}{2C_{3}C_{4}R_{3}R_{4}R_{L}\sqrt{\frac{R_{4}+2R_{L}}{C_{3}C_{4}R_{3}R_{4}R_{L}}}}}$$
K-LP:
$$\frac{R_{4}R_{L}}{R_{4}+2R_{L}}$$
K-HP: 0
K-BP:
$$\frac{C_{3}R_{3}R_{4}+2C_{3}R_{3}R_{4}R_{L}}{C_{3}R_{3}R_{4}+2C_{4}R_{4}R_{L}}}$$
Qz: 0
Wz: None

8.20 INVALID-NUMER-20
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1 \right)}{2 C_3 C_4 R_3 R_4 s^2 + C_3 C_L R_3 R_4 s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_4 R_4 s + C_L R_4 s + 2}$$

8.21 INVALID-NUMER-21 $Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

Parameters:

$$\begin{array}{l} \text{Q:} \quad \frac{C_{3}R_{3}R_{4}R_{L}\sqrt{\frac{R_{4}+2R_{L}}{C_{3}R_{3}R_{4}R_{L}(2C_{4}+C_{L})}}}(2C_{4}+C_{L})}{C_{3}R_{3}R_{4}+2C_{3}R_{3}R_{L}+C_{3}R_{4}R_{L}+2C_{4}R_{4}R_{L}+C_{L}R_{4}R_{L}} \\ \text{wo:} \quad \sqrt{\frac{R_{4}+2R_{L}}{C_{3}R_{3}R_{4}R_{L}(2C_{4}+C_{L})}} \\ \text{bandwidth:} \quad \frac{C_{3}R_{3}R_{4}+2C_{3}R_{3}R_{L}+C_{3}R_{4}R_{L}+2C_{4}R_{4}R_{L}+C_{L}R_{4}R_{L}}{C_{3}R_{3}R_{4}R_{L}(2C_{4}+C_{L})} \\ \text{K-LP:} \quad \frac{R_{4}R_{L}}{R_{4}+2R_{L}} \\ \text{K-HP:} \quad 0 \\ \text{K-BP:} \quad \frac{C_{3}R_{3}R_{4}+2C_{3}R_{3}R_{L}+C_{3}R_{4}R_{L}}{C_{3}R_{3}R_{4}R_{L}+2C_{4}R_{4}R_{L}+C_{L}R_{4}R_{L}} \\ \text{Qz:} \quad 0 \\ \text{Wz:} \quad \text{None} \end{array}$$

9 INVALID-WZ

9.1 INVALID-WZ-1
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1 \right) \left(C_L R_L s + 1 \right)}{C_4 C_L R_3 R_4 s^2 + 2 C_4 C_L R_3 R_L s^2 + C_4 C_L R_4 R_L s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L R_3 s + C_L R_L s + 1}$$

$$\begin{aligned} & \text{Q:} \ \frac{C_4C_L\sqrt{\frac{1}{C_4C_L(R_3R_4+2R_3R_L+R_4R_L)}}(R_3R_4+2R_3R_L+R_4R_L)}{2C_4R_3+C_4R_4+C_LR_3+C_LR_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_4C_L(R_3R_4+2R_3R_L+R_4R_L)}} \\ & \text{bandwidth:} \ \frac{2C_4R_3+C_4R_4+C_LR_3+C_LR_L}{C_4C_L(R_3R_4+2R_3R_L+R_4R_L)} \\ & \text{K-LP:} \ R_3 \\ & \text{K-HP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ & \text{K-BP:} \ \frac{R_3(C_4R_4+C_LR_L)}{2C_4R_3+C_4R_4+C_LR_3+C_LR_L} \\ & \text{Qz:} \ \frac{C_4C_LR_4R_L\sqrt{\frac{1}{C_4C_L(R_3R_4+2R_3R_L+R_4R_L)}}}{C_4R_4+C_LR_L} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_4C_LR_4R_L}} \end{aligned}$$

9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_L R_3 R_4 s^2 + 2 C_3 C_L R_3 R_L s^2 + C_3 C_L R_4 R_L s^2 + 2 C_3 R_3 s + C_3 R_4 s + C_L R_4 s + 2 C_L R_L s + 2}$$

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{\sqrt{2}C_3C_L\sqrt{\frac{1}{C_3C_L(R_3R_4+2R_3R_L+R_4R_L)}}(R_3R_4+2R_3R_L+R_4R_L)}{2C_3R_3+C_3R_4+C_LR_4+2C_LR_L} \\ & \text{wo:} \ \sqrt{2}\sqrt{\frac{1}{C_3C_L(R_3R_4+2R_3R_L+R_4R_L)}} \\ & \text{bandwidth:} \ \ \frac{2C_3R_3+C_3R_4+C_LR_4+2C_LR_L}{C_3C_L(R_3R_4+2R_3R_L+R_4R_L)} \\ & \text{K-LP:} \ \frac{R_4}{2} \\ & \text{K-HP:} \ \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ & \text{K-BP:} \ \ \frac{R_4(C_3R_3+C_LR_L)}{2C_3R_3+C_3R_4+C_LR_4+2C_LR_L} \\ & \text{Qz:} \ \ \frac{\sqrt{2}C_3C_LR_3R_L}{C_3C_L(R_3R_4+2R_3R_L+R_4R_L)} \\ & \text{Wz:} \ \ \sqrt{\frac{1}{C_3C_LR_3R_L}} \end{aligned}$$

9.3 INVALID-WZ-3
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 R_4 s + 1 \right)}{C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_4 R_4 s + 2 C_4 R_L s + 1}$$

$$\begin{aligned} & \text{Q:} \ \frac{C_3C_4\sqrt{\frac{1}{C_3C_4(R_3R_4+2R_3R_L+R_4R_L)}}(R_3R_4+2R_3R_L+R_4R_L)}{C_3R_3+C_3R_L+C_4R_4+2C_4R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_3C_4(R_3R_4+2R_3R_L+R_4R_L)}} \\ & \text{bandwidth:} \ \frac{C_3R_3+C_3R_L+C_4R_4+2C_4R_L}{C_3C_4(R_3R_4+2R_3R_L+R_4R_L)} \\ & \text{K-LP:} \ R_L \\ & \text{K-HP:} \ \frac{R_3R_4R_L}{R_3R_4+2R_3R_L+R_4R_L} \\ & \text{K-BP:} \ \frac{R_L(C_3R_3+C_4R_4)}{C_3R_3+C_4R_4+2C_4R_L} \\ & \text{Qz:} \ \frac{C_3C_4R_3R_4\sqrt{\frac{1}{C_3C_4(R_3R_4+2R_3R_L+R_4R_L)}}}{C_3R_3+C_4R_4} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_3C_4R_3R_4}} \end{aligned}$$

10 INVALID-ORDER

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

$$H(s) = \frac{R_3 R_4 R_L}{R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

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

$$H(s) = \frac{R_3 R_4}{C_L R_3 R_4 s + 2R_3 + R_4}$$

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

$$H(s) = \frac{R_3 R_4 R_L}{C_L R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

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

$$H(s) = \frac{R_3 R_4 (C_L R_L s + 1)}{C_L R_3 R_4 s + 2C_L R_3 R_L s + C_L R_4 R_L s + 2R_3 + R_4}$$

10.5 INVALID-ORDER-5 $Z(s) = (L_1 s, \infty, \infty, \infty, \infty, R_L)$

$$H(s) = \frac{R_3 R_L}{2C_4 R_3 R_L s + R_3 + R_L}$$

10.6 INVALID-ORDER-6
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3}{2C_4R_3s + C_LR_3s + 1}$$

10.7 INVALID-ORDER-7
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L}{2C_4 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L}$$

10.8 INVALID-ORDER-8
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right)}{2C_4 C_L L_L R_3 s^3 + 2C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + 1}$$

10.9 INVALID-ORDER-9
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2C_4 C_L L_L R_3 s^3 + 2C_4 C_L R_3 R_L s^2 + 2C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1}$$

10.10 INVALID-ORDER-10
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.11 INVALID-ORDER-11
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1 \right)}{2 C_4 C_L L_L R_3 R_L s^3 + 2 C_4 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L}$$

10.12 INVALID-ORDER-12
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L}{2C_4 R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

10.13 INVALID-ORDER-13
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4}{2C_4 R_3 R_4 s + C_L R_3 R_4 s + 2R_3 + R_4}$$

10.14 INVALID-ORDER-14
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_4 R_L}{2C_4 R_3 R_4 R_L s + C_L R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

10.15 INVALID-ORDER-15
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_L L_L s^2 + 1 \right)}{2 C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 R_3 R_4 s + 2 C_L L_L R_3 s^2 + C_L L_L R_4 s^2 + C_L R_3 R_4 s + 2 R_3 + R_4}$$

10.16 INVALID-ORDER-16
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.17 INVALID-ORDER-17
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.18 INVALID-ORDER-18
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_L L_L s^2 + 1\right)}{2 C_4 C_L L_L R_3 R_4 R_L s^3 + 2 C_4 R_3 R_4 R_L s + C_L L_L R_3 R_4 s^2 + 2 C_L L_L R_3 R_L s^2 + C_L L_L R_4 R_L s^2 + C_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + C_L R_3 R_4 R_L s^2 + C_L R_3 R_4 R_L s + R_3 R_4 R_L s + R_4 R_L s^2 + C_L R_3 R_4 R_L s + R_5 R_4 R_L s + R_5$$

10.19 INVALID-ORDER-19
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L (C_4 R_4 s + 1)}{C_4 R_3 R_4 s + 2 C_4 R_3 R_L s + C_4 R_4 R_L s + R_3 + R_L}$$

10.20 INVALID-ORDER-20
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$R_3 \left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + 1\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2 C_4 C_L L_L R_3 s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L R_3 R_4 s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L L_L s^2 + C_L R_3 s + 1}$$

10.21 INVALID-ORDER-21
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_4 R_4 s + 1\right)}{C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 L_L R_3 s^2 + C_4 L_L R_4 s^2 + C_4 R_3 R_4 s + C_L L_L R_3 s^2 + L_L s + R_3}$$

10.22 INVALID-ORDER-22
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{2 C_4 C_L L_L R_3 s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L R_3 R_4 s^2 + 2 C_4 C_L R_3 R_L s^2 + C_4 C_L R_4 R_L s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1}$$

10.23 INVALID-ORDER-23
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.24 INVALID-ORDER-24
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.25 INVALID-ORDER-25
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$R_3 R_L \left(C_4 R_4 s + 1 \right) \left(C_L L_L s^2 + 1 \right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + 1\right)}{C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 C_L L_L R_3 R_L s^3 + C_4 C_L L_R R_4 R_L s^3 + C_4 C_L R_3 R_4 R_L s^2 + C_4 R_3 R_4 s + 2 C_4 R_3 R_L s + C_4 R_4 R_L s + C_L L_L R_3 s^2 + C_L L_L R_2 s^2 + C_L R_3 R_L s + R_3 + R_L r_1 + C_1 R_2 r_2 + C_1 R_3 R_L r_1 + C_2 R_3 R_L r_2 + C_2 R_3 R_L r_1 + C_2 R_3 R_L r_2 + C_2 R_3 R_L r_2 + C_2 R_3 R_L r_1 + C_2 R_3 R_L r_2 + C_2 R_3 R_L r_1 + C_2 R_3 R_L r_2 + C_2 R_3 R_L r_1 + C_2 R_3 R_L r_2 + C_2 R_2 R_L r_2 + C_2 R_2 R_L r_2 + C_2$$

10.26 INVALID-ORDER-26
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 (C_4 L_4 s^2 + 1)}{C_4 C_L L_4 R_3 s^3 + C_4 L_4 s^2 + 2C_4 R_3 s + C_L R_3 s + 1}$$

10.27 INVALID-ORDER-27
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 s^2 + 1 \right)}{C_4 C_L L_4 R_3 R_L s^3 + C_4 L_4 R_3 s^2 + C_4 L_4 R_L s^2 + 2C_4 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L}$$

10.28 INVALID-ORDER-28
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1 \right) \left(C_L R_L s + 1 \right)}{C_4 C_L L_4 R_3 s^3 + C_4 C_L L_4 R_L s^3 + 2 C_4 C_L R_3 R_L s^2 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_L R_3 s + C_L R_L s + 1}$$

10.29 INVALID-ORDER-29
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right)}{C_4 C_L L_4 S^4 + C_4 C_L L_4 R_3 s^3 + 2C_4 C_L L_L R_3 s^3 + C_4 L_4 s^2 + 2C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + 1}$$

10.30 INVALID-ORDER-30
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_4 L_4 s^2 + 1\right)}{C_4 C_L L_4 L_L R_3 s^4 + C_4 L_4 L_L s^3 + C_4 L_4 R_3 s^2 + 2C_4 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3}$$

10.31 INVALID-ORDER-31
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_3 s^3 + C_4 C_L L_4 R_L s^3 + 2 C_4 C_L L_R R_3 s^3 + 2 C_4 C_L R_3 R_L s^2 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1}$$

10.32 INVALID-ORDER-32
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_4 C_L L_4 L_L R_3 R_L s^4 + C_4 L_4 L_L R_3 s^3 + C_4 L_4 L_L R_3 s^3 + C_4 L_4 R_3 R_L s^2 + 2 C_4 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L s^2 + C_4 L_4 R_4 R_4$$

10.33 INVALID-ORDER-33
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.34 INVALID-ORDER-34
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_4 C_L L_4 L_L R_3 s^4 + C_4 C_L L_4 R_3 R_L s^3 + 2 C_4 C_L L_L R_3 R_L s^3 + C_4 L_4 R_3 s^2 + C_4 L_4 R_1 s^2 + 2 C_4 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_3 s^2$$

10.35 INVALID-ORDER-35
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_L R_L s + 1\right)}{2 C_4 C_L L_4 R_3 R_L s^3 + 2 C_4 L_4 R_3 s^2 + C_L L_4 R_3 s^2 + C_L L_4 R_L s^2 + 2 C_L R_3 R_L s + L_4 s + 2 R_3}$$

10.36 INVALID-ORDER-36
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_L L_L s^2 + 1\right)}{2 C_4 C_L L_4 L_L R_3 s^4 + 2 C_4 L_4 R_3 s^2 + C_L L_4 L_L s^3 + C_L L_4 R_3 s^2 + 2 C_L L_L R_3 s^2 + L_4 s + 2 R_3}$$

10.37 INVALID-ORDER-37
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.38 INVALID-ORDER-38
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{2 C_4 C_L L_4 L_L R_3 R_L s^4 + 2 C_4 L_4 L_L R_3 s^3 + 2 C_4 L_4 R_3 R_L s^2 + C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 s^3 + 2 C_L L_L R_3 R_L s^2 + L_4 L_L s^2 + L_4 R_3 s + L_4 R_L s + 2 L_L R_3 s + 2 R_3 R_L s^2 + L_4 R_3 R_$$

10.39 INVALID-ORDER-39
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_3 R_L s \left(C_L L_L s^2 + 1\right)}{2 C_4 C_L L_4 L_L R_3 R_L s^4 + 2 C_4 L_4 R_3 R_L s^2 + C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 s^3 + C_L L_4 R_3 R_L s^2 + 2 C_L L_L R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L s^2 + L_4 R_3 R_L s^$$

10.40 INVALID-ORDER-40
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_4 C_L L_4 R_3 s^3 + C_4 C_L R_3 R_4 s^2 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L R_3 s + 1}$$

10.41 INVALID-ORDER-41
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.42 INVALID-ORDER-42
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_A C_L L_4 R_3 s^3 + C_A C_L L_4 R_L s^3 + C_A C_L R_3 R_A s^2 + 2C_A C_L R_3 R_L s^2 + C_A C_L R_4 R_L s^2 + 2C_A R_3 s + C_A R_4 s + C_L R_3 s + C_L R_4 s + 1}$$

10.43 INVALID-ORDER-43
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_4 C_L L_4 L_4 s^4 + C_4 C_L L_4 R_3 s^3 + 2 C_4 C_L L_L R_3 s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L R_3 R_4 s^2 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L L_L s^2 + C_L R_3 s + 1}$$

10.44 INVALID-ORDER-44
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.45 INVALID-ORDER-45
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.46 INVALID-ORDER-46
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.47 INVALID-ORDER-47
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.48 INVALID-ORDER-48
$$Z(s) = \left(\frac{L_{1s}}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_4 C_L L_4 L_L R_3 s^4 + C_4 C_L L_4 R_3 R_L s^3 + C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 C_L L_L R_3 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L R_3 R_4 R_L s^2 + C_4 L_4 R_3 s^2 + C_4 L_4 R_4 R_4 R_4 R_4 R_4 R_4 R_4 R_4$$

10.49 INVALID-ORDER-49
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.50 INVALID-ORDER-50
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s \left(C_L L_L s^2 + 1\right)}{2 C_4 C_L L_4 L_L R_3 R_4 s^4 + 2 C_4 L_4 R_3 R_4 s^2 + 2 C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_4 s^3 + C_L L_4 R_3 R_4 s^2 + 2 C_L L_L R_3 R_4 s^2 + 2 L_4 R_3 s + L_4 R_4 s + 2 R_3 R_4 s^2 + 2 C_L L_4 R_3 R_4 s^2 + 2 C_L R_3 R_4$$

10.51 INVALID-ORDER-51
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.52 INVALID-ORDER-52
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.53 INVALID-ORDER-53
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 R_L s \left(C_L L_L s^2 + 1\right)}{2 C_4 C_L L_4 L_L R_3 R_4 R_L s^4 + 2 C_4 L_4 R_3 R_4 R_L s^2 + C_L L_4 L_L R_3 R_4 s^3 + C_L L_4 L_L R_3 R_L s^3 + C_L L_4 R_3 R_4 R_L s^2 + 2 C_L L_L R_3 R_4 R_L s^2 + L_4 R_3 R_4 s + 2 L_4 R_3 R_L s^4 + 2 L_4 R_3 R_4 R_L s^4 + 2 L_4 R_4 R_L s^4 + 2 L_4 R_4 R_L s^4$$

10.54 INVALID-ORDER-54
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$R_3 \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)$$

10.55 INVALID-ORDER-55
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_4 C_L L_4 R_3 R_4 s^3 + C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_L s^2 + C_4 L_4 R_3 R_L s^2 + C_L L_4 R_3 R_4 R_L s + L_4 R_3 s + L_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s}$$

10.56 INVALID-ORDER-56
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.57 INVALID-ORDER-57
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

10.58 INVALID-ORDER-58
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.59 INVALID-ORDER-59
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.60 INVALID-ORDER-60
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_4 C_L L_4 L_L R_3 R_4 s^4 + C_4 L_4 L_L R_3 R_4 s^3 + 2 C_4 L_4 L_L R_3 R_L s^3 + C_4 L_4 L_L R_3 R_4 R_L s^2 + C_L L_4 L_L R_3 R_4 R_L s^3 + C_L L_L R_3 R_4 R_L s^2 + L_4 L_L R_3 s^2$$

10.61 INVALID-ORDER-61
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.62 INVALID-ORDER-62
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.63 INVALID-ORDER-63
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 C_L L_4 R_3 R_4 s^3 + 2 C_4 L_4 R_3 s^2 + C_4 L_4 R_4 s^2 + 2 C_4 R_3 R_4 s + C_L R_3 R_4 s + 2 R_3 + R_4}$$

10.64 INVALID-ORDER-64
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.65 INVALID-ORDER-65
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.66 INVALID-ORDER-66
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.67 INVALID-ORDER-67
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 R_4 s \left(C_4 L_4 s^2 + 1\right)}{C_4 C_L L_4 L_L R_3 R_4 s^4 + 2 C_4 L_4 L_L R_3 s^3 + C_4 L_4 L_L R_4 s^3 + C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_L R_3 R_4 s^2 + C_L L_L R_3 R_4 s^2 + 2 L_L R_3 s + L_L R_4 s + R_3 R_4 r^2}$$

10.68 INVALID-ORDER-68
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.69 INVALID-ORDER-69
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_4 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_4 C_L L_4 L_L R_3 R_4 R_L s^4 + C_4 L_4 L_L R_3 R_4 s^3 + 2 C_4 L_4 L_L R_3 R_L s^3 + C_4 L_4 L_L R_3 R_4 R_L s^2 + 2 C_4 L_L R_3 R_4 R_L s^2 + C_L L_L R_3 R_4 R_L s^2 + L_L R_3 R_4 s + 2 L_L R_3 R_4 s + L_L R_3 R_4 R_L s^2 + L_L R_3$$

10.70 INVALID-ORDER-70
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.71 INVALID-ORDER-71
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$\frac{11(s)}{C_4C_LL_4L_LR_3R_4s^4 + 2C_4C_LL_4L_LR_3R_Ls^4 + C_4C_LL_4L_RR_4R_Ls^4 + C_4C_LL_4R_3R_4R_Ls^3 + 2C_4C_LL_LR_3R_4R_Ls^3 + C_4L_4R_3R_4s^2 + 2C_4L_4R_3R_Ls^2 + C_4L_4R_3R_Ls^2 + 2C_4L_4R_3R_4s^2 + 2C_4L_4R_4R_4s^2 + 2C_4L_4R_4R_4s^2 + 2C_4L_4R_4R_4s^2 + 2C_4L_4R_4R_4s^2 + 2C_4L_4R_4R_4s^2 + 2C_4L_4R_4s^2 + 2C_4L$$

10.72 INVALID-ORDER-72
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_4 R_L}{C_3 R_4 R_L s + R_4 + 2R_L}$$

10.73 INVALID-ORDER-73
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4}{C_3 R_4 s + C_L R_4 s + 2}$$

10.74 INVALID-ORDER-74
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_4 R_L}{C_3 R_4 R_L s + C_L R_4 R_L s + R_4 + 2R_L}$$

10.75 INVALID-ORDER-75
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_L L_L s^2 + 1 \right)}{C_3 C_L L_L R_4 s^3 + C_3 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2}$$

10.76 INVALID-ORDER-76
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_4\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{C_3C_LL_LR_4s^3 + C_3C_LR_4R_Ls^2 + C_3R_4s + 2C_LL_Ls^2 + C_LR_4s + 2C_LR_Ls + 2}$$

10.77 INVALID-ORDER-77
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_4\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{C_3C_LL_LR_4R_Ls^3 + C_3L_LR_4s^2 + C_3R_4R_Ls + C_LL_LR_4s^2 + 2C_LL_LR_Ls^2 + 2L_Ls + R_4 + 2R_L}$$

10.78 INVALID-ORDER-78
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{R_4R_L\left(C_LL_Ls^2 + 1\right)}{C_3C_LL_LR_4R_Ls^3 + C_3R_4R_Ls + C_LL_LR_4s^2 + 2C_LL_LR_4s^2 + C_LR_4R_Ls + R_4 + 2R_L}$$

10.79 INVALID-ORDER-79 $Z(s) = (\infty, R_2, \infty, \infty, \infty, R_L)$

$$H(s) = \frac{R_L}{C_3 R_L s + 2C_4 R_L s + 1}$$

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

$$H(s)=\frac{1}{s\left(C_3+2C_4+C_L\right)}$$

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

$$H(s) = \frac{R_L}{C_3 R_L s + 2C_4 R_L s + C_L R_L s + 1}$$

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

$$H(s) = \frac{C_L R_L s + 1}{s \left(C_3 C_L R_L s + C_3 + 2C_4 C_L R_L s + 2C_4 + C_L \right)}$$

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

$$H(s) = \frac{C_L L_L s^2 + 1}{s \left(C_3 C_L L_L s^2 + C_3 + 2C_4 C_L L_L s^2 + 2C_4 + C_L \right)}$$

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

$$H(s) = \frac{L_L s}{C_3 L_L s^2 + 2C_4 L_L s^2 + C_L L_L s^2 + 1}$$

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

$$H(s) = \frac{C_L L_L s^2 + C_L R_L s + 1}{s \left(C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + 2C_4 C_L L_L s^2 + 2C_4 C_L R_L s + 2C_4 + C_L \right)}$$

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

$$H(s) = \frac{C_L L_L R_L s^2 + L_L s + R_L}{C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + 2 C_4 C_L L_L R_L s^3 + 2 C_4 L_L s^2 + 2 C_4 R_L s + C_L L_L s^2 + 1}$$

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

$$H(s) = \frac{R_L\left(C_L L_L s^2 + 1\right)}{C_3 C_L L_L R_L s^3 + C_3 R_L s + 2 C_4 C_L L_L R_L s^3 + 2 C_4 R_L s + C_L L_L s^2 + C_L R_L s + 1}$$

10.88 INVALID-ORDER-88
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_4 R_L}{C_3 R_4 R_L s + 2C_4 R_4 R_L s + R_4 + 2R_L}$$

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

$$H(s) = \frac{R_4}{C_3 R_4 s + 2C_4 R_4 s + C_L R_4 s + 2}$$

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

$$H(s) = \frac{R_4 R_L}{C_3 R_4 R_L s + 2 C_4 R_4 R_L s + C_L R_4 R_L s + R_4 + 2 R_L}$$

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

$$H(s) = \frac{R_4 \left(C_L L_L s^2 + 1 \right)}{C_3 C_L L_L R_4 s^3 + C_3 R_4 s + 2 C_4 C_L L_L R_4 s^3 + 2 C_4 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2}$$

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

$$H(s) = \frac{R_4 \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{C_3 C_L L_L R_4 s^3 + C_3 C_L R_4 R_L s^2 + C_3 R_4 s + 2 C_4 C_L L_L R_4 s^3 + 2 C_4 C_L R_4 R_L s^2 + 2 C_4 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2 C_L R_L s + 2 C_L R_4 s^2 + 2 C_4 R_4 R_L s^2 +$$

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

$$H(s) = \frac{R_4 \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{C_3 C_L L_L R_4 R_L s^3 + C_3 L_L R_4 s^2 + C_3 R_4 R_L s + 2 C_4 C_L L_L R_4 R_L s^3 + 2 C_4 L_L R_4 s^2 + 2 C_4 R_4 R_L s + C_L L_L R_4 s^2 + 2 C_L L_L R_L s^2 + 2 L_L s + R_4 + 2 R_L R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4 R_4 R_L s + C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4 R_4 R_L s^2 + 2 C_4 R_4 R_L s + C_4$$

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

$$H(s) = \frac{R_4 R_L \left(C_L L_L s^2 + 1 \right)}{C_3 C_L L_L R_4 R_L s^3 + C_3 R_4 R_L s + 2 C_4 C_L L_L R_4 R_L s^3 + 2 C_4 R_4 R_L s + C_L L_L R_4 s^2 + 2 C_L L_L R_L s^2 + C_L R_4 R_L s + R_4 + 2 R_L R_4 R_L s^2 + C_4 R_4 R_L s + C_4 R_4 R_L s^2 + C_4 R_4 R_L s + C_4 R_4 R_L s^2 + C_4$$

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

$$H(s) = \frac{C_4 R_4 s + 1}{s \left(C_3 C_4 R_4 s + C_3 + C_4 C_L R_4 s + 2 C_4 + C_L \right)}$$

10.96 INVALID-ORDER-96
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_4 R_4 s + 1)(C_L R_L s + 1)}{s(C_3 C_4 C_L R_4 R_L s^2 + C_3 C_4 R_4 s + C_3 C_L R_L s + C_3 + C_4 C_L R_4 s + 2C_4 C_L R_L s + 2C_4 + C_L)}$$

10.97 INVALID-ORDER-97
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{(C_4 R_4 s + 1) (C_L L_L s^2 + 1)}{s (C_3 C_4 C_L L_L R_4 s^3 + C_3 C_4 R_4 s + C_3 C_L L_L s^2 + C_3 + 2C_4 C_L L_L s^2 + C_4 C_L R_4 s + 2C_4 + C_L)}$$

10.98 INVALID-ORDER-98
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_L R_4 s^3 + C_3 L_L s^2 + C_4 C_L L_L R_4 s^3 + 2C_4 L_L s^2 + C_4 R_4 s + C_L L_L s^2 + 1}$$

10.99 INVALID-ORDER-99
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{s \left(C_3 C_4 C_L L_L R_4 s^3 + C_3 C_4 C_L R_4 R_L s^2 + C_3 C_4 R_4 s + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + 2 C_4 C_L L_L s^2 + C_4 C_L R_4 s + 2 C_4 C_L R_L s + 2 C_4 C_L L_L s^2 + C_4 C_L R_4 s + 2 C_4 C_L R_4 s +$$

10.100 INVALID-ORDER-100
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.101 INVALID-ORDER-101
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_4 R_4 s + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_4 C_L L_L R_4 s^4 + C_3 C_4 L_L R_4 s^3 + C_3 C_4 R_4 R_L s^2 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_4 R_L s + C_4 L_L R_4 s^3 + 2 C_4 C_L L_L R_L s^3 + 2 C_4 L_L s^2 + C_4 R_4 s + 2 C_4 R_L s + C_L L_L s^2 + 1 C_4 R_4 s^3 + 2 C_4 R_4 s^3 + 2 C_4 R_4 s + 2 C_4 R_4 s$$

10.102 INVALID-ORDER-102
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_4 R_4 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{C_3 C_4 C_L L_L R_4 R_L s^4 + C_3 C_4 R_4 R_L s^2 + C_3 C_L L_L R_L s^3 + C_4 C_L L_L R_4 s^3 + 2 C_4 C_L L_L R_L s^3 + C_4 C_L R_4 R_L s^2 + C_4 R_4 s + 2 C_4 R_L s + C_L L_L s^2 + C_L R_L s + 1}$$

