Filter Summary Report: TIA,some,parasitic,Z1,Z5,ZL

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10.40INVALID-ORDER-40 $Z(s) = (R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s})$. 62
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10.49INVALID-ORDER-49 $Z(s) = (R_1, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls})$. 63
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10.51INVALID-ORDER-51 $Z(s) = (R_1, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$. 63
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10.54INVALID-ORDER-54 $Z(s) = \left(R_1, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$. 63
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$10.57 \text{INVALID-ORDER-57 } Z(s) = \left(R_1, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots $. 64
10.58INVALID-ORDER-58 $Z(s) = \left(R_1, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$. 64
10.59INVALID-ORDER-59 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_f} + \frac{1}{L_f s}}\right)$. 64
$10.60 \text{INVALID-ORDER-} 60 \ Z(s) = \left(R_1, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_{\mathcal{E}}} + \frac{1}{L_{\mathcal{E}} s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $. 64
10.61INVALID-ORDER-61 $Z(s) = \left(R_1, \infty, \infty, \infty, \infty, \frac{1}{C_1 s + \frac{1}{2} + \frac{1}{2}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + \frac{1}{2} + \frac{1}{2}}\right)$. 64
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$10.63 \text{INVALID-ORDER-} 63 \ Z(s) = \left(R_1, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \dots $	
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10.66INVALID-ORDER-66 $Z(s) = \left(R_1, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	65
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$10.82 \text{INVALID-ORDER-82 } Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$	67
10.83INVALID-ORDER-83 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$	67
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$ \begin{aligned} & 10.84 \text{INVALID-ORDER-84} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \\ & 10.85 \text{INVALID-ORDER-85} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{L_L L s}{C_L L s^2 + 1} + R_L \right) \\ & 10.86 \text{INVALID-ORDER-86} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s^2} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \\ & 10.87 \text{INVALID-ORDER-87} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_L s} \right) \\ & 10.88 \text{INVALID-ORDER-88} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_R L s + 1} \right) \\ & 10.89 \text{INVALID-ORDER-90} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \right) \\ & 10.90 \text{INVALID-ORDER-90} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L s^2 + 1} \right) \\ & 10.92 \text{INVALID-ORDER-91} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L L s^2 + 1} \right) \\ & 10.92 \text{INVALID-ORDER-92} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 L s^2 + 1} \right) \\ & 10.92 \text{INVALID-ORDER-92} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s^2 + 1} \right) \\ & 10.92 \text{INVALID-ORDER-92} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s} + \frac{1}{C_5 s} \right) \end{aligned}$	67 67 67 68 68 68
$10.84 \text{INVALID-ORDER-84 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$ $10.85 \text{INVALID-ORDER-85 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{L_L s}{C_L L s^2 + 1} + R_L\right)$ $10.86 \text{INVALID-ORDER-86 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$ $10.87 \text{INVALID-ORDER-87 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_5 s}, \ \frac{1}{C_L R_L s + 1}\right)$ $10.88 \text{INVALID-ORDER-88 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$ $10.89 \text{INVALID-ORDER-89 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$ $10.90 \text{INVALID-ORDER-90 } Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_5 s}\right)$	67 67 67 68 68 68 68

$10.95 \text{INVALID-ORDER-95} \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 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) \ \dots $	68
10.96INVALID-ORDER-96 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s+1}, \frac{1}{C_L s}\right)$	68
10.97INVALID-ORDER-97 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s+1}, \frac{R_L}{C_L R_L s+1}\right)$	68
10.98INVALID-ORDER-98 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$	69
$10.99 \text{INVALID-ORDER-99 } Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right) \dots \dots$	69
$10.10 \text{ @NVALID-ORDER-100 } Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right) $	69
10.10INVALID-ORDER-101 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$	69
10.10 2 NVALID-ORDER-102 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	69
10.10 E NVALID-ORDER-103 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + \hat{R}_L\right)$	69
10.104NVALID-ORDER-104 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	69
10.10 INVALID-ORDER-105 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	69
$10.10 \text{ 6NVALID-ORDER-} 106 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_L R_L s + 1}\right) \dots $	69
$10.10 \text{ INVALID-ORDER-} 107 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right) \dots $	70
10.10\textbf{ENVALID-ORDER-108} $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	70
10.10 9 NVALID-ORDER-109 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	70
10.11 0 NVALID-ORDER-110 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	70
10.11INVALID-ORDER-111 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	70
10.112NVALID-ORDER-112 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	70
10.11\(\text{INVALID-ORDER-113} \(Z(s) = \left(L_1 s, \infty, \inf	70
10.11\(\frac{1}{4}\)NVALID-ORDER-114\(Z(s) = \left(L_1 s, \infty, \in	70
10.115NVALID-ORDER-115 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	71
$10.11 \text{ CNVALID-ORDER-116 } Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) $	71
10.11 INVALID-ORDER-110 $Z(s) = \begin{pmatrix} L_1s, \ \infty, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_LR_Ls + 1} \end{pmatrix}$	71
10.11&NVALID-ORDER-118 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	71
10.11 9 NVALID-ORDER-119 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	71
10.12 0 NVALID-ORDER-120 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	71
10.12 I NVALID-ORDER-121 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	71
10.122NVALID-ORDER-122 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	71
10.12\frac{\pi}{2}\text{NVALID-ORDER-123} $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)^{\frac{1}{2}}$	72
10.12#NVALID-ORDER-124 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$	72
10.125NVALID-ORDER-125 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$	72
10.126NVALID-ORDER-126 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$	72
$10.12 \text{INVALID-ORDER-} 125 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s}\right) $ $10.12 \text{INVALID-ORDER-} 126 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1}\right) $ $10.12 \text{INVALID-ORDER-} 127 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right) $	72
10.12 NVALID-ORDER-128 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$	72

10.12 9 NVALID-ORDER-129 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.13 0 NVALID-ORDER-130 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.13INVALID-ORDER-131 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.132NVALID-ORDER-132 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.13\(\text{ENVALID-ORDER-133} \(Z(s) = \left(L_1 s, \infty, \inf
10.13\(\text{LNVALID-ORDER-134}\(Z(s) = \left(L_1 s, \infty, \inf
10.13 INVALID-ORDER-135 $Z(s) = (L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s})$
10.136NVALID-ORDER-136 $Z(s) = (L_1 s, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1})$
10.13 TNVALID-ORDER-137 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.13 NVALID-ORDER-138 $Z(s) = (L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s})$
10.13 9 NVALID-ORDER-139 $Z(s) = (L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1})$
10.14 0 NVALID-ORDER-140 $Z(s) = (L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s})$
10.14INVALID-ORDER-141 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.142NVALID-ORDER-142 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.143NVALID-ORDER-143 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.14 INVALID-ORDER-144 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
10.145NVALID-ORDER-145 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
10.146NVALID-ORDER-146 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
10.14\bar{T}\text{NVALID-ORDER-147} $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
10.14\(\text{8NVALID-ORDER-148}\) $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
10.14 9 NVALID-ORDER-149 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
$10.15 \text{@NVALID-ORDER-}150 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots $
10.15INVALID-ORDER-151 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.152NVALID-ORDER-152 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.15 \text{ 2NVALID-ORDER-153 } Z(s) = \left(L_{1}s, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}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) $ $10.15 \text{ 2NVALID-ORDER-154 } Z(s) = \left(L_{1}s, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, \ R_{L}\right) $ $78 \text{ 2NVALID-ORDER-154 } Z(s) = \left(L_{1}s, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, \ R_{L}\right) $
10.154NVALID-ORDER-154 $Z(s) = (L_1 s, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L)$
10.15 INVALID-ORDER-155 $Z(s) = (L_1 s, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s})$
10.15 INVALID-ORDER-155 $Z(s) = \begin{pmatrix} L_1s, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls} \end{pmatrix}$. 10.15 INVALID-ORDER-156 $Z(s) = \begin{pmatrix} L_1s, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1} \end{pmatrix}$. 10.15 INVALID-ORDER-156 $Z(s) = \begin{pmatrix} L_1s, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1} \end{pmatrix}$. 10.15 INVALID-ORDER-157 $Z(s) = \begin{pmatrix} L_1s, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls} \end{pmatrix}$.
10.15 TNVALID-ORDER-157 $Z(s) = (L_1 s, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s})$
$10.15 \texttt{RNVALID-ORDER-} 158 \ Z(s) = \left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_L L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.15 9 NVALID-ORDER-159 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_7 L_7 s^2 + 1}\right)$
10.16 INVALID-ORDER-160 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
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10.16 INVALID-ORDER-161 $\boldsymbol{Z}(s) =$	$\left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	76
10.162NVALID-ORDER-162 $Z(s) =$	$(L_1s, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L)$	76
	$\left(L_{1}s, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \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 $	77
10.16 #NVALID-ORDER-164 $Z(s)=$	$\left(L_{1}s, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \ R_{L}\right)$	77
	$\left(L_{1}s, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \ \frac{1}{C_{L}s}\right)$	77
10.16 6 NVALID-ORDER-166 $Z(s) =$	$\left(L_1 s, \; \infty, \; \infty, \; \infty, \; rac{R_5 \left(L_5 s + rac{1}{C_5 s} ight)}{L_5 s + R_5 + rac{1}{C_5 s}}, \; rac{R_L}{C_L R_L s + 1} ight) \; \ldots \; $	77
10.16 TNVALID-ORDER-167 $Z(s) =$	()	77
	$\left(L_{1}s, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \ L_{L}s+\frac{1}{C_{L}s}\right) $	77
10.16 9 NVALID-ORDER-169 $Z(s) =$	$\left(L_1 s, \; \infty, \; \infty, \; \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \; \frac{L_L s}{C_L L_L s^2 + 1}\right)$	77
	$\left(L_{1}s, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots $	77
10.17 I NVALID-ORDER-171 $Z(s) =$	$\left(L_1 s, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right)$	78
	$\left(L_{1}s, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots $	78
10.17 % NVALID-ORDER-173 $Z(s) =$	$\left(L_{1}s, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}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) \ \dots \ $	78
	$\left(\frac{1}{C_1s},\;\infty,\;\infty,\;\infty,\;R_5,\;R_L ight)$	78
10.17 SNVALID-ORDER-175 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$	78
10.17 6 NVALID-ORDER-176 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$	78
10.17 NVALID-ORDER-177 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$	78
10.17&NVALID-ORDER-178 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$	78
10.17 9 NVALID-ORDER-179 $Z(s)=% {\textstyle\int\limits_{s=0}^{\infty }} \left({{\left {x_{s}} \right }} \right) \left({{\left {x_{s}} \right }} \right)$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	79
10.18 0 NVALID-ORDER-180 $Z(s)=$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \kappa, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) $ $\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right) $ $\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right) $	79
10.18INVALID-ORDER-181 $Z(s) = \displaystyle$	$\left(rac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ rac{1}{C_5s},\ rac{1}{C_Ls} ight)$	79
10.18 2 NVALID-ORDER-182 $Z(s) =$	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$	79
10.18 B NVALID-ORDER-183 $Z(s) =$	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$	79
10.18#NVALID-ORDER-184 $Z(s)=$	$\begin{pmatrix} C_{1s}, & \infty, & \infty, & \infty, & C_{5s}, & C_{Ls} \end{pmatrix}$ $\begin{pmatrix} \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{1}{C_{5s}}, & R_L + \frac{1}{C_{Ls}} \end{pmatrix}$ $\begin{pmatrix} \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{1}{C_{5s}}, & L_L s + \frac{1}{C_{Ls}} \end{pmatrix}$ $\begin{pmatrix} \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{1}{C_{5s}}, & \frac{L_L s}{C_L L_L s^2 + 1} \end{pmatrix}$ $\begin{pmatrix} \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{1}{C_{5s}}, & \frac{L_L s}{C_L L_L s^2 + 1} \end{pmatrix}$	79
10.18 INVALID-ORDER-185 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	79
10.18 6 NVALID-ORDER-186 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{B_I} + \frac{1}{L_Ls}}\right)$	79
10.18 T NVALID-ORDER-187 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	79
10.18 NVALID-ORDER-188 $Z(s) =$	$\left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)'$	80
10.18 9 NVALID-ORDER-189 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, R_{L} + \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	80
10.19 0 NVALID-ORDER-190 $Z(s) =$	$(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls})$	80
10.19 INVALID-ORDER-191 $Z(s) = \displaystyle$		80

10.19 2 NVALID-ORDER-192 $Z(s) = ($	$\frac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; \frac{R_5}{C_5 R_5 s + 1}, \; L_L s + R_L + \frac{1}{C_L s} $	80
10.19 & NVALID-ORDER-193 $Z(s) = \left(\frac{1}{s} \right)$	$rac{1}{C_{1}s}, \; \infty, \; \infty, \; \infty, \; rac{R_{5}}{C_{5}R_{5}s+1}, \; rac{1}{C_{L}s+rac{1}{R_{T}}+rac{1}{L_{L}s}} ight) \; \ldots \; $	80
10.194NVALID-ORDER-194 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	$\frac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; \frac{R_5}{C_5 R_5 s + 1}, \; \frac{L_L s}{C_L L_L s^2 + 1} + R_L \Big) \;\; \dots \; \dots \;$	80
10.19 SNVALID-ORDER-195 $Z(s) = \left(\frac{1}{2}\right)^{-1}$	$rac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; rac{R_5}{C_5 R_5 s + 1}, \; rac{R_L \left(L_L s + rac{1}{C_L s} ight)}{L_L s + R_L + rac{1}{C_I s}} ight) \;\; \ldots \;\; \ldots \;\; \ldots \;\; \ldots$	80
10.196NVALID-ORDER-196 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	$rac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; R_5 + rac{1}{C_5 s}, \; rac{1}{C_L s} ight) \; \ldots \; $	81
10.19 T NVALID-ORDER-197 $Z(s) = \left(\frac{1}{2} \right) \left(\frac{1}{2}$	$\frac{1}{c_1s}$, ∞ , ∞ , ∞ , $R_5 + \frac{1}{C_5s}$, $\frac{R_L}{C_LR_Ls+1}$	81
10.19&NVALID-ORDER-198 $Z(s) = \left(\frac{1}{s}\right)^{-1}$	$\frac{1}{t_1s}$, ∞ , ∞ , ∞ , $R_5 + \frac{1}{C_5s}$, $R_L + \frac{1}{C_Ls}$)	81
10.19 9 NVALID-ORDER-199 $Z(s) = \left(\frac{1}{s}\right)$	$\frac{1}{c_1s}$, ∞ , ∞ , ∞ , $R_5 + \frac{1}{C_5s}$, $L_Ls + \frac{1}{C_Ls}$)	81
10.20 0 NVALID-ORDER-200 $Z(s) = \left(\frac{1}{2} \right)$	$\frac{1}{C_1s}$, ∞ , ∞ , ∞ , $R_5 + \frac{1}{C_5s}$, $\frac{L_Ls}{C_LL_Ls^2+1}$)	81
10.20INVALID-ORDER-201 $Z(s) = \left(\frac{1}{2} \right) \left(\frac{1}{2} \right$	$\frac{1}{C_1s}$, ∞ , ∞ , ∞ , $R_5 + \frac{1}{C_5s}$, $L_Ls + R_L + \frac{1}{C_Ls}$)	81
10.202NVALID-ORDER-202 $Z(s) = \left(\frac{1}{2} \right)$	$rac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; R_5 + rac{1}{C_5 s}, \; rac{1}{C_L s + rac{1}{R_L} + rac{1}{L_L s}} ight) \;\; \ldots \;\;$	81
\	$\frac{1}{C_1s}$, ∞ , ∞ , ∞ , $R_5 + \frac{1}{C_5s}$, $\frac{L_Ls}{C_LL_Ls^2+1} + R_L$	81
10.204NVALID-ORDER-204 $Z(s) = \left(\frac{1}{2}\right)^{-1}$	$rac{1}{C_{1}s}, \; \infty, \; \infty, \; \infty, \; R_{5} + rac{1}{C_{5}s}, \; rac{R_{L}\left(L_{L}s + rac{1}{C_{L}s} ight)}{L_{L}s + R_{L} + rac{1}{C_{L}s}} ight) \; \ldots \; $	81
10.20 Invalid-order-205 $Z(s) = \left(\frac{10.20}{5}\right)$	$rac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; L_5 s + rac{1}{C_5 s}, \; R_L \Big) \; \ldots \; $	82
10.20 6 NVALID-ORDER-206 $Z(s) = \left(\frac{1}{2} \right)$	$\frac{1}{c_1s}$, ∞ , ∞ , ∞ , $L_5s+\frac{1}{C_5s}$, $\frac{1}{C_Ls}$	82
10.20 T NVALID-ORDER-207 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$\frac{1}{c_1s}$, ∞ , ∞ , ∞ , $L_5s + \frac{1}{C_5s}$, $\frac{R_L}{C_LR_Ls+1}$	82
10.20 NVALID-ORDER-208 $Z(s) = \left(\frac{1}{2}\right)^{1/2}$	$rac{1}{C_1s},\;\infty,\;\infty,\;\infty,\;L_5s+rac{1}{C_5s},\;R_L+rac{1}{C_Ls} ight)\;\;\ldots$	82
10.209NVALID-ORDER-209 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$\frac{1}{c_1s}, \; \infty, \; \infty, \; \infty, \; L_5s + \frac{1}{C_5s}, \; L_Ls + \frac{1}{C_Ls} $	82
10.21 0 NVALID-ORDER-210 $Z(s) = 0$	$\frac{1}{c_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \Big)$	82
10.21INVALID-ORDER-211 $Z(s) = \left(\begin{array}{c} \\ \end{array} \right)$	$\frac{1}{C_1s}$, ∞ , ∞ , ∞ , $L_5s + \frac{1}{C_5s}$, $L_Ls + R_L + \frac{1}{C_Ls}$	82
10.21 2 NVALID-ORDER-212 $Z(s) = \left(\frac{1}{2} \right)$	$\frac{1}{C_1 s}$, ∞ , ∞ , ∞ , $L_5 s + \frac{1}{C_5 s}$, $\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	82
10.21 B NVALID-ORDER-213 $Z(s) = \left(\frac{1}{2}\right)^{n}$	$\frac{1}{C_1s}$, ∞ , ∞ , ∞ , $L_5s + \frac{1}{C_5s}$, $\frac{L_Ls}{C_LL_Ls^2+1} + R_L$	83
10.21#NVALID-ORDER-214 $Z(s) = \left(\right)$	$\frac{1}{C_{1s}}, \infty, \infty, \infty, \infty, L_{5s} + \frac{1}{C_{5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$ $\frac{1}{C_{1s}}, \infty, \infty, \infty, \infty, \frac{L_{5s}}{C_5L_5s^2 + 1}, R_L\right) \qquad \qquad$	83
10.21 5 NVALID-ORDER-215 $Z(s) = \left(\frac{1}{2}\right)$	$\frac{1}{r_1s}$, ∞ , ∞ , ∞ , $\frac{L_5s}{C_5L_5s^2+1}$, R_L)	83
10.21 6 NVALID-ORDER-216 $Z(s) = \left(\frac{1}{2} \right)$	$\frac{1}{c_1s}, \; \infty, \; \infty, \; \infty, \; \frac{L_5s}{C_5L_5s^2+1}, \; \frac{1}{C_Ls} \Big) \;\; \ldots \;$	83
10.21 TNVALID-ORDER- $217 Z(s) = ($	$\frac{1}{r}$, ∞ , ∞ , ∞ , $\frac{L_5s}{\sigma}$, $\frac{R_L}{r^2+1}$, $\frac{R_L}{\sigma}$)	83
10.21 NVALID-ORDER-218 $Z(s) = \left(\frac{1}{2}\right)^{1/2}$	$rac{1}{C_{1}s}, \; \infty, \; \infty, \; \infty, \; rac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \; R_{L}+rac{1}{C_{L}s} \Big) \; . \; . \; . \; . \; . \; . \; . \; . \; . \; $	83
10.21 9 NVALID-ORDER-219 $Z(s) = \left(\frac{1}{2}\right)^{n}$	$\frac{1}{c_1 s}$, ∞ , ∞ , ∞ , $\frac{L_5 s}{C_5 L_5 s^2 + 1}$, $L_L s + \frac{1}{C_L s}$	83
10.22 0 NVALID-ORDER-220 $Z(s) = \left(\frac{1}{2} \right)$	$rac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; rac{L_5 s}{C_5 L_5 s^2 + 1}, \; rac{L_L s}{C_L L_L s^2 + 1} ight)' \; \ldots \; $	83
10.22INVALID-ORDER-221 $Z(s) = \left(\frac{1}{2}\right)^{-1}$	$\frac{1}{C_{1}s}$, ∞ , ∞ , ∞ , $\frac{L_{5}s}{C_{5}L_{5}s^{2}+1}$, $L_{L}s+R_{L}+\frac{1}{C_{L}s}$	84
10.22 2 NVALID-ORDER-222 $Z(s) = \left(\frac{1}{2} \right)$	$rac{1}{C_{1s}}, \infty, \infty, \infty, rac{L_{5s}}{C_5L_5s^2+1}, rac{1}{C_Ls+rac{1}{R_L}+rac{1}{L_Ls}} ight) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	84
10.22 B NVALID-ORDER-223 $Z(s) = \left(\frac{1}{2} \right)$	$\frac{1}{\sqrt{18}}$, ∞ , ∞ , ∞ , $\frac{L_5s}{C_5L_5s^2+1}$, $\frac{L_Ls}{C_LL_Ls^2+1} + R_L$)	84
10.224NVALID-ORDER-224 $Z(s) = \left(\frac{1}{2} \right)$	$\frac{1}{C_{1}s}$, ∞ , ∞ , ∞ , $\frac{L_{5}s}{C_{5}L_{5}s^{2}+1}$, $\frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right)'$	84
10.225NVALID-ORDER-225 $Z(s) = ($	$\frac{1}{1s}$, ∞ , ∞ , ∞ , $L_5s+R_5+\frac{1}{C_5s}$, R_L)	84

	$\left(\frac{1}{C_{1s}}, \infty, \infty, \infty, L_{5s} + R_{5} + \frac{1}{C_{5s}}, \frac{1}{C_{Ls}}\right)$	84
10.22 T NVALID-ORDER-227 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right) \qquad \dots $	84
10.22\&NVALID-ORDER-228 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$	84
10.229NVALID-ORDER-229 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$	85
10.23 0 NVALID-ORDER-230 $Z(s) =$	$\left(\frac{1}{C_{1s}}, \infty, \infty, \infty, L_{5s} + R_{5} + \frac{1}{C_{5s}}, \frac{L_{Ls}}{C_{LL_{Ls}^{2}+1}}\right)$	85
10.23 I NVALID-ORDER-231 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	85
10.232NVALID-ORDER-232 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right)$	85
10.23 BNVALID-ORDER-233 $Z(s)=$	$\left(\frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}s}, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} + R_{L}\right)$	85
10.23 \! NVALID-ORDER-234 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}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) \dots $	85
10.23 Б NVALID-ORDER-235 $Z(s)=$	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L\right)$	85
10.23 6 NVALID-ORDER-236 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ \frac{1}{C_{L}s}\right)$	85
10.23 T NVALID-ORDER-237 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ \frac{R_{L}}{C_{L}R_{L}s + 1}\right) \dots $	86
10.23&NVALID-ORDER-238 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, R_{L} + \frac{1}{C_{L}s}\right)$	86
10.23 9 NVALID-ORDER-239 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ L_{L}s + \frac{1}{C_{L}s}\right)$	86
10.24 0 NVALID-ORDER-240 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right) \qquad \cdots$	86
10.24INVALID-ORDER-241 $Z(s) =$	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	86
10.24 2 NVALID-ORDER-242 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right) $	86
10.24 3 NVALID-ORDER-243 $Z(s) =$	$\left(C_{5}^{s} + \overline{R_{5}} + \overline{L_{5}}^{s} + C_{L}^{s} C_{L}^{s} + 1 \right)$	86
10.24 #NVALID-ORDER-244 $Z(s)=$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	86
10.245NVALID-ORDER- $245 Z(s) =$		87
10.246NVALID-ORDER- $246 Z(s) =$	$\left(\frac{1}{C_{1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$	87
10.24TNVALID-ORDER- 247 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{R_{L}}{C_{L}R_{L}s+1}\right)$	87
10.24\(\text{NVALID-ORDER-248} \) $Z(s) =$	$\left(\frac{1}{C_{1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right)$	87
10.249NVALID-ORDER-249 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$	87
10.250NVALID-ORDER- $250 Z(s) =$	$ \left(\frac{1}{C_{1s}}, \infty, \infty, \infty, \frac{L_{5s}}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{L_{Ls}}{C_{L}L_{L}s^{2}+1}\right) \qquad \qquad$	87
10.25INVALID-ORDER-251 $Z(s) =$	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	87
10.25 2 NVALID-ORDER-252 $Z(s) =$	$\left(\frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right)\right) \dots \dots$	87
10.258NVALID-ORDER-253 $Z(s) =$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	88
10.25#NVALID-ORDER-254 $Z(s)=$		88
10.25 5 NVALID-ORDER-255 $Z(s) =$	$ \left(\frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5} \left(L_{5}s + \frac{1}{C_{5}s} \right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, R_{L} \right) $ $ \left(\frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5} \left(L_{5}s + \frac{1}{C_{5}s} \right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{1}{C_{L}s} \right) $	88
10.256NVALID-ORDER-256 $Z(s) =$	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right)$	88

10.25 T NVALID-ORDER-257 $Z(s) =$	$\left(rac{1}{C_1 s}, \; \infty, \; \infty, \; \infty, \; rac{R_5 \left(L_5 s + rac{1}{C_5 s} ight)}{L_5 s + R_5 + rac{1}{C_5 s}}, \; rac{R_L}{C_L R_L s + 1} ight) \; \ldots \; $	88
10.25&NVALID-ORDER-258 $Z(s)=$	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$	88
10.25 0 NVALID-ORDER-259 $Z(s)=$	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + \frac{1}{C_Ls}\right)$	88
10.26 0 NVALID-ORDER-260 $Z(s) =$	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	88
10.26INVALID-ORDER-261 $Z(s) =$	$\left(\begin{array}{ccc} C_{1s} & L_{5}s+L_{5}+C_{5}s & C_{Ls} \end{array}\right)$	89
10.26 2 NVALID-ORDER-262 $Z(s) =$	$\left(\begin{array}{ccc} C_{1}s & L_{5}s+R_{5}+\overline{C_{5}s} & C_{L}s+\overline{R_{L}}+\overline{L_{L}s} \end{array} ight)$	89
10.26 % NVALID-ORDER-263 $Z(s) =$	$\begin{pmatrix} c_{1s} & c_{2s} & c_{LLLs+1} \end{pmatrix}$	89
10.26 4 NVALID-ORDER-264 $Z(s)=$	$\left(\begin{smallmatrix}C_1s\end{smallmatrix}\right)^{L_5s+\iota\iota_5+} \left(\begin{smallmatrix}C_5s\end{smallmatrix}\right)^{L_5s+\iota\iota_5+} \left(\begin{smallmatrix}C_1s\end{smallmatrix}\right)^{L_5s+\iota\iota_5+} \left(\begin{smallmatrix}C_1s\end{smallmatrix}\right)^{L_5s+\iota_5+} \left(\begin{smallmatrix}C_1s\end{smallmatrix}\right)^{L_5s+} \left(\begin{smallmatrix}C_1s\end{smallmatrix}\right)^{L_5s+$	89
10.26 5 NVALID-ORDER-265 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, R_5, R_L\right)$	89
10.26 NVALID-ORDER-266 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)$	89
10.26 TNVALID-ORDER-267 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$	89
10.26 NVALID-ORDER-268 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$	89
10.26 9 NVALID-ORDER-269 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, R_5, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$	90
	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	90
10.27INVALID-ORDER-271 $Z(s) = \displaystyle$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ R_5, \ \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 $	90
10.272NVALID-ORDER-272 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$	90
10.27 & NVALID-ORDER-273 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$	90
10.27#NVALID-ORDER-274 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)'$	90
10.27 5 NVALID-ORDER-275 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	90
10.276NVALID-ORDER-276 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$	90
10.27 TNVALID-ORDER-277 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	91
10.27&NVALID-ORDER-278 $Z(s) =$	$ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \frac{1}{C_5s}, & \frac{L_Ls}{C_LL_Ls^2+1} + R_L \end{pmatrix} $ $ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{1}{C_5s}, & \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}} \end{pmatrix} $ $ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5}{C_5R_5s+1}, & R_L + \frac{1}{C_Ls} \end{pmatrix} $ $ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5}{C_5R_5s+1}, & L_Ls + \frac{1}{C_Ls} \end{pmatrix} $ $ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5}{C_5R_5s+1}, & L_Ls + \frac{1}{C_Ls} \end{pmatrix} $	91
10.27 9 NVALID-ORDER-279 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$	91
10.28 0 NVALID-ORDER-280 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)$	91
10.28 I NVALID-ORDER-281 $Z(s) =$	$\left(\frac{R_1}{R_{1-1}}, \infty, \infty, \infty, \frac{R_5}{R_{2-1}}, \frac{L_L s}{R_2 s}\right)$	91
10.28 2 NVALID-ORDER-282 $Z(s) =$	$\left(\frac{R_1}{GR_{-1}}, \infty, \infty, \infty, \frac{R_5}{GR_{-1}}, L_L s + R_L + \frac{1}{G}\right)$	91
10.28BNVALID-ORDER-283 $Z(s) =$	$\left(\frac{R_1}{C_1R_2+1}, \infty, \infty, \infty, \frac{R_5}{C_2R_2+1}, \frac{1}{C_2R_2+1}, \frac{1}{C_2R_2+1}\right)$	91
10.28#NVALID-ORDER-284 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	91
10.28 5 NVALID-ORDER-285 $Z(s)=$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 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) \ \dots $	92
10.28 6 NVALID-ORDER-286 $Z(s) =$	$\left(\frac{R_1}{C_1R_1+1}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_{rs}}, \frac{1}{C_{rs}}\right)$	92
10.28 T NVALID-ORDER-287 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$	92
10.28&NVALID-ORDER-288 $Z(s)=$	$ \left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1} \right) $ $ \left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) $	92

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10.289NVALID-ORDER-289 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) . . . . . . . . .
10.29INVALID-ORDER-291 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots
10.292NVALID-ORDER-292 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) . . . . . . . . . .
10.29 INVALID-ORDER-293 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots \dots
10.294NVALID-ORDER-294 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
10.29 INVALID-ORDER-295 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right) \dots \dots \dots
10.296NVALID-ORDER-296 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_1 s}, \frac{1}{C_1 s}\right) \dots \dots
10.29 INVALID-ORDER-297 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_5 R_1 s + 1}\right) \dots
10.29 NVALID-ORDER-298 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) . . . . .
10.299NVALID-ORDER-299 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots
10.300NVALID-ORDER-300 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . . .
10.302NVALID-ORDER-302 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{L_5 s} + \frac{1}{L_5 s}}\right)
10.30 INVALID-ORDER-305 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_7 L_7 s^2 + 1}, R_L\right) \dots \dots \dots
10.30 INVALID-ORDER-306 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_1 s}\right) . . . . . . . . .
10.30TNVALID-ORDER-307 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right) . . . . .
10.30 NVALID-ORDER-308 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right) \dots
10.309NVALID-ORDER-309 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right) \dots \dots
10.310NVALID-ORDER-310 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . . . .
10.312NVALID-ORDER-312 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)
10.318NVALID-ORDER-313 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots
10.314NVALID-ORDER-314 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^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}}\right)
10.31 INVALID-ORDER-315 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) \dots
10.316NVALID-ORDER-316 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right)
10.31 INVALID-ORDER-317 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.319NVALID-ORDER-319 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots
10.32 NVALID-ORDER-320 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) .....
10.32INVALID-ORDER-321 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
10.32\(\text{2NVALID-ORDER-322}\) Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \, \infty, \, \infty, \, \infty, \, L_5 s + R_5 + \frac{1}{C_5 s}, \, \frac{1}{C_L s + \frac{1}{R_7} + \frac{1}{L_7 s}}\right)
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10.32 B NVALID-ORDER-323 $Z(s) =$	$\begin{pmatrix} C_1R_1S_{\mp 1} & \cdots & C_5S & C_LL_LS_{\mp 1} \end{pmatrix}$	96
10.32#NVALID-ORDER-324 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ L_5s+R_5+\frac{1}{C_5s}, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \ \dots $	96
10.32\$NVALID-ORDER-325 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, R_L\right)$	96
10.326NVALID-ORDER-326 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ \frac{1}{C_Ls}\right) \dots $	97
10.32¶NVALID-ORDER-327 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ \frac{R_L}{C_LR_Ls+1}\right) \dots $	97
10.32&NVALID-ORDER-328 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$	97
10.32 9 NVALID-ORDER-329 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ L_Ls+\frac{1}{C_Ls}\right) \dots $	97
10.33 0 NVALID-ORDER-330 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) \ \dots $	97
10.33INVALID-ORDER-331 $Z(s) = \displaystyle$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ L_Ls+R_L+\frac{1}{C_Ls}\right) \ \dots $	97
10.332NVALID-ORDER-332 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right) \ \dots $	97
	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots $	97
10.334NVALID-ORDER-334 $Z(s)=$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 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) $	98
10.33 Б NVALID-ORDER-335 $Z(s)=$		98
10.33 6 NVALID-ORDER-336 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$	98
10.33 T NVALID-ORDER-337 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$	98
10.33&NVALID-ORDER-338 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right)$	98
10.33 9 NVALID-ORDER-339 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$	98
10.34 ONVALID-ORDER- $340 Z(s) =$		98
10.34INVALID-ORDER-341 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$	98
10.9400114110 ODDED 949 77()	$\begin{pmatrix} R_1 & L_2 & R_2 & R_3 & R_4 \end{pmatrix}$	99
10.34BNVALID-ORDER-343 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_s^2+1} + R_L\right)$	99
10.34#NVALID-ORDER-344 $Z(s)=$	$ \frac{C_{1}R_{1}}{C_{1}R_{1}s+1}, \infty, \infty, \infty, \frac{C_{1}L_{5}s^{2}+1}{C_{1}L_{1}L_{1}} + R_{5}, \frac{C_{1}L_{1}}{C_{1}L_{1}s^{2}+1} + R_{5}, \frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}) \\ \left(\frac{R_{1}}{C_{1}R_{1}s+1}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}\right) \\ \left(\frac{R_{1}}{C_{1}R_{1}s+1}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{R_{1}\left(L_{1}s+\frac{1}{C_{1}s}\right)}{L_{1}s+R_{1}+\frac{1}{C_{1}s}}\right) \\ \left(\frac{R_{1}}{C_{1}R_{1}s+1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, R_{1}\right) \\ \left(\frac{R_{1}}{C_{1}R_{1}s+1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \frac{1}{C_{1}s}\right) \\ \left(\frac{R_{1}}{C_{1}R_{1}s+1}, \infty, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \frac{1}{C_{1}s}\right) \\ \left(\frac{R_{1}}{C_{1}R_{1}s+1}, \frac{R_{1}}{C_{1}R_{1}s+1}, \frac{R_{1}}{C_{1}R_{1}s+1}, \frac{R_{2}}{C_{1}R_{1}s+1}, \frac{R_{1}}{C_{1}R_{1}s+1}, \frac{R_{2}}{C_{1}R_{1}s+1}, \frac{R_{1}}{C_{1}R_{1}s+1}, \frac{R_{2}}{C_{1}R_{1}s+1}, \frac{R_{2}}{C_{1}R$	99
10.34 5 NVALID-ORDER-345 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ R_L\right)$	99
10.34 6 NVALID-ORDER-346 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{1}{C_Ls}\right)$	99
10.34 NVALID-ORDER-347 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{R_L}{C_LR_Ls+1}\right)$	99
10.34&NVALID-ORDER-348 $Z(s) =$	$\left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_c s}}, \ R_L + \frac{1}{C_L s}\right) \dots $	99
10.34 9 NVALID-ORDER-349 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ L_Ls+\frac{1}{C_Ls}\right)$	99
10.35 0 NVALID-ORDER-350 $Z(s) =$	$\begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, & \frac{R_L}{C_LR_Ls+1} \right) \\ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, & R_L+\frac{1}{C_Ls} \right) \\ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, & L_Ls+\frac{1}{C_Ls} \end{pmatrix} \\ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, & \frac{L_Ls}{C_Ls+1} \end{pmatrix} \\ \begin{pmatrix} \frac{R_1}{C_1R_1s+1}, & \infty, & \infty, & \infty, & \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, & \frac{L_Ls}{C_LLs^2+1} \end{pmatrix} \\ \end{pmatrix} $	100
10.35INVALID-ORDER-351 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ L_Ls+R_L+\frac{1}{C_Ls}\right) \ \dots \ $	100

10.352NVALID-ORDER-352 $Z(s) =$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right) \qquad \dots$	100
10.35 & NVALID-ORDER-353 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots $	100
10.354NVALID-ORDER-354 $Z(s)=$	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \ \dots $	100
10.35 ${\tt NVALID}\text{-}{\tt ORDER}\text{-}355\ Z(s) =$	$\left(R_1+\frac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ R_5,\ R_L\right)$	100
10.35 @NVALID-ORDER-356 Z(s) =	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5, \ L_L s + \frac{1}{C_L s}\right)$	100
10.35 NVALID-ORDER-357 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	100
10.35\&NVALID-ORDER-358 $Z(s) =$	$\left(R_1+rac{1}{C_1s},\;\infty,\;\infty,\;\infty,\;R_5,\;L_Ls+R_L+rac{1}{C_Ls} ight)$	101
10.35 9 NVALID-ORDER-359 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	101
$10.36 @ {\rm NVALID\text{-}ORDER\text{-}} 360 \ Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	101
10.36INVALID-ORDER-361 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	101
10.362NVALID-ORDER-362 $Z(s) =$	$\left(R_1+\frac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_5s},\ \frac{1}{C_Ls}\right)$	101
10.36%NVALID-ORDER-363 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$	101
10.364NVALID-ORDER-364 $Z(s)=$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$	101
10.36 NVALID-ORDER-365 $Z(s) =$	$\left(R_1+\frac{1}{C_1s},\;\infty,\;\infty,\;\infty,\;\frac{1}{C_5s},\;L_Ls+\frac{1}{C_Ls}\right)$	101
10.366NVALID-ORDER-366 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	101
10.36 T NVALID-ORDER-367 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	102
10.36&NVALID-ORDER-368 $Z(s)=$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	102
	$\begin{pmatrix} 1 & C_1 S & V & V & C_2 S & C_L L_L S^2 + 1 & V & 2 \end{pmatrix}$	102
	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	102
10.37INVALID-ORDER-371 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s}\right)$	102
	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$	102
10.378NVALID-ORDER-373 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s}\right)$	102
10.37 4 NVALID-ORDER-374 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$	102
10.37 SNVALID-ORDER-375 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1})'$	102
10.376NVALID-ORDER-376 $Z(s) =$	$\left(R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	103
10.37¶NVALID-ORDER-377 $Z(s) = \\$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$	103
10.37%NVALID-ORDER-378 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	103
10.37 9 NVALID-ORDER-379 $Z(s) =$	$ \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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)' \\ \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right) \dots \\ $	103
10.38 0 NVALID-ORDER-380 $Z(s) =$	$\left\langle R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s} \right\rangle \dots $	103
10.38INVALID-ORDER-381 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$	103
10.382NVALID-ORDER-382 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$	103
10.382NVALID-ORDER-383 $Z(s) =$	$ \left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) $ $ \left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \right) $ $ \left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $ \left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $	103
10.384NVALID-ORDER-384 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	103

10.38 INVALID-ORDER-385 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	104
10.386NVALID-ORDER-386 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_2} + \frac{1}{L_L s}}\right)$	104
	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	104
10.38\NVALID-ORDER-388 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)^{\prime}$	104
		104
10.39 0 NVALID-ORDER-390 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	104
10.39INVALID-ORDER-391 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1})$	104
10.39 2 NVALID-ORDER-392 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s})$	104
10.39 % NVALID-ORDER-393 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s})$	105
10.39#NVALID-ORDER-394 $Z(s) = $	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	105
10.39 NVALID-ORDER-395 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	105
10.39 6 NVALID-ORDER-396 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	105
10.39 TNVALID-ORDER-397 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	105
10.39 NVALID-ORDER-398 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	105
10.39 9 NVALID-ORDER-399 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L)$	105
10.40 0 NVALID-ORDER-400 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s})$	105
10.40 I NVALID-ORDER-401 $Z(s)=$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1})$	106
10.40 2 NVALID-ORDER-402 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$	106
10.40 3 NVALID-ORDER-403 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s}\right)$	106
10.40 4 NVALID-ORDER-404 $Z(s)=$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	106
10.40 5 NVALID-ORDER-405 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	106
	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	106
10.40 T NVALID-ORDER-407 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	106
10.40 NVALID-ORDER-408 $Z(s)=$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	106
10.40 9 NVALID-ORDER-409 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)^{\frac{1}{L}}$	107
10.41 0 NVALID-ORDER-410 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s})$	107
10.41 I NVALID-ORDER-411 $Z(s) =$	$\left(R_{1} + \frac{1}{C_{1s}}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}s}, \frac{R_{L}}{C_{L}R_{L}s+1}\right) $	107
10.41 2 NVALID-ORDER-412 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$	107
10.41 & NVALID-ORDER-413 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$	107
10.41 4 NVALID-ORDER-414 $Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1})'$	107
	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s})$	
10.416NVALID-ORDER-416 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $	107
10.41 T NVALID-ORDER-417 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	108
10.41 NVALID-ORDER-418 $Z(s)=$	$\left(R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}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)' \dots $	108