10.103 INVALID-ORDER-103
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_L s^3 + C_3 R_L s + C_4 L_4 s^2 + 2C_4 R_L s + 1}$$

10.104 INVALID-ORDER-104
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_4 L_4 s^2 + 1}{s \left(C_3 C_4 L_4 s^2 + C_3 + C_4 C_L L_4 s^2 + 2C_4 + C_L \right)}$$

10.105 INVALID-ORDER-105
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_L s^3 + C_3 R_L s + C_4 C_L L_4 R_L s^3 + C_4 L_4 s^2 + 2 C_4 R_L s + C_L R_L s + 1}$$

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

$$H(s) = \frac{\left(C_4 L_4 s^2 + 1\right) \left(C_L R_L s + 1\right)}{s \left(C_3 C_4 C_L L_4 R_L s^3 + C_3 C_4 L_4 s^2 + C_3 C_L R_L s + C_3 + C_4 C_L L_4 s^2 + 2 C_4 C_L R_L s + 2 C_4 + C_L\right)}$$

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

$$H(s) = \frac{\left(C_4 L_4 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{s \left(C_3 C_4 C_L L_4 L_L s^4 + C_3 C_4 L_4 s^2 + C_3 C_L L_L s^2 + C_3 + C_4 C_L L_4 s^2 + 2C_4 C_L L_L s^2 + 2C_4 + C_L\right)}$$

10.108 INVALID-ORDER-108
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 L_L s^4 + C_3 L_L s^2 + C_4 C_L L_4 L_L s^4 + C_4 L_4 s^2 + 2C_4 L_L s^2 + C_L L_L s^2 + 1}$$

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

$$H(s) = \frac{\left(C_4L_4s^2 + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(C_3C_4C_LL_4L_Ls^4 + C_3C_4L_LL_8s^3 + C_3C_4L_4s^2 + C_3C_LL_Ls^2 + C_3C_LR_Ls + C_3 + C_4C_LL_4s^2 + 2C_4C_LL_Ls^2 + 2C_4C_LR_Ls + 2C_4 + C_L\right)}$$

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

$$H(s) = \frac{L_L R_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 L_L R_L s^4 + C_3 L_L R_L s^2 + C_4 C_L L_4 L_L R_L s^4 + C_4 L_4 L_L s^3 + C_4 L_4 R_L s^2 + 2C_4 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L R_L s^4 + C_4 L_4 R_L s^3 + C_4 L_4 R_L s^3 + C_4 L_4 R_L s^4 + C_4$$

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

$$H(s) = \frac{\left(C_4L_4s^2 + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{C_3C_4C_LL_4L_LS^5 + C_3C_4L_4L_Ls^4 + C_3C_4L_4R_Ls^3 + C_3L_LL_Rs^3 + C_3L_Ls^2 + C_3R_Ls + C_4C_LL_4L_Ls^4 + 2C_4C_LL_LR_Ls^3 + C_4L_4s^2 + 2C_4L_Ls^2 + 2C_4R_Ls + C_LL_Ls^2 + 1C_4C_LL_4L_Ls^4 + C_4C_LL_4L_4L_4s^4 + C_4C_LL_4L_4s^4 + C_4C_LL_4s^4 + C_4C_LL_4s$$

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

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right)}{C_3 C_4 C_L L_L R_L s^5 + C_3 C_4 L_4 R_L s^3 + C_3 C_L L_L R_L s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_L s^3 + 2 C_4 C_L L_L R_L s^3 + C_4 L_4 s^2 + 2 C_4 R_L s + C_L L_L s^2 + C_L R_L s + 1}$$

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

$$H(s) = \frac{L_4 s}{C_3 L_4 s^2 + 2C_4 L_4 s^2 + C_L L_4 s^2 + 2}$$

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

$$H(s) = \frac{L_4 s \left(C_L R_L s + 1\right)}{C_3 C_L L_4 R_L s^3 + C_3 L_4 s^2 + 2 C_4 C_L L_4 R_L s^3 + 2 C_4 L_4 s^2 + C_L L_4 s^2 + 2 C_L R_L s + 2}$$

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

$$H(s) = \frac{L_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_4 L_L s^4 + C_3 L_4 s^2 + 2 C_4 C_L L_4 L_L s^4 + 2 C_4 L_4 s^2 + C_L L_4 s^2 + 2 C_L L_L s^2 + 2}$$

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

$$H(s) = \frac{L_4 L_L s}{C_3 L_4 L_L s^2 + 2C_4 L_4 L_L s^2 + C_L L_4 L_L s^2 + L_4 + 2L_L}$$

10.117 INVALID-ORDER-117
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_4 L_L s^4 + C_3 C_L L_4 R_L s^3 + C_3 L_4 s^2 + 2 C_4 C_L L_4 L_L s^4 + 2 C_4 C_L L_4 R_L s^3 + 2 C_4 L_4 s^2 + 2 C_L L_5 s^2 + 2$$

10.118 INVALID-ORDER-118
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.119 INVALID-ORDER-119
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_4 L_L R_L s^4 + C_3 L_4 R_L s^2 + 2 C_4 C_L L_4 L_L R_L s^4 + 2 C_4 L_4 R_L s^2 + C_L L_4 L_L s^3 + C_L L_4 R_L s^2 + 2 C_L L_L R_L s^2 + L_4 s + 2 R_L R_L s^2 + 2 C_L L_4 R_L s^2 + 2 C_L R_L s^$$

10.120 INVALID-ORDER-120
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_4 R_L s^3 + C_3 C_4 R_4 R_L s^2 + C_3 R_L s + C_4 L_4 s^2 + C_4 R_4 s + 2 C_4 R_L s + 1}$$

10.121 INVALID-ORDER-121
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_4 L_4 s^2 + C_4 R_4 s + 1}{s \left(C_3 C_4 L_4 s^2 + C_3 C_4 R_4 s + C_3 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2 C_4 + C_L\right)}$$

10.122 INVALID-ORDER-122
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_4 R_L s^3 + C_3 C_4 R_A R_L s^2 + C_3 R_L s + C_4 C_L L_4 R_L s^3 + C_4 C_L R_A R_L s^2 + C_4 L_4 s^2 + C_4 R_A s + 2 C_4 R_L s + C_L R_L s + 1}$$

10.123 INVALID-ORDER-123
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{s \left(C_3 C_4 C_L L_4 R_L s^3 + C_3 C_4 C_L R_4 R_L s^2 + C_3 C_4 L_4 s^2 + C_3 C_4 R_4 s + C_3 C_L R_L s + C_3 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2 C_4 C_L R_4 s + 2$$

10.124 INVALID-ORDER-124
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{s \left(C_3 C_4 C_L L_L L_4 s^4 + C_3 C_4 L_L L_4 s^3 + C_3 C_4 L_4 s^2 + C_3 C_4 R_4 s + C_3 C_L L_L s^2 + C_3 + C_4 C_L L_4 s^2 + 2 C_4 C_L L_L s^2 + C_4 C_L R_4 s + 2 C_4 + C_L\right)}$$

10.125 INVALID-ORDER-125
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_4 L_L s^4 + C_3 C_4 L_L R_4 s^3 + C_3 L_L s^2 + C_4 C_L L_L L_L s^4 + C_4 C_L L_L R_4 s^3 + C_4 L_4 s^2 + 2 C_4 L_L s^2 + C_4 R_4 s + C_L L_L s^2 + 1}$$

10.126 INVALID-ORDER-126
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4L_4s^2 + C_4R_4s + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(C_3C_4C_LL_4L_Ls^4 + C_3C_4C_LL_4R_Ls^3 + C_3C_4C_LL_4R_4s^3 + C_3C_4C_LR_4R_Ls^2 + C_3C_4R_4s + C_3C_LL_Ls^2 + C_3C_LR_Ls + C_3 + C_4C_LL_4s^2 +$$

10.127 INVALID-ORDER-127
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 L_4 L_L R_L s^4 + C_3 C_4 L_L R_4 R_L s^3 + C_4 L_L L_L R_4 s^4 + C_4 C_L L_L R_4 R_L s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_L s^2 + C_4 L_L R_4 s^2 + C_$$

10.128 INVALID-ORDER-128
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_4L_4s^2 + C_4R_4s + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{C_3C_4C_LL_LR_Ls^5 + C_3C_4C_LL_LR_4R_Ls^4 + C_3C_4L_4L_Ls^3 + C_3C_4L_LR_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_LL_LR_Ls^3 + C_3L_Ls^2 + C_3R_Ls + C_4C_LL_LL_Ls^4 + C_4C_LL_LR_Ls^3 + C_$$

10.129 INVALID-ORDER-129
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 C_L L_4 L_L R_4 s^5 + C_3 C_4 L_4 L_L s^3 + C_3 C_4 R_4 R_L s^2 + C_3 C_L L_L R_L s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_L s^3 + C_4 C_L$$

10.130 INVALID-ORDER-130
$$Z(s) = \left(\infty, \ \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \ \infty, \ \infty, \ \infty, \ R_{L} + \frac{1}{C_{L}s}\right)$$

10.131 INVALID-ORDER-131
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_4 R_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_4 L_L R_4 s^4 + C_3 L_4 R_4 s^2 + 2 C_4 C_L L_4 L_L R_4 s^4 + 2 C_4 L_4 R_4 s^2 + 2 C_L L_4 L_L s^3 + C_L L_4 R_4 s^2 + 2 C_L R_4 R_4$$

10.132 INVALID-ORDER-132
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_4 R_4 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_4 L_L R_4 s^4 + C_3 C_L L_4 R_4 R_L s^3 + C_3 L_4 R_4 s^2 + 2 C_4 C_L L_4 L_L R_4 s^4 + 2 C_4 C_L L_4 R_4 R_L s^3 + 2 C_4 L_4 L_4 R_4 s^2 + 2 C_L L_4 R_4 s^2 + 2$$

10.133 INVALID-ORDER-133
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.134 INVALID-ORDER-134
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

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

$$H(s) = \frac{R_L \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_3 C_4 L_4 R_4 R_L s^3 + C_3 L_4 R_L s^2 + C_3 R_4 R_L s + C_4 L_4 R_4 s^2 + 2 C_4 L_4 R_L s^2 + L_4 s + R_4 + 2 R_L s^2 + 2 C_4 L_4 R_4 s^2 + 2 C_4 L_4$$

10.136 INVALID-ORDER-136
$$Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_3C_4L_4R_4s^3 + C_3L_4s^2 + C_3R_4s + C_4C_LL_4R_4s^3 + 2C_4L_4s^2 + C_LL_4s^2 + C_LR_4s + 2}$$

10.137 INVALID-ORDER-137
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

10.138 INVALID-ORDER-138
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 C_L L_4 R_L s^4 + C_3 C_4 L_4 R_4 s^3 + C_3 C_L L_4 R_L s^3 + C_3 C_L R_4 R_L s^2 + C_3 L_4 s^2 + C_3 R_4 s + C_4 C_L L_4 R_4 s^3 + 2 C_4 C_L L_4 R_L s^3 + 2 C_4 L_4 s^2 + C_L R_4 s + 2 C_L R_L s + 2 C_L R_4 s^2 + C_L R_4 s^$$

10.139 INVALID-ORDER-139
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 C_L L_4 L_L R_4 s^3 + C_3 C_L L_4 L_L s^4 + C_3 C_L L_L R_4 s^3 + C_3 L_4 s^2 + C_3 R_4 s + 2 C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_4 s^3 + 2 C_4 L_4 s^2 + C_L L_4 s^2 + 2 C_L L_4 s^2 + C_L L_4 s^$$

10.140 INVALID-ORDER-140
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.141 INVALID-ORDER-141
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.142 INVALID-ORDER-142
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.143 INVALID-ORDER-143
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right) \left(C_L L_L R_L s^2 + L_L s + L_L s^2 + L_L$$

10.144 INVALID-ORDER-144
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.145 INVALID-ORDER-145
$$Z(s) = (\infty, \infty, R_3, \infty, \infty, R_L)$$

$$H(s) = \frac{R_4 R_L \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_4 R_L s^3 + C_3 R_4 R_L s + C_4 L_4 R_4 s^2 + 2C_4 L_4 R_L s^2 + 2C_4 R_4 R_L s + R_4 + 2R_L r^2}$$

10.146 INVALID-ORDER-146 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_4 s^3 + C_3 R_4 s + C_4 C_L L_4 R_4 s^3 + 2C_4 L_4 s^2 + 2C_4 R_4 s + C_L R_4 s + 2}$$

10.147 INVALID-ORDER-147 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

10.148 INVALID-ORDER-148 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 \left(C_4 L_4 s^2 + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_4 C_L L_4 R_4 s^4 + C_3 C_4 L_4 R_4 s^3 + C_3 C_L R_4 R_L s^2 + C_3 R_4 s + C_4 C_L L_4 R_4 s^3 + 2 C_4 C_L L_4 R_L s^3 + 2 C_4 C_L R_4 R_L s^2 + 2 C_4 R_4 s + C_L R_4 s + 2 C_L R_L s + 2}$$

10.149 INVALID-ORDER-149 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

10.150 INVALID-ORDER-150 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.151 INVALID-ORDER-151 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{C_3 C_4 C_L L_4 L_L R_4 s^5 + C_3 C_4 C_L L_4 R_4 s^4 + C_3 C_4 L_4 R_4 s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_4 R_L s^2 + C_3 R_4 s + 2 C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_4 s^3 + 2 C_4 C_L L_4 R_4$$

10.152 INVALID-ORDER-152
$$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.153 INVALID-ORDER-153
$$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_4 \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{C_3 C_4 C_L L_4 L_L R_4 s^5 + C_3 C_4 L_4 L_L R_4 s^4 + C_3 C_4 L_4 L_L R_4 s^3 + C_3 C_L L_L R_4 R_L s^3 + C_3 L_L R_4 s^2 + C_3 R_4 R_L s + C_4 C_L L_4 L_L R_4 s^4 + 2 C_4 C_L L_4 L_L R_4 s^4 + 2 C_4 C_L L_4 L_L R_4 s^3 + 2 C_4 C_L L_4 L_L R_4 s^3 + 2 C_4 C_L L_4 L_L R_4 s^4 + 2 C_4 C_L L_4 L_4 R_4 s^4 + 2 C_4 C_L L_4 R_4 R_4 R_4 R_5 t^4 + 2 C_4 C_L L_4 R_4 R_5 t^4 + 2 C_4 C_L L_4 R_4 R_5 t^4 + 2 C_$$

10.154 INVALID-ORDER-154
$$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.155 INVALID-ORDER-155
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L}{C_3 R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

10.156 INVALID-ORDER-156
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4}{C_3 R_3 R_4 s + C_L R_3 R_4 s + 2R_3 + R_4}$$

10.157 INVALID-ORDER-157
$$Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_4 R_L}{C_3 R_3 R_4 R_L s + C_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L}$$

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

$$H(s) = \frac{R_3 R_4 \left(C_L L_L s^2 + 1 \right)}{C_3 C_L L_L R_3 R_4 s^3 + C_3 R_3 R_4 s + 2 C_L L_L R_3 s^2 + C_L L_L R_4 s^2 + C_L R_3 R_4 s + 2 R_3 + R_4}$$

10.159 INVALID-ORDER-159 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 R_4 \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_L R_3 R_4 s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + 2 C_L L_L R_3 s^2 + C_L L_L R_4 s^2 + C_L R_3 R_4 s + 2 C_L R_3 R_L s + C_L R_4 R_L s + 2 R_3 + R_4 R_L s + 2 R_3 R_4 R_L s + 2 R_3 R_4 R_L s + 2 R_4 R_L s + 2 R_3 R_4 R_L s + 2 R_4 R_L s +$$

10.160 INVALID-ORDER-160 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{R_3 R_4 \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 L_L R_3 R_4 s^2 + C_3 R_3 R_4 R_L s + C_L L_L R_3 R_4 s^2 + 2C_L L_L R_3 R_L s^2 + C_L L_L R_4 R_L s^2 + 2L_L R_3 s + L_L R_4 s + R_3 R_4 + 2R_3 R_L + R_4 R_L s^2 + 2R_4 R_L$$

10.161 INVALID-ORDER-161
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 R_3 R_4 R_L s + C_L L_L R_3 R_4 s^2 + 2C_L L_L R_3 R_L s^2 + C_L L_L R_4 R_L s^2 + C_L R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L r^2}$$

10.162 INVALID-ORDER-162
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L}{C_3 R_3 R_L s + 2C_4 R_3 R_L s + R_3 + R_L}$$

10.163 INVALID-ORDER-163
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3}{C_3 R_3 s + 2C_4 R_3 s + C_L R_3 s + 1}$$

10.164 INVALID-ORDER-164
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_3 R_L}{C_3 R_3 R_L s + 2 C_4 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L}$$

10.165 INVALID-ORDER-165
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right)}{C_3 C_L L_L R_3 s^3 + C_3 R_3 s + 2 C_4 C_L L_L R_3 s^3 + 2 C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + 1}$$

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

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + 2 C_4 C_L L_L R_3 s^3 + 2 C_4 C_L R_3 R_L s^2 + 2 C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1}$$

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

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

$$H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + 2 C_4 C_L L_L R_3 R_L s^3 + 2 C_4 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_3 s^2 + C_L L_L R_3 R_L s + R_3 + R_L}$$

10.169 INVALID-ORDER-169
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L}{C_3 R_3 R_4 R_L s + 2C_4 R_3 R_4 R_L s + R_3 R_4 + 2R_3 R_L + R_4 R_L}$$

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

$$H(s) = \frac{R_3 R_4}{C_3 R_3 R_4 s + 2C_4 R_3 R_4 s + C_L R_3 R_4 s + 2R_3 + R_4}$$

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

$$H(s) = \frac{R_3 R_4 R_L}{C_3 R_3 R_4 R_L s + 2 C_4 R_3 R_4 R_L s + C_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L}$$

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

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

$$H(s) = \frac{R_3 R_4 \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_L R_3 R_4 s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + 2 C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 C_L R_3 R_4 R_L s^2 + 2 C_4 R_3 R_4 s + 2 C_L L_L R_3 s^2 + C_L R_3 R_4 s + 2 C_L R_3 R_4 s$$

10.174 INVALID-ORDER-174
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 L_L R_3 R_4 s^2 + C_3 R_3 R_4 R_L s + 2 C_4 C_L L_L R_3 R_4 R_L s^3 + 2 C_4 L_L R_3 R_4 s^2 + 2 C_4 R_3 R_4 R_L s + C_L L_L R_3 R_4 s^2 + 2 C_L R_3$$

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

$$R_3 R_4 R_L \left(C_L L_L s^2 + 1 \right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 R_3 R_4 R_L s + 2 C_4 C_L L_L R_3 R_4 R_L s^3 + 2 C_4 R_3 R_4 R_L s + C_L L_L R_3 R_4 s^2 + 2 C_L L_L R_3 R_L s^2 + C_L L_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + C_4 R_3 R_4 R_L s + R_4 R_L s^2 + C_4 R_4 R_L s^2 + C_4$$

10.176 INVALID-ORDER-176
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1 \right) \left(C_L R_L s + 1 \right)}{C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + C_3 C_L R_3 R_L s^2 + C_4 C_L R_3 R_4 s^2 + 2 C_4 C_L R_3 R_L s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L R_3 s + C_L R_L s + 1}$$

10.177 INVALID-ORDER-177
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_L R_3 s^3 + C_4 C_L L_L R_3 s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L L_R R_3 R_4 s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L L_L s^2 + C_L R_3 s + 1}$$

10.178 INVALID-ORDER-178
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_L R_3 R_4 s^3 + C_3 L_L R_3 s^2 + C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 L_L R_3 s^2 + C_4 L_L R_4 s^2 + C_4 R_3 R_4 s + C_L L_L R_3 s^2 + L_L s + R_3}$$

10.179 INVALID-ORDER-179
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + 2 C_4 C_L L_L R_3 s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L L_R R_3 R_4 s^2 + 2 C_4 C_L R_3 R_L s^2 + C_4 C_L R_3 R_4 s^3 + C_4 C_L$$

10.180 INVALID-ORDER-180
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$L_L R_3 R_L s \left(C_4 R_4 s + 1 \right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_L R_3 R_4 R_L s^3 + C_3 L_L R_3 R_L s^2 + C_4 C_L L_L R_3 R_4 R_L s^3 + C_4 L_L R_3 R_4 s^2 + 2 C_4 L_L R_3 R_L s^2 + C_4 L_L R_3 R_4 R_L s^2 + C_4 R_3 R_4 R_L s + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L s^2 + C_4 R_3 R_4 R_L s^2 + C_4 R_$$

10.181 INVALID-ORDER-181
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_3 \left(C_4 R_4 s + 1 \right) \left(C_L L_L R_3 R_4 s^2 + L_L s + R_L \right)}{C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 L_L R_3 R_4 s^3 + C_3 C_4 L_L R_3 R_4 s^3 + C_3 C_4 L_L R_3 R_4 s^3 + C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 C_L L_L R_3 R_4 s^3 + C_4 C_L L_L R_4 R_L s^3 + 2 C_4 C_L L_L R_4 R_L s^4 + 2 C_4 C_L L_L R_4$$

10.182 INVALID-ORDER-182
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 R_4 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{C_3 C_4 C_L L_L R_3 R_4 R_L s^4 + C_3 C_4 R_3 R_4 R_L s^2 + C_3 C_L L_L R_3 R_L s^3 + C_4 C_L L_L R_3 R_4 s^3 + 2 C_4 C_L L_L R_3 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L R_3 R_4 R_L s^2 + C_4 R_3 R_4 s + 2 C_4 C_L R_3 R_4 R_L s^3 + C_4 C_$$

10.183 INVALID-ORDER-183
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_3 R_L s^3 + C_3 R_3 R_L s + C_4 L_4 R_3 s^2 + C_4 L_4 R_L s^2 + 2 C_4 R_3 R_L s + R_3 + R_L}$$

10.184 INVALID-ORDER-184
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_3 s^3 + C_3 R_3 s + C_4 C_L L_4 R_3 s^3 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_L R_3 s + 1}$$

10.185 INVALID-ORDER-185
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_3 R_L s^3 + C_3 R_3 R_L s + C_4 C_L L_4 R_3 R_L s^3 + C_4 L_4 R_3 s^2 + C_4 L_4 R_L s^2 + 2 C_4 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L R_2 R_3 R_L s + C_4 R_3 R_L s +$$

10.186 INVALID-ORDER-186
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \infty, R_{L} + \frac{1}{C_{L}s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_4 C_L L_4 R_3 R_L s^4 + C_3 C_4 L_4 R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_4 C_L L_4 R_3 s^3 + C_4 C_L L_4 R_L s^3 + 2 C_4 C_L R_3 R_L s^2 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_L R_3 s + C_L R_4 s + 1}$$

10.187 INVALID-ORDER-187
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_3 C_4 C_L L_4 L_L R_3 s^5 + C_3 C_4 L_4 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_3 s^3 + 2 C_4 C_L L_L R_3 s^3 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + 1}$$

10.188 INVALID-ORDER-188
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 L_L R_3 s^4 + C_3 L_L R_3 s^2 + C_4 C_L L_4 L_L R_3 s^4 + C_4 L_4 L_L s^3 + C_4 L_4 R_3 s^2 + 2 C_4 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3}$$

10.189 INVALID-ORDER-189
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_4 C_L L_4 R_3 s^5 + C_3 C_4 C_L L_4 R_3 s^4 + C_3 C_4 L_4 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_3 s^3 + C_4 C_L L_4 R_3 s^3 + 2 C_4$$

10.190 INVALID-ORDER-190
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$= \frac{L_L R_3 R_L s \left(C_4 L_4 s^2 + \frac{1}{2}\right)}{2}$$

10.191 INVALID-ORDER-191
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.192 INVALID-ORDER-192
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.193 INVALID-ORDER-193
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.194 INVALID-ORDER-194
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.195 INVALID-ORDER-195
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_4 L_L R_3 s^4 + C_3 C_L L_4 R_3 R_L s^3 + C_3 L_4 R_3 s^2 + 2 C_4 C_L L_4 L_L R_3 s^4 + 2 C_4 C_L L_4 R_3 R_L s^3 + 2 C_4 L_4 L_L s^3 + C_L L_4 R_3 s^2 + C_L L_4 R_3 s^2 + 2 C_L L_4 R_3 s^2 + 2 C_L L_4 R_3 s^2 + 2 C_L R_3 R_4 R_3 s^2 + C_L L_4 R_3 r_4 R_$$

10.196 INVALID-ORDER-196
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_4 L_L R_3 R_L s^4 + C_3 L_4 L_L R_3 s^3 + C_3 L_4 R_3 R_L s^2 + 2 C_4 C_L L_4 L_L R_3 R_L s^4 + 2 C_4 L_4 L_L R_3 s^3 + 2 C_4 L_4 R_3 R_L s^2 + C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 s^3 + 2 C_L L_4 R_3 R_L s^2 + L_4 L_L R_3 r_L s^2 + L_4 L_L R_3 r_L s^3 + 2 C_4 L_4 R_3 R_L s^3 + 2 C_4 R_3 R_$$

10.197 INVALID-ORDER-197
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_3 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_4 L_L R_3 R_L s^4 + C_3 L_4 R_3 R_L s^2 + 2 C_4 C_L L_4 L_L R_3 R_L s^4 + 2 C_4 L_4 R_3 R_L s^2 + C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 s^3 + C_L L_4 R_3 R_L s^2 + 2 C_L L_L R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L s^2 + 2 C_L R_3 R_L s^2 + 2$$

10.198 INVALID-ORDER-198
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L\right)$$

10.199 INVALID-ORDER-199
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_4 R_3 s^3 + C_3 C_4 R_3 R_4 s^2 + C_3 R_3 s + C_4 C_L L_4 R_3 s^3 + C_4 C_L R_3 R_4 s^2 + C_4 L_4 s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L R_3 s + 1}$$

10.202 INVALID-ORDER-202
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, 1 + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 C_L L_4 L_2 R_3 s^5 + C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_L R_3 s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_3 s^3 + 2 C_4 C_L L_L R_3 s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L L_4 R_3 s^3$$

10.203 INVALID-ORDER-203
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 L_4 L_L R_3 s^4 + C_3 C_4 L_L R_3 R_4 s^3 + C_4 L_L L_R R_3 s^4 + C_4 C_L L_L R_3 R_4 s^3 + C_4 L_4 L_L R_3 s^4 + C_4 L_L R_3 s^2 + C_4 L_L R_3 s^2$$

10.204 INVALID-ORDER-204
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.205 INVALID-ORDER-205
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$L_L R_3 R_L s \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 L_4 L_L R_3 R_L s^4 + C_3 C_4 L_L R_3 R_L s^3 + C_4 L_4 L_L R_3 R_L s^3 + C_4 L_4$$

10.206 INVALID-ORDER-206
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_4L_LR_3R_Ls^5 + C_3C_4C_LL_LR_3R_4R_Ls^4 + C_3C_4L_4L_RR_3s^4 + C_3C_4L_4R_3R_Ls^3 + C_3C_4L_LR_3R_4s^3 + C_3C_4R_3R_4R_Ls^2 + C_3C_LL_LR_3R_Ls^3 + C_3L_LR_3s^2 + C_3R_3R_Ls^3 + C_3C_4L_LR_3R_4s^3 + C_3C_4L_4L_4L_4R_3R_4s^3 + C_3C_4L_4L_4L_4R_3R_4s^3 + C_3C_4L_4L_4L_4L_4R_3R_4s^3 + C_3C_4L_4L_4L_4L_4R_3R_4s^3 + C_3C_4L_4L_4L_4R_3R_4s^3 + C_3C_4L_4L_4L_4R_4s^3 + C_3C_4L_4L_4R_4s^3 + C_3C$$

10.207 INVALID-ORDER-207
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.208 INVALID-ORDER-208
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

10.209 INVALID-ORDER-209
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_4 L_L R_3 R_4 s^4 + C_3 L_4 R_3 R_4 s^2 + 2 C_4 C_L L_4 L_L R_3 R_4 s^4 + 2 C_4 L_4 R_3 R_4 s^2 + 2 C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 s^3 + C_L L_4 R_3 R_4 s^2 + 2 C_L L_L R_3 R_4 s^2 + 2 L_4 R_3 s + L_4 R_4 s + 2 R_3 R_4 s^2 + 2 C_4 R_3 R_4 s^2$$

10.210 INVALID-ORDER-210
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_4 L_L R_3 R_4 s^4 + C_3 C_L L_4 R_3 R_4 R_L s^3 + C_3 L_4 R_3 R_4 s^2 + 2 C_4 C_L L_4 L_L R_3 R_4 s^4 + 2 C_4 C_L L_4 R_3 R_4 R_L s^3 + 2 C_4 L_4 R_3 R_4 s^2 + 2 C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 s^3 + C_L L_4 L_L R_3 R_4 s^2 + 2 C_L L_4 L_L R_3 R_4 s^3 + C_$$

10.211 INVALID-ORDER-211
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_4 L_L R_3 R_4 R_L s^4 + C_3 L_4 L_L R_3 R_4 s^3 + C_3 L_4 R_3 R_4 R_L s^2 + 2 C_4 C_L L_4 L_L R_3 R_4 R_L s^4 + 2 C_4 L_4 L_L R_3 R_4 s^3 + 2 C_4 L_4 L_L R_3 R_4 s^3 + 2 C_L L_4 L_L R_$$

10.212 INVALID-ORDER-212
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1} + R_{3}, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)$$

10.213 INVALID-ORDER-213
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L\right)$$

10.214 INVALID-ORDER-214
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.215 INVALID-ORDER-215
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.216 INVALID-ORDER-216
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.217 INVALID-ORDER-217
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