10.41 9 NVALID-ORDER-419 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L\right)$	80ء
10.42 0 NVALID-ORDER-420 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$	80ء
10.42 I NVALID-ORDER-421 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$	108
10.42 ½ NVALID-ORDER-422 $Z(s)=$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s})$	١08
		108
10.42 \! NVALID-ORDER-424 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	108
10.42 5 NVALID-ORDER-425 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$	109
		109
10.42 T NVALID-ORDER-427 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	١09
10.42\nablaNVALID-ORDER-428 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)' \dots \dots$	109
	$\left(R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, \ R_{L}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	١09
10.43 ONVALID-ORDER- $430 Z(s) =$	$(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s})$	109
	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$	109
	$\left(R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, R_{L} + \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	109
	$\left(R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, L_{L}s + \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	110
		110
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	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$.10
10.43 6NVALID-ORDER- 436 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \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
	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$.10
10.43&NVALID-ORDER-438 $Z(s)=$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \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
10.43 9 NVALID-ORDER-439 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L\right) \ \dots \ $.10
10.44 0 NVALID-ORDER-440 $Z(s)=$	$ \left(R_{1} + \frac{1}{C_{1s}}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, R_{L}\right) \dots \dots$	10
10.44 INVALID-ORDER-441 $Z(s)=$	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right) \dots $	11
10.442NVALID-ORDER-442 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$	11
10.44 & NVALID-ORDER-443 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$	11
10.44 INVALID-ORDER-444 $Z(s) =$	$ \begin{pmatrix} R_1 + \frac{1}{C_1 s}, & \infty, & \infty, & \infty, & \frac{L_5 s + R_5 + \frac{1}{C_5 s}}{L_5 s + \frac{1}{C_5 s}}, & \frac{R_L}{C_L R_L s + 1} \end{pmatrix} \\ \begin{pmatrix} R_1 + \frac{1}{C_1 s}, & \infty, & \infty, & \infty, & \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, & \frac{R_L}{C_L R_L s + 1} \end{pmatrix} \\ \begin{pmatrix} R_1 + \frac{1}{C_1 s}, & \infty, & \infty, & \infty, & \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, & R_L + \frac{1}{C_L s} \end{pmatrix} \\ \begin{pmatrix} R_1 + \frac{1}{C_1 s}, & \infty, & \infty, & \infty, & \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, & L_L s + \frac{1}{C_L s} \end{pmatrix} \\ \begin{pmatrix} R_1 + \frac{1}{C_1 s}, & \infty, & \infty, & \infty, & \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, & \frac{L_L s}{C_L L_L s^2 + 1} \end{pmatrix} $	11
10.44 INVALID-ORDER- 445 $Z(s) =$	$\left(R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{2}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	111
10.44 6 NVALID-ORDER-446 $Z(s) =$	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)' $	11
10.44 T NVALID-ORDER-447 $Z(s) =$	$ \left(R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{1}{C_{L}s + \frac{1}{L_{L}s}}\right) . 1 $ $ \left(R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) . 1 $	11

10.448NVALID-ORDER- 448 $Z(s) =$	$= \left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_5 s}} \right) \ \dots $.11
10.44 9 NVALID-ORDER-449 $Z(s) =$.12
	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $.12
	$\left(L_1s+\frac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ R_5,\ R_L+\frac{1}{C_1s}\right) \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots $.12
10.45 2 NVALID-ORDER- 452 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ R_5, \ L_Ls + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $.12
10.45 B NVALID-ORDER-453 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ R_5, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)' \dots \qquad \dots$	12
10.45 4 NVALID-ORDER-454 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \infty, R_{5}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$.12
10.45 NVALID-ORDER-455 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_r} + \frac{1}{L_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $.12
10.45 6 NVALID-ORDER-456 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	12
10.45 T NVALID-ORDER-457 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	13
10.45&NVALID-ORDER-458 $Z(s) =$	$(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{1}{C_5s}, R_L)$	13
10.45 9 NVALID-ORDER-459 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$	13
10.46 0 NVALID-ORDER-460 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) \qquad . \qquad 1$	13
10.46 I NVALID-ORDER-461 $Z(s) =$	$+\left(L_{1}s+\frac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_{5}s},\ R_{L}+\frac{1}{C_{L}s}\right)$.13
10.46 2 NVALID-ORDER-462 $Z(s) =$	$+\left(L_{1}s+rac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ rac{1}{C_{5}s},\ L_{L}s+rac{1}{C_{L}s} ight)$	13
10.46 NVALID-ORDER-463 $Z(s) =$	$=\left(L_1s+\frac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_5s},\ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	13
10.46 4 NVALID-ORDER-464 $Z(s) =$	$=\left(L_1s+rac{1}{C_1s},\;\infty,\;\infty,\;\infty,\;rac{1}{C_5s},\;L_Ls+R_L+rac{1}{C_Ls} ight)$.13
10.46 Б NVALID-ORDER-465 $Z(s)=$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \ \dots \ $	14
$10.46 \text{@NVALID-ORDER-466} \ Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L L_L s^2 + 1} + R_L \right) \ \dots $.14
10.46 T NVALID-ORDER-467 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 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) $.14
10.46\mathbb{g}NVALID-ORDER-468 $Z(s) =$	$=\left(L_{1}s+rac{1}{C_{1}s},\;\infty,\;\infty,\;\infty,\;rac{R_{5}}{C_{5}R_{5}s+1},\;R_{L} ight)$	14
10.46 9 NVALID-ORDER-469 $Z(s) =$	$=\left(L_{1}s+\frac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ \frac{R_{5}}{C_{5}R_{5}s+1},\ \frac{1}{C_{L}s}\right)$	14
10.470NVALID-ORDER-470 $Z(s) =$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$.14
10.47 I NVALID-ORDER-471 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$	14
10.47 2 NVALID-ORDER-472 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)$	14
10.47 3 NVALID-ORDER-473 $Z(s) =$	$=\left(L_{1}s+rac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ rac{R_{5}}{C_{5}R_{5}s+1},\ rac{L_{L}s}{C_{L}L_{L}s^{2}+1} ight)$	15
10.474NVALID-ORDER-474 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \qquad . \qquad $	15
10.47 5 NVALID-ORDER-475 $Z(s)=$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \ (1)$	15
	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} + R_{L}\right) \dots \qquad 1$	
10.47 T NVALID-ORDER-477 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 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) \ \dots \ $	15
10.47&NVALID-ORDER-478 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L\right) \dots \qquad 1$	15
10.479NVALID-ORDER- $479 Z(s) =$	$=\left(L_1s+\frac{1}{C_{rs}},\ \infty,\ \infty,\ \infty,\ R_5+\frac{1}{C_{rs}},\ \frac{1}{C_{rs}}\right)$	15
10.48 0 NVALID-ORDER-480 $Z(s) =$	$= \left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ R_{5} + \frac{1}{C_{5}s}, \ \frac{R_{L}}{C_{L}R_{L}s+1}\right) \qquad . \qquad $	15
10.48INVALID-ORDER-481 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$	16

10.48 2 NVALID-ORDER-482 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ R_{5} + \frac{1}{C_{5}s}, \ L_{L}s + \frac{1}{C_{L}s}\right)$	116
10.48 B NVALID-ORDER-483 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	116
10.484NVALID-ORDER-484 $Z(s)=$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ R_{5} + \frac{1}{C_{5}s}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$	116
10.48 Б NVALID-ORDER-485 $Z(s)=$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ R_{5} + \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right) \qquad \dots $	116
10.48 6 NVALID-ORDER-486 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	116
10.48 T NVALID-ORDER-487 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ R_{5} + \frac{1}{C_{5}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) \dots $	116
10.48\NVALID-ORDER-488 $Z(s) =$	$\left(L_{1}s+rac{1}{C_{1}s},\;\infty,\;\infty,\;\infty,\;\infty,\;L_{5}s+rac{1}{C_{5}s},\;R_{L} ight)$	116
10.48 9 NVALID-ORDER-489 $Z(s) =$	$\left(L_{1}s+rac{1}{C_{1}s},\;\infty,\;\infty,\;\infty,\;L_{5}s+rac{1}{C_{5}s},\;rac{1}{C_{L}s} ight)$	117
10.49 0 NVALID-ORDER-490 $Z(s) =$	$\left(L_{1}s+rac{1}{C_{1}s},\;\infty,\;\infty,\;\infty,\;L_{5}s+rac{1}{C_{5}s},\;rac{R_{L}}{C_{L}R_{L}s+1} ight)$	117
10.49 I NVALID-ORDER-491 $Z(s) =$	$\left(L_{1}s+rac{1}{C_{1}s},\;\infty,\;\infty,\;\infty,\;L_{5}s+rac{1}{C_{5}s},\;R_{L}+rac{1}{C_{L}s} ight)$	117
10.49 2 NVALID-ORDER-492 $Z(s) =$	$\left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$	117
10.49 3 NVALID-ORDER-493 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	117
10.494NVALID-ORDER-494 $Z(s) = \displaystyle$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ L_{5}s + \frac{1}{C_{5}s}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$	117
10.49 Б NVALID-ORDER-495 $Z(s)=$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ L_{5}s + \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right) \dots $	117
10.496NVALID-ORDER-496 $Z(s) =$	$\left(L_{1}s+rac{1}{C_{1}s},\;\infty,\;\infty,\;\infty,\;\infty,\;L_{5}s+rac{1}{C_{5}s},\;rac{L_{L}s}{C_{L}L_{L}s^{2}+1}+R_{L} ight)$	117
10.49 T NVALID-ORDER-497 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ L_{5}s + \frac{1}{C_{5}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) \ \dots \ $	118
10.49&NVALID-ORDER-498 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ R_L\right)$	118
10.49 9 NVALID-ORDER-499 $Z(s) =$	$\left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s}\right)$	118
10.50 0 NVALID-ORDER-500 $Z(s) =$	$\left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$	118
10.50 I NVALID-ORDER-501 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ R_L + \frac{1}{C_Ls}\right)$	118
10.502NVALID-ORDER-502 $Z(s) =$	$\left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s}\right)$	118
10.50 B NVALID-ORDER-503 $Z(s) =$	$\left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	118
	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	
	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \ \dots \ $	
10.506NVALID-ORDER-506 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	119
10.50 TNVALID-ORDER-507 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{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}}\right)' \qquad \dots $	119
10.50\nbeloeknvalid-Order-508 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L\right)^{C_2s}$	119
10.50 9 NVALID-ORDER-509 $Z(s) =$	$\left(L_1s+\frac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \frac{1}{C_Ls}\right)$	119
10.51 0 NVALID-ORDER-510 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)$	119
10.51 I NVALID-ORDER-511 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$	119
10.51 2 NVALID-ORDER-512 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$	119
10.51 3 NVALID-ORDER-513 $Z(s) =$	$(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1})'$	120
10.51#NVALID-ORDER-514 $Z(s) =$	$ \begin{pmatrix} L_1 s + \frac{1}{C_1 s}, & \infty, & \infty, & \infty, & L_5 s + R_5 + \frac{1}{C_5 s}, & \frac{L_L s}{C_L L_L s^2 + 1} \end{pmatrix}^{\prime} \dots \dots$	120
10.51 SNVALID-ORDER-515 $Z(s)=$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$	120

	$\left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}s}, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} + R_{L}\right)$	120
10.51 TNVALID-ORDER-517 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}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) \dots $. 120
		. 120
10.51 9 NVALID-ORDER-519 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls}\right)$	120
10.52 0 NVALID-ORDER-520 $Z(s) =$	$\left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$	120
10.52 I NVALID-ORDER-521 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$	121
10.522NVALID-ORDER-522 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$	121
10.52 % NVALID-ORDER-523 $Z(s)=$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	121
10.52#NVALID-ORDER-524 $Z(s)=$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	121
10.52\$NVALID-ORDER-525 $Z(s)=$	$\left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right) $	121
10.526NVALID-ORDER-526 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	121
10.52 T NVALID-ORDER-527 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}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)^{\prime} \ \dots $	121
	$\left(L_1s+rac{1}{C_1s},\ \infty,\ \infty,\ \infty,\ rac{L_5s}{C_5L_5s^2+1}+R_5,\ R_L ight)$	121
10.529NVALID-ORDER-529 $Z(s) =$	$(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls})$	122
10.53 0 NVALID-ORDER-530 $Z(s) =$	$(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1})$	122
10.53 I NVALID-ORDER-531 $Z(s) =$	$(L_1s + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls})$	122
	$\left(L_{1}s+\frac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\ L_{L}s+\frac{1}{C_{L}s}\right)$	122
	$\left(L_{1}s+\frac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\ \frac{L_{L}s}{C_{7}L_{1}s^{2}+1}\right)$	122
	$\left(L_{1}s+\frac{1}{C_{1}s},\ \infty,\ \infty,\ \infty,\ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\ L_{L}s+R_{L}+\frac{1}{C_{L}s}\right)$	122
10.53 5 NVALID-ORDER-535. Z(s) —	$\left(L_1s + \frac{1}{2} - \infty - \infty - \frac{L_5s}{2} + R_5 - \frac{1}{2}\right)$	122
10.536NVALID-ORDER-536 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots $	122
10.53 T NVALID-ORDER-537 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, \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) \dots $	123
10.53&NVALID-ORDER-538 $Z(s) =$	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_L\right)$	123
10.53 9 NVALID-ORDER-539 $Z(s) =$	$ \begin{pmatrix} L_{1s} + C_{1s}, & \infty, & \infty, & C_{5}L_{5}s^{2} + 1 + R_{5}, & C_{Ls} + \frac{1}{R_{L}} + \frac{1}{L_{Ls}} \end{pmatrix} $ $ \begin{pmatrix} L_{1s} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5}s^{2} + 1} + R_{5}, & \frac{L_{Ls}}{C_{L}L_{s}^{2} + 1} + R_{L} \end{pmatrix} $ $ \begin{pmatrix} L_{1s} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5}s^{2} + 1} + R_{5}, & \frac{R_{L}(L_{Ls} + \frac{1}{C_{Ls}})}{L_{Ls} + R_{L} + \frac{1}{C_{Ls}}} \end{pmatrix} $ $ \begin{pmatrix} L_{1s} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5s} + \frac{1}{C_{5s}})}{L_{5s} + R_{5} + \frac{1}{C_{5s}}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} L_{1s} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5s} + \frac{1}{C_{5s}})}{L_{5s} + R_{5} + \frac{1}{C_{5s}}}, & \frac{1}{C_{Ls}} \end{pmatrix} $	123
10.54 0 NVALID-ORDER-540 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \ \frac{R_{L}}{C_{L}R_{L}s + 1}\right) \dots $	123
10.54INVALID-ORDER-541 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}}}, \ R_{L} + \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	123
10.542NVALID-ORDER-542 $Z(s) =$	$ \left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{R_{L}}{C_{L}R_{L}s + 1} \right) $ $ \left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, R_{L} + \frac{1}{C_{L}s} \right) $ $ \left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, L_{L}s + \frac{1}{C_{L}s} \right) $ $ \left(L_{1}s + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{L_{L}s + \frac{1}{C_{L}s^{2} + 1}}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{L_{L}s}{C_{L}L_{s}^{2} + 1} \right) $	123
10.54 % NVALID-ORDER-543 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}}}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right) \ \dots $	123
10.54#NVALID-ORDER-544 $Z(s) =$	$\left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \ \dots \ $	123

10.54 Б NVALID-ORDER-545 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $	124
10.546NVALID-ORDER-546 $Z(s) =$	$= \left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $	124
10.54 invalid-order-547 $Z(s) =$	$= \left(L_{1}s + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}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) \dots $	124
10.54&NVALID-ORDER-548 $Z(s) =$	$=\left(rac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;\infty,\;R_5,\;rac{1}{C_Ls} ight)$	124
10.54 9 NVALID-ORDER-549 $Z(s) =$	$=\left(\frac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;\infty,\;R_5,\;rac{\dot{R}_L}{C_LR_Ls+1} ight)$	124
10.55 0 NVALID-ORDER-550 $Z(s) =$	$=\left(\frac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;R_5,\;R_L+rac{1}{C_Ls} ight)$	124
10.55 I NVALID-ORDER-551 $Z(s) =$	$=\left(\frac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;\infty,\;R_5,\;L_Ls+\frac{1}{C_Ls}\right)$	124
10.55 2 NVALID-ORDER-552 $Z(s) =$	$=\left(\frac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;R_5,\;rac{L_Ls}{C_LL_Ls^2+1} ight)'$	124
10.55 2 NVALID-ORDER-553 $Z(s) =$	$= \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s} \right) \dots $	125
10.554NVALID-ORDER-554 $Z(s) =$	$=\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;R_{5},\;rac{1}{C_{L}s+rac{1}{R_{L}}+rac{1}{L_{L}s}} ight)^{2}$	125
10.55 Б NVALID-ORDER-555 $Z(s) =$	$=\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;R_{5},\;\frac{L_{L}s}{C_{L}L_{L}s^{2}+1}+\overset{'}{R_{L}}\right)\;\ldots$	125
10.55 6 NVALID-ORDER-556 $Z(s) =$	$= \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right) $	125
10.55TNVALID-ORDER- 557 $Z(s) =$	$=\left(rac{L_1s}{C_1\overline{L_1}s^2+1},\;\infty,\;\infty,\;\infty,\;rac{1}{C_5s},\;R_L ight)$	125
10.55\newline NVALID-ORDER-558 $Z(s) =$	$=\left(rac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;rac{1}{C_5s},\;rac{1}{C_Ls} ight)$	125
10.55 9 NVALID-ORDER-559 $Z(s) =$	$=\left(rac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;rac{1}{C_5s},\;rac{R_L}{C_LR_Ls+1} ight)$	125
10.56 ONVALID-ORDER- $560 Z(s) =$	$=\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;\frac{1}{C_{5}s},\;R_{L}+\frac{1}{C_{L}s}\right)$	125
10.56INVALID-ORDER-561 $Z(s) =$	$=\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;\frac{1}{C_{5}s},\;L_{L}s+\frac{1}{C_{L}s}\right)$	125
10.562NVALID-ORDER-562 $Z(s) =$	$=\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;rac{1}{C_{5}s},\;rac{L_{L}s}{C_{L}L_{L}s^{2}+1} ight)^{'}$	126
10.56% NVALID-ORDER-563 $Z(s) =$	$=\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;\frac{1}{C_{5}s},\;L_{L}s+R_{L}+\frac{1}{C_{L}s}\right)$	126
10.564NVALID-ORDER-564 $Z(s) =$	$= \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s+\frac{1}{R_{L}}+\frac{1}{L_{L}s}}\right)^{\frac{1}{2}} $	126
10.56 NVALID-ORDER-565 $Z(s) =$	$\langle C_1L_1S^2+1 \rangle$	126
10.56 6 NVALID-ORDER-566 $Z(s) =$	$= \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}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)' \ \dots $	126
10.56TNVALID-ORDER- 567 $Z(s) =$	$= \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L\right) \ \dots $	126
10.56&NVALID-ORDER-568 $Z(s) =$	$=\left(rac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;rac{R_{5}}{C_{5}R_{5}s+1},\;rac{1}{C_{L}s} ight)$	126
10.56 9 NVALID-ORDER-569 $Z(s) =$	$ \begin{array}{c} \left(C_{1}L_{1}s^{2}+1, \ \infty, \ \infty, \ \infty, \ C_{5}R_{5}s+1, \ RL \right) \\ = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{1}{C_{L}s} \right) \\ = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{R_{L}}{C_{L}R_{L}s+1} \right) \\ = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ R_{L} + \frac{1}{C_{L}s} \right) \\ = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ L_{L}s + \frac{1}{C_{L}s} \right) \end{array} $	126
10.57 0 NVALID-ORDER-570 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$	126
10.57 I NVALID-ORDER-571 $Z(s) =$	$=\left(rac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;rac{R_{5}}{C_{5}R_{5}s+1},\;L_{L}s+rac{1}{C_{L}s} ight)$	127
10.57 2 NVALID-ORDER- $572 Z(s) =$	$=\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{R_5}{C_2R_2s+1}, \frac{L_Ls}{C_2L_1s^2+1}\right)$	127
10.57 B NVALID-ORDER-573 $Z(s) =$	$= \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	127
10.574NVALID-ORDER-574 $Z(s) =$	$=\left(rac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;rac{R_{5}}{C_{5}R_{5}s+1},\;rac{1}{C_{L}s+rac{1}{L_{2}}+rac{1}{L_{2}s}} ight)\;\dots$	127
10.575NVALID-ORDER- $575 Z(s) =$	$=\left(rac{L_1s}{C_1L_1s^2+1},\;\infty,\;\infty,\;\infty,\;rac{R_5}{C_5R_5s+1},\;rac{L_Ls}{C_LL_1s^2+1}+R_L ight)\;\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$	127
10.576NVALID-ORDER-576 $Z(s) =$	$= \left(\frac{L_{18}}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right)'$ $= \left(\frac{L_{18}}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ R_{5}+\frac{1}{C_{5}s}, \ R_{L}\right) \qquad . \qquad $	127
10.57TNVALID-ORDER- $577 Z(s) =$	$=\left(rac{L_{1}s}{C_{1}L_{1}s^{2}+1},\;\infty,\;\infty,\;\infty,\;R_{5}+rac{1}{C_{5}s},\;R_{L} ight)$	127

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10.57\( \text{NVALID-ORDER-578} \( Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty \infty, \infty, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_{1.5}} \right) \\ \tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}\tag{1.}
10.579NVALID-ORDER-579 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots
10.58@NVALID-ORDER-580 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right) \dots \dots
10.58INVALID-ORDER-581 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots
10.582NVALID-ORDER-582 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) .....
10.584NVALID-ORDER-584 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
10.58 INVALID-ORDER-585 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . . . . . . . . .
10.586NVALID-ORDER-586 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 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)
10.58 INVALID-ORDER-587 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right) \dots \dots \dots
10.58\ \text{NVALID-ORDER-588} Z(s) = \left(\frac{L_1 s}{C_1 L_0 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) \dots \dots
10.58 INVALID-ORDER-589 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_4 R_1 s + 1}\right) . . .
10.59@NVALID-ORDER-590 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right) \dots
10.59INVALID-ORDER-591 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_1 s}, L_L s + \frac{1}{C_L s}\right) . . . .
10.592NVALID-ORDER-592 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) \dots \dots
10.59 \text{ INVALID-ORDER-594 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \ \dots 
10.59 INVALID-ORDER-595 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1} + R_L\right) \dots \dots
10.596NVALID-ORDER-596 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 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)
10.59TNVALID-ORDER-597 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) . . . . . . . . . . . . . . . . .
10.59\( \text{NVALID-ORDER-598} \( Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_1 s} \right) \\ \tag{1.5} \quad \text{1.5} \]
10.599NVALID-ORDER-599 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_7 L_5 s^2 + 1}, \frac{R_L}{C_7 R_1 s + 1}\right) \dots
10.600NVALID-ORDER-600 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_1 s}\right) ....
10.60INVALID-ORDER-601 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right) \dots \dots
10.602NVALID-ORDER-602 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots
10.60BNVALID-ORDER-603 Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots \dots \dots
10.604NVALID-ORDER-604 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{L_1 s} + \frac{1}{L_2 s}}\right)
10.60 INVALID-ORDER-605 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) ....
10.606NVALID-ORDER-606 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^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}}\right)
10.60 TNVALID-ORDER-607 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) \dots
10.60 NVALID-ORDER-608 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) \dots
10.609NVALID-ORDER-609 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.61@NVALID-ORDER-610 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right) \dots
10.61INVALID-ORDER-611 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_4 s}\right)
                                                                                                                                                                             10.612NVALID-ORDER-612 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right)
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10.61 B NVALID-ORDER-613 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, L_5s+R_5+\frac{1}{C_5s}, L_Ls+R_L+\frac{1}{C_Ls}\right)$	32
10.61#NVALID-ORDER-614 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{L_5s}{C_1L_1s^2+1}, \frac{1}{C_5s}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	32
10.61 NVALID-ORDER-615 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	32
10.61 6 NVALID-ORDER-616 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \ \dots \ $	32
10.61 T NVALID-ORDER-617 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, R_L\right)$	32
10.61&NVALID-ORDER-618 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	32
10.61 9 NVALID-ORDER-619 $Z(s)=$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}}, \ \frac{R_{L}}{C_{L}R_{L}s+1}\right) \ \dots $	32
10.62 0 NVALID-ORDER-620 $Z(s)=$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}}, R_{L}+\frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	33
10.62 I NVALID-ORDER-621 $Z(s) =$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}}, L_{L}s+\frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	33
10.62 2 NVALID-ORDER-622 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots $	33
10.62 B NVALID-ORDER-623 $Z(s)=$	$\left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	33
10.62#NVALID-ORDER-624 $Z(s)=$	$\left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s + \frac{1}{L_L s}}\right)\right) $	33
10.62\$NVALID-ORDER-625 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	33
10.626NVALID-ORDER-626 $Z(s) = \displaystyle$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \dots $	33
$10.62 {\tt T} {\tt NVALID-ORDER-627} \ Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L\right)$	33
10.62\&NVALID-ORDER-628 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls}\right)$	34
10.62 9 NVALID-ORDER-629 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L}{C_LR_Ls+1}\right)$	34
10.63 0 NVALID-ORDER-630 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$	34
10.63INVALID-ORDER-631 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$	34
10.632NVALID-ORDER-632 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)'$	34
10.632NVALID-ORDER-633 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$	34
10.634NVALID-ORDER-634 $Z(s)=$	$ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \frac{L_{5}s}{c_{5}L_{5}s^{2}+1} + R_{5}, & \frac{L_{L}s}{c_{L}L_{z}s^{2}+1} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{L_{5}s}{c_{5}L_{5}s^{2}+1} + R_{5}, & \frac{L_{L}s}{c_{L}L_{z}s^{2}+1} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{L_{5}s}{c_{5}L_{5}s^{2}+1} + R_{5}, & \frac{1}{c_{L}s + \frac{1}{L_{L}s}} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{L_{5}s}{c_{5}L_{5}s^{2}+1} + R_{5}, & \frac{L_{L}s}{c_{L}L_{s}s^{2}+1} + R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{L_{5}s}{c_{5}L_{5}s^{2}+1} + R_{5}, & \frac{L_{L}s}{c_{L}L_{s}s^{2}+1} + R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{L_{5}s}{c_{5}L_{5}s^{2}+1} + R_{5}, & \frac{R_{L}(L_{L}s + \frac{1}{c_{L}s})}{L_{L}s + L_{L} + \frac{1}{c_{L}s}} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $ $ \begin{pmatrix} \frac{L_{18}}{c_{1}L_{1}s^{2}+1}, & \infty, & \infty, & \infty, & \frac{R_{5}(L_{5}s + \frac{1}{c_{5}s})}{L_{5}s + R_{5} + \frac{1}{c_{5}s}}, & R_{L} \end{pmatrix} $	34
10.63 5 NVALID-ORDER-635 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	34
10.63 6 NVALID-ORDER-636 $Z(s) =$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)^{2} + \dots + $	35
10.63 INVALID-ORDER-637 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, R_L\right)$	35
10.638NVALID-ORDER- 638 $Z(s) =$	$\left(\frac{L_1s}{GL_2}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{L_5}{C_5s}\right)}{2C_5s}, \frac{1}{G}\right)$	35
10.63 9 NVALID-ORDER-639 $Z(s)=$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \frac{R_{L}}{C_{L}R_{L}s+1}\right) \dots \dots$	35
10.64 ONVALID-ORDER- 640 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{R_5\left(\frac{L_5s+\frac{1}{C_5s}}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_4s}}, R_L+\frac{1}{C_Ls}\right)$	35
10.64 INVALID-ORDER-641 $Z(s)=$	$ \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, L_{L}s+\frac{1}{C_{L}s}\right) \qquad . \qquad . \qquad . \qquad . \qquad . \\ \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right) \qquad . \qquad $	35
10.642NVALID-ORDER-642 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1},\ \infty,\ \infty,\ \infty,\ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}},\ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	35

		$\frac{Q_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_5s}$	/	 	 	 135
		$\frac{2}{C_5}\left(\frac{L_5 s + \frac{1}{C_5 s}}{L_5 s + R_5 + \frac{1}{C_5 s}}\right), \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	/	 	 	 136
		$\frac{c_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + \frac{1}{C_5s}$	/	 	 	 136
10.64 6 NVALID-ORDER-646 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}\right)$	$, \infty, \infty, \infty, \frac{R_5}{L}$	$rac{R_5\left(L_5 s + rac{1}{C_5 s} ight)}{L_5 s + R_5 + rac{1}{C_5 s}}, rac{R_L\left(L_L s + rac{1}{C_L s} ight)}{L_L s + R_L + rac{1}{C_L s}}$	$\left(\frac{1}{2}\right)$	 	 	 136
10.64\text{TNVALID-ORDER-647} $Z(s) = \left(L_1 s + R_1\right)$	$_{1}+\frac{1}{C_{1}s},~\infty,~\infty,$	∞ , R_5 , $\frac{1}{C_L s}$)		 	 	 136
10.64 NVALID-ORDER-648 $Z(s) = \left(L_1 s + R_1\right)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	∞ , R_5 , $\frac{R_L}{C_L R_L s + 1}$)		 	 	 136
10.649NVALID-ORDER-649 $Z(s) = \left(L_1 s + R_1\right)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	∞ , R_5 , $R_L + \frac{1}{C_L s}$		 	 	 136
10.65 0 NVALID-ORDER-650 $Z(s) = \left(L_1 s + R_1\right)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	∞ , R_5 , $L_L s + \frac{1}{C_L s}$)		 	 	 136
10.65INVALID-ORDER-651 $Z(s) = (L_1 s + R_1)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	∞ , R_5 , $\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 136
10.652NVALID-ORDER-652 $Z(s) = (L_1 s + R_1)$	$_{1}+\frac{1}{C_{1}s}, \ \infty, \ \infty,$	∞ , R_5 , $L_L s + R_L + \frac{1}{C_L s}$)	 	 	 137
10.65\RNVALID-ORDER-653 $Z(s) = \left(L_1 s + R_1\right)$	$1+\frac{1}{C_1s}, \ \infty, \ \infty,$	$\infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$		 	 	 137
10.65#NVALID-ORDER-654 $Z(s) = \left(L_1 s + R_1\right)$	- 1			 	 	 137
10.65 NVALID-ORDER-655 $Z(s) = \left(L_1 s + R_1\right)$	$1+\frac{1}{C_1s}, \ \infty, \ \infty,$	∞ , R_5 , $\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 	 137
10.65 6 NVALID-ORDER-656 $Z(s) = \left(L_1 s + R_1\right)$	$_{1}+\frac{1}{C_{1}s},~\infty,~\infty,$	∞ , $\frac{1}{C_5 s}$, R_L)		 	 	 137
10.65 T NVALID-ORDER-657 $Z(s) = \left(L_1 s + R_1\right)$	$1+\frac{1}{C_1s}, \ \infty, \ \infty,$	$\infty, \frac{1}{C_5 s}, \frac{1}{C_L s}$		 	 	 137
10.65 NVALID-ORDER-658 $Z(s) = \left(L_1 s + R_1\right)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	$\infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}$		 	 	 137
10.65 9 NVALID-ORDER-659 $Z(s) = \left(L_1 s + R_1\right)$	$_{1}+\frac{1}{C_{1}s}, \infty, \infty, \infty,$	∞ , $\frac{1}{C_5 s}$, $R_L + \frac{1}{C_L s}$)		 	 	 137
10.66 0 NVALID-ORDER-660 $Z(s) = \left(L_1 s + R_1\right)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	∞ , $\frac{1}{C_5 s}$, $L_L s + \frac{1}{C_L s}$		 	 	 138
10.66INVALID-ORDER-661 $Z(s) = (L_1 s + R_1)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	$\infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 138
10.66 2 NVALID-ORDER-662 $Z(s) = (L_1 s + R_1)$	_		\bar{s})	 	 	 138
10.66\(\mathbb{E}\)NVALID-ORDER-663 $Z(s) = \left(L_1 s + R_1 \right)$	$1+\frac{1}{C_1s}, \ \infty, \ \infty,$	$\infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$		 	 	 138
10.664NVALID-ORDER-664 $Z(s) = (L_1 s + R_1)$						
10.66\(\frac{1}{2}\)NVALID-ORDER-665\(Z(s) = \left(L_1 s + R_1)\)	$1+\frac{1}{C_1s}, \ \infty, \ \infty,$	$\infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 	 138
10.66 6 NVALID-ORDER-666 $Z(s) = (L_1 s + R_1)$	$_{1}+\frac{1}{C_{1}s},~\infty,~\infty,$	∞ , $\frac{R_5}{C_5R_5s+1}$, R_L)		 	 	 138
10.66 T NVALID-ORDER-667 $Z(s) = (L_1 s + R_1)$	$_{1}+\frac{1}{C_{1}s}, \infty, \infty, \infty,$	$\infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}$		 	 	 138
10.66\(\mathbb{R}\) NVALID-ORDER-668 $Z(s) = \left(L_1 s + R_1 \right)$	$_{1}+\frac{1}{C_{1}s},~\infty,~\infty,$	∞ , $\frac{R_5}{C_5R_5s+1}$, $\frac{R_L}{C_LR_Ls+1}$		 	 	 139
10.66\(\mathbb{R}\) NVALID-ORDER-668 $Z(s) = \left(L_1 s + R_1 \right)$ 10.66\(\mathbb{D}\) NVALID-ORDER-669 $Z(s) = \left(L_1 s + R_1 \right)$	$_{1}+\frac{1}{C_{1}s}, \infty, \infty,$	$\infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s}$		 	 	 139
10.670NVALID-ORDER-670 $Z(s) = (L_1 s + R_1)$	$+\frac{1}{C_1s}$, ∞ , ∞ ,	∞ , $\frac{R_5}{C_5 R_5 s + 1}$, $L_L s + \frac{1}{C_L s}$)	 	 	 139
10.67INVALID-ORDER-671 $Z(s) = (L_1 s + R_1)$	$_{1}+\frac{1}{C_{1}s}, \ \infty, \ \infty,$	∞ , $\frac{R_5}{C_5R_5s+1}$, $\frac{L_Ls}{C_LL_Ls^2+1}$		 	 	 139
10.672NVALID-ORDER-672 $Z(s) = \left(L_1 s + R_1\right)$	$_{1}+\frac{1}{C_{1}s}, \ \infty, \ \infty,$	∞ , $\frac{R_5}{C_5 R_5 s + 1}$, $L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 139
10.67\(\mathbb{B}\) NVALID-ORDER-673 $Z(s) = \left(L_1 s + R_1 \right)$	$1+\frac{1}{C_1s}, \ \infty, \ \infty,$	$\infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\frac{1}{L^s}$)	 	 	 139
10.674NVALID-ORDER-674 $Z(s) = L_1 s + R_1$	$_{1}+\frac{1}{C_{1}s}, \ \infty, \ \infty,$	$\infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}$	$-R_L$)	 	 	 139
10.67 NVALID-ORDER-675 $Z(s) = \left(L_1 s + R_1\right)$	$_{l}+\frac{1}{C_{1}s},\ \infty,\ \infty,$	∞ , $\frac{R_5}{C_5R_5s+1}$, $\frac{R_L(L_Ls+\overline{L_C})}{L_Ls+R_L+\overline{L_C}}$	$\left(\frac{\overline{s}}{s}\right)$	 	 	 139

10.676NVALID-ORDER-676 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_2 s}, R_L\right)$
$10.67\text{INVALID-ORDER-}677\ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_5 s}\right) \dots \qquad \dots$
$10.67 \text{ENVALID-ORDER-} 678 \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_R R_L s + 1}\right) \dots $
10.67 9 NVALID-ORDER-679 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.68 INVALID-ORDER-680 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.68INVALID-ORDER-681 $Z(s) = (L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1})'$
10.682NVALID-ORDER-682 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.68 INVALID-ORDER-683 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.68 INVALID-ORDER-684 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.68 INVALID-ORDER-685 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.68 6 NVALID-ORDER-686 $Z(s) = (L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L)$
10.68 T NVALID-ORDER-687 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.68 NVALID-ORDER-688 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
10.68 9 NVALID-ORDER-689 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.69 0 NVALID-ORDER-690 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.69INVALID-ORDER-691 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.692NVALID-ORDER-692 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.69 INVALID-ORDER-693 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.69\(\text{LNVALID-ORDER-694}\(Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty,
10.69 INVALID-ORDER-695 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.696NVALID-ORDER-696 $Z(s) = (L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L)$
10.69 T NVALID-ORDER-697 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
10.69 NVALID-ORDER-698 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
10.69 9 NVALID-ORDER-699 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
10.70 0 NVALID-ORDER-700 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$
10.70INVALID-ORDER-701 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$
$10.702\text{NVALID-ORDER-}702\ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s},\ \infty,\ \infty,\ \infty,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ L_L s + R_L + \frac{1}{C_L s}\right) \ \dots \ $
10.70\(\text{ENVALID-ORDER-703} \(Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \qua
10.70 INVALID-ORDER-704 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.70 INVALID-ORDER-705 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.706NVALID-ORDER-706 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)^{\frac{1}{2}}$.
10.70 T NVALID-ORDER-707 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.70 INVALID-ORDER-708 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
$10.70 \text{@NVALID-ORDER-709 } Z(s) = \left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ R_{L} + \frac{1}{C_{L}s}\right) $ $10.71 \text{@NVALID-ORDER-710 } Z(s) = \left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ L_{L}s + \frac{1}{C_{L}s}\right) $ $10.71 \text{@NVALID-ORDER-710 } Z(s) = \left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ L_{L}s + \frac{1}{C_{L}s}\right) $ $10.71 \text{@NVALID-ORDER-710 } Z(s) = \left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ $
10.71 (i) NVALID-ORDER-710 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

10.71 I NVALID-ORDER-711 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	144
10.71 2 NVALID-ORDER-712 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}s}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$	144
10.71 & NVALID-ORDER-713 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}s}, \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right) \dots \dots$	144
10.714NVALID-ORDER-714 $Z(s) =$	$(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$	144
10.715NVALID-ORDER-715 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, L_{5}s + R_{5} + \frac{1}{C_{5}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)\right) \dots $	144
10.716NVALID-ORDER-716 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ R_{L}\right) \dots $	145
10.71 T NVALID-ORDER-717 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ \frac{1}{C_{L}s}\right) \dots $	145
10.71&NVALID-ORDER-718 $Z(s)=$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \frac{R_{L}}{C_{L}R_{L}s + 1}\right) \dots $	145
10.71 9 NVALID-ORDER-719 $Z(s)=$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ R_{L} + \frac{1}{C_{L}s}\right) $	145
10.72 0 NVALID-ORDER-720 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, L_{L}s + \frac{1}{C_{L}s}\right) \dots \dots$	145
10.72INVALID-ORDER-721 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right) \dots \dots$	145
10.72 2 NVALID-ORDER-722 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots \dots$	145
10.72 % NVALID-ORDER-723 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right)\right) $	145
	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots $	146
10.72\$NVALID-ORDER-725 $Z(s)=$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}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) \dots $	146
10.726NVALID-ORDER-726 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ R_L\right)$	146
10.72 TNVALID-ORDER-727 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{1}{C_Ls}\right)$	146
10.72&NVALID-ORDER-728 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{R_L}{C_LR_Ls + 1}\right)$	146
10.72 9 NVALID-ORDER-729 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$	146
10.73 0 NVALID-ORDER-730 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$	146
10.73 I NVALID-ORDER-731 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	146
10.732NVALID-ORDER-732 $Z(s) =$	$(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + R_L + \frac{1}{C_Ls})$	147
10.73 B NVALID-ORDER-733 $Z(s) =$	$ \begin{pmatrix} L_{1s} + R_{1} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5s}^{2}+1} + R_{5}, & \frac{L_{Ls}}{C_{L}L_{s}^{2}+1} \end{pmatrix} \\ \begin{pmatrix} L_{1s} + R_{1} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5s}^{2}+1} + R_{5}, & \frac{L_{Ls}}{C_{L}L_{s}^{2}+1} \end{pmatrix} \\ \begin{pmatrix} L_{1s} + R_{1} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5s}^{2}+1} + R_{5}, & \frac{1}{C_{Ls} + \frac{1}{R_{L}} + \frac{1}{L_{Ls}}} \end{pmatrix} \\ \begin{pmatrix} L_{1s} + R_{1} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5s}^{2}+1} + R_{5}, & \frac{L_{Ls}}{C_{Ls} + \frac{1}{R_{L}} + \frac{1}{L_{Ls}}} \end{pmatrix} \\ \begin{pmatrix} L_{1s} + R_{1} + \frac{1}{C_{1s}}, & \infty, & \infty, & \infty, & \frac{L_{5s}}{C_{5}L_{5s}^{2}+1} + R_{5}, & \frac{L_{Ls}}{C_{L}L_{s}^{2}+1} + R_{L} \end{pmatrix} \\ \end{pmatrix} $	147
10.734NVALID-ORDER-734 $Z(s)=$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	147
10.73 Б NVALID-ORDER-735 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, \ \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 $	147
10.736NVALID-ORDER-736 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{2}}, R_{L}\right)$	147
10.73 NVALID-ORDER-737 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_{rs}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_{rs} + R_{rs} + \frac{1}{C_{rs}}}, \frac{1}{C_{rs}}\right)$	147
10.73\NVALID-ORDER-738 $Z(s) =$	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_2}}, \frac{R_L}{C_LR_Ls + 1}\right)$	147
10.73 9 NVALID-ORDER-739 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, R_{L} + \frac{1}{C_{L}s}\right) \dots $	147
10.74 0 NVALID-ORDER-740 $Z(s) =$	$\left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, L_{L}s + \frac{1}{C_{L}s}\right) \dots \dots$	148

10.74INVALID-ORDER-741 $Z(s) =$	$= \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \qquad \dots $. 148
	$= \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $. 148
10.748NVALID-ORDER-743 $Z(s) =$	$= \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right)' - \dots $. 148
10.74\PVALID-ORDER-744 $Z(s) =$	$= \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $. 148
10.745NVALID-ORDER-745 $Z(s) =$	$= \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 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) \right) \ \dots $. 148
10.746NVALID-ORDER-746 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ \frac{1}{C_{L}s}\right) $. 148
10.74 T NVALID-ORDER-747 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ \frac{R_{L}}{C_{L}R_{L}s + 1}\right) $. 148
10.74&NVALID-ORDER-748 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ R_{L} + \frac{1}{C_{L}s}\right) \ \dots $	149
10.749NVALID-ORDER-749 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ L_{L}s + \frac{1}{C_{L}s}\right) \dots $. 149
10.75 0 NVALID-ORDER-750 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ R_{5}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right) \dots $	149
10.75INVALID-ORDER-751 $Z(s) =$	$\begin{pmatrix} c_{1b} + R_1 + L_{1s} \end{pmatrix}$	149
10.75 2 NVALID-ORDER-752 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$. 149
10.75 R NVALID-ORDER-753 $Z(s) =$	$\left(\begin{array}{cccc} C_{1S+R_1+L_1S} & C_{LS+L_2} \end{array}\right)$	149
10.754NVALID-ORDER-754 $Z(s) =$	$\begin{pmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	149
10.75 5 NVALID-ORDER-755 $Z(s) =$	$=\left(rac{1}{C_{1}s+rac{1}{R_{1}}+rac{1}{L_{1}s}},\;\infty,\;\infty,\;\infty,\;\infty,\;rac{1}{C_{5}s},\;R_{L} ight)$. 149
10.756NVALID-ORDER-756 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	150
10.75 T NVALID-ORDER-757 $Z(s) =$		150
10.75\(\text{8}\) NVALID-ORDER-758 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{1}{C_{5}s}, R_{L} + \frac{1}{C_{L}s}\right) \dots $	150
10.75 9 NVALID-ORDER-759 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{1}{C_{5}s}, L_{L}s + \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	150
10.76 0 NVALID-ORDER- 760 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right)' \qquad \dots$	150
10.76INVALID-ORDER- 761 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{1}{C_{5}s}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) $ $= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{1}{C_{5}s}, \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right) $ $= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{1}{C_{5}s}, \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right) $	150
10.762NVALID-ORDER- $762 Z(s) =$	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}},\ \infty,\ \infty,\ \infty,\ \frac{1}{C_{L}s+\frac{1}{R_{L}}+\frac{1}{L_{L}s}}\right) \ \dots \ $	150
10.76 B NVALID-ORDER-763 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{1}{C_{5}s}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots $	150
10.764NVALID-ORDER-764 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}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) \qquad \dots $	151
10.765NVALID-ORDER-765 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s + 1}, \ R_{L}\right)$ $= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s + 1}, \ \frac{1}{C_{L}s}\right)$	151
10.766NVALID-ORDER-766 $Z(s) =$	$= \left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s + 1}, \ \frac{1}{C_{L}s}\right) \qquad \qquad$	151
10.76 T NVALID-ORDER- 767 $Z(s) =$	$\left(\frac{\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}}{\frac{1}{C_1 s + \frac{1}{L_1 s}}}, \infty, \infty, \infty, \frac{\frac{\iota \iota_5}{C_5 R_5 s + 1}}{\frac{\iota_5}{C_L R_L s + 1}} \right)$	151