10.218 INVALID-ORDER-218
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.219 INVALID-ORDER-219
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_4L_LR_3R_4s^5 + C_3C_4C_LL_4R_3R_4R_Ls^4 + C_3C_4L_4R_3R_4s^3 + C_3C_LL_4L_RR_3s^4 + C_3C_LL_4R_3R_Ls^3 + C_3C_LL_4R_3R_4s^3 + C_3C$$

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

$$L_L R_3 R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_4 L_L R_3 R_4 R_L s^4 + C_3 L_4 L_L R_3 R_4 R_L s^2 + C_4 C_L L_4 L_L R_3 R_4 R_L s^4 + C_4 L_4 L_L R_3 R_4 s^3 + 2 C_4 L_4 L_L R_3 R_L s^3 + C_4 L_4 L_L R_3 R_4 R_L s^2 + C_L L_4 L_L R_3 R_4 R_L s^4 + C_4 L_4 L_L R_3 R_4 R_L s^3 + C_4 L_4 L_L R_4 R_L$$

10.221 INVALID-ORDER-221
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.222 INVALID-ORDER-222
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.223 INVALID-ORDER-223 $Z(s) = (\infty, \infty, \infty, R_4, \infty, R_L)$

$$H(s) = \frac{R_3 R_4 R_L \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 R_3 R_4 R_L s + C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_L s^2 + C_4 L_4 R_3 R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s^2$$

10.224 INVALID-ORDER-224 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{1}{C_{Ls}}\right)$

$$H(s) = \frac{R_3 R_4 \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 R_3 R_4 s^3 + C_3 R_3 R_4 s + C_4 C_L L_4 R_3 R_4 s^3 + 2 C_4 L_4 R_3 s^2 + C_4 L_4 R_4 s^2 + 2 C_4 R_3 R_4 s + C_L R_3 R_4 s + 2 R_3 + R_4}$$

10.225 INVALID-ORDER-225 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_4 R_L \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 R_3 R_4 R_L s + C_4 C_L L_4 R_3 R_4 R_L s^3 + C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_L s^2 + 2 C_4 R_3 R_4 R_L s + C_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s + C_4 R_3 R_4 R_L s + R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s + R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s + R_4$$

10.226 INVALID-ORDER-226 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 R_4 \left(C_4 L_4 s^2 + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_4 C_L L_4 R_3 R_4 R_L s^4 + C_3 C_4 L_4 R_3 R_4 s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + C_4 C_L L_4 R_3 R_4 s^3 + 2 C_4 C_L L_4 R_3 R_L s^3 + 2 C_4 C_L L_4 R_3 R_4 R_L s^3 + 2 C_4 C_$$

10.227 INVALID-ORDER-227 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s}\right)$

10.228 INVALID-ORDER-228 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_3 R_4 s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_4 L_L R_3 R_4 s^4 + C_3 L_L R_3 R_4 s^2 + C_4 C_L L_4 L_L R_3 R_4 s^4 + 2 C_4 L_4 L_L R_3 s^3 + C_4 L_4 L_L R_4 s^3 + C_4 L_4 R_3 R_4 s^2 + 2 C_4 L_L R_3 R_4 s^2 + 2 L_L R_3 R_4 s^2 + 2 L_L R_3 s + L_L R_4 s + R_3 R_4 s^2 + 2 L_L R_3 R_4 s^2 + 2 L_L$$

10.229 INVALID-ORDER-229 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$

10.230 INVALID-ORDER-230
$$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.231 INVALID-ORDER-231
$$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.232 INVALID-ORDER-232
$$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_4 R_L s}{C_3 C_4 C_L L_4 L_L R_3 R_4 R_L s^5 + C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 R_3 R_4 R_L s + C_4 C_L L_4 L_L R_3 R_4 s^4 + 2 C_4 C_L L_4 L_L R_3 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 R_3 R_4 R_L s^4 + C_4 C_L L_4 R_4 R_L s^4 + C_4 C_$$

10.233 INVALID-ORDER-233
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L\right)$$

$$H(s) = \frac{R_4 R_L (C_3 R_3 s + 1)}{C_3 R_3 R_4 s + 2C_3 R_3 R_L s + C_3 R_4 R_L s + R_4 + 2R_L}$$

10.234 INVALID-ORDER-234
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2 C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2}$$

10.235 INVALID-ORDER-235
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_4 s \left(C_3 R_3 s + 1\right)}{C_3 C_L L_L R_3 R_4 s^3 + 2 C_3 L_L R_3 s^2 + C_3 L_L R_4 s^2 + C_3 R_3 R_4 s + C_L L_L R_4 s^2 + 2 L_L s + R_4}$$

10.236 INVALID-ORDER-236
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{2 C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 C_L R_3 R_L s^2 + C_3 C_L R_4 R_L s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2 C_L R_L s + 2}$$

10.237 INVALID-ORDER-237
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.238 INVALID-ORDER-238
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.239 INVALID-ORDER-239
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.240 INVALID-ORDER-240
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_3 R_3 s + 1}{s \left(2 C_3 C_4 R_3 s + C_3 C_L R_3 s + C_3 + 2 C_4 + C_L\right)}$$

10.241 INVALID-ORDER-241
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3R_3s+1)(C_LR_Ls+1)}{s(2C_3C_4C_LR_3R_Ls^2 + 2C_3C_4R_3s + C_3C_LR_3s + C_3C_LR_Ls + C_3 + 2C_4C_LR_Ls + 2C_4 + C_L)}$$

10.242 INVALID-ORDER-242
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3R_3s + 1)(C_LL_Ls^2 + 1)}{s(2C_3C_4C_LL_LR_3s^3 + 2C_3C_4R_3s + C_3C_LL_Ls^2 + C_3C_LR_3s + C_3 + 2C_4C_LL_Ls^2 + 2C_4 + C_L)}$$

10.243 INVALID-ORDER-243
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_L R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + 2 C_4 L_L s^2 + C_L L_L s^2 + 1}$$

10.244 INVALID-ORDER-244
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.245 INVALID-ORDER-245
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_L R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + 2 C_4 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L R_L s^2 + C_4 L_L R_L s^2 + C_4$$

10.246 INVALID-ORDER-246
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.247 INVALID-ORDER-247
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2 C_3 C_4 C_L L_L R_3 R_L s^4 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + 2 C_4 C_L L_L R_L s^3 + 2 C_4 R_L s + C_L L_L s^2 + C_L R_L s + 1}$$

10.248 INVALID-ORDER-248
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1\right) \left(C_L R_L s + 1\right)}{2 C_3 C_4 C_L R_3 R_4 R_L s^3 + 2 C_3 C_4 R_3 R_4 s^2 + C_3 C_L R_3 R_4 s^2 + 2 C_3 C_L R_3 R_L s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_4 C_L R_4 R_L s^2 + 2 C_4 R_4 s + C_L R_4 s + 2 C_L R_L s + 2 C_4 R_4 R_L s^2 + 2$$

10.249 INVALID-ORDER-249
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2 C_3 C_4 C_L L_L R_3 R_4 s^4 + 2 C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_4 C_L L_L R_4 s^3 + 2 C_4 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2 C_4 R_4 s^2 + 2 C_4 R_4 s^3 + 2 C_4 R_4 s^$$

10.250 INVALID-ORDER-250
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.251 INVALID-ORDER-251
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2 C_3 C_4 C_L L_L R_3 R_4 s^4 + 2 C_3 C_4 C_L R_3 R_4 R_L s^3 + 2 C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 C_L R_3 R_L s^2 + C_3 C_L R_4 R_L s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_3 C_L R_3 R_4 s^2 + 2 C_3 R_4 R_L s^2 + 2 C_$$

10.252 INVALID-ORDER-252
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_4 R_L s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_L R_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 L_L R_3 R_4 s^2 + 2 C_3 L_L R_3 R_L s^2 + C_3 L_L R_4 R_L s^2 + C_3 R_3 R_4 R_L s + 2 C_4 L_L R_4 R_L s^2 + C_L L_L R_4 R_L s^2 + L_L R_4 s + 2 L_L R_4 s + 2$$

10.253 INVALID-ORDER-253
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.254 INVALID-ORDER-254
$$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 R_3 s + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_L R_3 R_4 R_L s^4 + 2 C_3 C_4 R_3 R_4 R_L s^2 + C_3 C_L L_L R_3 R_4 s^3 + 2 C_3 C_L L_L R_3 R_L s^3 + C_3 C_L L_L R_4 R_L s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 s + 2 C_3 R_3 R_L s + C_3 R_4 R_L s + 2 C_4 C_L R_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s^2 + C_3 R_4 R_L s^2 + C_3 R_4 R_L s^3 + C_3 R_4 R_L s^2 + C_3$$

10.255 INVALID-ORDER-255
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s}\right)$$

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

10.256 INVALID-ORDER-256
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 R_4 s + 1 \right)}{C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_4 C_L R_4 R_L s^2 + C_4 R_4 s + 2 C_4 R_L s + C_L R_L s + 1}$$

10.257 INVALID-ORDER-257
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.258 INVALID-ORDER-258
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.259 INVALID-ORDER-259
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_L R_3 R_4 s^4 + 2 C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L R_4 s^3 + C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_4 C_L L_L R_4 s^3 + 2 C_4 L_L s^2 + C_4 R_4 s + C_L L_L s^2 + 1}$$

10.260 INVALID-ORDER-260
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.261 INVALID-ORDER-261
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.262 INVALID-ORDER-262
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.263 INVALID-ORDER-263
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 R_4 s + 1 \right) \left(C_L L_L s^2 + C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L$$

10.264 INVALID-ORDER-264
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_L s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_4 L_4 s^2 + 2 C_4 R_L s + 1}$$

10.265 INVALID-ORDER-265
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3R_3s + 1)(C_4L_4s^2 + 1)}{s(C_3C_4C_LL_4R_3s^3 + C_3C_4L_4s^2 + 2C_3C_4R_3s + C_3C_LR_3s + C_3 + C_4C_LL_4s^2 + 2C_4 + C_L)}$$

10.266 INVALID-ORDER-266
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 C_L L_4 R_3 R_L s^4 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_L s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_4 C_L L_4 R_L s^3 + C_4 L_4 s^2 + 2 C_4 R_L s + C_L R_L s + 1}$$

10.267 INVALID-ORDER-267
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.268 INVALID-ORDER-268
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

10.269 INVALID-ORDER-269
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 C_L L_4 L_L R_3 s^5 + C_3 C_4 L_4 L_L s^4 + C_3 C_4 L_4 R_3 s^3 + 2 C_3 C_4 L_L R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_4 C_L L_4 L_L s^4 + C_4 L_4 s^2 + 2 C_4 L_L s^2 + 1}$$

10.270 INVALID-ORDER-270
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.271 INVALID-ORDER-271
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.272 INVALID-ORDER-272
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.273 INVALID-ORDER-273
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right) \left(C_L L_L s^3 + 1 \right) \left(C_4 L_4 L_L R_3 s^4 + C_3 C_4 L_L L_L R_3 s^3 + C_3 C_4 L_4 R_2 s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L R_2 s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L R_2 s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L R_3 s^$$

10.274 INVALID-ORDER-274
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_4 R_3 R_L s^3 + C_3 L_4 R_3 s^2 + C_3 L_4 R_L s^2 + 2 C_3 R_3 R_L s + 2 C_4 L_4 R_L s^2 + L_4 s + 2 R_L r_1 + 2 C_4 R_1 r_2 + 2 C_4 R_1 r_2 + 2 C_4 R_1 r_2 + 2 C_4 R_1 r_3 + 2 C_4 R_1 r_4 + 2 R_1 r_4 + 2 R_1 r_4 + 2 C_4 R_1 r_4 + 2 C_$$

10.275 INVALID-ORDER-275
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_4 R_3 s^3 + C_3 C_L L_4 R_3 s^3 + C_3 L_4 s^2 + 2 C_3 R_3 s + 2 C_4 L_4 s^2 + C_L L_4 s^2 + 2}$$

10.276 INVALID-ORDER-276
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.277 INVALID-ORDER-277
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s}\right)$$

10.278 INVALID-ORDER-278
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 s \left(C_3 R_3 s + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_4 L_L R_3 s^5 + 2 C_3 C_4 L_4 R_3 s^3 + C_3 C_L L_4 L_L s^4 + C_3 C_L L_4 R_3 s^3 + 2 C_3 C_L L_L R_3 s^3 + C_3 L_4 s^2 + 2 C_3 R_3 s + 2 C_4 C_L L_4 L_L s^4 + 2 C_4 L_4 s^2 + 2 C_L L_4 s^2 + 2 C_L L_4 s^2 + 2 C_4 L_4 s^2 + 2 C_4$$

10.279 INVALID-ORDER-279
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.280 INVALID-ORDER-280
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.281 INVALID-ORDER-281
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_1 s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_4 L_L R_3 R_L s^3 + C_3 C_L L_4 L_L R_3 s^2 + C_3 L_4 L_L R_2 s^2 + C_3 L_4 R_3 R_L s + 2 C_3 L_L R_3 R_L s + 2 C_4 L_4 L_L R_L s^2 + C_L L_4 L_L R_L s^2 + L_4 L_L s + L_4 R_L + 2 L_L R_L s^2 + L_4 L_L R_L s^$$

10.282 INVALID-ORDER-282
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.283 INVALID-ORDER-283
$$Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.284 INVALID-ORDER-284
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_4 L_4 s^2 + C_4 R_4 s + 2 C_4 R_L s + 1}$$

10.285 INVALID-ORDER-285
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s}\right)$$

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

10.286 INVALID-ORDER-286
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 C_L L_4 R_3 R_L s^4 + C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_4 R_4 R_L s^2$$

10.287 INVALID-ORDER-287
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.288 INVALID-ORDER-288
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.289 INVALID-ORDER-289
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_4 L_2 R_3 s^5 + C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 L_4 L_2 s^4 + C_3 C_4 L_4 R_3 s^3 + 2 C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L R_4 s^3 + C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_4 C_L L_4 R_4 s^3 + C_4 C_L L_4 R_4 s^4 + C_4 C_L L_4 R_4 s^4$$

10.290 INVALID-ORDER-290
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.291 INVALID-ORDER-291
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_S}{C_3 C_4 C_L L_4 L_L R_3 R_L s^5 + C_3 C_4 C_L L_L R_3 R_4 R_L s^4 + C_3 C_4 L_4 L_L R_3 s^4 + C_3 C_4 L_4 L_L R_3 s^4 + C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 L_L R_3 R_4 s^3 + 2 C_3 C_4 L_L R_3 R_L s^3 + C_3 C_$$

10.292 INVALID-ORDER-292
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.293 INVALID-ORDER-293
$$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.294 INVALID-ORDER-294
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_4 R_L s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 L_4 R_3 R_4 s^2 + 2 C_3 L_4 R_3 R_L s^2 + C_3 L_4 R_4 R_L s^2 + 2 C_3 R_3 R_4 R_L s + 2 C_4 L_4 R_4 R_L s^2 + L_4 R_4 s + 2 L_4 R_L s + 2 R_4 R_L s^2 + 2 C_3 R_3 R_4 R_L s + 2 R_4 R_L s^2 +$$

10.295 INVALID-ORDER-295
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{1}{C_Ls}\right)$$

10.296 INVALID-ORDER-296
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.297 INVALID-ORDER-297
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s}\right)$$

10.298 INVALID-ORDER-298
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.299 INVALID-ORDER-299
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_4 L_L R_4 s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_4 L_L R_3 R_4 s^3 + C_3 C_L L_4 L_L R_3 s^2 + C_3 L_4 L_L R_3 s^2 + C_3 L_4 L_L R_4 s^2 + C_3 L_4 R_3 R_4 s + 2 C_3 L_L R_3 R_4 s + 2 C_4 L_4 L_L R_4 s^2 + C_L L_4 L_L R_4 s^2 + 2 L_4 L_L s + L_4 R_4 + 2 L_L R_4 s^2 + 2 L_4 L_L R_$$

10.300 INVALID-ORDER-300
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_4L_RR_3R_4s^5 + 2C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4L_4R_3R_4s^3 + 2C_3C_LL_4L_RR_3s^4 + C_3C_LL_4L_RR_4s^4 + C_3C_LL_4R_3R_4s^3 + 2C_3C_LL_4R_3R_Ls^3 + 2C_3C_LL_4R_3R_Ls^3 + 2C_3C_LL_4R_3R_4s^3 + 2$$

10.301 INVALID-ORDER-301
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_4 R_L s \left(C_3 R_3 s + 1\right)}{2 C_3 C_4 L_4 L_L R_3 R_4 R_L s^3 + C_3 L_4 L_L R_3 R_4 s^2 + 2 C_3 L_4 L_L R_3 R_L s^2 + C_3 L_4 L_L R_4 R_L s^2 + C_3 L_4 R_3 R_4 R_L s + 2 C_3 L_L R_3 R_4 R_L s + 2 C_4 L_4 L_L R_4 R_L s^2 + C_4 L_4 L_$$

10.302 INVALID-ORDER-302
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.303 INVALID-ORDER-303
$$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_4}{2 C_3 C_4 C_L L_4 L_L R_3 R_4 R_L s^5 + 2 C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 C_L L_4 L_L R_3 R_4 s^4 + 2 C_3 C_L L_4 L_L R_3 R_L s^4 + C_3 C_L L_4 L_L R_4 R_L s^4 + C_3 C_L L_4 R_3 R_4 R_L s^3 + 2 C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 C_L L_4 R_3 R_4 R_L s^3 +$$

10.308 INVALID-ORDER-308
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

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

10.309 INVALID-ORDER-309
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_L L_R R_3 R_4 s^5 + 2 C_3 C_4 L_4 L_L R_3 s^4 + C_3 C_4 L_4 L_R R_3 R_4 s^3 + C_3 C_L L_L R_3 R_4 s^3 + C_3 L_4 L_L R_3 r_4 s^3 + C_3 L_4 L_L R_3 r_4 s^3 + C_3 L_4 L_L R_3 r_4 r_5 + C_3 L_4 L_4 R_3 r_4 r_5 + C_3 L_4 L_4 R_3 r_4 r_5 + C_3 L_4 R_3 r_5 + C_3 L_4 R_$$

10.310 INVALID-ORDER-310
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_LR_4s^5 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + C_3C_4C_LL_4R_4R_Ls^4 + 2C_3C_4L_4R_3s^3 + C_3C_4L_4R_4s^3 + C_3C_4L_4L_Ls^4 + C_3C_4L_4R_4R_4s^4 + C_3C_4L_4R_4R_4s^4 + C_3C_4L_4R_4R_4s^3 + C_3C_4L_4R_4s^3 + C_3C_4L_4R$$

10.311 INVALID-ORDER-311
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.312 INVALID-ORDER-312
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

10.313 INVALID-ORDER-313
$$Z(s) = \left(\infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.314 INVALID-ORDER-314 $Z(s) = (\infty, \infty, \infty, \infty, R_4, R_L)$

$$H(s) = \frac{R_4 R_L \left(C_3 R_3 s+1\right) \left(C_4 L_4 s^2+1\right)}{C_3 C_4 L_4 R_3 R_4 s^3+2 C_3 C_4 L_4 R_3 R_L s^3+2 C_3 C_4 R_3 R_4 R_L s^2+C_3 R_3 R_4 s+2 C_3 R_3 R_L s+C_3 R_4 R_L s+C_4 L_4 R_4 s^2+2 C_4 L_4 R_L s^2+2 C_4 R_4 R_L s+R_4+2 R_L s^2+2 C_4 R_4 R_L s^2+2 C_4 R_$$

10.315 INVALID-ORDER-315
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1\right) \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 C_L L_4 R_3 R_4 s^4 + 2 C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_4 s^3 + 2 C_3 C_4 R_3 R_4 s^2 + C_3 C_L R_3 R_4 s^2 + 2 C_3 R_3 s + C_3 R_4 s + C_4 C_L L_4 R_4 s^3 + 2 C_4 L_4 s^2 + 2 C_4 R_4 s + C_L R_4 s + 2 C_4 R_4 s^2 + 2 C_$$

10.316 INVALID-ORDER-316
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{R_L}{C_L R_L s + 1}\right)$$

10.317 INVALID-ORDER-317
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_L R_L s + 1 \right) \left(C_4 R_4 s^2 + 1 \right) \left(C_4 R_4$$

10.318 INVALID-ORDER-318
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, L_L s + \frac{1}{C_L s}\right)$$

10.319 INVALID-ORDER-319
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.320 INVALID-ORDER-320
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_RR_3s^5 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + 2C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_$$

10.321 INVALID-ORDER-321
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_4 R_L}{C_3 C_4 C_L L_4 L_L R_3 R_4 R_L s^5 + C_3 C_4 L_4 L_L R_3 R_4 s^4 + 2 C_3 C_4 L_4 L_L R_3 R_L s^4 + C_3 C_4 L_4 L_L R_4 R_L s^4 + C_3 C_4 L_4 R_3 R_4 R_L s^3 + 2 C_3 C_4 L_L R_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 L_$$

10.322 INVALID-ORDER-322
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_4L_LR_3R_4s^5 + 2C_3C_4C_LL_4L_RR_3R_Ls^5 + 2C_3C_4C_LL_4L_RR_4R_Ls^5 + 2C_3C_4C_LL_4R_3R_4R_Ls^4 + 2C_3C_4L_4L_RR_3s^4 + C_3C_4L_4L_RR_4s^4 + C_3C_4L_4R_3R_4s^3 + 2C_3C_4L_4R_3R_4s^4 + 2C_3C_4L_4L_RR_4s^4 + 2C_3C_4L_4L_4L_4s^4 + 2C_3C_4L_4L_4s^4 + 2C_3C_4L_4L_4t^4 + 2C_3C_4L_4L_4t^4 + 2C_3C_4L_4t^4 +$$

10.323 INVALID-ORDER-323
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.324 INVALID-ORDER-324
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right)}{C_3 C_L L_3 R_4 s^3 + 2 C_3 L_3 s^2 + C_3 R_4 s + C_L R_4 s + 2}$$

10.325 INVALID-ORDER-325
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 R_4 R_L s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 R_4 R_L s + C_L R_4 R_L s + R_4 + 2 R_L}$$

10.326 INVALID-ORDER-326
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right) \left(C_L R_L s + 1 \right)}{C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L L_3 R_L s^3 + C_3 C_L R_4 R_L s^2 + 2 C_3 L_3 s^2 + C_3 R_4 s + C_L R_4 s + 2 C_L R_L s + 2}$$

10.327 INVALID-ORDER-327
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_4 s^3 + C_3 C_L L_L R_4 s^3 + 2C_3 L_3 s^2 + C_3 R_4 s + 2C_L L_L s^2 + C_L R_4 s + 2}$$

10.328 INVALID-ORDER-328
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_4 s \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 L_L R_4 s^4 + 2 C_3 L_3 L_L s^3 + C_3 L_3 R_4 s^2 + C_3 L_L R_4 s^2 + C_L L_L R_4 s^2 + 2 L_L s + R_4}$$

10.329 INVALID-ORDER-329
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{2 C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_4 R_L s^2 + 2 C_3 L_3 s^2 + C_3 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2 C_L R_L s + 2}$$

10.331 INVALID-ORDER-331
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.332 INVALID-ORDER-332
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.333 INVALID-ORDER-333
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4R_4s+1}, R_L\right)$$

$$H(s) = \frac{R_L (C_3 L_3 s^2 + 1)}{2C_3 C_4 L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + 2C_4 R_L s + 1}$$

10.334 INVALID-ORDER-334
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_3 L_3 s^2 + 1}{s \left(2 C_3 C_4 L_3 s^2 + C_3 C_L L_3 s^2 + C_3 + 2 C_4 + C_L\right)}$$

10.335 INVALID-ORDER-335
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right)}{2C_3 C_4 L_3 R_L s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + 2C_4 R_L s + C_L R_L s + 1}$$

10.336 INVALID-ORDER-336
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LR_Ls + 1\right)}{s\left(2C_3C_4C_LL_3R_Ls^3 + 2C_3C_4L_3s^2 + C_3C_LL_3s^2 + C_3C_LR_Ls + C_3 + 2C_4C_LR_Ls + 2C_4 + C_L\right)}$$

10.337 INVALID-ORDER-337
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)}{s\left(2C_3C_4C_LL_3L_Ls^4 + 2C_3C_4L_3s^2 + C_3C_LL_3s^2 + C_3C_LL_Ls^2 + C_3 + 2C_4C_LL_Ls^2 + 2C_4 + C_L\right)}$$

10.338 INVALID-ORDER-338
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right)}{2C_3 C_4 L_3 L_L s^4 + C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + 2C_4 L_L s^2 + C_L L_L s^2 + 1}$$

10.339 INVALID-ORDER-339
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(2C_3C_4C_LL_3L_Ls^4 + 2C_3C_4C_LL_3R_Ls^3 + 2C_3C_4L_3s^2 + C_3C_LL_3s^2 + C_3C_LL_Ls^2 + C_3C_LR_Ls + C_3 + 2C_4C_LL_Ls^2 + 2C_4C_LR_Ls + 2C_4 + C_L\right)}$$

10.340 INVALID-ORDER-340
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.341 INVALID-ORDER-341
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{2C_3C_4C_LL_3L_LR_Ls^5 + 2C_3C_4L_3L_Ls^4 + 2C_3C_4L_3L_Ls^3 + C_3C_LL_3L_Ls^3 + C_3L_Ls^2 + C_3L_Ls^2$$

10.342 INVALID-ORDER-342
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2 C_3 C_4 C_L L_3 L_L R_L s^5 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 R_L s + 2 C_4 C_L L_L R_L s^3 + 2 C_4 R_L s + C_L L_L s^2 + C_L R_L s + 1}$$

10.343 INVALID-ORDER-343
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, R_L\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 s^2 + 1 \right)}{2 C_3 C_4 L_3 R_4 R_L s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 R_4 R_L s + 2 C_4 R_4 R_L s + R_4 + 2 R_L}$$

10.344 INVALID-ORDER-344
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right)}{2C_3 C_4 L_3 R_4 s^3 + C_3 C_L L_3 R_4 s^3 + 2C_3 L_3 s^2 + C_3 R_4 s + 2C_4 R_4 s + C_L R_4 s + 2C_4 R_4 s + C_4 R_4 s + C_$$

10.345 INVALID-ORDER-345
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_L L_3 R_4 R_L s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 R_4 R_L s + 2 C_4 R_4 R_L s + C_L R_4 R_L s + R_4 + 2 R_L R_4 R_L s^2 + C_4 R_4 R_L s + C_4 R_4 R_L s + C_4 R_4 R_L s + R_$$

10.346 INVALID-ORDER-346
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_L R_L s + 1\right)}{2 C_3 C_4 C_L L_3 R_4 s^4 + 2 C_3 C_4 L_3 R_4 s^3 + C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L L_3 R_L s^3 + C_3 C_L R_4 R_L s^2 + 2 C_3 L_3 s^2 + C_3 R_4 s + 2 C_4 C_L R_4 R_L s^2 + 2 C_4 R_4 s + C_L R_4 s + 2 C_L R_L s + 2 C_4 R_4 R_L s^2 +$$

10.347 INVALID-ORDER-347
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_3 L_L R_4 s^5 + 2 C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_4 s^3 + C_3 C_L L_L R_4 s^3 + 2 C_3 L_3 S^2 + C_3 R_4 s + 2 C_4 C_L L_L R_4 s^3 + 2 C_4 R_4 s + 2 C_L L_L s^2 + C_L R_4 s + 2 C_4 R_4 s^2 + C_4 R_4 s^3 + 2 C_4 R_4 s^3$$

10.348 INVALID-ORDER-348
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_4 s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_L R_4 s^4 + C_3 C_L L_3 L_L R_4 s^4 + 2 C_3 L_3 L_L s^3 + C_3 L_3 R_4 s^2 + C_3 L_L R_4 s^2 + 2 C_4 L_L R_4 s^2 + C_L L_L R_4 s^2 + 2 L_L s + R_4 R_4 s^2 + C_4 L_L R_4 s^$$

10.349 INVALID-ORDER-349
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2 C_3 C_4 C_L L_3 L_L R_4 s^5 + 2 C_3 C_4 L_L R_4 s^4 + 2 C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_4 s^3 + C_3 C_L R_4 R_L s^2 + 2 C_3 L_3 s^2 + C_3 R_4 s + 2 C_3 C_4 R_4 R_L s^3 + C_3 C_4 R_4 R_L s^2 + 2 C_3 R_4 s + 2 C_3 R_4 R_L s^4 + 2 C_3 R_4 R_L$$

10.350 INVALID-ORDER-350
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_L R_4 R_L s^4 + C_3 C_L L_3 L_L R_4 s^4 + C_3 L_3 L_L R_4 s^3 + 2 C_3 L_3 L_L R_L s^3 + C_3 L_3 R_4 R_L s^2 + C_3 L_L R_4 R_L s^2 + 2 C_4 L_L R_4 R_L s^2 + C_L L_L R_4 R_L s^2 + L_L R_4 s + 2 L_L R_4 s + 2$$

10.351 INVALID-ORDER-351
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{2 C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + 2 C_3 C_4 L_3 L_L R_4 s^4 + 2 C_3 C_L L_3 L_L R_4 s^4 + 2 C_3 C_L L_3 L_L R_4 s^4 + 2 C_3 C_L L_3 L_L R_4 s^3 + 2 C_3 L_3 L_L s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_4 s^3 + 2 C_3 L_$$