10.796NVALID-ORDER-796 $Z(s) = $	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.79 TNVALID-ORDER-797 $Z(s)=$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.79&NVALID-ORDER-798 $Z(s) = \displaystyle$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.79 9 NVALID-ORDER-799 $Z(s)=$	$\left(\frac{1}{C_1s + \frac{1}{R_1} + \frac{1}{L_1s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ L_Ls + \frac{1}{C_Ls}\right) \ \dots \ $
10.80 0 NVALID-ORDER-800 $Z(s) =$	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.80 INVALID-ORDER-801 $Z(s) = $	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, L_{L}s+R_{L}+\frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.802NVALID-ORDER-802 $Z(s) = $	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \frac{1}{C_{L}s+\frac{1}{R_{L}}+\frac{1}{L_{L}s}}\right)\right] \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.80&NVALID-ORDER-803 $Z(s)=$	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.80#NVALID-ORDER-804 $Z(s)=$	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{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}}\right) \right) \dots $
10.80 INVALID-ORDER-805 $Z(s) = $	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ L_{5}s+R_{5}+\frac{1}{C_{5}s}, \ R_{L}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.80@NVALID-ORDER-806 $Z(s) =$	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ L_{5}s+R_{5}+\frac{1}{C_{5}s}, \ \frac{1}{C_{L}s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.80¶NVALID-ORDER-807 $Z(s) = \\$	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}}, \infty, \infty, \infty, \infty, K_{5}s+R_{5}+\frac{1}{C_{5}s}, \frac{R_{L}}{C_{L}R_{L}s+1}\right) $
10.80&NVALID-ORDER-808 $Z(s) = $	$\left(\frac{1}{C_{1}s+\frac{1}{R_{1}}+\frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ L_{5}s+R_{5}+\frac{1}{C_{5}s}, \ R_{L}+\frac{1}{C_{L}s}\right) $
10.809NVALID-ORDER-809 $Z(s) = $	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \sum_{s=0}^{n} L_s + \frac{1}{C_5 s}, L_s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.81@NVALID-ORDER-810 $Z(s) =$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, K_5 s + K_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$
10.81 INVALID-ORDER-811 $Z(s) = \displaystyle$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, K_5 s + K_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.812NVALID-ORDER-812 $Z(s) =$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) $
10.81%NVALID-ORDER-813 $Z(s) =$	$\begin{pmatrix} c_1c_1 + R_1 + L_1s_1 \end{pmatrix}$
10.81#NVALID-ORDER-814 $Z(s) = \\$	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \sum_{s} L_{5}s + R_{5} + \frac{1}{C_{5}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) \right) $
10.81 NVALID-ORDER-815 $Z(s) =$	$\left(\begin{array}{cccc} C_1 s + \overline{R}_1 + \overline{L}_1 s & C_5 s + \overline{R}_5 + \overline{L}_5 s \end{array}\right)$
10.816NVALID-ORDER-816 $Z(s) =$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.81 TNVALID-ORDER-817 $Z(s) =$	$\left(\begin{array}{cccc} C_1s+\overline{R}_1+\overline{L}_1s & C_5s+\overline{R}_5+\overline{L}_5s & CLRLs+1 \end{array}\right)$
10.81&NVALID-ORDER-818 $Z(s) =$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.819NVALID-ORDER-819 $Z(s) = \\$	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.820NVALID-ORDER-820 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$
10.82INVALID-ORDER-821 $Z(s) =$	$\begin{pmatrix} C_{1s} + R_1 + L_{1s} & C_{5s} + R_5 + L_{5s} \end{pmatrix}$
10.822NVALID-ORDER-822 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$
$10.82 \texttt{B} \text{NVALID-ORDER-823} \ Z(s) =$	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $

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10.85RNVALID-ORDER-853 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{L_L s}\right)}{L_L s + R_L + \frac{1}{L_L s}}\right) \dots \dots \dots
10.85 INVALID-ORDER-855 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_1 s}, \frac{1}{C_1 s}\right) \dots \dots \dots
10.85 INVALID-ORDER-856 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.85 INVALID-ORDER-857 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right)
10.85\( \text{NVALID-ORDER-858} \( Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \right) \quad \tag{2.5}
10.859NVALID-ORDER-859 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
10.86 QNVALID-ORDER-860 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots
10.86INVALID-ORDER-861 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
10.862NVALID-ORDER-862 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . . .
10.864NVALID-ORDER-864 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right) \dots \dots \dots
10.86 INVALID-ORDER-865 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right) \dots
10.866NVALID-ORDER-866 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right) . . .
10.86 INVALID-ORDER-867 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right) \dots
10.86 NVALID-ORDER-868 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
10.86 INVALID-ORDER-869 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) \dots \dots \dots
10.87INVALID-ORDER-871 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
10.872NVALID-ORDER-872 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots
10.87\( \text{ENVALID-ORDER-873} \( Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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) \]
10.87\(\text{INVALID-ORDER-874}\) Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \, \infty, \, \infty, \, \infty, \, R_5 + \frac{1}{C_5 s}, \, R_L\right) \, \ldots \, \ldots \, \ldots
10.87 INVALID-ORDER-875 Z(s) = \left(\frac{L_1 s}{C_1 L_0 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_1 s}, \frac{1}{C_1 s}\right) \dots \dots
10.876NVALID-ORDER-876 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_4 R_4 s + 1}\right) \dots
10.87 INVALID-ORDER-877 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right) \dots
10.87\( \text{NVALID-ORDER-878} \) Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \, \infty, \, \infty, \, \infty, \, R_5 + \frac{1}{C_5 s}, \, L_L s + \frac{1}{C_4 s} \right) \dots
10.879NVALID-ORDER-879 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) . . . . . .
10.88@NVALID-ORDER-880 Z(s) = \left(\frac{L_{18}}{C_{1}L_{1}s^{2}+1} + R_{1}, \infty, \infty, \infty, R_{5} + \frac{1}{C_{5}s}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) . . . .
10.88INVALID-ORDER-881 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \dots \dots \dots
10.882NVALID-ORDER-882 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . . . . . .
10.88 INVALID-ORDER-883 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)......
10.88 INVALID-ORDER-885 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right) \dots \dots
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10.88 INVALID-ORDER-887 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) \dots \dots
10.88\ NVALID-ORDER-888 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) . . . . . . . . . . . .
10.89 INVALID-ORDER-895 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_1 s}\right) \dots \dots \dots
10.896NVALID-ORDER-896 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.89TNVALID-ORDER-897 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right) \dots
10.89\( \text{NVALID-ORDER-898} \( Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \right) \\ \tag{1.5.1}
10.899NVALID-ORDER-899 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right) ......
10.90 \text{INVALID-ORDER-901 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) 
10.904NVALID-ORDER-904 Z(s) = \left(\frac{L_1 s}{C_1 L_0 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) .....
10.90 INVALID-ORDER-905 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) \dots \dots
10.90 INVALID-ORDER-906 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_4 R_4 s + 1}\right) ......
10.90 TNVALID-ORDER-907 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right) \dots \dots
10.90\( \text{NVALID-ORDER-908} \( Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty,
10.909NVALID-ORDER-909 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) \dots \dots \dots
10.91 \text{INVALID-ORDER-911 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \infty, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) 
10.914NVALID-ORDER-914 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right) \dots \dots \dots \dots
10.91 INVALID-ORDER-915 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, \frac{1}{C_L s}\right) . . . . . . . . . . . .
10.91 \text{ (INVALID-ORDER-916 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots 
10.91 \text{INVALID-ORDER-} 917 \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{L_5 s}}, \ R_L + \frac{1}{C_L s}\right)
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10.92 0 NVALID-ORDER-920 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \dots $. 170
10.92INVALID-ORDER-921 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \dots $	170
10.922NVALID-ORDER-922 $Z(s) =$	$\begin{pmatrix} c_1c_1c_2 + 1 & c_5c_1 + L_5c_2 & c_1c_2c_2 + 1 \end{pmatrix}$	170
10.92\$NVALID-ORDER-923 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \right) \dots $	170
10.924NVALID-ORDER-924 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L\right)$	171
10.92 δ NVALID-ORDER-925 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1,\ \infty,\ \infty,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \frac{1}{C_Ls}\right)$	171
10.926NVALID-ORDER-926 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$	171
10.92 T NVALID-ORDER-927 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1,\ \infty,\ \infty,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ R_L+\frac{1}{C_Ls}\right)$. 171
10.92\NVALID-ORDER-928 $Z(s) =$		
10.92 9 NVALID-ORDER-929 $Z(s) =$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1},\ \infty,\ \infty,\ \infty,\ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right) \ \ \ldots $	
10.93@NVALID-ORDER-930 $Z(s) =$		
10.93INVALID-ORDER-931 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \dots $	171
10.932NVALID-ORDER-932 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	172
10.93 % NVALID-ORDER-933 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \ \dots $	172
10.934NVALID-ORDER-934 $Z(s)=$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1}, \ \infty, \ \infty, \ \infty, \ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \ R_{L}\right) \ \dots $	172
10.93 \$NVALID-ORDER-935 $Z(s)=% {\textstyle\int\limits_{s=0}^{\infty}} \left({{S_{s}}} \right) \left({S_{s}} \right) \left($	$R_r(L_r s + \frac{1}{r})$	172
10.936NVALID-ORDER-936 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L}{C_LR_Ls+1}\right) \dots $	172
10.93 T NVALID-ORDER-937 $Z(s) =$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_L + \frac{1}{C_Ls}\right) \ \dots $	172
10.93&NVALID-ORDER-938 $Z(s)=$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + \frac{1}{C_Ls}\right) \dots $	172
	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) \ \dots $	172
	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \dots $	
10.94 INVALID-ORDER-941 $Z(s) = \displaystyle$	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \right)' - \dots $	173
10.94 אינער און אינער און אינער און דער אינער אייער אינער איי	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1},\ \infty,\ \infty,\ \infty,\ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}},\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}+R_{L}\right)\ \dots$	173
10.94\%NVALID-ORDER-943 $Z(s) =$	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}+R_{1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right)^{2}.\ldots\right)$	173
10.94#NVALID-ORDER-944 $Z(s)=$	$\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, \ R_5, \ \frac{1}{C_L s}\right) \ \dots \ $	173
10.945NVALID-ORDER-945 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$. 173
10.946NVALID-ORDER-946 $Z(s)=$	$ \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, R_5, R_L + \frac{1}{C_L s} \right) $	173
10.94¶NVALID-ORDER-947 $Z(s) =$	$\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_5, L_Ls + \frac{1}{C_Ls}\right) \dots $	173
10.94&NVALID-ORDER-948 $Z(s)=$	$\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_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)' \ldots \ldots \ldots \ldots \ldots \ldots \ldots $	174

10.94 9 NVALID-ORDER-949 $Z(s)=$	$\left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s}\right) \ . \ . \ . \ . \ . \ . \ .$. 174
10.95 0 NVALID-ORDER-950 $Z(s)=$	$\left\langle R_{s}\left(L_{s}\otimes\pm\frac{1}{s}\right)\right\rangle$. 174
10.95 I NVALID-ORDER-951 $Z(s) =$	$\begin{pmatrix} B_{10} + R_1 + C_{18} \end{pmatrix}$	
10.95 אינער און אינער און אינער און אינער און אינער אינער און אינער אייער אינער אייער אינער אייער אינער	$\left\langle P \left(I_{1} \right) \right\rangle = \left\langle P \left(I_{1} \right) \right\rangle$. 174
10.95%NVALID-ORDER-953 $Z(s) =$	$\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, \ \frac{1}{C_5 s}, \ R_L\right) \ \dots $. 174
10.954NVALID-ORDER-954 $Z(s)=$	$\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, \frac{1}{C_5 s}, \frac{1}{C_L s}\right) \dots $. 174
10.95 % NVALID-ORDER-955 $Z(s)=$	$\left\langle R_{1}\left\langle L_{1}\right\rangle +\frac{1}{L_{1}}\right\rangle$. 174
10.956NVALID-ORDER-956 $Z(s) =$	$\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, \ \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right) \dots $. 175
10.95 T NVALID-ORDER-957 $Z(s) =$	$\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, \ \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) $. 175
10.95&NVALID-ORDER-958 $Z(s) =$	$\left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots$. 175
10.95 9 NVALID-ORDER-959 $Z(s) =$	$\left\langle P_{1}\left(1,z\right) \right\rangle$. 175
10.96 0 NVALID-ORDER-960 $Z(s) =$	$\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, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $. 175
10.96INVALID-ORDER-961 $Z(s) =$	$\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, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $. 175
10.962NVALID-ORDER-962 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots $. 175
10.96 3 NVALID-ORDER-963 $Z(s)=$	$\left(\begin{array}{ccc} E_{1}s+E_{1}+C_{1}s \end{array}\right)$. 175
10.964NVALID-ORDER-964 $Z(s)=$	$\left(\begin{array}{cccc}L_1s+n_1+\overline{C_1s}&C_5n_0s+1&C_Ls\end{array}\right)$. 176
10.96 Б NVALID-ORDER-965 $Z(s)=$	$\left(\begin{array}{cccc}L_1s+\kappa_1+\overline{C_1s}\end{array}\right)$. 176
10.96&NVALID-ORDER-966 $Z(s) =$	$ \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, R_L + \frac{1}{C_Ls}\right) \\ \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + \frac{1}{C_Ls}\right) \\ \dots \dots$. 176
10.96 T NVALID-ORDER-967 $Z(s) =$	$\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{R_5}{C_5R_5s + 1}, L_Ls + \frac{1}{C_Ls}\right) \dots $. 176
10.96&NVALID-ORDER-968 $Z(s)=$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right) \dots $. 176
10.96 9 NVALID-ORDER-969 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \right)$. 176
10.97 0 NVALID-ORDER-970 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)\right)$. 176
10.97INVALID-ORDER-971 $Z(s) =$	$ \begin{pmatrix} R_1 \left(L_1 s + \frac{1}{C_1 s} \right) \\ L_1 s + R_1 + \frac{1}{C_1 s} \end{pmatrix}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \end{pmatrix} $ $ \begin{pmatrix} R_1 \left(L_1 s + \frac{1}{C_1 s} \right) \\ L_1 s + R_1 + \frac{1}{C_1 s} \end{pmatrix}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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}} \end{pmatrix} $ $ \begin{pmatrix} R_1 \left(L_1 s + \frac{1}{C_1 s} \right) \\ L_1 s + R_1 + \frac{1}{C_1 s} \end{pmatrix}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L \end{pmatrix} $ $ \begin{pmatrix} R_1 \left(L_1 s + \frac{1}{C_1 s} \right) \\ L_1 s + R_1 + \frac{1}{C_1 s} \end{pmatrix}, \infty, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L \end{pmatrix} $. 176
10.972NVALID-ORDER-972 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots $. 177
10.97\%NVALID-ORDER-973 $Z(s) =$	$\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, \ R_5 + \frac{1}{C_5 s}, \ R_L\right) \ \dots $. 177
10.974NVALID-ORDER-974 $Z(s)=$	$\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_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right) \dots $. 177

10.975 NVALID-ORDER-975 $Z(s) = \displaystyle$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right) \dots $	177
10.976NVALID-ORDER-976 $Z(s) =$	$\left(R_{\bullet}\left(L_{\bullet}s+\frac{1}{2}\right)\right)$	177
10.97¶NVALID-ORDER-977 $Z(s) =$	$\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_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right) $	177
10.97&NVALID-ORDER-978 $Z(s) =$	$\langle P I \rangle $	177
10.979NVALID-ORDER-979 $Z(s) =$	$\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_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots $	177
10.98©NVALID-ORDER-980 $Z(s) =$	$\left(\begin{array}{ccc}L_1s+R_1+\frac{1}{C_1s}\end{array}\right)$	178
10.98INVALID-ORDER-981 $Z(s) =$	$\left(\frac{L_1s+L_1+C_1s}{C_1s}\right)$	178
10.982NVALID-ORDER-982 $Z(s) =$	$\left(\begin{array}{cccc}L_{L^{s}}+L_{L}+C_{L^{s}}\end{array}\right)$	178
10.98 B NVALID-ORDER-983 $Z(s) =$	$\left(\begin{array}{ccc} I_{1s} + I_{1} + C_{1s} \\ \end{array}\right)$	178
10.98 #NVALID-ORDER-984 $Z(s)=$	$\left(\begin{array}{ccc} L_{1s} + R_{1} + C_{1s} \\ \end{array}\right)$	178
10.98\$NVALID-ORDER-985 $Z(s) =$	$\left(\begin{array}{cccc} E_{1s} + E_{1} + C_{1s} & & & & & & & & & & & & & & & & & & &$	178
10.986NVALID-ORDER-986 $Z(s) =$	$\left(\frac{L_1s+L_1+\overline{C_1s}}{C_1s}\right)$	178
10.98 T NVALID-ORDER-987 $Z(s) =$	$\left(\frac{L_1 s + R_1 + \frac{1}{C_1 s}}{C_1 s}\right)$	178
10.98&NVALID-ORDER-988 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	179
10.98 9 NVALID-ORDER-989 $Z(s) =$	$\left(\begin{array}{ccc} E_{1s} + K_{1} + C_{1s} \end{array}\right)$	179
10.99 © NVALID-ORDER-990 $Z(s) =$	$\left(\begin{array}{ccc}L_1s+R_1+\overline{C_1}s&C_5s&C_Ls+\overline{R_L}+\overline{L_L}s\end{array} ight)$	179
10.99INVALID-ORDER-991 $Z(s) =$	$\left(rac{L_1 s + R_1 + \overline{C_1 s}}{C_1 s} ight) = \left(rac{C_5 s}{C_1 L_2 s} + \Gamma ight)$	179
10.99 2 NVALID-ORDER-992 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \sum_{t=0}^{\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 $	179
10.99 & NVALID-ORDER-993 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L\right) $	179
10.99 #NVALID-ORDER-994 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls}\right)$	179
10.99 Б NVALID-ORDER-995 $Z(s) =$	$\left(\frac{L_{1}s + R_{1} + \frac{1}{C_{1}s}}{L_{1}s + \frac{1}{C_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \frac{R_{L}}{C_{L}R_{L}s + 1}\right) - \dots - $	179
10.996NVALID-ORDER-996 $Z(s) =$	$\left(\frac{N(-N-1)}{L+D-1}, \infty, \infty, \infty, \frac{N(-N-1)}{L+D-1}, R_L + \frac{1}{C-1}\right)$	180
10.99 T NVALID-ORDER-997 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls+\frac{1}{C_Ls}\right)$	180
10.99&NVALID-ORDER-998 $Z(s) =$	$ \begin{pmatrix} \frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, & \infty, & \infty, & \infty, & \frac{L_5s}{C_5L_5s^2 + 1}, & L_Ls + \frac{1}{C_Ls}\right) \\ \frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, & \infty, & \infty, & \infty, & \frac{L_5s}{C_5L_5s^2 + 1}, & \frac{L_Ls}{C_LL_s^2 + 1}\right) \\ \frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, & \infty, & \infty, & \infty, & \frac{L_5s}{C_5L_5s^2 + 1}, & L_Ls + R_L + \frac{1}{C_Ls}\right) \\ \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_5s}{C_5L_5s^2 + 1}, & L_Ls + R_L + \frac{1}{C_Ls}\right) $	180
10.99 9 NVALID-ORDER-999 $Z(s) =$	$\left(\frac{\frac{L_{1}(L_{1}s+\frac{1}{C_{1}s})}{L_{1}s+R_{1}+\frac{1}{C_{1}s}}}{L_{1}s+R_{1}+\frac{1}{C_{1}s}}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, L_{L}s+R_{L}+\frac{1}{C_{L}s}\right) \dots $	180
10.10 ON VALID-ORDER- $1000 \ Z(s) =$	$= \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, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $	180

10.100NVALID-ORDER-1001 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}},\right.$	$1, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L$
10.10 02 VALID-ORDER-1002 $Z(s)=$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}},\right.$	$18, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}$
10.10 03 VALID-ORDER-1003 $Z(s)=$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}},\right.$	$, \infty, \infty, \infty, R_5 + R_5 + \frac{1}{C_5 s}, R_L$
10.10 0M VALID-ORDER-1004 $Z(s)=$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}},\right.$	$, \infty, \infty, \infty, R_5 + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}$
10.10 03 VALID-ORDER-1005 $Z(s) =$	Cis	$(1, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1})$
10.10 0N VALID-ORDER-1006 $Z(s) =$	` ,	$(1, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls})$
10.100% VALID-ORDER-1007 $Z(s) =$	(1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18 , ∞ , ∞ , ∞ , $L_5s + R_5 + \frac{1}{C_5s}$, $L_Ls + \frac{1}{C_Ls}$
10.10 0 NVALID-ORDER-1008 $Z(s) =$		18 , ∞ , ∞ , ∞ , $L_5s + R_5 + \frac{1}{C_5s}$, $\frac{L_Ls}{C_LL_Ls^2+1}$
10.10 0N VALID-ORDER-1009 $Z(s) =$	()	18 , ∞ , ∞ , ∞ , $L_5s + R_5 + \frac{1}{C_5s}$, $L_Ls + R_L + \frac{1}{C_Ls}$
10.10 IN VALID-ORDER-1010 $Z(s) =$	-1-	$, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} $
10.10 IN VALID-ORDER-1011 $Z(s) =$	Cis	18 , ∞ , ∞ , ∞ , $L_5s + R_5 + \frac{1}{C_5s}$, $\frac{L_Ls}{C_LL_Ls^2+1} + R_L$
10.10 IN VALID-ORDER-1012 $Z(s) =$	()	$, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.10 IN VALID-ORDER-1013 $Z(s) =$	($18, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L$
10.10 IM VALID-ORDER-1014 $Z(s) =$		$, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s} $
10.10 IN VALID-ORDER-1015 $Z(s) =$		$, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1} $
10.10 IN VALID-ORDER-1016 $Z(s) =$		$, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s} $
10.10 IM VALID-ORDER-1017 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right)$	$, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s} $
$10.10 \mathbf{IN} \text{VALID-ORDER-1018} \ Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right)$	$, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} $
10.10 1N VALID-ORDER-1019 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right)$	$18, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}$
$10.10 \mathbf{2N} \text{VALID-ORDER-1020} \ Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right)$	$(1, \infty, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}})$
10.102NVALID-ORDER-1021 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right.$	(18) (2.18) (2.18) (3.18) $(3.$
10.10 22 VALID-ORDER-1022 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right.$	$_{1}, \infty, \infty, \infty, \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)'$
$10.10 \mathbf{2N} \text{VALID-ORDER-1023} \ Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right.$	$, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L$
$10.10 \mathbf{2N} \text{VALID-ORDER-1024} \ Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right)$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
10.10 2N VALID-ORDER-1025 $Z(s) =$	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}},\right)$	$_{1}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5}, \frac{R_{L}}{C_{L}R_{L}s+1}$
$10.10 \mathbf{2N} \text{VALID-ORDER-1026} \ Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}},\right.$	$_{1}, \infty, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, R_{L} + \frac{1}{C_{L}s}$

$10.10 {\tt PN} {\tt VALID-ORDER-1027} \ Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, L_L s + \frac{1}{C_L s}$		 	 	 	 	 	183
$10.10 \mathbf{2N} \text{VALID-ORDER-1028} \ Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{L_{5s}}{C_{5}L_{5}s^{2}+1} + R_{5}$	$, \frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	 	 	184
10.10 2N VALID-ORDER-1029 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}$, $L_L s + R_L +$	$-\frac{1}{C_L s}$	 	 	 	 	 	184
10.10 BN VALID-ORDER-1030 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L}}$	$\frac{1}{s}$ \cdots	 	 	 	 	 	184
10.10 BN VALID-ORDER-1031 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{L_L s}{C_L L_L s^2 + 1} +$	R_L)	 	 	 	 	 	184
10.10821VALID-ORDER-1032 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{R_L \left(L_L s + \frac{1}{C_L s} + \frac{1}{C_L s$	$\left(\frac{\overline{s}}{\overline{s}}\right)$	 	 	 	 	 	184
10.10 BN VALID-ORDER-1033 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	R_L)		 	 	 	 	 	184
10.10 BM VALID-ORDER-1034 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$\frac{1}{C_L s}$ \cdots		 	 	 	 	 	184
10.10 BN VALID-ORDER-1035 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$\frac{R_L}{C_L R_L s + 1}$		 	 	 	 	 	184
10.10 BN VALID-ORDER-1036 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$R_L + \frac{1}{C_L s}$		 	 	 	 	 	185
10.10BN VALID-ORDER-1037 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$L_L s + \frac{1}{C_L s}$		 	 	 	 	 	185
10.10 BN VALID-ORDER-1038 $Z(s) =$	$ \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right) $	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	 	 	185
10.10 BN VALID-ORDER-1039 $Z(s) =$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$L_L s + R_L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$	 	 	 	 	 	185
10.104NVALID-ORDER-1040 $Z(s)=$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$)	 	 	 	 	 	185
10.104NVALID-ORDER-1041 $Z(s)=$	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R$	R_L)	 	 	 	 	 	185
וויים אוויים אוויי	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}\right)$	$, \infty, \infty, \infty, \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$)	 	 	 	 	 	185

 $\textbf{1} \quad \textbf{Examined} \ \ H(z) \ \ \textbf{for TIA some parasitic Z1 Z5 ZL:} \ \ \frac{Z_1Z_L(Z_5g_mr_o + Z_5 - r_o)}{Z_1Z_5g_mr_o + Z_1Z_5 + 2Z_1Z_Lg_mr_o + 4Z_1Z_L + Z_1r_o + Z_5Z_L + Z_5r_o + Z_Lr_o}$

$$H(z) = \frac{Z_1 Z_L \left(Z_5 g_m r_o + Z_5 - r_o \right)}{Z_1 Z_5 g_m r_o + Z_1 Z_5 + 2 Z_1 Z_L g_m r_o + 4 Z_1 Z_L + Z_1 r_o + Z_5 Z_L + Z_5 r_o + Z_L r_o}$$

- 2 HP
- 3 BP
- **3.1** BP-1 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_1 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_L L_L R_1 R_5 g_m r_o s^2 + C_L L_L R_1 r_o s^2 + C_L L_L R_5 r_o s^2 + 2 L_L R_1 g_m r_o s + 4 L_L R_1 s + L_L R_5 s + L_L r_o s + R_1 R_5 g_m r_o + R_1 R_5 + R_1 r_o + R_5 r_o}$$

Parameters:

Q:
$$\frac{C_L\sqrt{\frac{1}{C_LL_L}}(R_1R_5g_mr_o + R_1R_5 + R_1r_o + R_5r_o)}{2R_1g_mr_o + 4R_1 + R_5 + r_o}$$
 wo:
$$\sqrt{\frac{1}{C_LL_L}}$$
 bandwidth:
$$\frac{2R_1g_mr_o + 4R_1 + R_5 + r_o}{C_L(R_1R_5g_mr_o + R_1R_5 + R_1r_o + R_5r_o)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_1(R_5g_mr_o + R_5 - r_o)}{2R_1g_mr_o + 4R_1 + R_5 + r_o}$$
 Qz: 0 Wz: None

3.2 BP-2 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

Parameters:

Q:
$$\frac{C_L R_L \sqrt{\frac{1}{C_L L_L}}}{R_1 R_5 g_m r_o + R_1 R_5 + R_1 r_o + R_5 r_o)}$$
wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
bandwidth:
$$\frac{R_1 R_5 g_m r_o + R_1 R_5 + 2R_1 R_L g_m r_o + 4R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}{C_L R_L (R_1 R_5 g_m r_o + 4R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}$$
K-LP: 0
K-HP: 0
K-BP:
$$\frac{R_1 R_5 g_m r_o + R_1 R_5 + 2R_1 R_L g_m r_o + 4R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}{R_1 R_L (R_5 g_m r_o + R_5 - r_o)}$$
Qz: 0
Wz: None

3.3 BP-3 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

Q:
$$\frac{C_L L_1 \sqrt{\frac{R_5 + r_o}{C_L L_1 (R_5 g_m r_o + R_5 + r_o)}} (R_5 g_m r_o + R_5 + r_o)}{C_L R_5 r_o + 2L_1 g_m r_o + 4L_1}$$

wo:
$$\sqrt{\frac{R_5+r_o}{C_LL_1(R_5g_mr_o+R_5+r_o)}}$$
 bandwidth: $\frac{C_LR_5r_o+2L_1g_mr_o+4L_1}{C_LL_1(R_5g_mr_o+R_5+r_o)}$ K-LP: 0 K-HP: 0 K-BP: $\frac{L_1(R_5g_mr_o+R_5-r_o)}{C_LR_5r_o+2L_1g_mr_o+4L_1}$ Qz: 0 Wz: None

3.4 BP-4
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_L L_1 R_5 R_L g_m r_o s^2 + C_L L_1 R_5 R_L s^2 + C_L L_1 R_L r_o s^2 + C_L R_5 R_L r_o s + L_1 R_5 g_m r_o s + L_1 R_5 s + 2 L_1 R_L g_m r_o s + 4 L_1 R_L s + L_1 r_o s + R_5 R_L + R_5 r_o + R_L r_o}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_L L_1 R_L \sqrt{\frac{R_5 R_L + R_5 r_o + R_L r_o}{C_L L_1 R_L (R_5 g_m r_o + R_5 + r_o)}} (R_5 g_m r_o + R_5 + r_o)}{C_L R_5 R_L r_o + L_1 R_5 g_m r_o + L_1 R_5 + 2L_1 R_L g_m r_o + 4L_1 R_L + L_1 r_o} \\ \text{wo:} \ \sqrt{\frac{R_5 R_L + R_5 r_o + R_L r_o}{C_L L_1 R_L (R_5 g_m r_o + R_5 + r_o)}} \\ \text{bandwidth:} \ \frac{C_L R_5 R_L r_o + L_1 R_5 g_m r_o + L_1 R_5 + 2L_1 R_L g_m r_o + 4L_1 R_L + L_1 r_o}{C_L L_1 R_L (R_5 g_m r_o + R_5 + r_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{L_1 R_L (R_5 g_m r_o + R_5 - r_o)}{C_L R_5 R_L r_o + L_1 R_5 g_m r_o + L_1 R_5 + 2L_1 R_L g_m r_o + 4L_1 R_L + L_1 r_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.5 BP-5
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, R_L\right)$$

$$H(s) = \frac{L_1 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 L_1 R_5 R_L s^2 + C_1 L_1 R_5 r_o s^2 + L_1 R_5 g_m r_o s + L_1 R_5 s + 2 L_1 R_L g_m r_o s + 4 L_1 R_L s + L_1 r_o s + R_5 R_L + R_5 r_o + R_L r_o}$$

Parameters:

Q:
$$\frac{C_1\sqrt{\frac{1}{C_1L_1}}(R_5R_L + R_5r_o + R_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}$$
 wo:
$$\sqrt{\frac{1}{C_1L_1}}$$
 bandwidth:
$$\frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{C_1(R_5R_L + R_5r_o + R_Lr_o)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}$$
 Qz: 0 Wz: None

3.6 BP-6
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, R_L\right)$$

$$H(s) = \frac{L_1 R_1 R_2 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 L_1 R_1 R_5 r_o s^2 + C_1 L_1 R_1 R_5 r_o s^2 + L_1 R_1 R_5 g_m r_o s + L_1 R_1 R_5 s + 2 L_1 R_1 R_L g_m r_o s + 4 L_1 R_1 R_L s + L_1 R_1 r_o s + L_1 R_5 r_o s + L_1 R_L r_o s + R_1 R_5 R_L s + L_1 R_5 r_o s + R_1 R_5 R_L s + L_1 R_5 r_o s + R_1 R_5 R_L s + L_1 R_5 r_o s + R_1 R_5 R_L s + R_1 R_5 r_o s + R_1 R_5 R_L s + R_1 R_5 r_o s + R_1 R_5 R_L s +$$

$$\begin{aligned} &\text{Q: } \frac{C_1R_1\sqrt{\frac{1}{C_1L_1}}(R_5R_L + R_5r_o + R_Lr_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o} \\ &\text{wo: } \sqrt{\frac{1}{C_1L_1}} \\ &\text{bandwidth: } \frac{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}{C_1R_1(R_5R_L + R_5r_o + R_Lr_o)} \end{aligned}$$

K-LP: 0 K-HP: 0

K-Hr: 0 K-BP: $\frac{R_1 R_L (R_5 g_m r_o + R_5 - r_o)}{R_1 R_5 g_m r_o + R_1 R_5 + 2R_1 R_L g_m r_o + 4R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}$ Qz: 0

Wz: None

4 LP

4.1 LP-1
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{R_5 g_m r_o + R_5 - r_o}{C_1 C_L R_5 r_o s^2 + C_1 R_5 s + C_1 r_o s + C_L R_5 g_m r_o s + C_L R_5 s + C_L r_o s + 2 g_m r_o + 4}$

Q: $\frac{\sqrt{2}C_{1}C_{L}R_{5}r_{o}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}R_{5}r_{o}}}}{C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}}$ wo: $\sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}R_{5}r_{o}}}$ bandwidth: $\frac{C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}{C_{1}C_{L}R_{5}r_{o}}}$ K-LP: $\frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2(g_{m}r_{o}+2)}}$ K-HP: 0 K-BP· Ω

K-BP: 0

Qz: None

Wz: None

4.2 LP-2 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

Parameters:

Q: $\frac{C_{1}C_{L}R_{5}R_{L}r_{o}\sqrt{\frac{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}{C_{1}C_{L}R_{5}R_{L}r_{o}}}}{\frac{C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{C_{1}C_{L}R_{5}R_{L}r_{o}}}$ wo: $\sqrt{\frac{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}{C_{1}C_{L}R_{5}R_{L}r_{o}}}}$ bandwidth: $\frac{C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{C_{1}C_{L}R_{5}R_{L}r_{o}}}$

K-LP: $\frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}$ K-HP: 0

K-BP: 0

Qz: None Wz: None

4.3 LP-3 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L R_1 R_5 r_o s^2 + C_1 R_1 R_5 s + C_1 R_1 r_o s + C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 s + C_L R_1 r_o s + C_L R_5 r_o s + 2 R_1 g_m r_o + 4 R_1 + R_5 + r_o}$$

$$\begin{array}{c} Q\colon \frac{C_{1}C_{L}R_{1}R_{5}r_{o}\sqrt{\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{C_{1}C_{L}R_{1}R_{5}r_{o}}}}{C_{1}R_{1}R_{5}+C_{1}R_{1}r_{o}+C_{L}R_{1}R_{5}g_{m}r_{o}+C_{L}R_{1}R_{5}+C_{L}R_{1}r_{o}+C_{L}R_{5}r_{o}}}\\ \text{wo: } \sqrt{\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{C_{1}C_{L}R_{1}R_{5}r_{o}}} \end{array}$$

4.4 LP-4
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L R_1 R_5 R_L r_o s^2 + C_1 R_1 R_5 R_L s + C_1 R_1 R_5 r_o s + C_L R_1 R_5 R_L g_m r_o s + C_L R_1 R_5 R_L s + C_L R_1 R_5 R_L r_o s + C_L R_$$

$$\begin{array}{l} \text{Q:} \frac{C_{1}C_{L}R_{1}R_{5}R_{L}r_{o}\sqrt{\frac{R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}}{C_{1}R_{1}R_{5}R_{L}+C_{1}R_{1}R_{5}r_{o}+C_{L}R_{1}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{1}R_{5}R_{L}+C_{L}}R_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}r_{o}}} \\ \text{wo:} \ \sqrt{\frac{R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}{C_{1}C_{L}R_{1}R_{5}R_{L}+r_{o}}}} \\ \text{bandwidth:} \ \frac{C_{1}R_{1}R_{5}R_{L}+C_{1}R_{1}R_{5}r_{o}+C_{1}R_{1}R_{L}r_{o}+C_{L}R_{1}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{1}R_{5}R_{L}+C_{L}R_{1}R_{5}R_{L}+C_{L}R_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}r_{o}}}{C_{1}C_{L}R_{1}R_{5}R_{L}r_{o}}} \\ \text{K-LP:} \ \frac{R_{1}R_{L}(R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}}{R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}}{K_{-}BP:} \\ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

5 BS

5.1 BS-1
$$Z(s) = \left(R_1, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

Parameters:

Q:
$$\frac{L_L \sqrt{\frac{1}{C_L L_L}} (2R_1 g_m r_o + 4R_1 + R_5 + r_o)}{R_1 R_5 g_m} r_o + R_1 R_5 + R_1 r_o + R_5 r_o}$$
wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
bandwidth:
$$\frac{R_1 R_5 g_m r_o + R_1 R_5 + R_1 r_o + R_5 r_o}{L_L (2R_1 g_m r_o + 4R_1 + R_5 + r_o)}$$
K-LP:
$$\frac{R_1 (R_5 g_m r_o + R_5 - r_o)}{2R_1 g_m r_o + 4R_1 + R_5 + r_o}$$
K-HP:
$$\frac{R_1 (R_5 g_m r_o + R_5 - r_o)}{2R_1 g_m r_o + 4R_1 + R_5 + r_o}$$
K-BP: 0
Qz: None
Wz:
$$\sqrt{\frac{1}{C_L L_L}}$$

5.2 BS-2
$$Z(s) = \left(R_1, \infty, \infty, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_1 R_L \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L L_L R_1 R_5 g_m r_o s^2 + C_L L_L R_1 R_2 s^2 + 2 C_L L_L R_1 R_L s^2 + C_L L_L R_1 r_o s^2 + C_L L_L R_5 r_o s^2 + C_L R_1 R_5 r_o s^2 + C_L R_$$

```
 \begin{array}{l} \text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_L(R_1R_5g_mr_o + R_1R_5 + R_1r_o + R_5r_o)} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{R_L(R_1R_5g_mr_o + R_1R_5 + R_1r_o + R_5r_o)}{L_L(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)} \\ \text{K-LP:} \ \frac{R_1R_L(R_5g_mr_o + R_5-r_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}} \\ \text{K-HP:} \ \frac{R_1R_L(R_5g_mr_o + R_5-r_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{array}
```

5.3 BS-3 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L\right)$

Parameters:

Q:
$$\frac{L_{1}\sqrt{\frac{1}{C_{1}L_{1}}}(R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o})}{R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}$$
 wo:
$$\sqrt{\frac{1}{C_{1}L_{1}}}$$
 bandwidth:
$$\frac{R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}{L_{1}(R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o})}$$
 K-LP:
$$\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}$$
 K-HP:
$$\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}$$
 K-BP: 0 Qz: None Wz:
$$\sqrt{\frac{1}{C_{1}L_{1}}}$$

5.4 BS-4
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, R_5, R_L\right)$$

 $H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 L_1 R_1 R_5 g_m r_o s^2 + C_1 L_1 R_1 R_5 s^2 + 2 C_1 L_1 R_1 R_L g_m r_o s^2 + 4 C_1 L_1 R_1 r_o s^2 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_1(R_5R_L + R_5r_o + R_Lr_o)} \\ \text{wo:} \ \sqrt{\frac{1}{C_1L_1}} \\ \text{bandwidth:} \ \frac{R_1(R_5R_L + R_5r_o + R_Lr_o)}{L_1(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)} \\ \text{K-LP:} \ \frac{R_1R_1(R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_1R_L(R_5g_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)} \\ \text{K-HP:} \ \frac{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_1L_1}} \end{array}$$

6 GE

6.1 GE-1
$$Z(s) = \left(R_1, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$Q: \frac{L_L\sqrt{\frac{1}{C_LL_L}}(2R_1g_mr_o+4R_1+R_5+r_o)}{R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}$$
 wo:
$$\sqrt{\frac{1}{C_LL_L}}$$
 bandwidth:
$$\frac{R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}{L_L(2R_1g_mr_o+4R_1+R_5+r_o)}$$
 K-LP:
$$\frac{R_1(R_5g_mr_o+R_5-r_o)}{2R_1g_mr_o+4R_1+R_5+r_o}$$
 K-HP:
$$\frac{R_1(R_5g_mr_o+R_5-r_o)}{2R_1g_mr_o+4R_1+R_5+r_o}$$
 K-BP:
$$\frac{R_1R_5g_mr_o+R_5-r_o}{R_1R_5g_mr_o+R_5-R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}$$
 Qz:
$$\frac{L_L\sqrt{\frac{1}{C_LL_L}}}{R_L}$$
 Wz:
$$\sqrt{\frac{1}{C_LL_L}}$$

6.2 GE-2
$$Z(s) = \left(R_1, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_1 \left(R_5 g_m r_o + R_5 - r_o \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{C_L L_L R_1 R_5 g_m r_o s^2 + C_L L_L R_1 R_2 s^2 + 4 C_L L_L R_1 R_L s^2 + C_L L_L R_1 r_o s^2 + C_L L_L R_1 r_o s^2 + C_L L_L R_1 r_o s^2 + 2 L_L R_1 g_m r_o s + 4 L_L R_1 s + L_L R_5 s + L_L r_o s + R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_1 r_o s^2 + 2 R_1 R_2 g_m r_o s^2 + 2 R_1 R_2 g_m r_o s^2 + 2 R_1 R_2 g_m r_o s + 4 R_2$$

Parameters:

$$Q \colon \frac{C_L \sqrt{\frac{1}{C_L L_L}}}{(R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}{2 R_1 g_m r_o + 4 R_1 + R_5 + r_o}$$

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

$$\text{bandwidth: } \frac{2 R_1 g_m r_o + 4 R_1 + R_5 + r_o}{C_L (R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}$$

$$\text{K-LP: } \frac{R_1 R_L (R_5 g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}{R_1 R_L (R_5 g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}$$

$$\text{K-HP: } \frac{R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}{R_1 R_L (R_5 g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}$$

$$\text{K-BP: } \frac{R_1 (R_5 g_m r_o + R_5 - r_o)}{2 R_1 g_m r_o + 4 R_1 R_L + R_5 r_o}$$