10.352 INVALID-ORDER-352
$$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.353 INVALID-ORDER-353
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 R_4 s + 1 \right)}{C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 R_4 R_L s^2 + C_3 L_3 s^2 + C_3 R_L s + C_4 R_4 s + 2 C_4 R_L s + 1}$$

10.354 INVALID-ORDER-354
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4R_4s + 1\right)}{s\left(C_3C_4C_LL_3R_4s^3 + 2C_3C_4L_3s^2 + C_3C_4R_4s + C_3C_LL_3s^2 + C_3 + C_4C_LR_4s + 2C_4 + C_L\right)}$$

10.355 INVALID-ORDER-355
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 R_4 s + 1 \right)}{C_3 C_4 C_L L_3 R_4 R_L s^4 + C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 R_4 R_L s^2 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_4 C_L R_4 R_L s^2 + C_4 R_4 s + 2 C_4 R_L s + C_L R_L s + 1}$$

10.356 INVALID-ORDER-356
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4R_4s + 1\right)\left(C_LR_Ls + 1\right)}{s\left(C_3C_4C_LL_3R_4s^3 + 2C_3C_4C_LL_3R_Ls^3 + C_3C_4C_LR_4R_Ls^2 + 2C_3C_4L_3s^2 + C_3C_4R_4s + C_3C_LL_3s^2 + C_3C_LR_Ls + C_3 + C_4C_LR_4s + 2C_4C_LR_Ls + 2C_4 + C_L\right)}$$

10.357 INVALID-ORDER-357
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4R_4s + 1\right)\left(C_LL_Ls^2 + 1\right)}{s\left(2C_3C_4C_LL_3L_Ls^4 + C_3C_4C_LL_3R_4s^3 + C_3C_4L_LR_4s^3 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + C_3C_LL_4s^2 + C_3C_LL_Ls^2 + C_4C_LL_Ls^2 + C_4C_LL_4s^2 +$$

10.358 INVALID-ORDER-358
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_3 L_L R_4 s^5 + 2 C_3 C_4 L_3 L_L s^4 + C_3 C_4 L_3 R_4 s^3 + C_3 C_4 L_L R_4 s^3 + C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_4 C_L L_L R_4 s^3 + 2 C_4 L_L s^2 + C_4 R_4 s + C_L L_L s^2 + 1}$$

10.359 INVALID-ORDER-359
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4R_4s + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(2C_3C_4C_LL_3L_Ls^4 + C_3C_4C_LL_3R_4s^3 + 2C_3C_4C_LL_3R_Ls^3 + C_3C_4C_LL_R4s^3 + C_3C_4C_LR_4R_Ls^2 + 2C_3C_4L_3s^2 + C_3C_4L_3s^2 + C_3C_LL_3s^2 + C_3C_$$

10.360 INVALID-ORDER-360
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_3 L_3 s^2 + 1\right) \left(C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_3 L_L R_4 s^5 + C_3 C_4 L_3 L_L R_4 s^4 + 2 C_3 C_4 L_3 L_L R_L s^4 + C_3 C_4 L_L R_4 R_L s^3 + C_3 C_4 L_L R_4 R_L s^3 + C_3 L_L L_L R_4 s^4 + C_3 L_3 L_L R_2 s^4 + C_3 L_L R_L s^2 + C_4 L_L L_L R_4 R_L s^3 + C_4 L_L R_4 R_L s^3 + C_5 L_L R_5 R_L s^3 + C_$$

10.361 INVALID-ORDER-361
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4R_4s + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_Ls^2\right)}{C_3C_4C_LL_3L_LR_4s^5 + 2C_3C_4C_LL_3L_LR_4s^4 + 2C_3C_4L_3L_Ls^4 + C_3C_4L_3R_4s^3 + 2C_3C_4L_3R_Ls^3 + C_3C_4L_LR_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_LL_3L_Ls^4 + C_3C_4L_3R_4s^3 + 2C_3C_4L_3R_4s^3 + C_3C_4L_3R_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_4L_3L_Ls^4 + C_3C_4L_3R_4s^3 + C_3C_4L_3R_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_4L_3R_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_4L_3R_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_4L_3R_4s^3 + C_3C_4R_4R_Ls^2 + C_3C_4R_4R_4R_4R_5 + C_3C_4R_4R_4R_4R_5 + C_3C_4R_4R_4R_4R_5 + C_3C_4R_4R_4R_4R_5 + C_3C_4R_4R_4R_5 + C_3C_4R_4R_4R_5 + C_3C_4R_4R_4R_5 + C_3C_4R_4R_4R_5 + C_3C_4R_4R_4R_5 + C_3C_4R_4R_4R_5 + C_3C_4R_4R_5 + C_3C_4R_5 + C_3C_4$$

10.362 INVALID-ORDER-362
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.363 INVALID-ORDER-363
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 L_4 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_4 L_4 s^2 + 2 C_4 R_L s + 1}$$

10.364 INVALID-ORDER-364
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + C_3C_LL_3s^2 + C_3 + C_4C_LL_4s^2 + 2C_4 + C_L\right)}$$

10.365 INVALID-ORDER-365
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 C_L L_3 L_4 R_L s^5 + C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 L_4 R_L s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_4 S^2 + C_3 R_L s + C_4 C_L L_4 R_L s^3 + C_4 L_4 s^2 + 2 C_4 R_L s + C_L R_L s + 1}$$

10.366 INVALID-ORDER-366
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + 1\right)\left(C_LR_Ls + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + 2C_3C_4C_LL_3R_Ls^3 + C_3C_4L_4R_Ls^3 + 2C_3C_4L_4s^2 + C_3C_4L_4s^2 + C_3C_LL_3s^2 + C_3C_LR_Ls + C_3 + C_4C_LL_4s^2 + 2C_4C_LR_Ls + 2C_4 + C_L\right)}$$

10.367 INVALID-ORDER-367
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_{4s}}{C_4 L_4 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + 2C_3C_4C_LL_3L_Ls^4 + C_3C_4L_Ls^4 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + C_3C_LL_3s^2 + C_3C_LL_4s^2 + 2C_4C_LL_4s^2 + 2C_4$$

10.368 INVALID-ORDER-368
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.369 INVALID-ORDER-369
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + 2C_3C_4C_LL_3L_Ls^4 + 2C_3C_4C_LL_4L_Ls^4 + C_3C_4C_LL_4R_Ls^3 + 2C_3C_4L_4s^2 + C_3C_4L_4s^2 + C_3C_LL_3s^2 + C_3C_LL_4s^2 + C_3C_LL$$

10.370 INVALID-ORDER-370
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.371 INVALID-ORDER-371
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + 1\right)\left(C_4L_4s^2 + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_Ls^2 + L_Ls + R_Ls^2\right)}{C_3C_4C_LL_3L_4L_2s^6 + 2C_3C_4C_LL_3L_LR_Ls^5 + C_3C_4L_3L_4s^4 + 2C_3C_4L_3L_Ls^4 + 2C_3C_4L_3R_Ls^3 + C_3C_4L_4L_Ls^4 + C_3C_4L_4L_Ls^3 + C_3C_4L_3L_Ls^4 + C_3C_4L_3L_2s^4 + C_3C_4L_3L_3L_2s^4 + C_3C_4L_3L_3L_3L_3s^4 + C_3C_4L_3L_3L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_$$

10.372 INVALID-ORDER-372
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_{4s}}{C_4L_4s^2+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_4$$

10.373 INVALID-ORDER-373
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_L\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2C_3 C_4 L_3 L_4 R_L s^4 + C_3 L_3 L_4 s^3 + 2C_3 L_3 R_L s^2 + C_3 L_4 R_L s^2 + 2C_4 L_4 R_L s^2 + L_4 s + 2R_L s^2 + 2C_4 L_4 R_L s^2 + L_4 s + 2R_L s^2 + 2C_4 L_4 R_L s^2 + L_4 s + 2R_L s^2 + 2C_4 L_4 R_L s^2 + 2C_$$

10.374 INVALID-ORDER-374
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4s \left(C_3 L_3 s^2 + 1\right)}{2C_3 C_4 L_3 L_4 s^4 + C_3 C_L L_3 L_4 s^4 + 2C_3 L_3 s^2 + C_3 L_4 s^2 + 2C_4 L_4 s^2 + C_L L_4 s^2 + 2}$$

10.375 INVALID-ORDER-375
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_L s^4 + C_3 C_L L_3 L_4 R_L s^4 + C_3 L_3 L_4 s^3 + 2 C_3 L_3 R_L s^2 + C_3 L_4 R_L s^2 + 2 C_4 L_4 R_L s^2 + C_L L_4 R_L s^2 + L_4 s + 2 R_L R_L s^2 + C_4 L_4 R_L s^$$

10.376 INVALID-ORDER-376
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 s \left(C_3 L_3 s^2 + 1\right) \left(C_L R_L s + 1\right)}{2 C_3 C_4 C_L L_3 L_4 R_L s^5 + 2 C_3 C_4 L_3 L_4 s^4 + C_3 C_L L_3 L_4 s^4 + 2 C_3 C_L L_3 R_L s^3 + C_3 C_L L_4 R_L s^3 + 2 C_3 L_4 s^2 + 2 C_4 C_L L_4 R_L s^3 + 2 C_4 L_4 s^2 + C_L L_4 s^2 + 2 C_L R_L s + 2 C_4 C_L L_4 R_L s^3 + 2 C_4 L_4 R_L s^3$$

10.377 INVALID-ORDER-377
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 s \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_3 L_4 L_5 ^6 + 2 C_3 C_4 L_3 L_4 s^4 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_4 L_L s^4 + 2 C_3 L_3 s^2 + C_3 L_4 s^2 + 2 C_4 C_L L_4 L_L s^4 + 2 C_4 L_4 s^2 + C_L L_4 s^2 + 2 C_L L_L s^2 + 2 C_4 L_4 L_4 s^4 + 2 C_4 L_4 L_4 L_4 s^4 + 2 C_4 L_4 L_4 s^4 + 2 C_4 L_4 L_4 L_4 s^4 + 2 C_4 L_4 L_4 L_4 s^4 + 2 C_4 L_4 L_4 L_4 t^4 + 2 C_4 L_4 L_4 L_4 t^4 + 2 C_4 L_4$$

10.378 INVALID-ORDER-378
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.379 INVALID-ORDER-379
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.380 INVALID-ORDER-380
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_L s^4 + C_3 C_L L_3 L_4 L_L R_L s^3 + C_3 L_3 L_4 R_L s^2 + 2 C_3 L_3 L_L R_L s^2 + C_3 L_4 L_L R_L s^2 + C_L L_4 L_L R_L s^2 + L_4 L_L s + L_4 R_L + 2 L_L R_L s^2 + 2 L_4 L_L$$

10.381 INVALID-ORDER-381
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_4 s \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{2 C_3 C_4 C_L L_3 L_4 L_L R_L s^6 + 2 C_3 C_4 L_3 L_4 L_L s^5 + 2 C_3 C_4 L_3 L_4 L_L s^5 + 2 C_3 C_L L_3 L_4 L_L s^4 + C_3 C_L L_4 L_L R_L s^4 + C_3 L_3 L_4 s^3 + 2 C_3 L_3 L_L s^3 + 2 C_3 L_3 R_L s^2 + C_3 L_4 L_L R_L s^4 + C_3 L_4 L_$$

10.382 INVALID-ORDER-382
$$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_3 L_4 L_L s^6 + 2 C_3 C_4 L_3 L_4 L_L s^5 + C_3 C_L L_3 L_4 R_L s^4 + 2 C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_4 L_L R_L s^4 + C_3 L_3 L_4 s^3 + 2 C_3 L_3 R_L s^2 + C_3 L_4 R_L s^2 + 2 C_4 C_L R_L s^4 + C_3 C_L L_3 L_4 L_L R_L s^4 + C_3 C_L L_3 L_4 L_L R_L s^4 + C_3 C_L L_3 L_4 R_L s^2 + 2 C_4 C_L R_L s^4 + C_3 C_L L_3 L_4 R_L s^4$$

10.383 INVALID-ORDER-383
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_3 L_4 s^4 + C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 L_4 R_L s^3 + C_3 C_4 R_4 R_L s^2 + C_3 L_3 s^2 + C_3 R_L s + C_4 L_4 s^2 + C_4 R_4 s + 2 C_4 R_L s + 1}$$

10.384 INVALID-ORDER-384
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + C_4R_4s + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + C_3C_4L_LR_4s^3 + 2C_3C_4L_4s^2 + C_3C_4L_4s^2 + C_3C_4L_4s^2 + C_3C_LL_3s^2 + C_3 + C_4C_LL_4s^2 + C_4C_LR_4s + 2C_4 + C_L\right)}$$

10.386 INVALID-ORDER-386
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LR_Ls + 1\right)\left(C_4L_4s^2 + C_4R_4s + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + C_3C_4C_LL_3R_4s^3 + 2C_3C_4C_LL_3R_Ls^3 + C_3C_4C_LL_4R_Ls^3 + C_3C_4C_LR_4R_Ls^2 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + C_3C_4R_4s + C_3C_LL_3s^2 + C_3C_L$$

10.387 INVALID-ORDER-387
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_s^2 + 1\right)\left(C_4L_4s^2 + C_4R_4s + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + 2C_3C_4C_LL_3L_Ls^4 + C_3C_4C_LL_3R_4s^3 + C_3C_4L_LL_s^4 + C_3C_4C_LL_LR_4s^3 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + C_3C_4L$$

10.388 INVALID-ORDER-388
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_3 L_4 L_5 e^6 + C_3 C_4 C_L L_3 L_4 R_4 s^5 + C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 L_4 s^4 + C_3 C_4 L_4 L_4 L_5 e^4 + C_3 C_4 L_4 L_4 L_5 e^4 + C_3 L_5 e^4 + C_5 L_5 e^4$$

10.389 INVALID-ORDER-389
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4s^2 + C_4R_4s + 1\right)\left(C_LL_Ls^2 + C_4R_4$$

10.390 INVALID-ORDER-390
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $H(s) = \frac{L_L R_L}{C_3 C_4 C_L L_3 L_4 L_L R_L s^6 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 L_3 L_4 L_L s^5 + C_3 C_4 L_3 L_4 R_L s^4 + C_3 C_4 L_3 L_L R_4 s^4 + 2 C_3 C_4 L_3 L_L R_L s^4 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 L_4 L_L R_L s^4 + C_3 C_4 L_3 L_L R_L s^4 + C_3 C_$

10.391 INVALID-ORDER-391
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.392 INVALID-ORDER-392
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.393 INVALID-ORDER-393
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, R_L\right)$$

$$H(s) = \frac{L_4 R_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_4 s^4 + C_3 L_3 L_4 R_4 s^3 + 2 C_3 L_3 L_4 R_L s^3 + 2 C_3 L_3 R_4 R_L s^2 + C_3 L_4 R_4 R_L s^2 + 2 C_4 L_4 R_4 R_L s^2 + L_4 R_4 s + 2 L_4 R_L s + 2 R_4 R_L s^2 + 2 C_4 L_4 R_4$$

10.394 INVALID-ORDER-394
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_{4s}}{C_4L_4s^2+1} + R_4, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_4 R_4 s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_4 s^4 + C_3 C_L L_3 L_4 R_4 s^4 + 2 C_3 L_3 L_4 s^3 + 2 C_3 L_3 R_4 s^2 + C_3 L_4 R_4 s^2 + 2 C_4 L_4 R_4 s^2 + C_L L_4 R_4 s^2 + 2 L_4 s + 2 R_4 R_4 s^2 + 2 C_4 L_4 R_4 s^2 + 2 C_4 L_$$

10.395 INVALID-ORDER-395
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{R_L}{C_L R_L s + 1}\right)$$

10.396 INVALID-ORDER-396
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, R_L + \frac{1}{C_L s}\right)$$

10.397 INVALID-ORDER-397
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, L_Ls + \frac{1}{C_Ls}\right)$$

10.398 INVALID-ORDER-398
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_4 L_L R_4 s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_4 s^4 + C_3 C_L L_3 L_4 L_L R_4 s^4 + 2 C_3 L_3 L_4 L_L s^3 + C_3 L_3 L_4 R_4 s^2 + 2 C_3 L_3 L_L R_4 s^2 + 2 C_4 L_4 L_L R_4 s^2 + C_L L_4 L_L R_4 s^2 + 2 L_4 L_L s + L_4 R_4 + 2 L_L R_4 s^2 + 2 L_4 L_L R_4 s^2 + 2$$

10.399 INVALID-ORDER-399
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.400 INVALID-ORDER-400
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_4 L_L R_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_4 R_L s^4 + C_3 L_4 L_L R_4 R_L s^3 + 2 C_3 L_3 L_4 L_L R_4 s^3 + 2 C_3 L_3 L_4 R_4 R_L s^2 + 2 C_3 L_3 L_L R_4 R_L s^2 + C_3 L_4 L_L R_4 R_L s^2 + 2 C_4 L_4 L_L R_4 R_L s^2 + C_$$

10.401 INVALID-ORDER-401
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_4R_Ls^6 + 2C_3C_4L_3L_4L_LR_4s^5 + 2C_3C_4L_3L_4R_4R_Ls^4 + C_3C_LL_3L_4L_LR_4s^5 + 2C_3C_LL_3L_4L_LR_4s^5 + 2C_3C_LL_3L_4L_4L_4L_4s^5 + 2C_3C_LL_3L_4L_4L_4s^5 + 2C_3C_LL_3L_4L_4s^5 + 2C_3C_LL_3L_4L_4s^5 + 2C_3C_LL_3L_4L_4s^5 + 2C_3C_LL_3L_4L_4s^5 + 2C_3C_LL_3L_4s^5 + 2C_3C_L$$

10.402 INVALID-ORDER-402
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_{4s}}{C_4L_4s^2+1} + R_4, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.403 INVALID-ORDER-403
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_3 C_4 L_3 L_4 R_4 s^4 + 2 C_3 C_4 L_3 L_4 R_L s^4 + C_3 C_4 L_4 R_4 R_L s^3 + C_3 L_3 L_4 s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 L_4 R_L s^2 + C_4 L_4 R_4 s^2 + 2 C_4 L_4 R_L s^2 + L_4 s + R_4 + 2 R_L r_4 R_4 r_5 + 2 C_4 R_4 r_5 + 2 C_4 R_4 R_5 r_5 + 2 C_5 R_5$$

10.404 INVALID-ORDER-404
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_4L_4R_4s^2 + L_4s + R_4\right)}{C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4L_3L_4s^4 + C_3C_4L_4R_4s^3 + C_3C_LL_3L_4s^4 + C_3C_LL_3R_4s^3 + 2C_3L_3s^2 + C_3L_4s^2 + C_3R_4s + C_4C_LL_4R_4s^3 + 2C_4L_4s^2 + C_LL_4s^2 + C_LR_4s + 2C_4L_4s^3 + C_4C_4L_4R_4s^3 + C_4C_4L$$

10.405 INVALID-ORDER-405
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_3 C_4 C_L L_3 L_4 R_L s^5 + C_3 C_4 L_3 L_4 R_4 s^4 + 2 C_3 C_4 L_3 L_4 R_L s^4 + C_3 C_4 L_3 L_4 R_L s^3 + C_3 C_L L_3 R_4 R_L s^3 + C_3 L_3 L_4 s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 L_4 R_L s^3 + C_3 L_4 R_L s^3$$

10.406 INVALID-ORDER-406
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LR_Ls + 1\right)\left(C_4L_4R_4s^2 + L_4s + R_4R_4s^2 + L_4s + R_4s^2 + L_4s + R_4s^2 + L_4s + R_4s^2 + L_4s + R_4s^2 + L_4s^2 + L_4s$$

10.407 INVALID-ORDER-407
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)\left(C_4L_4R_4s^2 + L_4s + R_4R_4S^2 + L_4S^2 + L_4$$

10.408 INVALID-ORDER-408
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.409 INVALID-ORDER-409
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_Ls^5 + C_3C_4C_LL_4L_LR_4s^5 + C_3C_4C_LL_4R_4R_Ls^4 + 2C_3C_4L_3L_4s^4 + C_3C_4L_4R_4s^3 + C_3C_4L_3L_4s^4 + 2C_3C_4L_3L_4s^4 + 2C_3C_4L_3L_3c_5 + 2C_3C_4C_4L_3L_3c_5 + 2C_3C_4C_4L_3c_5 + 2C_3C_4C_4C_4L_3c_5 + 2C_3C_4C_4C_4C_4c_5 + 2C_$$

10.410 INVALID-ORDER-410
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.411 INVALID-ORDER-411
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_4s^6 + 2C_3C_4C_LL_3L_4L_LR_4s^6 + C_3C_4C_LL_4L_LR_4R_Ls^5 + 2C_3C_4L_3L_4L_Ls^5 + C_3C_4L_3L_4R_4s^4 + 2C_3C_4L_3L_4R_Ls^4 + C_3C_4L_4L_LR_4s^4 + C_3C_4L_4R_4R_Ls^3 + C_3C_4L_3L_4L_LR_4s^4 + C_3C_4L_4L_LR_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C_4L_4L_4L_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C_4L_4L_4R_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C_4L_4L_4R_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C_4L_4L_4R_4s^4 + C_3C_4L_4L_4R_4s^4 + C_3C_4L_4R_4s^4 + C_3C_4L_4R_4s^4 + C_3C_4L_4R_4s^4 + C_3C_4L_4R_4s^4 + C_3C_4L_4R_4s^4 + C_3C_4L_4L_4R_4s^4 + C_3C_4L_4L_4R_4s^4 + C_3C_4L_4L_4L_4R_4s^4 + C_3C$$

10.412 INVALID-ORDER-412
$$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4\left(L_4s + \frac{1}{C_4s}\right)}{L_4s + R_4 + \frac{1}{C_4s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_4s^6 + 2C_3C_4C_LL_3L_4L_LR_4s^6 + C_3C_4C_LL_3L_4R_4R_Ls^5 + C_3C_4C_LL_4L_LR_4R_Ls^5 + C_3C_4L_3L_4R_4s^4 + 2C_3C_4L_3L_4R_Ls^4 + C_3C_4L_4R_4R_Ls^3 + C_3C_4L_3L_4L_LR_4s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_$$

10.413 INVALID-ORDER-413 $Z(s) = (R_1, R_2, \infty, \infty, \infty, R_L)$

10.414 INVALID-ORDER-414
$$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 C_L L_3 L_4 R_4 s^5 + 2 C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 R_4 s^3 + C_3 C_4 L_4 R_4 s^3 + C_3 C_L L_3 R_4 s^3 + 2 C_3 L_3 s^2 + C_3 R_4 s + C_4 C_L L_4 R_4 s^3 + 2 C_4 L_4 s^2 + 2 C_4 R_4 s + C_L R_4 s + 2 C_4 R_4 s^2 +$$

10.415 INVALID-ORDER-415 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

10.416 INVALID-ORDER-416 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_4$$

10.417 INVALID-ORDER-417 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 s$$

10.418 INVALID-ORDER-418 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.419 INVALID-ORDER-419
$$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_5^6 + C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_Ls^5 + 2C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3R_4R_Ls^4 + C_3C_4C_LL_4L_4R_4s^5 + C_3C_4C_LL_4R_4R_Ls^4 + 2C_3C_4L_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3R_4R_Ls^4 + C_3C_4C_LL_4L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3R_4R_4s^5 + 2C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4C_LL_3L_4$$

10.420 INVALID-ORDER-420 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{L_L \kappa_4 \kappa_L s}{C_3 C_4 C_L L_3 L_4 L_L R_4 R_L s^6 + C_3 C_4 L_3 L_4 L_L R_4 s^5 + 2 C_3 C_4 L_3 L_4 L_L R_4 s^5 + C_3 C_4 L_3 L_4 R_4 R_L s^4 + 2 C_3 C_4 L_3 L_L R_4 R_L s^4 + C_3 C_4 L_4 L_L R_4 R_L s^4 + C_3 C_4 L_3 L_L R_4 R_L s^4$

10.421 INVALID-ORDER-421 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.422 INVALID-ORDER-422 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

 $H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 L_L R_4 s^6 + 2 C_3 C_4 C_L L_3 L_4 L_L R_L s^6 + C_3 C_4 C_L L_3 L_4 R_4 R_L s^5 + 2 C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_4 L_L R_4 R_L s^5 + C_3 C_4 L_3 L_4 R_4 s^4 + 2 C_3 C_4 L_3 L_4 R_L s^4 + 2 C_3 C_4 L_3 L_4 R_4 R_L s^5 + C_3 C_4 C_L L_3 L_4 R_4 R_L s^5 + C_3 C_4 C_L L_3 L_4 R_4 R_L s^5 + C_3 C_4 L_4 R_4 R_L s^5$

10.423 INVALID-ORDER-423 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3 R_4 s \left(C_L R_L s + 1\right)}{C_3 C_L L_3 R_4 R_L s^3 + C_3 L_3 R_4 s^2 + C_L L_3 R_4 s^2 + 2C_L L_3 R_L s^2 + C_L R_4 R_L s + 2L_3 s + R_4}$$

10.424 INVALID-ORDER-424 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3 R_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_4 s^4 + C_3 L_3 R_4 s^2 + 2C_L L_3 L_L s^3 + C_L L_3 R_4 s^2 + C_L L_L R_4 s^2 + 2L_3 s + R_4}$$

10.425 INVALID-ORDER-425
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.426 INVALID-ORDER-426
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_3 R_4 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_3 L_L R_4 s^4 + C_3 L_3 L_L R_4 s^3 + C_3 L_3 R_4 R_L s^2 + C_L L_3 L_L R_4 s^3 + 2C_L L_3 L_L R_4 s^3 + C_L L_L R_4 R_L s^2 + 2L_3 L_L s^2 + L_3 R_4 s + 2L_3 R_L s + L_L R_4 s + R_4 R_L s^2 + 2L_3 L_L R_4 R_L s^2 + 2L_2 L_L R_4 R_L$$

10.427 INVALID-ORDER-427
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 R_4 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_4 R_L s^4 + C_3 L_3 R_4 R_L s^2 + C_L L_3 L_L R_4 s^3 + 2C_L L_3 L_L R_L s^3 + C_L L_3 R_4 R_L s^2 + C_L L_L R_4 R_L s^2 + L_3 R_4 s + 2L_3 R_L s + R_4 R_L s^2 + 2L_3 R_4 R_L s^$$

10.428 INVALID-ORDER-428
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 s}{C_3 L_3 s^2 + 2C_4 L_3 s^2 + C_L L_3 s^2 + 1}$$

10.429 INVALID-ORDER-429
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 s \left(C_L R_L s + 1\right)}{C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + 2 C_4 C_L L_3 R_L s^3 + 2 C_4 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1}$$

10.430 INVALID-ORDER-430
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + 2C_4 C_L L_3 L_L s^4 + 2C_4 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1}$$

10.431 INVALID-ORDER-431
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L s}{C_3 L_3 L_L s^2 + 2C_4 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L}$$

10.432 INVALID-ORDER-432
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3s \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + 2 C_4 C_L L_3 L_L s^4 + 2 C_4 C_L L_3 R_L s^3 + 2 C_4 L_3 s^2 + C_L L_3 s^2 + C_L L_4 s^2 + C_L R_L s + 1}$$

10.433 INVALID-ORDER-433
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.434 INVALID-ORDER-434
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + 2 C_4 C_L L_3 L_L R_L s^4 + 2 C_4 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_1 R_L s^2 + L_3 s + R_L R_L s^2 + C_4 R_L R_L s^2 +$$

10.435 INVALID-ORDER-435
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4 s \left(C_L R_L s + 1\right)}{C_3 C_L L_3 R_4 R_L s^3 + C_3 L_3 R_4 s^2 + 2 C_4 C_L L_3 R_4 R_L s^3 + 2 C_4 L_3 R_4 s^2 + C_L L_3 R_4 s^2 + 2 C_L L_3 R_L s^2 + C_L R_4 R_L s + 2 L_3 s + R_4}$$

10.436 INVALID-ORDER-436
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_4 s^4 + C_3 L_3 R_4 s^2 + 2 C_4 C_L L_3 L_L R_4 s^4 + 2 C_4 L_3 R_4 s^2 + 2 C_L L_3 L_L s^3 + C_L L_3 R_4 s^2 + C_L L_L R_4 s^2 + 2 L_3 s + R_4}$$

10.437 INVALID-ORDER-437
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.438 INVALID-ORDER-438
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_3 R_4 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_3 L_L R_4 s^4 + C_3 L_3 L_L R_4 s^3 + C_3 L_3 R_4 R_L s^2 + 2 C_4 C_L L_3 L_L R_4 s^4 + 2 C_4 L_3 L_L R_4 s^3 + 2 C_4 L_3 L_L R_4 s^3 + 2 C_L L_3 L_L R_4 s^3 + C_L L_L R_4 R_L s^2 + 2 L_3 L_L R_4 s^3 + 2 C_4 L_3 L_L R_4 s^3 + 2$$

10.439 INVALID-ORDER-439
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.440 INVALID-ORDER-440
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 R_4 R_L s^3 + C_3 L_3 R_L s^2 + C_4 L_3 R_4 s^2 + 2 C_4 L_3 R_L s^2 + C_4 R_4 R_L s + L_3 s + R_L}$$

10.441 INVALID-ORDER-441
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3s \left(C_4 R_4 s + 1 \right)}{C_3 C_4 L_3 R_4 s^3 + C_3 L_3 s^2 + C_4 C_L L_3 R_4 s^3 + 2 C_4 L_3 s^2 + C_4 R_4 s + C_L L_3 s^2 + 1}$$