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

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

6.3 GE-3
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

$$Q \colon \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_1g_mr_o + R_1 + R_L + r_o)}{2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o}$$
wo: $\sqrt{\frac{1}{C_5L_5}}$
bandwidth: $\frac{2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o}{L_5(R_1g_mr_o + R_1 + R_L + r_o)}$
K-LP: $\frac{R_1R_L(g_mr_o + 1)}{R_1g_mr_o + R_1 + R_L + r_o}$
K-HP: $\frac{R_1R_L(g_mr_o + 1)}{R_1g_mr_o + R_1 + R_L + r_o}$
K-BP: $-\frac{R_1R_Lg_mr_o + R_1R_Lr_o}{2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o}$
Qz: $\frac{L_5\sqrt{\frac{1}{C_5L_5}}(-g_mr_o - 1)}{r_o}$

Wz:
$$\sqrt{\frac{1}{C_5 L_5}}$$

6.4 GE-4
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

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

$$\begin{aligned} & \text{Q:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o)}{R_1g_mr_o + R_1 + R_L + r_o} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth:} \ \frac{R_1g_mr_o + R_1 + R_L + r_o}{C_5(2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o)} \\ & \text{K-LP:} \ -\frac{R_1R_Lr_o}{2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o} \\ & \text{K-HP:} \ -\frac{R_1R_Lr_o}{2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o} \\ & \text{K-BP:} \ \frac{R_1R_L(g_mr_o + 1)}{R_1g_mr_o + R_1 + R_L + r_o} \\ & \text{Qz:} \ -\frac{C_5r_o\sqrt{\frac{1}{C_5L_5}}}{g_mr_o + 1} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.5 GE-5
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

Parameters:

$$Q \colon \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_1g_mr_o + R_1 + R_L + r_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}$$

$$\text{wo: } \sqrt{\frac{1}{C_5L_5}}$$

$$\text{bandwidth: } \frac{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}{L_5(R_1g_mr_o + R_1 + R_L + r_o)}$$

$$\text{K-LP: } \frac{R_1R_L(g_mr_o + 1)}{R_1g_mr_o + R_1 + R_L + r_o}$$

$$\text{K-HP: } \frac{R_1R_L(g_mr_o + 1)}{R_1g_mr_o + R_1 + R_L + r_o}$$

$$\text{K-BP: } \frac{R_1R_L(g_mr_o + 1)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}$$

$$\text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(g_mr_o + 1)}{R_5g_mr_o + R_5 - r_o}$$

$$\text{Wz: } \sqrt{\frac{1}{C_5L_5}}$$

6.6 GE-6
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

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

$$\begin{aligned} & \text{Q:} \ \frac{C_5 R_5 \sqrt{\frac{1}{C_5 L_5}} (2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_L r_o)}{R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5 L_5}} \\ & \text{bandwidth:} \ \frac{R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}{C_5 R_5 (2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_L r_o)} \\ & \text{K-LP:} \ -\frac{R_1 R_L r_o}{2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_L r_o} \end{aligned}$$

$$\begin{aligned} & \text{K-HP:} - \frac{R_1 R_L r_o}{2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_L r_o} \\ & \text{K-BP:} \quad \frac{R_1 R_L (R_5 g_m r_o + R_5 - r_o)}{R_1 R_5 g_m r_o + R_1} R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o} \\ & \text{Qz:} \quad - \frac{C_5 R_5 r_o \sqrt{\frac{1}{C_5 L_5}}}{R_5 g_m r_o + R_5 - r_o} \\ & \text{Wz:} \quad \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

6.7 GE-7
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

 $S(s) = \frac{R_1 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 L_5 R_1 R_5 g_m r_o s^2 + C_5 L_5 R_1 R_L g_m r_o s^2 + 4 C_5 L_5 R_1 R_L s^2 + C_5 L_5 R_5 R_L s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_1 r_o s^2 + L_5 R_1 g_m r_o s + L_5 R_1 s + L_5 R_L s + L_5 r_o s + R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 + R_5$

Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_1g_mr_o + R_1 + R_L + r_o} \\ &\text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth:} \ \frac{R_1g_mr_o + R_1 + R_L + r_o}{C_5(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)} \\ &\text{K-LP:} \ \frac{R_1R_L(R_5g_mr_o + R_5 - r_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o} \\ &\text{K-HP:} \ \frac{R_1R_L(g_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_1R_L(g_mr_o + 1)} \\ &\text{K-BP:} \ \frac{R_1R_L(g_mr_o + 1)}{R_1g_mr_o + R_1 + R_L + r_o} \\ &\text{Qz:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_5g_mr_o + R_5 - r_o)}{g_mr_o + 1} \\ &\text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.8 GE-8
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

 $H(s) = \frac{R_1 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 L_5 R_1 R_5 g_m r_o s^2 + C_5 L_5 R_1 R_5 g^2 + C_5 L_5 R_1 R_5 g^$

Parameters:

$$Q\colon \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_5(2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o)}$$
wo:
$$\sqrt{\frac{1}{C_5L_5}}$$
bandwidth:
$$\frac{R_5(2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_Lr_o)}{L_5(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}$$
K-LP:
$$\frac{R_1R_L(R_5g_mr_o + R_5r_o + R_5r_o + R_Lr_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}$$
K-HP:
$$\frac{R_1R_L(R_5g_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_1R_5g_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}$$
K-BP:
$$-\frac{R_1R_Lr_o}{2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}}$$
Qz:
$$\frac{L_5\sqrt{\frac{1}{C_5L_5}}(-R_5g_mr_o - R_5 + r_o)}{R_5r_o}$$
Wz:
$$\sqrt{\frac{1}{C_5L_5}}$$

6.9 GE-9
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 L_1 R_5 g_m r_o s^2 + C_1 L_1 R_5 g^2 + 2 C_1 L_1 R_L g_m r_o s^2 + 4 C_1 L_1 R_L s^2 + C_1 L_1 R_5 g_m r_o s + C_1 R_1 R_5 g_m r_o s + 4 C_1 R_1 R_L g_m r_o s + 4 C_1 R_1 R_5 s + C_1 R_5 r_o s + C_1 R_$$