10.442 INVALID-ORDER-442
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.443 INVALID-ORDER-443
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 s \left(C_4 R_4 s + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_4 C_L L_3 R_4 s^4 + C_3 C_4 L_3 R_4 s^3 + C_3 C_L L_3 R_L s^3 + C_4 C_L L_3 R_4 s^3 + 2 C_4 C_L L_3 R_L s^3 + C_4 C_L R_4 R_L s^2 + 2 C_4 L_3 s^2 + C_4 R_4 s + C_L L_3 s^2 + C_L R_L s + 1}$$

10.444 INVALID-ORDER-444
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

10.445 INVALID-ORDER-445
$$Z(s) = \left(R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.446 INVALID-ORDER-446
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.447 INVALID-ORDER-447
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 L_L R_4 S^3 + C_3 L_3 L_L R_L s^2 + C_4 C_L L_3 L_L R_4 R_L s^3 + C_4 L_3 L_L R_L s^2 + 2 C_4 L_3 L_L R_L s^2 + C_4 L_3 R_4 R_L s + C_4 L_L R_4 R_L s + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L R_L s^2 + C_4 L_3 R_4 R_L s + C_4 L_4 R_L R_L$$

10.448 INVALID-ORDER-448
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.449 INVALID-ORDER-449
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.450 INVALID-ORDER-450
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_L s^4 + C_3 L_3 R_L s^2 + C_4 L_3 L_4 s^3 + 2C_4 L_3 R_L s^2 + C_4 L_4 R_L s^2 + L_3 s + R_L}$$

10.451 INVALID-ORDER-451
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3s \left(C_4 L_4 s^2 + 1 \right)}{C_3 C_4 L_3 L_4 s^4 + C_3 L_3 s^2 + C_4 C_L L_3 L_4 s^4 + 2C_4 L_3 s^2 + C_4 L_4 s^2 + C_L L_3 s^2 + 1}$$

10.452 INVALID-ORDER-452
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.453 INVALID-ORDER-453
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.454 INVALID-ORDER-454
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

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

10.455 INVALID-ORDER-455
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.456 INVALID-ORDER-456
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.457 INVALID-ORDER-457
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.458 INVALID-ORDER-458
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.459 INVALID-ORDER-459
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.460 INVALID-ORDER-460
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3 L_4 s}{C_3 L_3 L_4 s^2 + 2C_4 L_3 L_4 s^2 + C_L L_3 L_4 s^2 + 2L_3 + L_4}$$

10.461 INVALID-ORDER-461
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3 L_4 s \left(C_L R_L s + 1\right)}{C_3 C_L L_3 L_4 R_L s^3 + C_3 L_3 L_4 s^2 + 2 C_4 C_L L_3 L_4 R_L s^3 + 2 C_4 L_3 L_4 s^2 + C_L L_3 L_4 s^2 + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 L_3 + L_4 R_L s^2 + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 L_3 + L_4 R_L s^2 + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 L_3 + L_4 R_L s^2 + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 L_3 + L_4 R_L s^2 + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 L_3 + L_4 R_L s^2 + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 C_L L_3 R_L s + C_L L_4 R_L s + 2 C_$$

10.462 INVALID-ORDER-462
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

10.463 INVALID-ORDER-463
$$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_4 L_L s}{C_3 L_3 L_4 L_L s^2 + 2 C_4 L_3 L_4 L_L s^2 + C_L L_3 L_4 L_L s^2 + L_3 L_4 + 2 L_3 L_L + L_4 L_L}$$

10.464 INVALID-ORDER-464
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3L_4s\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{C_3C_LL_3L_4L_Ls^4 + C_3C_LL_3L_4R_Ls^3 + C_3L_3L_4s^2 + 2C_4C_LL_3L_4L_Ls^4 + 2C_4C_LL_3L_4R_Ls^3 + 2C_4L_3L_4s^2 + 2C_LL_3L_4s^2 + 2C_LL_3R_Ls + C_LL_4L_Ls^2 + C_LL_4R_Ls^2 + C_LR_4R_Ls^2 + C_LR_4R$$

10.465 INVALID-ORDER-465
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.466 INVALID-ORDER-466
$$Z(s) = \left(R_1, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{L_3 L_4 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_4 L_L R_L s^4 + C_3 L_3 L_4 R_L s^2 + 2 C_4 C_L L_3 L_4 L_L R_L s^4 + 2 C_4 L_3 L_4 R_L s^2 + C_L L_3 L_4 L_L s^3 + C_L L_3 L_4 R_L s^2 + 2 C_L L_3 L_L R_L s^2 + C_L L_4 L_L R_L s^2 + L_3 L_4 s + 2 L_3 R_L + L_4 R_L s^2 + 2 C_L L_3 L_$$

10.467 INVALID-ORDER-467
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3R_Ls\left(C_4L_4s^2 + C_4R_4s + 1\right)}{C_3C_4L_3L_4R_Ls^4 + C_3C_4L_3R_4R_Ls^3 + C_3L_3R_Ls^2 + C_4L_3L_4s^3 + C_4L_3R_4s^2 + 2C_4L_3R_Ls^2 + C_4L_4R_Ls^2 + C_4R_4R_Ls + L_3s + R_Ls^2}$$

10.468 INVALID-ORDER-468
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3s\left(C_4L_4s^2 + C_4R_4s + 1\right)}{C_2C_4L_2L_4s^4 + C_2C_4L_2R_4s^3 + C_2L_2s^2 + C_4C_4L_2L_4s^4 + C_4C_4L_2R_4s^3 + 2C_4L_2s^2 + C_4L_4s^2 + C_4R_4s + C_4L_2s^2 + 1}$$

10.469 INVALID-ORDER-469
$$Z(s) = \left(R_1, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 L_3 L_4 R_L s^4 + C_3 C_4 L_3 R_4 R_L s^3 + C_4 L_2 L_3 L_4 R_L s^4 + C_4 C_L L_3 R_4 R_L s^3 + C_4 L_3 R_4 s^2 + 2 C_4 L_3 R_L s^2 + C_4 L_4 R_L s^2 + C_4 R_4 R_L s + C_L L_3 R_L s^2 + R_4 R_L s^2 + C_4 R_4 R_L s^2 + C_$$

10.470 INVALID-ORDER-470
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls}\right)$$

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

10.471 INVALID-ORDER-471
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$$

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

10.472 INVALID-ORDER-472
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(C_4L_4s^2 + C_4R_4s + 1\right)}{C_3C_4L_3L_Ls^4 + C_3C_4L_3L_LR_4s^3 + C_3L_3L_Ls^2 + C_4C_LL_3L_4L_s^4 + C_4C_LL_3L_LR_4s^3 + C_4L_3L_4s^2 + 2C_4L_3L_Ls^2 + C_4L_3R_4s + C_4L_4L_s^2 + C_4L_4L_4s^2 + C$$

10.473 INVALID-ORDER-473
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3s \left(C_4 L_4 s^2 + C_3 C_4 C_L L_3 L_4 L_1 s^6 + C_3 C_4 C_L L_3 L_4 R_L s^5 + C_3 C_4 C_L L_3 L_4 R_4 s^5 + C_3 C_4 C_L L_3 R_4 R_L s^4 + C_3 C_4 L_3 L_4 s^4 + C_3 C_4 L_3 L_4 s^3 + C_3 C_L L_3 L_4 s^4 + C$$

10.474 INVALID-ORDER-474
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.475 INVALID-ORDER-475
$$Z(s) = \left(R_1, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_Ls^6 + C_3C_4C_LL_3L_LR_4R_Ls^5 + C_3C_4L_3L_4L_Ls^5 + C_3C_4L_3L_4R_Ls^4 + C_3C_4L_3L_LR_4s^4 + C_3C_4L_3R_4R_Ls^3 + C_3C_4L_3L_LR_4s^4 + C_3C_4L_3L_4L_4s^4 + C_3C_4L_3L_4t^4 + C_3C_4L_3L_4t^4$$

10.476 INVALID-ORDER-476
$$Z(s) = \left(R_1, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{L_3 R_{LS}}{C_3 C_4 C_L L_3 L_4 L_L R_L s^6 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 L_3 L_4 R_L s^4 + C_3 C_4 L_3 L_L R_L s^4 + C_3 C_4 L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_4 C_L L_3 L_4 L_L s^5 + C_4 C_L L_3 L_4 R_L s^4 + C_4 C_L L_3 L_L R_L s^4 + C_4 C_L L_3 L_4 R_L s^4 + C_4 C_L L_3 L$$

10.477 INVALID-ORDER-477 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

10.478 INVALID-ORDER-478 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_3L_4R_4s\left(C_LL_Ls^2 + 1\right)}{C_3C_LL_3L_4L_LR_4s^4 + C_3L_3L_4R_4s^2 + 2C_4C_LL_3L_4L_LR_4s^4 + 2C_4L_3L_4R_4s^2 + 2C_LL_3L_4L_Ls^3 + C_LL_3L_4R_4s^2 + 2C_LL_3L_LR_4s^2 + 2L_3L_4s + 2L_3R_4 + L_4R_4s^2 + 2C_4L_3L_4R_4s^2 + 2C_4L_4R_4s^2 + 2C_4L_4R_4s^2 + 2C_4L_4R_4s^2 + 2C_4L_4R_4s^2 + 2C_4L_4R_4s^2 + 2C_$

10.479 INVALID-ORDER-479 $Z(s) = \left(L_1 s, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3L_4R_4s\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{C_3C_LL_3L_4L_LR_4s^4 + C_3C_LL_3L_4R_4s^3 + C_3L_3L_4R_4s^2 + 2C_4C_LL_3L_4L_LR_4s^4 + 2C_4C_LL_3L_4R_4s^3 + 2C_4L_3L_4R_4s^2 + 2C_LL_3L_4L_Ls^3 + C_LL_3L_4L_Ls^3 + C_LL_3L_4R_4s^2 + 2C_LL_3L_4R_4s^2 + 2C_LL_3$$

10.480 INVALID-ORDER-480 $Z(s) = \left(L_1 s, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{L_3 L_4 R_4 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_3 L_4 L_L R_4 s^4 + C_3 L_3 L_4 L_L R_4 s^3 + C_3 L_3 L_4 L_L R_4 s^2 + 2 C_4 C_L L_3 L_4 L_L R_4 s^4 + 2 C_4 L_3 L_4 L_L R_4 s^3 + 2 C_4 L_3 L_4 L_L R_4 s^3 + 2 C_L L_3 L_4 L_L R_4 s^$$

10.481 INVALID-ORDER-481 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

$$H(s) = \frac{L_3 L_4 R_4 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_4 L_L R_4 R_L s^4 + C_3 L_3 L_4 R_4 R_L s^2 + 2 C_4 C_L L_3 L_4 L_L R_4 R_L s^4 + 2 C_4 L_3 L_4 L_L R_4 s^3 + 2 C_L L_3 L_4 L_L R_L s^3 + C_L L_3 L_4 R_4 R_L s^2 + 2 C_L L_3 L_4 R_4 R_L s^2 + C_L L_3 L_4 R_4 R_L s^3 + C_L L_3 L_4 R_4 R_L s^2 + C_L L_3 L_4 R_4 R_L s^3 + C_L L_3 L_4 R_4 R_L s^2 + C_L L_3 L_4 R_4 R_L s^3 + C_L L_3 L_4 R_4 R_L s^$$

10.482 INVALID-ORDER-482 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$

$$H(s) = \frac{L_3 R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_3 L_4 R_L s^4 + C_3 L_3 L_4 R_L s^3 + C_3 L_3 R_4 R_L s^2 + L_4 L_3 L_4 R_4 s^3 + 2 C_4 L_3 L_4 R_L s^3 + C_4 L_4 R_4 R_L s^2 + L_3 L_4 s^2 + L_3 R_4 s + 2 L_3 R_L s + L_4 R_L s + R_4 R_L s^2 + L_4 R_4 R_L s^2 + L_4$$

10.483 INVALID-ORDER-483 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_3 C_4 L_3 L_4 R_4 s^4 + C_3 L_3 L_4 s^3 + C_3 L_3 R_4 s^2 + C_4 C_L L_3 L_4 R_4 s^4 + 2 C_4 L_3 L_4 s^3 + C_4 L_4 R_4 s^2 + C_L L_3 L_4 s^3 + C_L L_3 R_4 s^2 + 2 L_3 s + L_4 s + R_4}$$

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

$$H(s) = \frac{L_3 R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_3 L_4 R_L s^4 + C_3 L_3 L_4 R_L s^3 + C_3 L_3 R_4 R_L s^2 + C_4 C_L L_3 L_4 R_4 R_L s^4 + C_4 L_3 L_4 R_4 s^3 + 2C_4 L_3 L_4 R_L s^3 + C_4 L_4 R_4 R_L s^2 + C_L L_3 L_4 R_L s^3 + C_L L_3 R_4 R_L s^2 + L_3 L_4 s^2 + L_3 L_4 R_4 R_L s^3 + C_4 L_4 R_4 R_L s^4 + C_4 L$$

10.485 INVALID-ORDER-485 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

10.486 INVALID-ORDER-486 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

10.487 INVALID-ORDER-487 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.488 INVALID-ORDER-488
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_4s^6 + C_3C_4C_LL_3L_4R_4s^5 + C_3C_4L_3L_4R_4s^4 + C_3C_LL_3L_4L_Ls^5 + C_3C_LL_3L_4R_Ls^4 + C_3C_LL_3L_4R_4s^4 + C_3C_LL_3R_4R_Ls^3 + C_3L_3L_4R_4s^4 + C_3C_LL_3L_4R_4s^4 + C_3C_LL_3L$$

10.489 INVALID-ORDER-489
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_3 L_4 L_L R_4 s^4 + C_3 L_3 L_4 L_L R_4 s^3 + C_4 L_3 L_4 L_L R_4 s^3 + 2 C_4 L_3 L_4 L_L R_4 s^3 + C_4 L_3 L_4 R_L s^2 + C_4 L_4 L_L R_4 R_L s^2 + C_4 L_4 L_4 R_4 R_L s^2 + C_4 L_4 L_4 R_4 R_L s^2 + C_4 L_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 L_4 R_4 R_L$$

10.490 INVALID-ORDER-490
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.491 INVALID-ORDER-491
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.492 INVALID-ORDER-492
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, R_L\right)$$

10.493 INVALID-ORDER-493
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4 s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_4 s^4 + C_3 L_3 R_4 s^2 + C_4 C_L L_3 L_4 R_4 s^4 + 2 C_4 L_3 L_4 s^3 + 2 C_4 L_3 R_4 s^2 + C_4 L_4 R_4 s^2 + C_L L_3 R_4 s^2 + 2 L_3 s + R_4}$$

10.494 INVALID-ORDER-494
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_4 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_4 R_L s^4 + C_3 L_3 R_4 R_L s^2 + C_4 C_L L_3 L_4 R_4 R_L s^4 + C_4 L_3 L_4 R_4 s^3 + 2 C_4 L_3 L_4 R_L s^3 + 2 C_4 L_3 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_L L_3 R_4 R_L s^2 + L_3 R_4 s + 2 L_3 R_L s + R_4 R_L s^2 + 2 C_4 L_3 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_$$

10.495 INVALID-ORDER-495
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4 s \left(C_4 L_4 s^2 + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_4 C_L L_3 L_4 R_4 R_L s^5 + C_3 C_4 L_3 L_4 R_L s^3 + C_3 L_3 R_4 s^2 + C_4 C_L L_3 L_4 R_4 s^4 + 2 C_4 C_L L_3 L_4 R_L s^3 + C_4 C_L L_4 R_4 R_L s^3 + 2 C_4 L_3 L_4 s^3 + 2 C_4 L_3 L_4 R_4 s^4 + 2 C_4 C_L L_3 L_4 R_4 R_L s^3 + C_4 C_L L_3 L_4 R_4 s^3 + 2 C_4 L_3 L_4 R_4 s^3 + 2 C_4 L_3 L_4 R_4 s^4 + 2 C_4 C_L L_3 L_4 R_4 R_L s^3 + C_4 C_L L_3 L_4 R_4 R_L s^$$

10.496 INVALID-ORDER-496
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.497 INVALID-ORDER-497
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_4 s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 L_L R_4 s^4 + C_3 L_3 L_L R_4 s^2 + C_4 C_L L_3 L_4 L_L R_4 s^4 + 2 C_4 L_3 L_4 L_L s^3 + C_4 L_3 L_4 R_4 s^2 + 2 C_4 L_3 L_L R_4 s^2 + C_4 L_4 L_L R_4 s^2 + C_4 L_4 L_L R_4 s^2 + 2 L_3 L_L R_4 s^2 + 2 L_$$

10.498 INVALID-ORDER-498
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_4}{C_3 C_4 C_L L_3 L_4 L_L R_4 s^6 + C_3 C_4 C_L L_3 L_4 R_4 R_L s^5 + C_3 C_4 L_3 L_4 R_4 s^4 + C_3 C_L L_3 L_4 R_4 s^4 + C_3 C_L L_3 R_4 R_L s^3 + C_3 L_3 R_4 s^2 + 2 C_4 C_L L_3 L_4 L_L s^5 + C_4 C_L L_3 L_4 R_4 s^4 + 2 C_4 C_L L_3 L_$$

10.499 INVALID-ORDER-499
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.500 INVALID-ORDER-500
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 L_L R_4 R_L s^6 + C_3 C_4 L_3 L_4 L_L R_4 s^5 + C_3 C_4 L_3 L_4 R_4 R_L s^4 + C_3 C_L L_3 L_L R_4 R_L s^4 + C_3 L_3 L_L R_4 R_L s^3 + C_3 L_3 R_4 R_L s^2 + C_4 C_L L_3 L_4 L_L R_4 s^5 + 2$$

10.501 INVALID-ORDER-501
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 R_4 R_L s}{C_3 C_4 C_L L_3 L_4 L_L R_4 R_L s^6 + C_3 C_4 L_3 L_4 R_4 R_L s^4 + C_3 C_L L_3 L_L R_4 R_L s^4 + C_3 L_3 R_4 R_L s^2 + C_4 C_L L_3 L_4 L_L R_4 s^5 + 2 C_4 C_L L_3 L_4 L_L R_L s^5 + C_4 C_L L_3 L_4 R_4 R_L s^4 + 2 C_4 C_L L_3 L_L R_4 R_L s^4 + 2 C_4 C_L L_3 L_4 R_4 R_L s^4 + 2 C_4 C_L L_3 L_$$

10.502 INVALID-ORDER-502
$$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_L L_3 R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 L_3 s^2 + 2 C_3 R_3 s + C_3 R_4 s + C_L R_4 s + 2}$$

10.503 INVALID-ORDER-503
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

10.504 INVALID-ORDER-504
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_L R_L s + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 C_L R_3 R_L s^2 + C_3 C_L R_4 R_L s^2 + 2 C_3 L_3 s^2 + 2 C_3 R_3 s + C_3 R_4 s + C_L R_4 s + 2 C_L R_L s + 2 C_L R_4 R_4 r^2 + 2 C_3 R_4 r^2 + 2 C_4 R_4 r^2$$

10.505 INVALID-ORDER-505
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

10.506 INVALID-ORDER-506
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.507 INVALID-ORDER-507
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

10.508 INVALID-ORDER-508
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.509 INVALID-ORDER-509
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{C_3 C_L L_3 L_L R_4 s^4 + 2 C_3 C_L L_L R_3 R_4 s^3 + 2 C_3 C_L L_L R_3 R_L s^3 + C_3 C_L L_L R_4 R_L s^3 + 2 C_3 L_3 L_L s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + 2 C_3 L_L R_3 s^2 + C_3 L_L R_4 s^2 + C_3 L_L R_4 s^2 + C_3 L_L R_4 s^3 + C_3 L_L R_5 s^3 + C_3 L_L R_$$

10.510 INVALID-ORDER-510
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_L L_L s^2 + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{C_3 C_L L_3 L_L R_4 s^4 + 2 C_3 C_L L_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 s^3 + 2 C_3 C_L L_L R_3 R_L s^3 + C_3 C_L L_L R_4 R_L s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_4 s^3 + 2 C_3 C_L L_L R_3 R_4 s^3 + 2 C_3 C_L L_L R_3 R_4 s^3 + C_3 C_L L_L R_4 R_L s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 L_3 R_4 R_L s^3 + C_3 C_L R_3 R_4 R_L s^3 + C_3$$

10.511 INVALID-ORDER-511
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{2C_3 C_4 L_3 R_L s^3 + 2C_3 C_4 R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 2C_4 R_L s + 1}$$

10.512 INVALID-ORDER-512
$$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_3L_3s^2 + C_3R_3s + 1}{s\left(2C_3C_4L_3s^2 + 2C_3C_4R_3s + C_3C_LL_3s^2 + C_3C_LR_3s + C_3 + 2C_4 + C_L\right)}$$

10.513 INVALID-ORDER-513
$$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{2C_3 C_4 L_3 R_L s^3 + 2C_3 C_4 R_3 R_L s^2 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 2C_4 R_L s + C_L R_L s + 1}$$

10.514 INVALID-ORDER-514
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{s \left(2 C_3 C_4 C_L L_3 R_L s^3 + 2 C_3 C_4 C_L R_3 R_L s^2 + 2 C_3 C_4 L_3 s^2 + 2 C_3 C_4 R_3 s + C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_4 s + C_3 + 2 C_4 C_L R_4 s + 2 C_4 + C_L\right)}$$

10.515 INVALID-ORDER-515
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{s \left(2C_3 C_4 C_L L_3 L_L s^4 + 2C_3 C_4 C_L L_L R_3 s^3 + 2C_3 C_4 L_3 s^2 + 2C_3 C_4 R_3 s + C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_L L_$$

10.516 INVALID-ORDER-516
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2C_3 C_4 L_3 L_L s^4 + 2C_3 C_4 L_L R_3 s^3 + C_3 C_L L_2 L_L R_3 s^3 + C_3 L_L L_R R_3 s^3 + C_3 L_L s^2 + C_3 L_L s^2 + C_3 L_L s^2 + C_4 L_L s^2$$

10.517 INVALID-ORDER-517
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(2C_3C_4C_LL_3L_Ls^4 + 2C_3C_4C_LL_3R_Ls^3 + 2C_3C_4C_LL_Rs^3 + 2C_3C_4C_LR_3R_Ls^2 + 2C_3C_4L_3s^2 + 2C_3C_4R_3s + C_3C_LL_3s^2 + C$$

10.518 INVALID-ORDER-518
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_L R_L s^4 + 2 C_3 C_4 L_L R_3 R_L s^3 + C_3 L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_2 s^2 + C_3 L_L R_2 s^2 + C_4 L_$$

10.519 INVALID-ORDER-519
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{2C_3C_4C_LL_3L_LR_Ls^5 + 2C_3C_4L_LL_Rs^4 + 2C_3C_4L_3L_Ls^4 + 2C_3C_4L_2R_3s^3 + 2C_3C_4L_LR_3s^3 + 2C_3C_4L_3L_Ls^4 + C_3C_LL_LR_3s^3 + C_3L_LL_Rs^3 + C_3L_LL_R$$

10.520 INVALID-ORDER-520
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{2 C_3 C_4 C_L L_3 L_L R_2 s^5 + 2 C_3 C_4 C_L L_L R_3 R_L s^4 + 2 C_3 C_4 L_3 R_L s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_2 s^3 + C_3 C_L L_R R_2 s^3 + C_3 C_L L_R R_2 s^3 + C_3 C_L R_3 R_L s^2 + C_3 C_L R_3 R_L s^3 + C_3 C_L R_3 R_$$

10.521 INVALID-ORDER-521
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

10.522 INVALID-ORDER-522
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{2 C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_3 R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 L_3 s^2 + 2 C_3 R_3 s + C_3 R_4 s + 2 C_4 R_4 s + C_L R_4 s + 2 C_4 R_4 s + C_4 R_4 s$$

10.523 INVALID-ORDER-523
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 R_4 R_L s^3 + 2 C_3 C_4 R_3 R_4 R_L s^2 + C_3 C_L L_3 R_4 R_L s^3 + C_3 C_L R_3 R_4 R_L s^2 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_4 s + 2 C_3 R_3 R_L s + C_3 R_4 R_L s + 2 C_4 R_4 R_L s + C_L R_4 R_L s + 2 C_4 R_4 R_L s$$

10.524 INVALID-ORDER-524
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_L R_L s + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{2 C_3 C_4 C_L L_3 R_4 R_L s^4 + 2 C_3 C_4 L_3 R_4 R_L s^3 + 2 C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L L_3 R_4 s^3 + 2 C_3 C_L R_3 R_4 s^2 + 2 C_3 C_L R_3 R_4 s^$$

10.525 INVALID-ORDER-525
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

10.526 INVALID-ORDER-526
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_4 s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_L R_4 s^4 + 2 C_3 C_4 L_L R_3 R_4 s^3 + C_3 C_L L_L R_3 R_4 s^3 + 2 C_3 L_L R_3 s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_4 s^2 + C_4 L_L R_4 s^2 +$$

10.527 INVALID-ORDER-527
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

10.528 INVALID-ORDER-528
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_4 R_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_L R_4 R_L s^4 + 2 C_3 C_4 L_L R_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 L_L R_3 R_4 R_L s^$$

10.529 INVALID-ORDER-529
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.530 INVALID-ORDER-530
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{I}{2C_3C_4C_LL_3L_LR_4R_Ls^5 + 2C_3C_4C_LL_LR_3R_4R_Ls^4 + 2C_3C_4L_3R_4R_Ls^3 + 2C_3C_4R_3R_4R_Ls^2 + C_3C_LL_3L_LR_4s^4 + 2C_3C_LL_3L_LR_4s^4 + C_3C_LL_3R_4R_Ls^3 +$$

10.531 INVALID-ORDER-531
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_4 R_4 s + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_4 R_4 s + 2 C_4 R_L s + 1}$$

10.532 INVALID-ORDER-532
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4 R_4 s + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{s \left(C_3 C_4 C_L L_3 R_4 s^3 + C_3 C_4 C_L R_3 R_4 s^2 + 2 C_3 C_4 L_3 s^2 + 2 C_3 C_4 R_3 s + C_3 C_4 L_3 s^2 + C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_4 C_L R_4 s + 2 C_4 + C_L\right)}$$

10.533 INVALID-ORDER-533
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_4 R_4 s + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_4 C_L L_3 R_4 R_L s^4 + C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_4 L_3 R_L s^3 + C_3 C_4 L_3 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 C_4 R_3 R_L s^3 + C_3 C_L R_3 R_L s^3 + C_2 C_L R_3 R_L s^3 +$$

10.534 INVALID-ORDER-534
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4R_4s + 1\right)\left(C_LR_Ls + 1\right)\left(C_3L_3s^2 + C_3R_3s + 1\right)}{s\left(C_3C_4C_LL_3R_4s^3 + 2C_3C_4C_LR_3R_4s^2 + 2C_3C_4C_LR_3R_Ls^2 + C_3C_4C_LR_4R_Ls^2 + 2C_3C_4L_3s^2 + 2C_3C_4R_3s + C_3C_4R_4s + C_3C_LL_3s^2 + C_3C_LR_3s + C_3C_LR_3$$

10.535 INVALID-ORDER-535
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{s \left(2 C_3 C_4 C_L L_3 L_L s^4 + C_3 C_4 C_L L_2 R_3 s^3 + C_3 C_4 C_L L_L R_4 s^3 + C_3 C_4 C_L L_R s^3 + C_3 C_4 C_L L_3 s^2 + 2 C_3 C_4 L_3 s^2 + 2 C_3 C_4 R_3 s + C_3 C_4 R_4 s + C_3 C_L L_3 s^2 + C_3 C_L L_2 s^2 + C_3 C_4 R_3 s^2 + C_3 C_4 R_4 s +$$

10.536 INVALID-ORDER-536
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_4 R_4 s + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{C_3 C_4 C_L L_L R_3 R_4 s^4 + 2 C_3 C_4 L_L L_3 R_4 s^3 + 2 C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L R_4 s^3 + C_3 C_4 L_L R_3 s^4 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 C_4 L_L R_3 s^3 + C_3 C_4 L_L$$

10.537 INVALID-ORDER-537
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4 R_4 s + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_L L_L s^2 + C_3 C_4 C_L L_3 L_L s^4 + C_3 C_4 C_L L_3 R_4 s^3 + 2 C_3 C_4 C_L L_L R_3 s^3 + C_3 C_4 C_L L_L R_4 s^3 + C_3 C_4 C_L R_3 R_4 s^2 + 2 C_3 C_4 C_L R_3 R_L s^2 + C_3 C_4 C_L R_4 R_L s^2 + 2 C_3 C_4 L_3 R_4 s^3 + C_3 C_4 C_L R_3 R_4 s^3 + C_3 C_4 C_L R_3 R_4 s^3 + 2 C_3 C_4 C_L R_3 R_4 s^3 + C_3 C_4 C_L R_3$$

10.538 INVALID-ORDER-538
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3}{C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_L R_3 R_4 R_L s^4 + C_3 C_4 L_3 L_L R_4 s^4 + 2 C_3 C_4 L_3 L_L R_4 s^4 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 L_L R_3 R_4 s^3 + 2 C_3 C_4 L_L R_3 R_4 s^3 + C_3 C_4 L_L R_4 R_L s^4 + C_3$$

10.539 INVALID-ORDER-539
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.540 INVALID-ORDER-540
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_L R_4 s^5 + 2 C_3 C_4 C_L L_3 L_L R_L s^5 + C_3 C_4 C_L L_3 R_4 R_L s^4 + C_3 C_4 C_L L_L R_3 R_4 s^4 + 2 C_3 C_4 C_L L_L R_3 R_L s^4 + C_3 C_4 C_L L_L R_4 R_L s^4 + C_3 C_4 C_L R_3 R_4 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 C_L R_3 R_4 R_L s^4 + C_3 C_4 C_L R_3 R_4 R_$$

10.541 INVALID-ORDER-541
$$Z(s) = \left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_L s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_4 L_4 s^2 + 2 C_4 R_L s + 1}$$

10.542 INVALID-ORDER-542
$$Z(s) = \left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4L_4s^2 + 1\right)\left(C_3L_3s^2 + C_3R_3s + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + C_3C_4C_LL_4R_3s^3 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + 2C_3C_4R_3s + C_3C_LL_3s^2 + C_3C_LR_3s + C_3C_LL_4s^2 + 2C_4 + C_L\right)}$$

10.543 INVALID-ORDER-543
$$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_4 C_L L_3 L_4 R_L s^5 + C_3 C_4 C_L L_4 R_3 R_L s^4 + C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 R_L s^3 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_L s^3 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_3 R_L s^$$

10.546 INVALID-ORDER-546
$$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.547 INVALID-ORDER-547
$$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.548 INVALID-ORDER-548
$$Z(s) = \left(L_1 s, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.549 INVALID-ORDER-549
$$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_Ls^6 + 2C_3C_4C_LL_3L_LR_Ls^5 + C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_LR_2s^5 + 2C_3C_4C_LL_LR_3R_Ls^4 + 2C_3C_4L_3L_4s^4 + 2C_3C_4L_3L_Ls^4 + 2C_3C_4L_3L_3L_s^4 + 2C_3C_4L_3L_s^4 + 2C_3C_4L_s^4 + 2C_3C_4L_s^4 + 2C_3C_4L_s^4 + 2C_3C_4L_s^4 + 2C_3C_4L_s^4 + 2C_3C_4L_$$

10.550 INVALID-ORDER-550
$$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_Ls^5 + 2C_3C_4C_LL_3L_LR_Ls^5 + C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_LR_Ls^5 + C_3C_4C_LL_4R_3R_Ls^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + 2C_3C_4C_LL_$$

10.551 INVALID-ORDER-551
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$$

10.552 INVALID-ORDER-552
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4s\left(C_3L_3s^2 + C_3R_3s + 1\right)}{2C_3C_4L_3L_4s^4 + 2C_3C_4L_4R_3s^3 + C_3C_LL_3L_4s^4 + C_3C_LL_4R_3s^3 + 2C_3L_3s^2 + C_3L_4s^2 + 2C_3R_3s + 2C_4L_4s^2 + C_LL_4s^2 + 2C_3R_3s^2 + C_3L_4s^2 + 2C_3R_3s + 2C_4L_4s^2 + 2C_4L_4s^2$$

10.553 INVALID-ORDER-553
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 R_L s^4 + 2 C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_L L_3 L_4 R_L s^4 + C_3 C_L L_4 R_3 R_L s^3 + C_3 L_4 L_4 s^3 + 2 C_3 L_3 R_L s^2 + C_3 L_4 R_3 s^2 + C_3 L_4 R_L s^2 + 2 C_3 R_3 R_L s + 2 C_4 L_4 R_L s^2 + C_4 L_4$$

10.554 INVALID-ORDER-554 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

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

10.555 INVALID-ORDER-555 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

10.556 INVALID-ORDER-556 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_4 L_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 L_L s^4 + 2 C_3 C_4 L_4 L_L R_3 s^3 + C_3 C_L L_4 L_L R_3 s^3 + C_3 L_4 L_L s^2 + 2 C_3 L_3 L_4 L_2 s^2 + C_3 L_4 L_L s^2 + C_4 L_4 L_L s^$$

10.557 INVALID-ORDER-557 $Z(s) = \left(\frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_4 s \left(C_3 L_4 C_4 L_3 L_4 L_L s^6 + 2 C_3 C_4 C_L L_3 L_4 R_L s^5 + 2 C_3 C_4 C_L L_4 L_L R_3 s^5 + 2 C_3 C_4 C_L L_4 R_3 R_L s^4 + 2 C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_4 L_3 L_4 s^4 + 2 C_3 C_L L_3 L_4 s^4 + 2 C_3$$

10.558 INVALID-ORDER-558
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4 L_L R_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_3 s^4 + 2 C_3 C_4 L_4 L_L R_3 R_L s^3 + C_3 L_4 L_L R_3 s^4 + C_3 L_4 L_$$

10.559 INVALID-ORDER-559
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.560 INVALID-ORDER-560
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_2s^6 + 2C_3C_4C_LL_4L_LR_3R_Ls^5 + 2C_3C_4L_3L_4R_Ls^4 + 2C_3C_4L_4R_3R_Ls^3 + C_3C_LL_3L_4L_Ls^5 + C_3C_LL_3L_4R_Ls^4 + 2C_3C_LL_3L_4R_Ls^4 + C_3C_LL_4L_LR_3s^4 + C_3C_LL_4L_LR_3s^4 + C_3C_LL_3L_4L_Ls^5 + C_3C_LL_3L_4R_Ls^4 + 2C_3C_LL_3L_4R_Ls^4 + C_3C_LL_4L_LR_3s^4 + C_3C_LL_3L_4R_Ls^4 + C_3C_LL_3L_3R_Ls^4 + C_3C_LL_3R_Ls^2 + C_3C_LL_3R_Ls^2 + C_3C_LL_3R_Ls^2 + C_3C_LL_3R_Ls^2 + C_3C_LL_3R_Ls^2 + C_3C_LL_3R_Ls$$

10.561 INVALID-ORDER-561
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_3 C_4 L_3 L_4 s^4 + C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_L s^3 + C_3 C_4 R_3 R_4 s^2 + 2 C_3 C_4 R_3 R_L s^2 + C_3 C_4 R_4 R_L s^2 + C_3 R_3 s + C_3 R_4 s + C_4 R_4 s^2 + C_$$

10.562 INVALID-ORDER-562
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_4L_4s^2 + C_4R_4s + 1\right)}{s\left(C_3C_4C_LL_3L_4s^4 + C_3C_4C_LL_3R_4s^3 + C_3C_4C_LL_3R_4s^3 + C_3C_4C_LR_3R_4s^2 + 2C_3C_4L_3s^2 + C_3C_4L_4s^2 + 2C_3C_4R_3s + C_3C_4R_4s + C_3C_LL_3s^2 + C_3C_LR_3s + C_3C_LL_4s^2 + C_3C_LL_4s^2 + C_3C_LL_4s^2 + C_3C_LL_4s^2 + C_3C_LL_4s^2 + C_3C_LL_3s^2 + C_3C_LL_3s^2 + C_3C_LL_4s^2 + C_3C_L$$

10.563 INVALID-ORDER-563
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.564 INVALID-ORDER-564
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_4 L_4 s^2 + C_3 R_3 s^2 + C_3 R_4 s^2 + C_3 R_4 s^3 + C_3 C_4 C_L L_3 R_4 s^3 + C_3 C_4 C_L L_4 R_3 s^3 + C_3 C_4 C_L L_4 R_2 s^3 + C_3 C_4 C_L R_3 R_4 s^2 + 2 C$$

10.565 INVALID-ORDER-565
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.566 INVALID-ORDER-566
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + C_3 L_4 L_L s^6 + C_3 C_4 C_L L_3 L_L R_4 s^5 + C_3 C_4 C_L L_4 L_L R_3 s^5 + C_3 C_4 C_L L_L R_3 R_4 s^4 + C_3 C_4 L_3 L_4 s^4 + C_3 C_4 L_3 L_L s^4 + C_3 C_4 L_4 L$$

10.567 INVALID-ORDER-567
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.568 INVALID-ORDER-568
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_2s^6 + C_3C_4C_LL_3L_LR_4R_Ls^5 + C_3C_4C_LL_4L_RR_3R_Ls^5 + C_3C_4C_LL_LR_3R_4R_Ls^4 + C_3C_4L_3L_4L_Ls^5 + C_3C_4L_3L_4R_Ls^4 + C_3C_4L_3L_4R$$

10.569 INVALID-ORDER-569
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.570 INVALID-ORDER-570
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.571 INVALID-ORDER-571
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_4 R_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 R_4 R_L s^4 + 2 C_3 C_4 L_4 R_3 R_4 R_L s^3 + 2 C_3 L_3 L_4 R_L s^3 + 2 C_3 L_3 R_4 R_L s^2 + C_3 L_4 R_3 R_4 s^2 + 2 C_3 L_4 R_3 R_L s^2 + 2 C_3 R_3 R_4 R_L s + 2 C_4 L_4 R_4 R_L s^2 + 2 C_3 R_3 R_4 R_L s^2 + 2 C_3 R_$$

10.572 INVALID-ORDER-572
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_4 s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 R_4 s^4 + 2 C_3 C_4 L_4 R_3 R_4 s^3 + C_3 C_L L_4 R_3 R_4 s^3 + 2 C_3 L_3 L_4 s^3 + 2 C_3 L_3 R_4 s^2 + 2 C_3 L_4 R_3 s^2 + C_3 L_4 R_4 s^2 + 2 C_3 R_3 R_4 s + 2 C_4 L_4 R_4 s^2 + C_L L_4 R_4 s^2 + C_4 L_4 R_4$$

10.573 INVALID-ORDER-573
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_4 R_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 R_4 R_L s^4 + 2 C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 L_4 L_4 R_3 R_4 R_L s^3 + 2 C_3 L_3 L_4 R_4 R_L s^3 + 2 C_3 L_3 R_4 R_L s^2 + C_3 L_4 R_3 R_4 s^2 + 2 C_3 L_4 R_3 R_4 R_L s^2 + 2 C_3 L_4 R_3 R_4 R_L s^3 + 2 C_3 L_3 R_4 R_L s^3 + 2 C_3 L_3 R_4 R_L s^2 + 2 C_3 L_4 R_3 R_4 R_L s^2 + 2 C_3 L_4 R_3 R_4 R_L s^3 + 2 C_3 L_4 R_4 R_L s^3 +$$

10.574 INVALID-ORDER-574
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4R_4R_Ls^5 + 2C_3C_4C_LL_4R_3R_4R_Ls^4 + 2C_3C_4L_3L_4R_4s^4 + 2C_3C_4L_4R_3R_4s^3 + 2C_3C_LL_3L_4R_4s^4 + 2C_3C_LL_3L_4R_Ls^4 + 2C_3C_LL_3R_4R_Ls^3 + 2C_3C_LL_4R_3R_4s^3 + 2C_3C_LL_3L_4R_4s^4 + 2C_3C_LL_3L_4R_4s^$$

10.575 INVALID-ORDER-575
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.576 INVALID-ORDER-576
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_4 L_L R_4 s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_4 s^4 + 2 C_3 C_4 L_4 L_L R_3 R_4 s^3 + C_3 C_L L_4 L_L R_3 R_4 s^3 + 2 C_3 L_3 L_4 L_L s^3 + C_3 L_3 L_4 L_L s^3 + 2 C_3 L_3 L_L R_4 s^2 + 2 C_3 L_4 L_L R_3 s^2 + C_3 L_4 L_L R_4 s^2 + 2 C_3 L_4 L_L R_4 s^2 + 2$$

10.577 INVALID-ORDER-577
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_4s^6 + 2C_3C_4C_LL_3L_4R_4R_Ls^5 + 2C_3C_4C_LL_4L_RR_3R_4s^5 + 2C_3C_4C_LL_4R_3R_4R_Ls^4 + 2C_3C_4L_3L_4R_4s^4 + 2C_3C_4L_4R_3R_4s^3 + 2C_3C_LL_3L_4L_Ls^5 + C_3C_LL_3L_4L_Rs^5 + 2C_3C_4C_LL_4R_3R_4s^5 + 2C_3C_4L_4R_3R_4s^4 + 2C_3C_4L_4R_3R_4s^4 + 2C_3C_4L_4R_3R_4s^3 + 2C_3C_4L_4R_3R_4s^5 + 2C_3$$

10.578 INVALID-ORDER-578
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_4L_LR_3}{2C_3C_4L_3L_4L_LR_4R_Ls^4 + 2C_3C_4L_4L_LR_3R_4R_Ls^3 + C_3C_LL_4L_LR_3R_4R_Ls^3 + C_3L_3L_4L_LR_4s^3 + 2C_3L_3L_4L_LR_4s^3 + C_3L_3L_4L_LR_4s^3 + C_3L_3L_4L_4L_4s^3 + C_3L_4L_4L_4s^3 + C_3L_4L_4L_4t^3 + C_3L_$$

10.579 INVALID-ORDER-579
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.580 INVALID-ORDER-580
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.581 INVALID-ORDER-581
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4 \right)}{C_3 C_4 L_3 L_4 R_4 s^4 + 2 C_3 C_4 L_4 R_3 R_4 s^3 + 2 C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 L_4 R_4 R_L s^3 + C_3 L_3 L_4 s^3 + C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_L s^2 + C_3 L_4 R_3 s^2 + C_3 L_4 R_4 s^2 + C_3 L_4 R_5 s^$$

10.582 INVALID-ORDER-582
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_4L_4R_4s^2 + L_4s + R_4\right)}{C_3C_4C_LL_3L_4R_4s^5 + C_3C_4L_4R_3R_4s^4 + 2C_3C_4L_3L_4s^3 + C_3C_4L_4R_4s^3 + C_3C_LL_3L_4s^4 + C_3C_LL_3R_4s^3 + C_3C_LL_4R_3s^3 + C_3C_LR_3R_4s^2 + 2C_3L_3s^2 + C_3C_4L_4R_3s^3 + C_3C_4L_4R$$

10.583 INVALID-ORDER-583
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_4R_Ls^5 + C_3C_4C_LL_4R_3R_4R_Ls^4 + C_3C_4L_3L_4R_4s^4 + 2C_3C_4L_3L_4R_Ls^4 + C_3C_4L_4R_3R_4s^3 + 2C_3C_4L_4R_3R_Ls^3 + C_3C_4L_4R_4R_Ls^3 + C_3C_4L_3L_4R_Ls^4 + C_3C_4L_3L_4R_4R_Ls^4 + C_3C_4L_4R_3R_4s^3 + 2C_3C_4L_4R_3R_Ls^3 + C_3C_4L_4R_4R_Ls^3 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_3L_4R_3R_4s^3 + 2C_3C_4L_4R_3R_Ls^3 + C_3C_4L_4R_4R_Ls^3 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_4R_3R_4s^3 + C_3C_4L_4R_4R_4s^3 + C_3C_4L_4R_4R_4s^4 + C_3C_4L_4R_4s^4 + C_3C_4L_4R_4s^4$$

10.584 INVALID-ORDER-584
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_Ls^5 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + C_3C_4C_LL_4R_4R_Ls^4 + 2C_3C_4L_3L_4s^4 + 2C_3C_4L_4R_3s^3 + C_3C_4L_4R_4s^3 + C_3C_4L_4R_3R_Ls^4 + C_3C_4C_LL_4R_4R_Ls^4 + 2C_3C_4L_4R_3s^3 + C_3C_4L_4R_4s^3 + C_3C_4L_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_LL_4R_4R_4s^4 + C_3C_4C_$$

10.585 INVALID-ORDER-585
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_LR_4s^5 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4L_3L_4s^4 + 2C_3C_4L_4R_3s^3 + C_3C_4L_4R_4s^3 + C_3C_4L_4L_4R_4s^5 + C_3C_4L_4R_3R_4s^4 + 2C_3C_4L_4R_3s^3 + C_3C_4L_4R_4s^3 + C_3C_4L_4R_$$

10.586 INVALID-ORDER-586
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.587 INVALID-ORDER-587
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_4s^5 + 2C_3C_4C_LL_3L_4R_Ls^5 + 2C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_LR_4s^5 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_3R_Ls^4 + C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_3R_4s^4 + 2C_3C_4C_LL_4R_4s^4 + 2C_3C_$$

10.588 INVALID-ORDER-588
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.589 INVALID-ORDER-589
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.590 INVALID-ORDER-590
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.591 INVALID-ORDER-591
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

10.592 INVALID-ORDER-592
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_4 L_4 s^2 + 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_4 C_L L_3 L_4 R_4 s^5 + C_3 C_4 C_L L_4 R_3 R_4 s^4 + 2 C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_4 R_4 s^3 + 2 C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_3 R_4 s^3 + C_3 C_L R_3 R_4 s^2 + 2 C_3 L_3 R_4 s^2 + 2 C_3 L_3 R_4 s^3 + C_3 C_4 R_3 R_4 s^3$$

10.593 INVALID-ORDER-593
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.594 INVALID-ORDER-594
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 R_4 s^5 + 2 C_3 C_4 C_L L_3 L_4 R_L s^5 + 2 C_3 C_4 C_L L_3 R_4 R_L s^4 + C_3 C_4 C_L L_4 R_3 R_4 s^4 + 2 C_3 C_4 C_L L_4 R_3 R_L s^4 + C_3 C_4 C_L L_4 R_4 R_L s^4 + 2 C_3 C_4 C_L L_4 R_4$$

10.595 INVALID-ORDER-595
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.596 INVALID-ORDER-596
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.597 INVALID-ORDER-597
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.598 INVALID-ORDER-598
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.599 INVALID-ORDER-599
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.600 INVALID-ORDER-600
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 L_L R_4 s^6 + 2 C_3 C_4 C_L L_3 L_4 L_L R_L s^6 + C_3 C_4 C_L L_3 L_4 R_4 R_L s^5 + 2 C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_4 L_L R_3 R_4 s^5 + 2 C_3 C_4 C_L L_4 L_L R_3 R_L s^5 + C_3 C_4 C_L L_4 L_L R_4 R_L s^5 + C_4 C_L L_4 L_$$

10.601 INVALID-ORDER-601
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.602 INVALID-ORDER-602
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.603 INVALID-ORDER-603
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 s^4 + C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_4 s^3 + C_L L_3 R_3 R_4 s^2 + 2 C_L L_3 R_3 R_4 s^2 + C_L L_3 R_4 R_L s^2 + C_L L_3 R_$$

10.604 INVALID-ORDER-604
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_3 L_L R_3 R_4 R_L s^4 + C_3 L_3 L_L R_3 R_4 R_L s^2 + C_L L_3 L_L R_3 R_4 s^3 + 2C_L L_3 L_L R_3 R_L s^3 + C_L L_3 L_L R_3 R_4 R_L s^2 + 2L_3 L_L R_3 s^2 + L_3 L_L R_3 s^2 + L_$$

10.605 INVALID-ORDER-605
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 R_L s^4 + C_3 L_3 R_3 R_4 R_L s^2 + C_L L_3 L_L R_3 R_4 s^3 + 2C_L L_3 L_L R_3 R_L s^3 + C_L L_3 L_L R_4 R_L s^3 + C_L L_3 R_3 R_4 R_L s^2 + C_L L_L R_3 R_4 R_L s^2 + L_3 R_3 R_4 s + 2L_3 R_3 R_L s + L_3 R_3 R_4 R_L s^3 + C_L R_3 R_4 R_L s^3 + C_L R_3 R_4 R_L s^2 + C_L R_3 R_4 R_L s^3 + C_L R_3 R_4$$

10.606 INVALID-ORDER-606
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_L R_L s + 1\right)}{C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + 2 C_4 C_L L_3 R_3 R_L s^3 + 2 C_4 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_4 s^2 + C_L R_3 R_L s + L_3 s + R_3}$$

10.607 INVALID-ORDER-607
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + 2 C_4 C_L L_3 L_L R_3 s^4 + 2 C_4 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3}$$

10.608 INVALID-ORDER-608
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + 2 C_4 C_L L_3 L_L R_3 s^4 + 2 C_4 C_L L_3 R_3 R_L s^3 + 2 C_4 L_3 R_L s^3 + C_L L_3 R_L s^3 + C_L L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L L_3 R_L s^3 + C_L L_3 R_$$

10.609 INVALID-ORDER-609
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + 2 C_4 C_L L_3 L_L R_3 R_L s^4 + 2 C_4 L_3 L_L R_3 s^3 + 2 C_4 L_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_3 s^2 + L_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_$$

10.610 INVALID-ORDER-610
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + 2 C_4 C_L L_3 L_L R_3 R_L s^4 + 2 C_4 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_3 s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L s^2 + C_L R_3 R_L s^2 + C_$$

10.611 INVALID-ORDER-611
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.612 INVALID-ORDER-612
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 s^4 + C_3 L_3 R_3 R_4 s^2 + 2 C_4 C_L L_3 L_L R_3 R_4 s^4 + 2 C_4 L_3 R_3 R_4 s^2 + 2 C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_4 s^3 + C_L L_3 R_3 R_4 s^2 + 2 L_3 R_3 s + L_3 R_4 s + R_3 R_4 s^2 + 2 C_4 L_3 R_3 R_4 s^2 + 2 C_4 R_3 R_4 s^2 + 2 C_4 R_3 R_4 s^2 + 2 C_4 R_3 R_4 s^3 + C_4 R_3$$

10.613 INVALID-ORDER-613
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 s^4 + C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_4 C_L L_3 L_L R_3 R_4 s^4 + 2 C_4 C_L L_3 R_3 R_4 R_L s^3 + 2 C_4 L_3 R_3 R_4 s^2 + 2 C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_3 R_4 s^3 +$$

10.614 INVALID-ORDER-614
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_L L_3 L_L R_3 R_4 R_L s^4 + C_3 L_3 L_L R_3 R_4 s^3 + C_3 L_3 R_4 R_L s^2 + 2 C_4 C_L L_3 L_L R_3 R_4 R_L s^4 + 2 C_4 L_3 L_L R_3 R_4 s^3 + 2 C_4 L_3 L_L R_3 R_4 s^3 + 2 C_L L_3 L_L R_3 R_$$

10.615 INVALID-ORDER-615
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 R_L s^4 + C_3 L_3 R_3 R_4 R_L s^2 + 2 C_4 C_L L_3 L_L R_3 R_4 R_L s^4 + 2 C_4 L_3 R_3 R_4 R_L s^2 + C_L L_3 L_L R_3 R_4 s^3 + 2 C_L L_3 L_L R_3 R_L s^3 + C_L L_3 R_4 R_L s^2 + C_L R_3 R_4 R_L s^2 + C_L R_3 R_4 R_L s^3 + C_L R_3 R_4 R_$$

10.616 INVALID-ORDER-616
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_4 L_3 R_3 R_4 s^2 + 2C_4 L_3 R_3 R_L s^2 + C_4 L_3 R_4 R_L s^2 + C_4 R_3 R_4 R_L s + L_3 R_3 s + L_3 R_L s + R_3 R_L s^2 + C_4 R_3 R_4 R_L s^2 + C_4 R_3 R_4 R_L s + L_3 R_3 R_4 R_L s + R_3 R_L s +$$

10.617 INVALID-ORDER-617
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 R_3 R_4 s^3 + C_3 L_3 R_3 s^2 + C_4 C_L L_3 R_3 R_4 s^3 + 2 C_4 L_3 R_3 s^2 + C_4 L_3 R_4 s^2 + C_4 R_3 R_4 s + C_L L_3 R_3 s^2 + L_3 s + R_3}$$

10.618 INVALID-ORDER-618
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_4 C_L L_3 R_3 R_4 R_L s^3 + C_4 L_3 R_3 R_4 s^2 + 2 C_4 L_3 R_3 R_L s^2 + C_4 L_3 R_4 R_L s^2 + C_4 R_3 R_4 R_L s + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L s^2 + C_4 R_3 R_4 R_L s^2 + C_4 R_3 R_4$$

10.619 INVALID-ORDER-619
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_4 R_4 s + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_4 C_L L_3 R_3 R_4 s^4 + C_3 C_4 L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_4 C_L L_3 R_3 R_4 s^3 + 2 C_4 C_L L_3 R_3 R_L s^3 + C_4 C_L L_3 R_4 R_L s^3 + C_4 C_L R_3 R_$$

10.620 INVALID-ORDER-620
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.621 INVALID-ORDER-621
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_3 s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 L_L R_3 R_4 s^3 + C_3 L_3 L_L R_3 s^2 + C_4 C_L L_3 L_L R_3 R_4 s^3 + 2 C_4 L_3 L_L R_3 s^2 + L_3 L_L$$

10.622 INVALID-ORDER-622
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s}{C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + 2 C_4 C_L L_3 L_L R_3 s^4 + C_4 C_L L_3 L_L R_4 s^4 + C_4 C_L L_3 R_3 R_4 s^3 + C_4 C_L L_3 R_3 R_4 R_4 s^3 + C_4 C_L L_3 R_3 R_4 R_4 s^3 + C_4 C_L L_3 R_3 R_4 s^3 + C_4 C_L L_3 R_3 R_4 R_4 s^3 + C_4 C_L L_3 R_5 r^2 + C_4 C_L L_3 R_5 r^2 + C_4 C_L L_3 R_5 r^2 + C_4 C_L L_5 R_5 r^2 + C_5 C_L L_$$

10.623 INVALID-ORDER-623
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_L s \left(C_4 R_4 s + 1\right)}{C_3 C_4 L_3 L_L R_3 R_4 R_L s^3 + C_3 L_3 L_L R_3 R_4 R_L s^2 + C_4 L_3 L_L R_3 R_4 s^2 + 2 C_4 L_3 L_L R_3 R_L s^2 + C_4 L_3 L_L R_3 R_4 R_L s + C_4 L_L R_3 R_4 R_L s + C_4$$

10.624 INVALID-ORDER-624
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_LR_3R_4R_Ls^5 + C_3C_4L_3L_LR_3R_4s^4 + C_3C_4L_3R_3R_4R_Ls^3 + C_3C_LL_3L_LR_3R_Ls^4 + C_3L_3L_LR_3s^3 + C_3L_3R_3R_Ls^2 + C_4C_LL_3L_LR_3R_4s^4 + 2C_4C_LL_3L_LR_3R_Ls^4 + C_3C_4L_3L_LR_3R_Ls^4 + C_3C_4L_3L_LR_3R_Ls^4$$

10.625 INVALID-ORDER-625
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.626 INVALID-ORDER-626 $Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \frac{1}{C_2s}, \infty, \infty, \infty, R_L\right)$

10.627 INVALID-ORDER-627 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_3 s^4 + C_3 L_3 R_3 s^2 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 L_3 L_4 s^3 + 2C_4 L_3 R_3 s^2 + C_4 L_4 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3}$$

10.628 INVALID-ORDER-628 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_4 C_L L_3 L_4 R_3 R_L s^4 + C_4 L_3 L_4 R_3 s^3 + C_4 L_3 L_4 R_3 s^3 + 2 C_4 L_3 R_3 R_L s^2 + C_4 L_4 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L s^2 + C_4 R_3 R_L s^2 + C_4$$

10.629 INVALID-ORDER-629 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

10.630 INVALID-ORDER-630
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_4 L_4 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_3 C_4 C_L L_3 L_4 L_R 3 s^6 + C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_3 s^2 + C_4 C_L L_3 L_4 L_L s^5 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 C_L L_4 L_L R_3 s^4 + C_4 C_L L_4 L_L R_3 s^4 + C_4 C_L L_3 L_4 L_4 R_3 s^4 + C_4 C_L L_3 L_4 R_3 R_3 r^4 + C_4 C_L L_3 L_4 R_3 r^4 + C_4 C_L L_3 L_4 R_3 r^4 + C_4 C_L L_3 L_4 R_3$$

10.631 INVALID-ORDER-631
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.632 INVALID-ORDER-632
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s}{C_3 C_4 C_L L_3 L_4 L_L R_3 s^6 + C_3 C_4 C_L L_3 L_4 R_3 R_L s^5 + C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_4 C_L L_3 L_4 L_L s^5 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 C_L L_3 L_4 R_L s^5 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 C_L L_3 L_4 R_L s^5 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 C_L L_3 L_4 R_L s^5 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 C_L L_3 L_4 R_L s^5 + C_4 C_L L_3 L_4 R_3 s^4 + C_4 C_L L_3 L_$$

10.633 INVALID-ORDER-633
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3 L_L R_3 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 R_L s^2 + C_4 C_L L_3 L_4 L_L R_3 R_L s^4 + C_4 L_3 L_4 L_L R_3 s^3 + C_4 L_3 L_4 L_L R_3 s^3 + C_4 L_3 L_4 R_3 R_L s^2 + 2 C_4 L_3 L_L R_3 R_L s^2 + C_4 L_4 L_L R_3 R_L s^2 + C_$$

10.634 INVALID-ORDER-634
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.635 INVALID-ORDER-635
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = \frac{L_3 R_3 R_L s + C_4 C_L L_3 L_4 L_L R_3 R_L s^6 + C_3 C_4 L_3 L_4 R_3 R_L s^4 + C_3 C_L L_3 L_4 R_3 R_L s^4 + C_3 L_3 L_4 R_3 R_L s^2 + C_4 C_L L_3 L_4 L_L R_3 s^5 + C_4 C_L L_3 L_4 L_L R_3 s^5 + C_4 C_L L_3 L_4 R_3 R_L s^4 + 2 C_4 C_L L_3 L_4$

10.636 INVALID-ORDER-636
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3L_4R_3s\left(C_LR_Ls + 1\right)}{C_3C_LL_3L_4R_3R_Ls^3 + C_3L_3L_4R_3s^2 + 2C_4C_LL_3L_4R_3R_Ls^3 + 2C_4L_3L_4R_3s^2 + C_LL_3L_4R_3s^2 + C_LL_3L_4R_3s^$$

10.637 INVALID-ORDER-637
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.638 INVALID-ORDER-638
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 L_4 R_3 s \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_3 C_L L_3 L_4 L_L R_3 s^4 + C_3 C_L L_3 L_4 R_3 R_L s^3 + C_3 L_3 L_4 R_3 s^2 + 2 C_4 C_L L_3 L_4 L_L R_3 s^4 + 2 C_4 C_L L_3 L_4 R_3 R_L s^3 + 2 C_4 L_3 L_4 L_L s^3 + C_L L_3 L_4 R_3 s^2 + C_L L_3 L_4 R_$$

10.639 INVALID-ORDER-639
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.640 INVALID-ORDER-640
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_3 L_4 R_3 R_L s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_4 L_L R_3 R_L s^4 + C_3 L_3 L_4 R_3 R_L s^2 + 2 C_4 C_L L_3 L_4 L_L R_3 R_L s^4 + 2 C_4 L_3 L_4 R_3 R_L s^2 + C_L L_3 L_4 L_L R_3 s^3 + C_L L_3 L_4 L_L R_2 s^3 + C_L L_3 L_4 R_3 R_L s^2 + 2 C_L L_3 L_L R_3 R_L s^2 + C_L L_3 L_4 L_L R_3 R_L s^3 + C_L L_3 L_4 L_L R_3 R_L s^$$

10.641 INVALID-ORDER-641
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

10.642 INVALID-ORDER-642
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.643 INVALID-ORDER-643
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.644 INVALID-ORDER-644
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(\frac{L_3 R_3 s}{C_3 C_4 C_L L_3 L_4 R_3 R_L s^5 + C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_4 C_L L_3 L_4 R_3 s^4 +$$

10.645 INVALID-ORDER-645
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{L_3 R_3 s}{C_3 C_4 C_L L_3 L_4 L_L R_3 s^6 + C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_4 L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_3 R_3 s^2 + C_4 C_L L_3 L_4 L_5 s^5 + C_4 C_L L_3 L_4 R_3 s^4 + 2 C_4 C_L L_$

10.646 INVALID-ORDER-646
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_3L_LR_3s\left(C_4L_4s^2 + C_4R_4s + 1\right)}{C_3C_4L_3L_4L_R3s^4 + C_3C_4L_3L_LR_3s^2 + C_4C_LL_3L_4L_R3s^4 + C_4C_LL_3L_LR_3R_4s^3 + C_4L_3L_4L_Ls^3 + C_4L_3L_4R_3s^2 + 2C_4L_3L_LR_3s^2 + C_4L_3L_LR_3s^2 + C_4L_3L_4R_3s^2 + C_4L_4R_3s^2 + C_4L_4R_3s^2 + C_4L_4R_3s^2 + C_4L_4R$

10.647 INVALID-ORDER-647
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_LR_3R_4s^5 + C_3C_4C_LL_3R_3R_4R_Ls^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3R_3R_4s^3 + C_3C_LL_3L_LR_3s^4 + C_3C_LL_3L_2L_3c^4 + C_3C_LL_3L_3c^4 + C_3C_LL_3c^4 + C_3C_LL_3c^4 + C_3C_LL_3c^4 + C_3C_LL_3c^4$

10.648 INVALID-ORDER-648
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.649 INVALID-ORDER-649 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.650 INVALID-ORDER-650
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.651 INVALID-ORDER-651
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3L_4R_3R_4s\left(C_LR_Ls + 1\right)}{C_3C_LL_3L_4R_3R_4R_Ls^3 + C_3L_3L_4R_3R_4s^2 + 2C_4C_LL_3L_4R_3R_4R_Ls^3 + 2C_4L_3L_4R_3R_4s^2 + C_LL_3L_4R_3R_4s^2 + 2C_LL_3L_4R_3R_Ls^2 + C_LL_3L_4R_3R_4s^2 + 2C_LL_3L_4R_3R_4s^2 + 2C_LL_3L_4R_3R_4s$$

10.652 INVALID-ORDER-652
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 L_4 R_3 R_4 s \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_4 L_L R_3 R_4 s^4 + C_3 L_3 L_4 R_3 R_4 s^2 + 2 C_4 L_4 L_4 R_3 R_4 s^2 + 2 C_L L_3 L_4 L_L R_3 s^3 + C_L L_3 L_4 L_L R_4 s^3 + C_L L_3 L_4 R_3 R_4 s^2 + 2 C_L L_3 L_4 R_3 R_4 s^2 + C_L L_$$

10.653 INVALID-ORDER-653
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.654 INVALID-ORDER-654
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.655 INVALID-ORDER-655
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.656 INVALID-ORDER-656
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_3 L_4 R_3 R_4 R_L s^4 + C_3 L_3 L_4 R_3 R_4 R_L s^3 + C_4 L_3 L_4 R_3 R_4 s^3 + 2 C_4 L_3 L_4 R_3 R_L s^3 + C_4 L_3 L_4 R_3 R_4 R_L s^3 + C_4 L_4 R_3 R_4 R_L s^2 + L_3 L_4 R_3 s^2 + L_3 L_4 R_3$$

10.657 INVALID-ORDER-657
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.658 INVALID-ORDER-658
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.659 INVALID-ORDER-659
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + C_3C_4L_3L_4R_3R_4s^4 + C_3C_LL_3L_4R_3R_Ls^4 + C_3C_LL_3R_3R_4R_Ls^3 + C_3L_3L_4R_3s^3 + C_3L_3R_3R_4s^2 + C_4C_LL_3L_4R_3R_4s^4 + 2C_4C_LL_3L_4R_3R_Ls^4 + C_3C_LL_3R_3R_4R_Ls^3 + C_3L_3R_3R_4s^2 + C_4C_LL_3L_4R_3R_4s^4 + 2C_4C_LL_3L_4R_3R_4s^4 + C_3C_LL_3R_3R_4R_Ls^3 + C_3L_3R_3R_4R_Ls^3 + C_3R_3R_4R_Ls^3 + C_3R_3R_4R_Ls^$$

10.660 INVALID-ORDER-660
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.661 INVALID-ORDER-661
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.662 INVALID-ORDER-662
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3R_4s^6 + C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + C_3C_4L_3L_4R_3R_4s^4 + C_3C_LL_3L_4L_Rs^5 + C_3C_LL_3L_4R_3R_4s^4 + C_3C_LL$$

10.663 INVALID-ORDER-663
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 L_3 L_4 L_L R_3 R_4 R_L s^4 + C_3 L_3 L_4 L_L R_3 R_L s^3 + C_3 L_3 L_L R_3 R_4 R_L s^2 + C_4 C_L L_3 L_4 L_L R_3 R_4 R_L s^4 + C_4 L_3 L_4 L_L R_3 R_4 s^3 + 2 C_4 L_3 L_4 L_L R_3 R_L s^3 + C_4 L_3 L_4 L_L R_4 R_L s^3 + C_4 L_3 L_4 L_L R_3 R_4 R_L s^4 + C_4 L_4 L_L R_3 R_4 R_L s^4 + C_4 L_4 L_L R_3 R_L s^4 + C_4 L_4 L_L R_3 R_L s^4 + C_4 L_4 L_L R_3 R_L s^$$

10.664 INVALID-ORDER-664
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.665 INVALID-ORDER-665
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.666 INVALID-ORDER-666
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

10.667 INVALID-ORDER-667
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.668 INVALID-ORDER-668
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 R_L s \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_3 R_4 R_L s^4 + C_3 L_3 R_3 R_4 R_L s^2 + C_4 C_L L_3 L_4 R_3 R_4 R_L s^4 + C_4 L_3 L_4 R_3 R_4 s^3 + 2 C_4 L_3 L_4 R_3 R_L s^3 + 2 C_4 L_3 R_3 R_4 R_L s^3 + 2 C_4 L_3 R_3 R_4 R_L s^2 + C_4 L_4 R_3 R_4 R_L s^2 + C_4 L_3 L_4 R_3 R_4 R_L s^3 + 2 C_4 L_3 R_4 R_L s^3 + 2 C_4 R_4 R_L s^3 + 2 C_4 R_4 R_4 R_L s^3 + 2 C_4 R_4 R_4 R_L s^3 + 2 C_4 R_4 R_$$

10.669 INVALID-ORDER-669
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 R_4 s \left(6 + \frac{L_3 L_4 R_3 R_4 R_L s^5 + C_3 C_4 L_3 L_4 R_3 R_4 s^4 + C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + C_4 C_L L_3 L_4 R_3 R_4 s^4 + 2 C_4 C_L L_3 L_4 R_3 R_L s^4 + C_4 C_L L_3 L_4 R_4 R_L s^4 + 2 C_4 C_L L_3 R_3 R_4 R_L s^4 + 2 C_4 C_L L_3 R_3 R_4 R_L s^4 + 2 C_4 C_L L_3 L_4 R_3 R_4 s^4 + 2 C_4 C_L L_3 L_4 R_3$$

10.670 INVALID-ORDER-670
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.671 INVALID-ORDER-671
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.672 INVALID-ORDER-672
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.673 INVALID-ORDER-673
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.674 INVALID-ORDER-674
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.675 INVALID-ORDER-675
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.676 INVALID-ORDER-676
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 C_L L_3 R_3 R_4 s^3 + 2 C_3 L_3 R_3 s^2 + C_3 L_3 R_4 s^2 + C_L L_3 R_4 s^2 + C_L R_3 R_4 s + 2 L_3 s + 2 R_3 + R_4}$$

10.677 INVALID-ORDER-677
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_L L_3 R_4 R_L s^2 + C_L R_3 R_4 R_L s + L_3 R_4 s + 2 L_3 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + 2 R_4 R_L s^2$$

10.678 INVALID-ORDER-678
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_L R_L s + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 C_L L_3 R_3 R_4 s^3 + 2 C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_3 R_4 R_L s^3 + 2 C_3 L_3 R_3 s^2 + C_L L_3 R_4 s^2 + C_L L_3 R_4 s^2 + C_L L_3 R_4 s^2 + C_L R_3 R_4 s + 2 C_$$

10.679 INVALID-ORDER-679
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{2 C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_4 s^4 + C_3 C_L L_3 R_3 R_4 s^3 + 2 C_3 L_3 R_4 s^2 + 2 C_L L_3 L_L s^3 + C_L L_3 R_4 s^2 + 2 C_L L_L R_3 s^2 + C_L L_L R_4 s^2 + C_L R_3 R_4 s + 2 L_3 s + 2 R_3 + R_3}$$

$$H(s) = \frac{R_4 \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right) \left(C_L L_L R_L s^2 + C_3 L_L L_R R_2 R_2 s^4 + C_3 L_L L_R R_2 R_2 s^4 + C_3 L_L L_R R_2 R_2 s^4 + C_3 L_L L_R R_2 R_2 r_2 R_3 R_2 r_2 R_3 R_2 R_2 r_3 R_2 R_2 r_3 R_2 R_2 r_4 R_2 r_3 R_2 R_2 r_4 R_2 r_3 R_2 R_2 r_4 R_2 r_3 R_2 r_4 R_2$$

10.684 INVALID-ORDER-684
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L \left(C_L L_L s^2 + 1 \right) \left(C_3 L_3 R_3 R_4 s^2 + L_3 s + R_4 R_L s^2 + L_3 L_4 R_4 R_L s^3 + L_3 R_4 R_L s^3$$

10.685 INVALID-ORDER-685
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + 2 C_4 L_3 R_L s^2 + 2 C_4 R_3 R_L s + L_3 s + R_3 + R_L}$$

10.686 INVALID-ORDER-686
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{2C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 R_3 s^3 + C_3 L_2 s^2 + 2C_4 L_3 s^2 + 2C_4 R_3 s + C_L L_3 s^2 + C_L R_3 s + 1}$$

10.687 INVALID-ORDER-687
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.688 INVALID-ORDER-688
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 C_L L_3 R_3 R_L s^4 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 R_2 s^3 + C_3 L_4 S^3 + 2 C_4 C_L L_3 R_L s^3 + 2 C_4 C_L L_3 R_L s^2 + 2 C_4 L_3 s^2 + 2 C_4 R_3 s + C_L L_3 s^2 + C_L R_3 s + C_L R_4 s + C_L R_4 s^2 + C_L R_4 s^$$

10.689 INVALID-ORDER-689
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2C_3 C_4 C_L L_3 L_L R_3 s^5 + 2C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + 2C_4 C_L L_L L_2 s^4 + 2C_4 C_L L_L R_3 s^3 + 2C_4 L_3 s^2 + 2C_4 R_3 s + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L L_3 s^2 + C_L$$

10.690 INVALID-ORDER-690
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + 2 C_4 L_3 L_L s^3 + 2 C_4 L_L R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3}$$

10.691 INVALID-ORDER-691
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.692 INVALID-ORDER-692
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 L_3 L_L R_3 R_L s^4 + C_3 C_L L_3 L_L R_3 s^3 + C_3 L_3 L_L R_2 s^3 + C_3 L_3 R_3 R_L s^2 + 2 C_4 L_3 L_L R_3 s^3 + 2 C_4 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L R_3 r_L s^2 + C_L L_3 L_L R_3 r_L s^3 + C_L R_$$

10.693 INVALID-ORDER-693
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.694 INVALID-ORDER-694
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.695 INVALID-ORDER-695
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

10.696 INVALID-ORDER-696
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.697 INVALID-ORDER-697
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_4 R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 L_3 R_3 R_4 R_L s^3 + C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_4 R_L s^2 + 2 C_4 L_3 R_4 R_L s^2 + 2 C_4 R_3 R_4 R_L s + C_L L_3 R_4 R_L s^2 + C_L R_3 R_4 R_L s + L_3 R_4 s + 2 C_4 R_3 R_4 R_L s^2 + 2 C_4 R_4 R_L s^$$

10.698 INVALID-ORDER-698
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_4 \left(C_L R_L s + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{2 C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + 2 C_3 C_4 L_3 R_3 R_4 s^3 + C_3 C_L L_3 R_3 R_4 s^3 + 2 C_3 C_L L_3 R_3 R_4 s^3 + 2 C_3 C_L L_3 R_3 R_4 s^3 + 2 C_4 C_L L_3 R_4 R_L s^3 + 2 C_4 C_$$

10.699 INVALID-ORDER-699
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.700 INVALID-ORDER-700
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_4 s \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 L_3 L_L R_3 R_4 s^4 + C_3 C_L L_3 L_L R_3 R_4 s^4 + 2 C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_4 s^3 + C_3 L_3 R_4 s^2 + 2 C_4 L_3 L_L R_4 s^3 + 2 C_4 L_L R_3 R_4 s^2 + C_L L_3 L_L R_4 s^3 + C_L L_L R_3 R_4 s^2 + 2 L_3 L_L s^2}$$

10.701 INVALID-ORDER-701
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3R_3R_4R_Ls^4 + 2C_3C_4L_3R_3R_4s^3 + 2C_3C_LL_3L_LR_3s^4 + C_3C_LL_3L_LR_4s^4 + C_3C_LL_3R_3R_4s^3 + 2C_3C_LL_3R_3R_4s^3 + C_3C_LL_3R_4R_Ls^3 + 2C_3C_LL_3R_3R_4s^3 + 2C_3C_LL_3R_3R_3R_4s^3 + 2C_3C_LL_3R_3R_3R_4s^3 + 2C_3C_LL_3R_3R_3R_4s^3 + 2C_3C_LL_3R_$$

10.702 INVALID-ORDER-702
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.703 INVALID-ORDER-703
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.704 INVALID-ORDER-704
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.705 INVALID-ORDER-705
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

10.706 INVALID-ORDER-706
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4R_4s + 1\right)\left(C_3L_3R_3s^2 + L_3s + R_3\right)}{C_3C_4C_LL_3R_3R_4s^4 + 2C_3C_4L_3R_3s^3 + C_3C_4L_3R_4s^3 + C_3C_LL_3R_3s^3 + C_4C_LL_3R_4s^3 + C_4C_LR_3R_4s^2 + 2C_4L_3s^2 + 2C_4R_3s + C_4R_4s + C_LL_3s^2 + C_LR_3s + 1}$$

10.707 INVALID-ORDER-707
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_4 R_4 s + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_4 C_L L_3 R_4 R_L s^3 + C_4 C_L R_3 R_4 R_L s^2 + C_4 C_L R_3 R_4 R_L s^3 + C_4 C_L R_3 R_4 R_L s^3$$

10.708 INVALID-ORDER-708
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

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

10.709 INVALID-ORDER-709
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4 R_4 s + 1\right) \left(C_L L_L s^2 + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 C_L L_3 L_L R_3 s^5 + C_3 C_4 C_L L_3 L_L R_4 s^5 + C_3 C_4 C_L L_3 R_3 R_4 s^4 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_4 L_3 L_L s^4 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 L_L s^4 + C_4 C_L L_2 L_L s^4$$

10.710 INVALID-ORDER-710
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.711 INVALID-ORDER-711
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_LR_3s^5 + C_3C_4C_LL_3L_LR_4s^5 + C_3C_4C_LL_3R_3R_4s^4 + 2C_3C_4C_LL_3R_3R_Ls^4 + C_3C_4C_LL_3R_4R_Ls^4 + 2C_3C_4L_3R_3s^3 + C_3C_4L_3R_4s^3 + C_3C_4L_3L_Ls^4 + C_3C_4L_3R_3R_4s^4 + C_3C_4L$$

10.712 INVALID-ORDER-712
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.713 INVALID-ORDER-713
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4C_LL_3L_LR_4R_Ls^5 + 2C_3C_4L_3L_LR_3s^4 + C_3C_4L_3L_LR_4s^4 + C_3C_4L_3R_3R_4s^3 + 2C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3R_4R_Ls^3 + C_3C_4L_3L_LR_3s^4 + C_3C_4L_3L_LR_3s^4 + C_3C_4L_3R_4s^3 + 2C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3R_4R_Ls^3 + C_3C_4L_3L_LR_3s^4 + C_3C_4L_3L_LR_3s^4 + C_3C_4L_3R_4s^3 + 2C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3R_4R_Ls^3 + C_3C_4L_3L_Rs^3 +$$

10.714 INVALID-ORDER-714
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + 2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 L_3 L_L R_4 R_L s^4 + C_3 C_4 L_3 R_4 R_L s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^4 + C_3 C_4 R_4 R_L s^4 + C_3$$

10.715 INVALID-ORDER-715
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

10.716 INVALID-ORDER-716
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4L_4s^2 + 1\right)\left(C_3L_3R_3s^2 + L_3s + R_3\right)}{C_3C_4C_LL_3L_4R_3s^5 + C_3C_4L_3L_4s^4 + 2C_3C_4L_3R_3s^3 + C_3L_2R_3s^3 + C_3L_3L_4s^4 + C_4C_LL_3L_4s^4 + C_4C_LL_4R_3s^3 + 2C_4L_3s^2 + C_4L_4s^2 + 2C_4R_3s + C_LL_3s^2 + C_LR_3s + 1}$$

10.717 INVALID-ORDER-717
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.718 INVALID-ORDER-718
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.719 INVALID-ORDER-719
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4L_4s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)\left(C_3L_3R_3s^2 + L_3s + R_3\right)}{C_3C_4C_LL_3L_4S^6 + C_3C_4C_LL_3L_4R_3s^5 + 2C_3C_4C_LL_3L_4S^4 + 2C_3C_4L_3R_3s^3 + C_3C_LL_3L_4S^4 + 2C_3C_4L_3L_4S^4 + 2C_4C_LL_3L_4S^4 + 2C_4$$

10.720 INVALID-ORDER-720
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.721 INVALID-ORDER-721
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

10.722 INVALID-ORDER-722
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.723 INVALID-ORDER-723
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_LR_3s^6 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4L_3L_4L_Ls^5 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_Ls^4 + 2C_3C_4L_3L_LR_3s^4 + 2C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_3s$$

10.724 INVALID-ORDER-724
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RL_s^6 + C_3C_4C_LL_3L_4R_3R_Ls^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_Ls^4 + 2C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3L_4R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_3R_Ls^4 + 2C_3C_4L_3L_4R_3R_2R_2R_3R_3R_2R_3R_3R_2R_3R_3R_3R_3R_3R_3R_3R_3R_3R_3R$$

10.725 INVALID-ORDER-725
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

$$H(s) = \frac{L_4 R_L s \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 L_3 L_4 R_3 s^4 + C_3 L_3 L_4 R_3 s^3 + C_3 L_3 L_4 R_L s^3 + 2 C_3 L_3 R_3 R_L s^2 + 2 C_4 L_3 L_4 R_3 r_L s^2 + L_3 L_4 s^2 + 2 L_3 R_L s + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L s^2 + L_4 R_3 r_L s^2 + L_3 R_L s^2 + L_3 R_L s^2 + L_4 R_3 r_L s^2 + L_4 R_$$

10.726 INVALID-ORDER-726
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.727 INVALID-ORDER-727
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.728 INVALID-ORDER-728
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.729 INVALID-ORDER-729
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 s \left(C_L L_L s^2 + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_4 C_L L_3 L_4 L_L R_3 s^6 + 2 C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 R_3 s^4 + C_3 L_3 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_4$$

10.730 INVALID-ORDER-730
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.731 INVALID-ORDER-731
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

10.732 INVALID-ORDER-732
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.733 INVALID-ORDER-733
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.734 INVALID-ORDER-734
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3R_Ls^6 + 2C_3C_4L_3L_4R_3R_Ls^4 + C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4L_LR_3s^5 + C_3C_LL_3L_4R_3R_Ls^4 + 2C_3C_LL_3L_4R_3R_Ls^4 + C_3L_3L_4R_3s^3 + C_3L_3L_3L_3R_3s^3 + C_3L_3L_3L_3R_3s^3 + C_3L_3L_3L_3R_3s^3 + C_3L_3L_3L_3R_3s^3 + C_3L_3L_3R_3s^3 + C_3L_3R_3s^3 + C$$

10.735 INVALID-ORDER-735
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_L \left(C_4 L_4 s^2 + C_4 R_4 s + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_4 L_3 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 L_3 R_3 s^2 + C_4 L_3 L_4 s^3 + C_4 L_3 R_4 s^2 + 2 C_4 L_3 R_4 s^2 + C_4 L_4 R_3 s^2 + C_4 L_3 R_4 s^3 + C_4 L_3 R_4 s^2 + C_$$

10.736 INVALID-ORDER-736
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_4L_4s^2 + C_4R_4s + 1\right)\left(C_3L_3R_3s^2 + L_3s + R_3\right)}{C_3C_4C_LL_3L_4R_3s^5 + C_3C_4L_LR_3R_4s^4 + C_3C_4L_3L_4s^4 + 2C_3C_4L_3R_3s^3 + C_3C_4L_3R_4s^3 + C_3C_LL_3R_3s^3 + C_4C_LL_3L_4s^4 + C_4C_LL_3R_4s^3 + C_4C_LL_4R_3s^3 + C_4C_LL_3R_4s^4 + C_4C_LL_3R_4s^3 + C_4C_LL_4R_3s^3 + C_4C_LL_3R_4s^3 + C_4C_LL_3R_4s^3 + C_4C_LL_3R_4s^3 + C_4C_LL_3R_3s^3 + C_4C_$$

10.737 INVALID-ORDER-737
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3R_3R_4R_Ls^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_Ls^4 + C_3C_4L_3R_3R_4s^3 + 2C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3R_4R_Ls^3 + C_3C_4L_3R_3R_Ls^3 + C_3C_4L_3R_3R_4R_Ls^3 +$$

10.738 INVALID-ORDER-738
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L_4R_Ls^5 + C_3C_4C_LL_3R_3R_4s^4 + 2C_3C_4C_LL_3R_3R_Ls^4 + C_3C_4C_LL_3R_4R_Ls^4 + 2C_3C_4L_3L_4s^4 + 2C_3C_4L_3R_3s^3 + C_3C_4L_3R_4s^3 + C_3C_4L_3R_3s^3 + C$$

10.739 INVALID-ORDER-739
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_3s^5 + 2C_3C_4C_LL_3L_LR_3s^5 + C_3C_4C_LL_3L_LR_4s^5 + C_3C_4C_LL_3R_3R_4s^4 + C_3C_4L_3L_4s^4 + 2C_3C_4L_3R_3s^3 + C_3C_4L_3R_4s^3 + C_3C_4L_3L_Ls^4 + C_3C_4L_3L_4L_3s^4 + C_3C_4L_3L_4L_3s^3 + C_3C_4L_3L_4L_3s^4 + C_3C_4L_3L_4L_3s^4 + C_3C_4L_3L_4L_3s^3 + C_3C_4L_3L_4L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_3L_$$

10.740 INVALID-ORDER-740
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.741 INVALID-ORDER-741
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 L_1 s^6 + C_3 C_4 C_L L_3 L_4 R_3 s^5 + C_3 C_4 C_L L_3 L_4 R_L s^5 + 2 C_3 C_4 C_L L_3 L_L R_3 s^5 + C_3 C_4 C_L L_3 L_L R_4 s^5 + C_3 C_4 C_L L_3 R_3 R_4 s^4 + 2 C_3 C_4 C_L L_3 R_3 R_L s^4 + C_3 C_4 C_L L_3 R_4 R_L s^6 + C_3 C_4 C_L L_3 R_$$

10.742 INVALID-ORDER-742
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.743 INVALID-ORDER-743
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.744 INVALID-ORDER-744
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 L_L R_3 s^6 + C_3 C_4 C_L L_3 L_4 L_L R_L s^6 + C_3 C_4 C_L L_3 L_4 R_3 R_L s^5 + C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + 2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + 2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + 2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_3 L_L$$

10.745 INVALID-ORDER-745
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

10.746 INVALID-ORDER-746
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.747 INVALID-ORDER-747
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.748 INVALID-ORDER-748
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + 2C_3C_4L_3L_4R_3R_4s^4 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_Ls^4 + C_3C_LL_3L_4R_4R_Ls^4 + 2C_3C_LL_3R_3R_4R_Ls^3 + 2C_3L_3L_4R_3s^3 + C_3L_3L_4R_4s^3 + C_3C_LL_3L_4R_3R_4s^4 + C_3C_LL_3L_4R_3R_$$

10.749 INVALID-ORDER-749
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.750 INVALID-ORDER-750
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.751 INVALID-ORDER-751
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_RR_3R_4s^6 + 2C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + 2C_3C_4L_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4L_RR_4s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4L_RR_3s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_RR_3s^5 + 2C_3C_LL_3L_4L_RR_3s^5 + 2C_3C_LL_3L_4L_RR_3s^5 + 2C_3C_LL_3L_4L_RR_3s^5 + 2C_3C_LL_3L_4L_RR_3s^5 + 2C_3C_LL_3L_4L_RR_3s^5 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C$$

10.752 INVALID-ORDER-752
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.753 INVALID-ORDER-753
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.754 INVALID-ORDER-754
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.755 INVALID-ORDER-755
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty\right)$$

10.756 INVALID-ORDER-756
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_4L_4R_4s^2 + L_4s + R_3R_4s^2 + L_4s + R_3R_4$$

10.757 INVALID-ORDER-757
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + C_3C_4L_3L_4R_3R_4s^4 + 2C_3C_4L_3L_4R_3R_Ls^4 + C_3C_4L_3L_4R_3R_Ls^4 + C_3C_LL_3L_4R_3R_Ls^4 + C_3C_LL_3R_3R_4R_Ls^3 + C_3L_3L_4R_3s^3 + C_3L_3L_3L_4R_3s^3 + C_3L_3L_3L_3R_3s^3 + C_3L_3L_3L_3R_3s^3$$

10.758 INVALID-ORDER-758
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_4R_4R_Ls^5 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_3s^4 + C_3C_LL_3L_4R_3s^4 + C_3C_LL_3L_3L_3R_3s^4 + C_3C_LL_3L_3R_3s^4 + C_3C_LL_3L_3R_3s^4 + C_3C_LL_3L_3R_3s^4 + C_3C_LL_3L_3R_3s^4 + C_3C_LL_3L_3R_3s^4 + C_3C_LL_3L_3R_3s^4 + C_3C_LL_3L_3R_$$

10.759 INVALID-ORDER-759
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RA_5s^6 + C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_LL_3L_4L_Ls^5 + C_3C_LL_3L_4R_3s^4 + 2C_3C_LL_3L_4R_3s^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4L_Ls^5 + C_3C_4L_3L_4R_3s^4 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_3L_4R_3s^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_3L_3L_3R_3s^4 + C_3C_4L_3L_3L_3R_3s^4 + C_3$$

10.760 INVALID-ORDER-760
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3R_4s^6 + 2C_3C_4L_3L_4L_LR_3s^5 + C_3C_4L_3L_4L_LR_4s^5 + C_3C_4L_3L_4R_3R_4s^4 + C_3C_LL_3L_4L_LR_3s^5 + C_3C_LL_3L_4L_LR_3s^4 + C_3L_3L_4L_Ls^4 + C_3L_3L_4$$

10.761 INVALID-ORDER-761
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RA_s^6 + C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_4R_4R_Ls^5 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_$$

10.762 INVALID-ORDER-762
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.763 INVALID-ORDER-763
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.764 INVALID-ORDER-764
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.765 INVALID-ORDER-765
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_4 R_L \left(C_4 L_4 s^2 + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 R_4 R_4 s^2 + 2 C_3 C_4 L_3 L_4 R_4 R_4 s^4 + 2 C_3 C_4 L_3 L_4 R_4 R_4 s^3 + 2 C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_4 R_4 s^2 + 2 C_4 L_3 L_4 R_4 s^3 + 2 C_4 L_4 L_5 R_5 t^3 + 2 C_4 L_5 L_5 R_5 t^3 + 2 C_4 L_5 L_5 R_5 t^3 + 2 C_5 L_5 R_5$$

10.766 INVALID-ORDER-766
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

10.767 INVALID-ORDER-767
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.768 INVALID-ORDER-768
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.769 INVALID-ORDER-769
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

10.770 INVALID-ORDER-770
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.771 INVALID-ORDER-771
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_Rs^6 + C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_4$$

10.772 INVALID-ORDER-772
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.773 INVALID-ORDER-773
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3R_4s^6 + 2C_3C_4C_LL_3L_4L_LR_3R_Ls^6 + C_3C_4C_LL_3L_4L_LR_4R_Ls^6 + 2C_3C_4C_LL_3L_LR_3R_4R_Ls^5 + 2C_3C_4L_3L_4L_LR_3s^5 + C_3C_4L_3L_4L_LR_4s^5 + C_3C_4L_3L_4L_Rs^6 + 2C_3C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_4C_LL_3L_4L_Rs^6 + 2C_4C_4C_4C_4C_4C_4C_4C_4C_4C_4C_4$$

10.774 INVALID-ORDER-774
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.775 INVALID-ORDER-775
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 R_3 R_4 s^3 + 2 C_3 L_3 R_3 s^2 + C_3 L_3 R_4 s^2 + C_3 R_3 R_4 s + C_L R_3 R_4 s + 2 R_3 + R_4}$$

10.776 INVALID-ORDER-776
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s + C_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L r^2}$$

10.777 INVALID-ORDER-777
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

10.778 INVALID-ORDER-778
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.779 INVALID-ORDER-779
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 R_4 s \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 s^4 + 2 C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_4 s^3 + C_3 L_3 R_3 R_4 s^2 + C_3 L_L R_3 R_4 s^2 + C_L L_L R_3 R_4 s^2 + 2 L_L R_3 s + L_L R_4 s + R_3 R_4 r^2 + C_4 R_3 R_4 r^2 +$$

10.780 INVALID-ORDER-780
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{2 C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_4 R_4 s^3 + 2 C_3 C_L L_3 R_3 R_4 s^3 + C_3 C_L L_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 s^3 + C_3 C_L R_3 R_4 R_L s^2 + 2 C_3 L_3 R_3 s^2 + C_3 L_3 R_4 s^2 + C_3 R_3 R_4 R_L s^3 + C_3 C_L R_3$$

10.781 INVALID-ORDER-781
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 R_L s^4 + C_3 L_3 L_L R_3 R_4 s^3 + 2 C_3 L_3 L_L R_3 R_L s^3 + C_3 L_3 L_L R_3 R_4 R_L s^2 + C_3 L_L R_3 R_4 R_L s^2 + C_L L_L R_3 R_4 R_L s^2 + L_L R_3 R_4 s + 2 L_L R_3 R_4 s + 2 L_L R_3 R_4 s + 2 L_L R_3 R_4 R_L s^2 + C_4 L_L$$

10.782 INVALID-ORDER-782
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$C_{3}C_{L}L_{3}L_{L}R_{3}R_{4}s^{4} + 2C_{3}C_{L}L_{3}L_{L}R_{3}R_{L}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{4}R_{L}s^{4} + C_{3}C_{L}L_{L}R_{3}R_{4}R_{L}s^{3} + 2C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{4}s^{3} + C_{3}L_{3}R_{3}R_{4}s^{2} + 2C_{3}L_{3}R_{3}R_{L}s^{2} + C_{3}L_{3}R_{3}R_{L}s^{2} + C_{3}L_{3}R_{3}R_{L}s^{2} + C_{3}L_{3}R_{3}R_{L}s^{2} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}R_{3}R_{L}s^{2} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{3}s^{3} + C_{3}L_{3}L_{L}R_{3}s^{2} + C_{3}L_{3}L_{$$

10.783 INVALID-ORDER-783
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_4 s^4 + 2 C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 C_L L_3 R_4 R_L s^3 + C_3 C_L L_L R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s^3 + C_3 R_4 R_$$

10.784 INVALID-ORDER-784
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1 \right)}{2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + 2 C_4 R_3 R_L s + R_3 + R_L}$$

10.785 INVALID-ORDER-785
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 (C_3 L_3 s^2 + 1)}{2C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + 2C_4 R_3 s + C_L R_3 s + 1}$$

10.786 INVALID-ORDER-786
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + 2 C_4 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L R_3 R_L s^2 + C_3 R_3 R_L s^2 + C_3 R_3 R_L s + C_4 R_3 R_L s +$$

10.787 INVALID-ORDER-787
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1\right) \left(C_L R_L s + 1\right)}{2 C_3 C_4 C_L L_3 R_3 R_L s^4 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + 2 C_4 C_L R_3 R_L s^2 + 2 C_4 R_3 s + C_L R_3 s + C_L R_4 s + 1}$$

10.788 INVALID-ORDER-788
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_3 L_L R_3 s^5 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_L L_R s^3 + C_3 L_L L_R s^3 + 2 C_4 C_L L_L R_3 s^3 + 2 C_4 R_3 s + C_L L_L s^2 + C_L R_3 s + 1 C_4 R_3 s^3 + C_$$

10.789 INVALID-ORDER-789
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_3 L_3 s^2 + 1\right)}{2C_3 C_4 L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + 2C_4 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3}$$

10.790 INVALID-ORDER-790
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2 C_3 C_4 C_L L_3 L_L R_3 s^5 + 2 C_3 C_4 C_L L_3 R_3 R_L s^4 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_2 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_3 R_L$$

10.791 INVALID-ORDER-791
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_L R_3 R_L s^4 + C_3 C_L L_3 L_L R_3 R_L s^3 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + 2 C_4 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L s^2 + C_4 L_L R_3 R_L s^2 + C_$$

10.792 INVALID-ORDER-792
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + 2 C_3 C_4 L_3 L_L R_3 s^4 + 2 C_3 C_4 L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 R_L s^3 + C_3 L_3 R_L s^3 + C_3 L_$$

10.793 INVALID-ORDER-793
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + 2 C_4 C_L L_3 R_3 R_L s^3 + C_3 C_L L_2 R_3 R_L s^3 + C_3 C_L L_3 R_3 R_L s^$$

10.794 INVALID-ORDER-794
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s + 2 C_4 R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + 2 R_3 R_4 R_L s^2 + 2 R_3 R_4 R_L s + 2 R_$$

10.795 INVALID-ORDER-795
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_3 L_3 s^2 + 1\right)}{2C_3 C_4 L_3 R_3 R_4 s^3 + C_3 C_L L_3 R_3 R_4 s^3 + 2C_3 L_3 R_3 s^2 + C_3 L_3 R_4 s^2 + C_3 R_3 R_4 s + 2C_4 R_3 R_4 s + C_L R_3 R_4 s + 2R_3 + R_4}$$

10.796 INVALID-ORDER-796
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 R_3 R_4 R_L s^3 + C_3 C_L L_3 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_4 R_L s^2 + C_3 L_3 R_4 R_L s + 2 C_4 R_3 R_4 R_L s + C_L R_3 R_4 R_L s + R_3 R_4 + 2 R_3 R_L + R_4 R_L s^2 + C_3 R_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s + C_4 R_4 R_L s + C_4 R_3 R_4 R_$$

10.797 INVALID-ORDER-797
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 R_4 \left(C_3 L_3 s^2 + 1\right) \left(C_L R_L s + 1\right)}{2 C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + 2 C_3 C_4 L_3 R_3 R_4 s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_3 R_4 R_L s^3 + C_3 C_L R_3 R_4 R_L s^2 + 2 C_3 L_3 R_3 s^2 + C_3 L_3 R_4 s^2 + C_3 R_3 R_4 s^2 + C_3 R_3$$

10.798 INVALID-ORDER-798
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

10.799 INVALID-ORDER-799
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.800 INVALID-ORDER-800
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3}{2C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3R_3R_4R_Ls^4 + 2C_3C_4L_3R_3R_4s^3 + 2C_3C_LL_3L_LR_3s^4 + C_3C_LL_3L_LR_4s^4 + C_3C_LL_3R_3R_4s^3 + 2C_3C_LL_3R_3R_Ls^3 + C_3C_LL_3R_4R_Ls^3 + C_3C_LL_3R_3R_4s^3 + 2C_3C_LL_3R_3R_4s^3 + 2C_3C_LL_3R_3R_4s^3$$

10.801 INVALID-ORDER-801
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.802 INVALID-ORDER-802
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.803 INVALID-ORDER-803
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.804 INVALID-ORDER-804
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

10.805 INVALID-ORDER-805
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1\right) \left(C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_3 R_3 R_4 s^4 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_4 L_3 R_4 s^3 + C_3 C_4 R_3 R_4 s^2 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_4 C_L R_3 R_4 s^2 + 2 C_4 R_3 s + C_4 R_4 s + C_L R_3 s + 1}$$

10.806 INVALID-ORDER-806
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^2 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_4 s^2 + C_3 R_3 R_L s + C_4 C_L R_3 R_4 R_L s^2 + C_4 R_3 R_4 R_L s^3 + C_3 R_4 R_L s^3 + C_$$

10.807 INVALID-ORDER-807
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_4 R_4 s + 1 \right) \left(C_L R_L s + 1 \right)}{C_3 C_4 C_L L_3 R_3 R_4 s^4 + 2 C_3 C_4 C_L L_3 R_3 R_L s^4 + C_3 C_4 C_L L_3 R_4 R_L s^3 + 2 C_3 C_4 L_3 R_3 s^3 + C_3 C_4 L_3 R_4 s^3 + C_3 C_4 L_3 R_3 s^3 + C_3$$

10.808 INVALID-ORDER-808
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

10.809 INVALID-ORDER-809
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.810 INVALID-ORDER-810
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_LR_3s^5 + C_3C_4C_LL_3L_LR_4s^5 + C_3C_4C_LL_3R_3R_4s^4 + 2C_3C_4C_LL_3R_3R_Ls^4 + C_3C_4C_LL_3R_4R_Ls^4 + C_3C_4C_LL_RR_3R_4s^4 + C_3C_4C_LR_3R_4R_Ls^3 + 2C_3C_4L_RR_3R_4s^4 + C_3C_4C_LR_3R_4R_Ls^4 + C_3C_4C_LL_RR_3R_4s^4 + C_3C_4C_LR_3R_4R_Ls^4 + C_3C_4C_LR_3R_4R$$

10.811 INVALID-ORDER-811
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.812 INVALID-ORDER-812
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.813 INVALID-ORDER-813
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_L R_3 R_4 s^5 + 2 C_3 C_4 C_L L_3 L_L R_3 R_L s^5 + C_3 C_4 C_L L_3 L_L R_4 R_L s^5 + C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_L R_3 R_4 R_L s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^4 + C_3 C_4 L_4 R_3 R_4 R_L s^4 + C_3 C_4 L_4 R_4 R_L s^4 + C_3 C_4 R_4 R_4$$

10.814 INVALID-ORDER-814
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L\right)$$

10.815 INVALID-ORDER-815
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$$

10.816 INVALID-ORDER-816
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$$

10.817 INVALID-ORDER-817
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_L R_L s + 1 \right) \left(C_L$$

10.818 INVALID-ORDER-818
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right) \left(C_4 L_4 s^2 + 1 \right) \left(C_4$$

10.819 INVALID-ORDER-819
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.820 INVALID-ORDER-820
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L_4R_Ls^5 + 2C_3C_4C_LL_3L_LR_3s^5 + 2C_3C_4C_LL_3R_3R_Ls^4 + C_3C_4C_LL_4L_R_3s^5 + C_3C_4C_LL_4R_3R_Ls^4 + C_3C_4C_LL_4R_3$$

10.821 INVALID-ORDER-821
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s}{C_3 C_4 C_L L_3 L_4 L_L R_3 R_L s^6 + C_3 C_4 L_3 L_4 L_L R_3 s^5 + C_3 C_4 L_3 L_4 L_L R_3 s^5 + C_3 C_4 L_3 L_4 R_3 R_L s^4 + 2 C_3 C_4 L_3 L_L R_3 R_L s^4 + C_3 C_4 L_4 L_L R_3 R_L s^4 + C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 C_L R_3 R_L s^4 + C_3$$

10.822 INVALID-ORDER-822
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_LR_2s^6 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4C_LL_4L_LR_3R_Ls^5 + C_3C_4L_3L_4L_Ls^5 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_Ls^4 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_3L_3R_3s^4 + C_3C_4C_4L_3L_3L_3R_3s^4 + C_3C_4C_4L_3L_3L_3R_3s^4 + C_3C_4C_4L_3L_3L_3R_3s^4 + C_3C_4C_4L_$$

10.823 INVALID-ORDER-823
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RL_s^6 + C_3C_4C_LL_3L_4R_3R_Ls^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4C_LL_4L_LR_3R_Ls^5 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_Ls^4 + 2C_3C_4L_3L_4R_3R_Ls^5 + C_3C_4C_LL_4L_LR_3R_Ls^5 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_3L_3c^4 + C_3C_4L_3L_3c^4 + C_3C_4L_3L_3c^4 + C_3C_4L_3c^4 + C_3C_4L_3c^4 + C_3C_4L_3c^4 + C_3C_4L_3c^4 + C_3C_4$$

10.824 INVALID-ORDER-824
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_3 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_3 R_L s^4 + C_3 L_3 L_4 R_3 s^3 + C_3 L_3 L_4 R_L s^3 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_4 R_3 R_L s^2 + 2 C_4 L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L s^2 + 2 C_4 L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L s^2 + 2 C_4 L_4 R_3 R_L s^2$$

10.825 INVALID-ORDER-825
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_3 s^4 + C_3 L_3 L_4 s^3 + 2 C_3 L_3 R_3 s^2 + C_3 L_4 R_3 s^2 + 2 C_4 L_4 R_3 s^2 + C_L L_4 R_3 s^2 + L_4 s + 2 R_3 R_3 s^2 + C_4 L_4 R_3 s^$$

10.826 INVALID-ORDER-826
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_4 R_3 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_3 R_L s^4 + C_3 C_L L_3 L_4 R_3 R_L s^3 + C_3 L_3 L_4 R_L s^3 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_4 R_3 R_L s^2 + 2 C_4 L_4 R_3 R_L s^2 + C_L L_4 R_3 R_L s^2 + L_4 R_3 s + L_4 R_L s + 2 R_3 R_L s^2 + C_4 R_3 R_L s^2 + C_$$

10.827 INVALID-ORDER-827
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_3 L_3 s^2 + 1\right) \left(C_L R_L s + 1\right)}{2 C_3 C_4 C_L L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_L s^4 + 2 C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_4 R_3 R_L s^3 + C_3 L_3 L_4 s^3 + 2 C_3 L_4 R_3 s^2 + C_3 L_4 R_3 s^2 + 2 C_4 C_L R_3 R_L s^3 + C_3 C_L L_4 R_3 R_L s^3 +$$

10.828 INVALID-ORDER-828
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 s \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{2 C_3 C_4 C_L L_3 L_4 L_L R_3 s^6 + 2 C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_L L_3 L_4 R_3 s^4 + 2 C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_4 L_L R_3 s^4 + C_3 L_3 L_4 s^3 + 2 C_3 L_3 R_3 s^2 + C_3 L_4 R_3 s^2 + 2 C_4 C_L L_4 L_4 R_3 s^4 + C_3 L_4 R_$$

10.829 INVALID-ORDER-829
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_4 L_L R_3 s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_3 s^4 + C_3 C_L L_3 L_4 L_L R_3 s^4 + C_3 L_3 L_4 L_L s^3 + C_3 L_3 L_4 R_3 s^2 + 2 C_3 L_3 L_L R_3 s^2 + C_3 L_4 L_L R_3 s^2 + C_L L_4 L_L R_3 s^2 + L_4 L_L s + L_4 R_3 + 2 L_L R_3 t^2 + L_4 L_L t^$$

10.830 INVALID-ORDER-830
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.831 INVALID-ORDER-831
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.832 INVALID-ORDER-832
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.833 INVALID-ORDER-833
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{L_4 R_3 R_L}{2C_3 C_4 C_L L_3 L_4 L_L R_3 R_L s^6 + 2C_3 C_4 L_3 L_4 R_3 R_L s^4 + C_3 C_L L_3 L_4 L_L R_3 s^5 + C_3 C_L L_3 L_4 L_L R_3 s^5 + C_3 C_L L_3 L_4 L_L R_3 R_L s^4 + 2C_3 C_L L_3 L_4 R_3 R_L s^4 + C_3 C_L L_4 L_L R_3 R_L s^4 + C_3 C_L L_3 L_4 L_L R_3 R_L s$$

10.834 INVALID-ORDER-834
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_4 L_3 R_4 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 R_3 R_4 R_L s^2 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s^3 + C_3 C_4 R_3 R_4 R_L s^3 + C_3 C_4 R_4 R_L s^3 + C_4 R_4 R_L$$

10.835 INVALID-ORDER-835
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 s^2 + C_4 R_4 s + 1\right)}{C_3 C_4 C_L L_3 L_4 R_3 s^5 + C_3 C_4 L_L R_3 R_4 s^4 + C_3 C_4 L_3 R_3 s^3 + C_3 C_4 L_3 R_4 s^3 + C_3 C_4 L_4 R_3 s^3 + C_3 C_4 L_3 R_3 s^3 + C_3 L_4 R_3 s^3$$

10.836 INVALID-ORDER-836
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 C_4 C_L L_3 L_4 R_3 R_L s^5 + C_3 C_4 C_L L_3 R_3 R_4 R_L s^4 + C_3 C_4 L_3 L_4 R_3 s^4 + C_3 C_4 L_3 L_4 R_1 s^4 + C_3 C_4 L_3 R_3 R_4 s^3 + 2 C_3 C_4 L_3 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^3 + C_3 C_4 L_4 R_3 R_L s^3 + C_3 C_4 L_3 R_4 R_L s^4 + C_3 C_4 R_4$$

10.837 INVALID-ORDER-837
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L_4R_Ls^5 + C_3C_4C_LL_3R_3R_4s^4 + 2C_3C_4C_LL_3R_3R_Ls^4 + C_3C_4C_LL_3R_4R_Ls^4 + C_3C_4C_LL_4R_3R_Ls^4 + C_3C_4C_LL_3R_4R_Ls^4 + C_3C_4C_LL_3R_3$$

10.838 INVALID-ORDER-838
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_3s^5 + 2C_3C_4C_LL_3L_LR_3s^5 + C_3C_4C_LL_3L_LR_4s^5 + C_3C_4C_LL_3R_3R_4s^4 + C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_4L_LR_3s^5 + C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L_4$$

10.839 INVALID-ORDER-839
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.840 INVALID-ORDER-840
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_Ls^6 + C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L_4R_Ls^5 + 2C_3C_4C_LL_3L_LR_3s^5 + C_3C_4C_LL_3L_LR_4s^5 + C_3C_4C_LL_3R_3R_4s^4 + 2C_3C_4C_LL_3R_3R_Ls^4 + C_3C_4C_LL_3R_4R_Ls^5 + 2C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L_4R_3s^5 + C_3C_4C_LL_3L$$

10.841 INVALID-ORDER-841
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3R_Ls^6 + C_3C_4C_LL_3L_LR_3R_4R_Ls^5 + C_3C_4L_3L_4L_Rs^5 + C_3C_4L_3L_4L_Rs^5 + C_3C_4L_3L_4R_3R_Ls^4 + C_3C_4L_3L_4R_3R_4s^4 + C_3C_4L_3L$$

10.842 INVALID-ORDER-842
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.843 INVALID-ORDER-843
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RL_s^6 + C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + C_3C_4C_LL_3L_LR_3R_4s^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^5 + 2C_3C_4C_LL_3L_LR_3R_Ls^$$

10.844 INVALID-ORDER-844
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{L_4 R_3 R_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_3 R_4 s^4 + C_3 L_3 L_4 R_3 R_4 s^3 + 2 C_3 L_3 L_4 R_3 R_L s^3 + C_3 L_3 L_4 R_3 R_4 R_L s^2 + C_3 L_4 R_3 R_4 R_L s^2 + 2 C_4 L_4 R_3 R_4 R_L s^2 + L_4 R_3 R_4 s + 2 L_4 R_3 R_L s + L_4 R_3 R_4 R_L s^2 + 2 C_4 L_4 R_3 R_4 R_L s^2 + 2 C_4$$

10.845 INVALID-ORDER-845
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_4 R_3 R_4 s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 R_3 R_4 s^4 + C_3 C_L L_3 L_4 R_3 R_4 s^4 + 2 C_3 L_3 L_4 R_3 s^3 + C_3 L_3 L_4 R_4 s^3 + 2 C_3 L_3 R_3 R_4 s^2 + C_3 L_4 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_4 s^2 + C_L L_4 R_3 R_4 s^2 + 2 L_4 R_3 s + L_4 R_4 s + 2 R_3 R_4 s^2 + 2 C_4 L_4 R_3 R_4 s^2 + C_4 L_4 R_3 R_4 s^$$

10.846 INVALID-ORDER-846
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.847 INVALID-ORDER-847 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

10.848 INVALID-ORDER-848 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

10.849 INVALID-ORDER-849 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.850 INVALID-ORDER-850 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3R_4s^6 + 2C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + 2C_3C_4L_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_LR_3s^5 + C_3C_LL_3L_4L_LR_4s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_LR_3s^5 + C_3C_LL_3L_4L_LR_4s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_LR_3s^5 + C_3C_LL_3L_4L_LR_4s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_LR_3s^5 + C_3C_LL_3L_4L_LR_4s^5 + C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_4R_3R_4s^4 + 2C_3C_LL_3L_4L_4R_3R_4s^4 + 2C_3C_LL_3L_4R_3R_4s^4 + 2C_$

10.851 INVALID-ORDER-851 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right)$

 $H(s) = \frac{L_4 L_L R_3 R_4 R_L s \left(C_3 L_3 s^2 + 1\right)}{2 C_3 C_4 L_3 L_4 L_L R_3 R_4 R_L s^4 + C_3 C_L L_3 L_4 L_L R_3 R_4 R_L s^4 + C_3 L_3 L_4 L_L R_3 R_4 s^3 + 2 C_3 L_3 L_4 L_L R_3 R_L s^3 + C_3 L_3 L_4 L_L R_3 R_4 R_L s^2 + 2 C_3 L_3 L_L R_3 R_4 R_L s^2 + C_3 L_3 L_4 L_L R_3 R_4 R_L s^3 + C_3 L_4 L_$

10.852 INVALID-ORDER-852
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.853 INVALID-ORDER-853
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_RR_3R_4R_Ls^6 + 2C_3C_4L_3L_4R_3R_4R_Ls^4 + C_3C_LL_3L_4L_RR_3R_4s^5 + 2C_3C_LL_3L_4L_RR_3R_Ls^5 + C_3C_LL_3L_4L_RR_4R_Ls^5 + C_3C_LL_3L_4R_3R_4R_Ls^4 + 2C_3C_LL_3L_4L_RR_3R_4s^5 + 2C_3C_LL_3L_4L_RR_3R_Ls^5 + C_3C_LL_3L_4L_RR_3R_4R_Ls^4 + 2C_3C_LL_3L_4L_RR_3R_4s^5 + 2C_3C_LL_3L_4L_RR_3R_Ls^5 + C_3C_LL_3L_4L_RR_3R_4R_Ls^4 + 2C_3C_LL_3L_4L_RR_3R_4s^5 + 2C_3C_LL_3L_4L_RR_3R_4R_Ls^4 + 2C_3C_LL_3L_4L_RR_3R_4s^5 + 2C_3C_LL_3L_4L_RR_3R_4s^5 + 2C_3C_LL_3L_4L_RR_3R_4R_Ls^4 + 2C_3C$$

10.854 INVALID-ORDER-854
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 R_4 s^2 + L_4 s + R_4\right)}{C_3 C_4 L_3 L_4 R_3 R_4 s^4 + 2 C_3 C_4 L_3 L_4 R_3 R_L s^4 + C_3 C_4 L_3 L_4 R_4 R_L s^4 + C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 L_3 L_4 R_3 s^3 + C_3 L_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 L_3 R_4 R_L s^3 +$$

10.855 INVALID-ORDER-855
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.856 INVALID-ORDER-856
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_4R_Ls^5 + C_3C_4L_3L_4R_3R_4s^4 + 2C_3C_4L_3L_4R_3R_Ls^4 + C_3C_4L_3L_4R_3R_4s^4 + C_3C_4L_4R_3R_4R_Ls^3 + C_3C_LL_3L_4R_3R_Ls^4 + C_3C_LL_3R_3R_4R_Ls^3 + C_3C_LL_3$$

10.857 INVALID-ORDER-857
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_4R_4R_Ls^5 + C_3C_4C_LL_4R_3R_4R_Ls^4 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_4R_3R_4s^3 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_3L_4R_3s^4 + C_3C_4L_3L_3L_4R_3s^4 + C_3C_4L_3L_3L_3L_3R_3s^4 + C_3C_4L_3L_3L_3R_3s^4 + C_3C_4L_3L_3L_3R_3s^4 + C_3C_4L_3L_3L_3R_3s^4 + C_3C_4L_3L_3L_3R_3s^4 + C_3C_4L_$$

10.858 INVALID-ORDER-858
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RA_s^6 + C_3C_4C_LL_3L_4R_3R_4s^5 + C_3C_4C_LL_4L_LR_3R_4s^5 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_4s^4 + C_3C_4L_4R_3R_4s^3 + C_3C_4L_3L_4L_LR_3R_4s^4 + C_3C_4L_3L_4L_RA_s^2 + C_3C_4L_3L_4L_AL_A^2 + C_3C_4L_3L_4L_A^2 + C_3C_4L_4L_4L_4L_4L_4 + C_3C_4L_4L_4L_4L_4 + C_3C_4L_4L_4L_4L_4 + C_3C_4L_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4L_4 + C_3C_4L_4 +$$

10.859 INVALID-ORDER-859
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.860 INVALID-ORDER-860
$$Z(s) = \left(\frac{L_{1s}}{C_{1}L_{1}s^{2}+1}, \frac{1}{C_{2}s}, \infty, \infty, \infty, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$$

10.861 INVALID-ORDER-861
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_4 C_L L_3 L_4 L_L R_3 R_4 R_L s^6 + C_3 C_4 L_3 L_4 L_L R_3 R_4 s^5 + 2 C_3 C_4 L_3 L_4 L_L R_3 R_L s^5 + C_3 C_4 L_3 L_4 L_L R_4 R_L s^5 + C_3 C_4 L_3 L_4 L_L R_3 R_4 R_L s^4 + C_3 C_4 L_4 L_L R_3 R_4 R_L s^4 + C_3 C_4 L_3 L_4 L_L R_3 R_4$$

10.862 INVALID-ORDER-862
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4L_LR_3R_4s^6 + 2C_3C_4C_LL_3L_4L_LR_3R_Ls^6 + C_3C_4C_LL_3L_4L_LR_4R_Ls^6 + C_3C_4C_LL_4L_LR_3R_4R_Ls^5 + 2C_3C_4L_3L_4L_LR_3s^5 + C_3C_4L_3L_4L_LR_4s^5 + C_3C_4L_3L_4L_LR_3s^6 + C_3C_4L_3L_4L_4L_3s^6 + C_3C_4L_3L_4L_3s^6 + C_3C_4L_3L_3L_4L_3s^6 + C_3C_4L_3L_3L_3s^6 + C_3C_4L_3L_3s^6 + C_3C_4L_3L_$$

10.863 INVALID-ORDER-863
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.864 INVALID-ORDER-864
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L\right)$$

$$H(s) = \frac{R_3 R_4 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_4 L_4 s^2 + 1\right)}{C_3 C_4 L_3 L_4 R_3 R_4 s^4 + 2 C_3 C_4 L_3 L_4 R_4 R_L s^4 + 2 C_3 C_4 L_3 R_3 R_4 R_L s^3 + C_3 C_4 L_4 R_3 R_4 R_L s^3 + C_3 L_3 R_3 R_4 s^2 + 2 C_3 L_3 R_3 R_L s^2 + C_3 L_3 R_4 R_L s^2 + C_3 R_3 R_4 R_L s^3 + C_3 L_3 R_4 R_L s^3 + C_3 L_3$$

10.865 INVALID-ORDER-865
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$$

10.866 INVALID-ORDER-866
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$$

10.867 INVALID-ORDER-867
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_4R_4R_Ls^5 + 2C_3C_4C_LL_3R_3R_4R_Ls^4 + C_3C_4C_LL_4R_3R_4R_Ls^4 + 2C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_4R_3s^4 + C_3C_4L_3L_3L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_3L_3s^4 + C_3C_4L_3L_3s^4 + C$$

10.868 INVALID-ORDER-868
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$$

10.869 INVALID-ORDER-869
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.870 INVALID-ORDER-870
$$Z(s) = \left(\frac{L_{1s}}{C_{1}L_{1}s^{2}+1}, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, \infty, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$$

$$H(s) = \frac{1}{2C_3C_4C_LL_3L_4L_LR_3s^6 + C_3C_4C_LL_3L_4L_RA_s^6 + C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R_Ls^5 + C_3C_4C_LL_3L_4R_4R_Ls^5 + 2C_3C_4C_LL_3L_4R_3R_4s^5 + 2C_3C_4C_LL_3L_4R_3R$$

10.871 INVALID-ORDER-871
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.872 INVALID-ORDER-872 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.873 INVALID-ORDER-873
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$