$$\text{Q: } \frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}$$

```
wo: \sqrt{\frac{1}{C_1L_1}} bandwidth: \frac{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o}{L_1(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)} K-LP: \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} K-HP: \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} K-BP: \frac{R_1R_L(R_5g_mr_o + R_5 - r_o)}{R_1R_2(R_5g_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)} Qz: \frac{L_1\sqrt{\frac{1}{C_1L_1}}}{R_1} Wz: \sqrt{\frac{1}{C_1L_1}}
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6.10 GE-10
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_L \left(R_5 g_m r_o + R_5 - r_o \right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{C_1 L_1 R_1 R_5 g_m r_o s^2 + C_1 L_1 R_1 R_2 g^2 + C_1 L_1 R_1 R_2 s^2 + C_1 L_1 R_1 r_o s^2 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^2 + L_1 R_5 g_m r_o s + L_$$

$$\begin{array}{l} \text{Q:} \ \frac{C_1\sqrt{\frac{1}{C_1L_1}}(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{wo:} \ \sqrt{\frac{1}{C_1L_1}} \\ \text{bandwidth:} \ \frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{C_1(R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)} \\ \text{K-LP:} \ \frac{R_1R_L(R_5g_mr_o + R_5 - r_o)}{R_1R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o} \\ \text{K-HP:} \ \frac{R_1R_L(R_5g_mr_o + R_1R_5 + 2R_1R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_1R_2(R_5g_mr_o + R_5 - r_o)} \\ \text{K-BP:} \ \frac{R_L(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_1R_L + R_1r_o + R_5R_L + R_5r_o + R_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{Qz:} \ C_1R_1\sqrt{\frac{1}{C_1L_1}} \\ \text{Wz:} \ \sqrt{\frac{1}{C_1L_1}} \\ \end{array}$$

7 AP

8 INVALID-NUMER

8.1 INVALID-NUMER-1
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

Q:
$$\frac{C_5C_LR_1r_o\sqrt{\frac{1}{C_5C_LR_1r_o}}}{2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o}$$
 wo:
$$\sqrt{\frac{1}{C_5C_LR_1r_o}}$$
 bandwidth:
$$\frac{2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o}{C_5C_LR_1r_o}$$
 K-LP:
$$R_1\left(g_mr_o+1\right)$$
 K-HP:
$$0$$
 K-BP:
$$-\frac{C_5R_1r_o}{2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o}$$
 Qz:
$$0$$
 Wz: None

8.2 INVALID-NUMER-2 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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

Parameters:

Q: $\frac{C_5C_LR_1R_Lr_o\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_5C_LR_1R_Lr_o}}}{\frac{2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}{C_5C_LR_1R_Lr_o}}$ wo: $\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_5C_LR_1R_Lr_o}}$ bandwidth: $\frac{2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}{C_5C_LR_1R_Lr_o}$ K-LP: $\frac{R_1R_L(g_mr_o+1)}{R_1g_mr_o+R_1+R_L+r_o}$ K-HP: 0 K-BP: $-\frac{C_5R_1R_Lr_o}{2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}{C_5C_LR_1R_Lr_o}$ Qz: 0 Wz: None

8.3 INVALID-NUMER-3 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

Parameters:

8.4 INVALID-NUMER-4 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{R_1 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 C_L R_1 R_5 R_L r_o s^2 + 2 C_5 R_1 R_5 R_L g_m r_o s + 4 C_5 R_1 R_5 R_L s + C_5 R_1 R_5 r_o s + C_L R_1 R_5 R_L g_m r_o s + C_L R_1 R_5 R_L s + C_L R_1 R_5 r_o s + C_L R_1 R$

Parameters:

Q: $\frac{C_5C_LR_1R_5R_Lr_o\sqrt{\frac{R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}{C_5C_LR_1R_5R_Lr_o}}{\frac{C_5C_LR_1R_5R_Lr_o}{C_5C_LR_1R_5R_Lr_o}}$ wo: $\sqrt{\frac{R_1R_5g_mr_o+4C_5R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}{C_5C_LR_1R_5R_Lr_o+C_LR_1R_5R_Lg_mr_o+C_LR_1R_5R_L+C_LR_1R_Lr_o+C_LR_5R_Lr_o}}}$ bandwidth: $\frac{2C_5R_1R_5R_Lg_mr_o+4C_5R_1R_5R_L+C_5R_1R_5r_o+C_5R_5R_Lr_o+C_LR_1R_5R_Lg_mr_o+C_LR_1R_5R_L+C_LR_1R_Lr_o+C_LR_5R_Lr_o}{C_5C_LR_1R_5R_Lr_o}}$ K-LP: $\frac{R_1R_L(R_5g_mr_o+R_5-r_o)}{R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}{C_5R_1R_5R_Lr_o}}$ K-HP: 0K-BP: $-\frac{C_5R_1R_5R_Lg_mr_o+4C_5R_1R_5R_L+C_5R_1R_5r_o+C_5R_5R_Lr_o}{2C_5R_1R_5R_Lr_o+C_LR_1R_5R_L+C_LR_1R_Lr_o+C_LR_5R_Lr_o}}$ Qz: 0Wz: None

8.5 INVALID-NUMER-5 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 R_5 s^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L R_5 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 R_5 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_5C_L\sqrt{\frac{1}{C_5C_L(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}}(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}{2C_5R_1g_mr_o+4C_5R_1+C_5R_5+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o} \\ \text{wo:} \ \sqrt{\frac{1}{C_5C_L(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}} \\ \text{bandwidth:} \ \frac{2C_5R_1g_mr_o+4C_5R_1+C_5R_5+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o}{C_5C_L(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)} \\ \text{K-LP:} \ R_1\left(g_mr_o+1\right) \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_5R_1(R_5g_mr_o+R_5-r_o)}{2C_5R_1g_mr_o+4C_5R_1+C_5R_5+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$

8.6 INVALID-NUMER-6 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_1 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_1 R_5 R_L g_m r_o s^2 + C_5 C_L R_1 R_L r_o s^2 + C_5 C_L R_5 R_L r_o s^2 + C_5 R_1 R_5 g_m r_o s + C_5 R_1 R_5 s + 2 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 R_L s + C_5 R_1 r_o s + C_5 R_1 R_L g_m r_o s + C_5 R_1 R_L g_m r_o s + C_4 R_1 R_L g_m r_o s + C_4 R_1 R_L g_m r_o s + C_4 R_1 R_L g_m r_o s + C_5 R_1 R_5 g_m r_o s + C_$

Parameters:

Q:
$$\frac{C_5C_LR_L\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_5C_LR_L(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}}(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}{C_5R_1R_5g_mr_o+C_5R_1R_5+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}}$$
wo:
$$\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_5C_LR_L(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}}}$$
bandwidth:
$$\frac{C_5R_1R_5g_mr_o+C_5R_1R_5+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}{C_5C_LR_L(R_1R_5g_mr_o+R_1R_5+R_1r_o+R_5r_o)}}$$
K-LP:
$$\frac{R_1R_L(g_mr_o+1)}{R_1g_mr_o+R_1+R_L+r_o}}$$
K-HP: 0

K-BP:
$$\frac{C_5R_1R_5g_mr_o+C_5R_1R_5+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}{C_5R_1R_5g_mr_o+C_5R_1R_5+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+C_LR_1R_Lg_mr_o+C_LR_1R_L+C_LR_Lr_o}$$
Qz: 0

Wz: None

8.7 INVALID-NUMER-7 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

$$\begin{aligned} &\text{Q:} \frac{C_L L_1 \sqrt{\frac{R_5 + r_o}{C_L L_1 (R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o)}}{C_L R_5 R_L + C_L R_5 r_o + C_L R_L r_o + 2 L_1 g_m r_o + 4 L_1} \\ &\text{W0:} \quad \sqrt{\frac{R_5 + r_o}{C_L L_1 (R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o)}}{C_L L_1 (R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o)}} \\ &\text{bandwidth:} \quad \frac{C_L R_5 R_L + C_L R_5 r_o + C_L R_L r_o + 2 L_1 g_m r_o + 4 L_1}{C_L L_1 (R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o)}} \\ &\text{K-LP:} \quad 0 \\ &\text{K-HP:} \quad \frac{R_L (R_5 g_m r_o + R_5 - r_o)}{R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}} \\ &\text{K-BP:} \quad \frac{L_1 (R_5 g_m r_o + R_5 - r_o)}{C_L R_5 R_L + C_L R_5 r_o + C_L R_L r_o + 2 L_1 g_m r_o + 4 L_1}} \\ &\text{Qz:} \quad C_L R_L \sqrt{\frac{R_5 + r_o}{C_L L_1 (R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o)}}} \\ &\text{Wz:} \quad \text{None} \end{aligned}$$

8.8 INVALID-NUMER-8 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{L_1 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{2C_5 L_1 R_L g_m r_o s^2 + 4C_5 L_1 R_L s^2 + C_5 L_1 r_o s^2 + C_5 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o s^2 + C_5 R_L r_o s + L_1 g_m r_o s + L_2 r_o s^2 + C_5 R_L r_o s + L_2 r_o s^2 + C_5 R_L r_o s + L_3 r_o s^2 + C_5 R_L r_o$$

Parameters:

$$\begin{array}{l} \text{Q:} & \frac{C_5L_1\sqrt{\frac{R_L+r_o}{C_5L_1(2R_Lg_mr_o+4R_L+r_o)}}}{C_5R_Lr_o+L_1g_mr_o+L_1} \\ \text{Wo:} & \frac{R_L+r_o}{C_5L_1(2R_Lg_mr_o+4R_L+r_o)} \\ \text{bandwidth:} & \frac{C_5R_Lr_o+L_1g_mr_o+L_1}{C_5L_1(2R_Lg_mr_o+4R_L+r_o)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & -\frac{R_Lr_o}{2R_Lg_mr_o+4R_L+r_o} \\ \text{K-BP:} & \frac{L_1R_L(g_mr_o+1)}{C_5R_Lr_o+L_1g_mr_o+L_1} \\ \text{Qz:} & -\frac{C_5r_o\sqrt{\frac{R_L+r_o}{C_5L_1(2R_Lg_mr_o+4R_L+r_o)}}}{g_mr_o+1} \\ \text{Wz:} & \text{None} \end{array}$$

8.9 INVALID-NUMER-9 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{L_1 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{2 C_5 L_1 R_5 R_L g_m r_o s^2 + 4 C_5 L_1 R_5 R_L s^2 + C_5 L_1 R_5 r_o s^2 + C_5 R_5 R_L r_o s + L_1 R_5 g_m r_o s + L_1 R_5 s + 2 L_1 R_L g_m r_o s + 4 L_1 R_L s + L_1 r_o s + R_5 R_L + R_5 r_o + R_L r_o s}$$

Parameters:

$$\begin{array}{l} \mathbf{Q} \colon \frac{C_5L_1R_5\sqrt{\frac{R_5R_L+R_5r_o+R_Lr_o}{C_5L_1R_5(2R_Lg_mr_o+4R_L+r_o)}}}{C_5R_5R_Lr_o+L_1R_5g_mr_o+L_1R_5+2L_1R_Lg_mr_o+4L_1R_L+L_1r_o}}\\ \mathbf{Wo} \colon \sqrt{\frac{R_5R_L+R_5r_o+R_Lr_o}{C_5L_1R_5(2R_Lg_mr_o+4R_L+r_o)}}}\\ \mathbf{bandwidth} \colon \frac{C_5R_5R_Lr_o+L_1R_5g_mr_o+L_1R_5+2L_1R_Lg_mr_o+4L_1R_L+L_1r_o}{C_5L_1R_5(2R_Lg_mr_o+4R_L+r_o)}}\\ \mathbf{K}\text{-LP} \colon \mathbf{0}\\ \mathbf{K}\text{-HP} \colon -\frac{R_Lr_o}{2R_Lg_mr_o+4R_L+r_o}\\ \mathbf{K}\text{-BP} \colon \frac{L_1R_L(R_5g_mr_o+R_5-r_o)}{C_5R_5R_Lr_o+L_1R_5g_mr_o+L_1R_5+2L_1R_Lg_mr_o+4L_1R_L+L_1r_o}\\ \mathbf{Qz} \colon -\frac{C_5R_5r_o\sqrt{\frac{R_5R_L+R_5r_o+R_Lr_o}{C_5L_1R_5(2R_Lg_mr_o+4R_L+r_o)}}}}{R_5g_mr_o+R_5-r_o}\\ \mathbf{Wz} \colon \mathbf{None} \end{array}$$

8.10 INVALID-NUMER-10 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{L_1 R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 L_1 R_5 g_m r_o s^2 + C_5 L_1 R_5 s^2 + 2 C_5 L_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_L s^2 + C_5 L_1 r_o s^2 + C_5 R_5 R_L s + C_5 R_5 r_o s + C_5 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o r_o s}$$

$$Q: \frac{C_5L_1\sqrt{\frac{R_L+r_o}{C_5L_1(R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o)}}(R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o)}{C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+L_1g_mr_o+L_1}$$

$$wo: \sqrt{\frac{R_L+r_o}{C_5L_1(R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o)}}$$
bandwidth:
$$\frac{C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+L_1g_mr_o+L_1}{C_5L_1(R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o)}$$

$$K-LP: 0$$

$$K-HP: \frac{R_L(R_5g_mr_o+R_5-r_o)}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}$$

$$K-BP: \frac{L_1R_L(g_mr_o+1)}{C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o+L_1g_mr_o+L_1}$$

$$Qz: \frac{C_5\sqrt{\frac{R_L+r_o}{C_5L_1(R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o)}}(R_5g_mr_o+R_5-r_o)}{g_mr_o+1}$$

Wz: None

8.11 INVALID-NUMER-11 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_{1}C_{L}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}(R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o})}}}(R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o})}{C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}}\\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}(R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o})}}\\ \text{bandwidth:} \ \frac{C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}{C_{1}C_{L}(R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o})}\\ \text{K-LP:} \ \frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2(g_{m}r_{o}+2)}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_{L}R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$

8.12 INVALID-NUMER-12 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

Parameters:

Q: $\frac{C_1C_5R_Lr_o\sqrt{\frac{g_mr_o+1}{C_1C_5R_Lr_o}}}{C_1R_L+C_1r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}$ wo: $\sqrt{\frac{g_mr_o+1}{C_1C_5R_Lr_o}}$ bandwidth: $\frac{C_1R_L+C_1r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_1C_5R_Lr_o}$ K-LP: R_L K-HP: 0
K-BP: $-\frac{C_5R_Lr_o}{C_1R_L+C_1r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}$ Qz: 0
Wz: None

8.13 INVALID-NUMER-13 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_5 C_L R_L r_o s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + C_L R_L g_m r_o s + C_L R_L s + g_m r_o + 1}$$

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{R_L r_o \sqrt{\frac{g_m r_o + 1}{R_L r_o (C_1 C_5 + C_1 C_L + C_5 C_L)}} (C_1 C_5 + C_1 C_L + C_5 C_L)}{C_1 R_L + C_1 r_o + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L} \\ \text{wo:} \ \sqrt{\frac{g_m r_o + 1}{R_L r_o (C_1 C_5 + C_1 C_L + C_5 C_L)}} \\ \text{bandwidth:} \ \frac{C_1 R_L + C_1 r_o + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L}{R_L r_o (C_1 C_5 + C_1 C_L + C_5 C_L)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5 R_L r_o}{C_1 R_L + C_1 r_o + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L}}{Q_{\text{Z:}} \ 0} \\ \text{Wz:} \ \text{None} \end{array}$

8.14 INVALID-NUMER-14
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

Q: $\frac{C_1C_5R_5R_Lr_o\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_1C_5R_5R_Lr_o}}}{C_1R_5R_L+C_1R_5r_o+C_1R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}}$ wo: $\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_1C_5R_5R_Lr_o}}}$ bandwidth: $\frac{C_1R_5R_L+C_1R_5r_o+C_1R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}{C_1C_5R_5R_Lr_o}}$ K-LP: $\frac{R_L(R_5g_mr_o+R_5-r_o)}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}}$ K-HP: 0 K-BP: $-\frac{C_5R_5R_Lr_o}{C_1R_5R_L+C_1R_5r_o+C_1R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}}{C_1R_5R_L+C_5R_5r_o+C_1R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}}$ Qz: 0 Wz: None

8.15 INVALID-NUMER-15 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{C_1C_5R_5r_os^2 + C_1C_LR_5r_os^2 + C_1R_5s + C_1r_os + C_5C_LR_5r_os^2 + 2C_5R_5g_mr_os + 4C_5R_5s + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_5R_5r_os^2 + C_5R_5r_os^2 + C_5R$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_5r_o\sqrt{\frac{g_mr_o+2}{R_5r_o(C_1C_5+C_1C_L+C_5C_L)}}}{C_1R_5+C_1r_o+2C_5R_5g_mr_o+4C_5R_5+C_LR_5g_mr_o+C_LR_5+C_Lr_o}\\ \text{Wo:} \ \sqrt{2}\sqrt{\frac{g_mr_o+2}{R_5r_o(C_1C_5+C_1C_L+C_5C_L)}}\\ \text{bandwidth:} \ \frac{C_1R_5+C_1r_o+2C_5R_5g_mr_o+4C_5R_5+C_LR_5g_mr_o+C_LR_5+C_Lr_o}{R_5r_o(C_1C_5+C_1C_L+C_5C_L)}\\ \text{K-LP:} \ \frac{R_5g_mr_o+R_5-r_o}{2(g_mr_o+2)}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ -\frac{C_5R_5r_o}{C_1R_5+C_1r_o+2C_5R_5g_mr_o+4C_5R_5+C_LR_5g_mr_o+C_LR_5+C_Lr_o}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

8.16 INVALID-NUMER-16 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s+1}, \frac{R_L}{C_L R_L s+1}\right)$

$$\begin{array}{c} R_{5}R_{L}r_{o}\sqrt{\frac{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}{R_{5}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}\\ Q\colon \frac{1}{C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+2C_{5}R_{5}R_{L}g_{m}r_{o}+4C_{5}R_{5}R_{L}+C_{5}R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}}\\ \text{wo:} \sqrt{\frac{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}{R_{5}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}\\ \text{bandwidth:} \frac{C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+2C_{5}R_{5}R_{L}g_{m}r_{o}+4C_{5}R_{5}R_{L}+C_{5}R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{R_{5}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}\\ \text{K-LP:} \frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}}\\ \text{K-HP:} 0\\ \text{K-BP:} -\frac{C_{5}R_{5}R_{L}r_{o}}{C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+2C_{5}R_{5}R_{L}g_{m}r_{o}+4C_{5}R_{5}R_{L}+C_{5}R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}}\\ \text{Vz:} \text{None} \end{array}$$

8.17 INVALID-NUMER-17 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 R_5 R_L s^2 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_1C_5\sqrt{\frac{g_mr_o+1}{C_1C_5(R_5R_L+R_5r_o+R_Lr_o)}}(R_5R_L+R_5r_o+R_Lr_o)}{C_1R_L+C_1r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}\\ \text{Wo:} \ \sqrt{\frac{g_mr_o+1}{C_1C_5(R_5R_L+R_5r_o+R_Lr_o)}}\\ \text{bandwidth:} \ \frac{C_1R_L+C_1r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_1C_5(R_5R_L+R_5r_o+R_Lr_o)}\\ \text{K-LP:} \ R_L\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_5R_L(R_5g_mr_o+R_5-r_o)}{C_1R_L+C_1r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

8.18 INVALID-NUMER-18 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

Parameters:

$$Q: \frac{C_1C_LR_1\sqrt{\frac{2R_1g_mr_o+4R_1+R_5+r_o}{C_1C_LR_1(R_5R_L+R_5r_o+R_Lr_o)}}}(R_5R_L+R_5r_o+R_Lr_o)}{C_1R_1R_5+C_1R_1r_o+C_LR_1R_5g_mr_o+C_LR_1R_5+2C_LR_1R_Lg_mr_o+4C_LR_1R_L+C_LR_1r_o+C_LR_5R_L+C_LR_5r_o+C_LR_Lr_o}$$
wo:
$$\sqrt{\frac{2R_1g_mr_o+4R_1+R_5+r_o}{C_1C_LR_1(R_5R_L+R_5r_o+R_Lr_o)}}$$
bandwidth:
$$\frac{C_1R_1R_5+C_1R_1r_o+C_LR_1R_5g_mr_o+C_LR_1R_5+2C_LR_1R_Lg_mr_o+4C_LR_1R_L+C_LR_1r_o+C_LR_5R_L+C_LR_5r_o+C_LR_Lr_o}{C_1C_LR_1(R_5R_L+R_5r_o+R_Lr_o)}}$$
K-LP:
$$\frac{R_1(R_5g_mr_o+R_5-r_o)}{2R_1g_mr_o+4R_1+R_5+r_o}$$
K-HP: 0

K-BP:
$$\frac{C_LR_1R_L(R_5g_mr_o+R_5-r_o)}{C_1R_1R_5+C_LR_1R_5g_mr_o+C_LR_1R_5+2C_LR_1R_Lg_mr_o+4C_LR_1R_L+C_LR_1r_o+C_LR_5R_L+C_LR_5r_o+C_LR_Lr_o}{C_1C_R_1R_Lg_mr_o+4C_LR_1R_L+C_LR_1r_o+C_LR_5R_L+C_LR_5r_o+C_LR_Lr_o}$$
Wz: None

8.19 INVALID-NUMER-19 $Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \frac{1}{C_5s}, R_L\right)$

Q:
$$\frac{C_1C_5R_1R_Lr_o\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_1C_5R_1R_Lr_o}}}{C_1R_1R_L+C_1R_1r_o+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_Lr_o}}$$
 wo:
$$\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_1C_5R_1R_Lr_o}}$$
 bandwidth:
$$\frac{C_1R_1R_L+C_1R_1r_o+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_Lr_o}{C_1C_5R_1R_Lr_o}}$$
 K-LP:
$$\frac{R_1R_L(g_mr_o+1)}{R_1g_mr_o+R_1+R_L+r_o}$$
 K-HP:
$$0$$
 K-BP:
$$-\frac{C_5R_1R_Lr_o}{C_1R_1R_L+C_1R_1r_o+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_Lr_o}}{C_1C_5R_1R_Lr_o}$$
 Qz:
$$0$$
 Wz: None

8.20 INVALID-NUMER-20
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

 $\text{Q: } \frac{R_1 r_o \sqrt{\frac{1}{R_1 r_o \left(C_1 C_5 + C_1 C_L + C_5 C_L\right)}} \left(C_1 C_5 + C_1 C_L + C_5 C_L\right)}{C_1 R_1 + 2 C_5 R_1 g_m r_o + 4 C_5 R_1 + C_5 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o}$ wo: $\sqrt{\frac{1}{R_1 r_o(C_1 C_5 + C_1 C_L + C_5 C_L)}}$ bandwidth: $\frac{C_1 R_1 + 2 C_5 R_1 g_m r_o + 4 C_5 R_1 + C_5 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o}{R_1 r_o(C_1 C_5 + C_1 C_L + C_5 C_L)}$ K-LP: $R_1 (g_m r_o + 1)$ K-HP: 0 K-BP: $-\frac{C_5R_1r_o}{C_1R_1+2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o}$ Qz: 0 Wz: None

8.21 INVALID-NUMER-21 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

Parameters:

$$\begin{array}{c} R_{1}R_{L}r_{o}\sqrt{\frac{R_{1}g_{m}r_{o}+R_{1}+R_{L}+r_{o}}{R_{1}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}\\ Q\colon \frac{R_{1}R_{L}+C_{1}R_{1}r_{o}+2C_{5}R_{1}R_{L}g_{m}r_{o}+4C_{5}R_{1}R_{L}+C_{5}R_{1}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{1}R_{L}g_{m}r_{o}+C_{L}R_{1}R_{L}+C_{L}R_{L}r_{o}}}{R_{1}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}\\ \text{wo:} \sqrt{\frac{R_{1}g_{m}r_{o}+R_{1}+R_{L}+r_{o}}{R_{1}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}\\ \text{bandwidth:} \frac{C_{1}R_{1}R_{L}+C_{1}R_{1}r_{o}+2C_{5}R_{1}R_{L}g_{m}r_{o}+4C_{5}R_{1}R_{L}+C_{5}R_{1}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{1}R_{L}g_{m}r_{o}+C_{L}R_{1}R_{L}+C_{L}R_{L}r_{o}}{R_{1}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}\\ \text{K-LP:} \frac{R_{1}R_{L}(g_{m}r_{o}+1)}{R_{1}g_{m}r_{o}+R_{1}+R_{L}+r_{o}}\\ \text{K-HP:} 0\\ \text{K-BP:} -\frac{C_{5}R_{1}R_{L}r_{o}}{C_{1}R_{1}R_{L}+C_{1}R_{1}r_{o}+2C_{5}R_{1}R_{L}g_{m}r_{o}+4C_{5}R_{1}R_{L}+C_{5}R_{1}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{1}R_{L}g_{m}r_{o}+C_{L}R_{1}R_{L}+C_{L}R_{L}r_{o}}}{Q_{Z}:} 0\\ \text{Wz:} \text{None} \end{array}$$

8.22 INVALID-NUMER-22 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{R_1 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 R_1 R_5 R_L r_o s^2 + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_5 R_1 R_5 R_L g_m r_o s + 4 C_5 R_1 R_5 r_o s + C_5 R_1 R_5 r_o s + C_5 R_5 R_L r_o s + R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o + R_5 R_L r_o s + R_5 R_L$$

Parameters:
$$\begin{aligned} & C_1C_5R_1R_5R_Lr_o\sqrt{\frac{R_1R_5gmr_o+R_1R_5+2R_1R_Lgmr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}{C_1C_5R_1R_5R_Lr_o}}} \\ & Q: \frac{C_1C_5R_1R_5R_L+C_1R_1R_5r_o+C_1R_1R_Lr_o+2C_5R_1R_5R_Lgmr_o+4C_5R_1R_5R_L+C_5R_1R_5r_o+C_5R_5R_Lr_o}{C_1C_5R_1R_5R_Lgmr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}} \\ & wo: \sqrt{\frac{R_1R_5gmr_o+R_1R_5+2R_1R_Lgmr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}{C_1C_5R_1R_5R_Lr_o}}} \\ & bandwidth: \frac{C_1R_1R_5R_L+C_1R_1R_5r_o+C_1R_1R_Lr_o+2C_5R_1R_5R_Lgmr_o+4C_5R_1R_5R_L+C_5R_1R_5r_o+C_5R_5R_Lr_o}{C_1C_5R_1R_5R_Lr_o}} \\ & K-LP: \frac{R_1R_L(R_5gmr_o+R_5-r_o)}{R_1R_5gmr_o+R_1R_5+2R_1R_Lgmr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o}}{C_5R_1R_5R_Lr_o} \\ & K-HP: 0 \\ & K-BP: -\frac{C_5R_1R_5R_L+C_1R_1R_5r_o+C_1R_1R_Lr_o+2C_5R_1R_5R_Lgmr_o+4C_5R_1R_5R_L+C_5R_1R_5r_o+C_5R_5R_Lr_o}{C_5R_1R_5R_Lgmr_o+4C_5R_1R_5R_L+C_5R_1R_5r_o+C_5R_5R_Lr_o}} \\ & Wz: None \end{aligned}$$

8.23 INVALID-NUMER-23
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_L R_1 R_5 r_o s^2 + C_1 R_1 R_5 s + C_5 C_L R_1 R_5 r_o s^2 + 2 C_5 R_1 R_5 g_m r_o s + 4 C_5 R_1 R_5 s + C_5 R_5 r_o s + C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 s + C_L R_1 r_o s$$

 $R_{1}R_{5}r_{o}\sqrt{\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{R_{1}R_{5}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}}}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L}})$ Q: $\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{C_{1}R_{1}R_{5}+C_{1}R_{1}r_{o}+2C_{5}R_{1}R_{5}g_{m}r_{o}+4C_{5}R_{1}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{1}R_{5}g_{m}r_{o}+C_{L}R_{1}R_{5}+C_{L}R_{1}r_{o}+C_{L}R_{5}r_{o}}$ wo: $\sqrt{\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{R_{1}R_{5}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}$ bandwidth: $\frac{C_{1}R_{1}R_{5}+C_{1}R_{1}r_{o}+2C_{5}R_{1}R_{5}g_{m}r_{o}+4C_{5}R_{1}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{1}R_{5}g_{m}r_{o}+C_{L}R_{1}R_{5}+C_{L}R_{1}r_{o}+C_{L}R_{5}r_{o}}{R_{1}R_{5}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}$ K-LP: $\frac{R_{1}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}$ K-HP: 0 K-BP: $-\frac{C_{5}R_{1}R_{5}r_{o}}{C_{1}R_{1}R_{5}+C_{1}R_{1}r_{o}+2C_{5}R_{1}R_{5}g_{m}r_{o}+4C_{5}R_{1}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{1}R_{5}g_{m}r_{o}+C_{L}R_{1}R_{5}+C_{L}R_{1}r_{o}+C_{L}R_{5}r_{o}}}{Q_{Z}$ Qz: 0 Wz: None

8.24 INVALID-NUMER-24 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_1 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 R_1 R_5 R_L r_o s^2 + C_1 C_L R_1 R_5 R_L r_o s^2 + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_5 C_L R_1 R_5 R_L r_o s^2 + 2 C_5 R_1 R_5 R_L g_m r_o s + 4 C_5 R_1 R_5 r_o s + C_5 R_1 R_5 r_o s + C_5 R_1 R_5 R_L r_o s + C_4 R_1 R_5 R_L r_o s + C$

Parameters:

$$\begin{array}{c} R_{1}R_{5}R_{L}r_{o}\sqrt{\frac{R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}{R_{1}R_{5}R_{L}r_{o}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L})}}}(C_{1}C_{5}+C_{1}C_{L}+C_{5}C_{L}})\\ Q: \frac{1}{C_{1}R_{1}R_{5}R_{L}+C_{1}R_{1}R_{5}r_{o}+C_{1}R_{1}R_{L}r_{o}+2C_{5}R_{1}R_{5}R_{L}g_{m}r_{o}+4C_{5}R_{1}R_{5}r_{o}+C_{5}R_{5}R_{L}r_{o}+C_{L}R_{1}R_{5}R_{L}+C_{L}R_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}r_{o}}{C_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}}\\ wo: \sqrt{\frac{R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}{R_{1}R_{5}R_{L}+C_{5}R_{1}R_{5}r_{o}+C_{5}R_{5}R_{L}r_{o}+C_{L}R_{1}R_{5}R_{L}+C_{L}R_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}r_{o}}}}\\ bandwidth: \frac{C_{1}R_{1}R_{5}R_{L}+C_{1}R_{1}R_{5}r_{o}+C_{1}R_{1}R_{L}r_{o}+2C_{5}R_{1}R_{5}R_{L}g_{m}r_{o}+4C_{5}R_{1}R_{5}r_{o}+C_{5}R_{5}R_{L}r_{o}+C_{L}R_{1}R_{5}R_{L}+C_{L}R_{1}R_{5}R_{L}+C_{L}R_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}r_{o}}}{R_{1}R_{5}R_{L}+C_{1}R_{1}R_{5}r_{o}+C_{1}R_{1}R_{L}r_{o}+2C_{5}R_{1}R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}}}\\ K-LP: \frac{R_{1}R_{L}(R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}r_{o}+R_{5}r_{o}+R_{5}r_{c}+R_{5}r_{o}+R_{L}r_{o}}{R_{1}R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{5}R_{L}+R_{5}R_$$

8.25 INVALID-NUMER-25 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_1 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 R_1 R_5 R_L s^2 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_5 R_1 R_L s + C_1 R_1 r_o s + C_5 R_1 R_5 g_m r_o s + C_5 R_1 R_5 s + 2 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 R_L s + C_5 R_1 r_o s +$

$$Q\colon \frac{C_1C_5R_1\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_1C_5R_1(R_5R_L+R_5r_o+R_Lr_o)}}}(R_5R_L+R_5r_o+R_Lr_o)}{C_1R_1R_L+C_1R_1r_o+C_5R_1R_5g_mr_o+C_5R_1R_5+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o}$$
 wo:
$$\sqrt{\frac{R_1g_mr_o+R_1+R_L+r_o}{C_1C_5R_1(R_5R_L+R_5r_o+R_Lr_o)}}$$
 bandwidth:
$$\frac{C_1R_1R_L+C_1R_1r_o+C_5R_1R_5g_mr_o+C_5R_1R_5+2C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o}{C_1C_5R_1(R_5R_L+R_5r_o+R_Lr_o)}$$
 K-LP:
$$\frac{R_1R_L(g_mr_o+1)}{R_1g_mr_o+R_1+R_L+r_o}$$
 K-HP:
$$0$$
 K-BP:
$$\frac{C_5R_1R_L(R_5g_mr_o+R_5-r_o)}{C_1R_1R_L+C_1R_1r_o+C_5R_1R_5g_mr_o+C_5R_1R_Lg_mr_o+4C_5R_1R_L+C_5R_1r_o+C_5R_5R_L+C_5R_5r_o+C_5R_Lr_o}{Qz: 0}$$
 Wz: None

8.26 INVALID-NUMER-26
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$$

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

Q:
$$\frac{\sqrt{2}C_{1}C_{L}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}{2C_{1}R_{1}g_{m}r_{o}+4C_{1}R_{1}+C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}}$$
wo:
$$\sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}$$
bandwidth:
$$\frac{2C_{1}R_{1}g_{m}r_{o}+4C_{1}R_{1}+C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}{C_{1}C_{L}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}$$
K-LP:
$$\frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2(g_{m}r_{o}+2)}}$$
K-HP: 0
K-BP:
$$\frac{C_{1}R_{1}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{2C_{1}R_{1}g_{m}r_{o}+4C_{1}R_{1}+C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}}$$
Qz: 0
Wz: None

8.27 INVALID-NUMER-27 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L R_1 R_5 R_L g_m r_o s^2 + C_1 C_L R_1 R_L r_o s^2 + C_1 C_L R_5 R_L r_o s^2 + C_1 R_1 R_5 g_m r_o s + C_1 R_1 R_5 s + 2 C_1 R_1 R_L g_m r_o s + 4 C_1 R_1 R_L s + C_1 R_1 r_o s + C_1 R_5 R_L s + C_1 R_5 R_L g_m r_o s + C_$

Parameters:

Q:
$$\frac{C_{1}C_{L}R_{L}\sqrt{\frac{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}{C_{1}C_{L}R_{L}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}}}{R_{1}R_{1}R_{5}+2C_{1}R_{1}R_{5}+2C_{1}R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o}})}$$
Wo:
$$\sqrt{\frac{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}{C_{1}C_{L}R_{L}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}}}{C_{1}C_{L}R_{L}(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o})}}$$
bandwidth:
$$\frac{C_{1}R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+R_{1}r_{o}+R_{5}r_{o}}}{C_{1}C_{L}R_{L}(R_{1}R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4C_{1}R_{1}R_{L}+C_{1}R_{1}r_{o}+C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}}$$
K-LP:
$$\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}}$$
K-HP: 0

K-BP:
$$\frac{C_{1}R_{1}R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{C_{1}R_{1}R_{5}+2C_{1}R_{1}R_{L}g_{m}r_{o}+4C_{1}R_{1}R_{L}+C_{1}R_{1}r_{o}+C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}}$$
Wz: None

9 INVALID-WZ

9.1 INVALID-WZ-1
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L s^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L R_L r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L R_L s + C_L r_o s + 1}$$

$$\begin{aligned} & \text{Q:} \ \frac{C_5C_L\sqrt{\frac{1}{C_5C_L(2R_1R_Lgmr_o+4R_1R_L+R_1r_o+R_Lr_o)}}(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)}{2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5C_L(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)}} \\ & \text{bandwidth:} \ \frac{2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o}{C_5C_L(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)} \\ & \text{K-LP:} \ R_1\left(g_mr_o+1\right) \\ & \text{K-HP:} \ -\frac{R_1R_Lr_o}{2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o} \\ & \text{K-BP:} \ \frac{R_1(-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}{2C_5R_1g_mr_o+4C_5R_1+C_5r_o+C_LR_1g_mr_o+C_LR_L)} \\ & \text{Qz:} \ \frac{C_5C_LR_Lr_o\sqrt{\frac{C_5C_L(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)}{C_5r_o-C_LR_Lg_mr_o+C_LR_L}}{C_5r_o-C_LR_Lg_mr_o+C_LR_L} \end{aligned}$$

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Wz: \sqrt{\frac{-g_m r_o - 1}{C_5 C_L R_L r_o}}
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9.2 INVALID-WZ-2 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

 $R_1 (C_L R_L s + 1) (C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o)$

 $H(s) = -\frac{1}{2C_5C_LR_1R_5R_Lg_mr_os^2 + 4C_5C_LR_1R_5R_Ls^2 + C_5C_LR_1R_5r_os^2 + 2C_5R_1R_5g_mr_os + 4C_5R_1R_5s + C_5R_5r_os + C_LR_1R_5g_mr_os + 4C_LR_1R_5g_mr_os + 4C_LR_1R_5g_mr$

Parameters:

 $\begin{array}{c} C_{5}C_{L}R_{5}\sqrt{\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{C_{5}C_{L}R_{5}(2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}}}(2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o}})\\ Q: \frac{2R_{1}g_{m}r_{o}+4C_{5}R_{1}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{1}R_{5}g_{m}r_{o}}{C_{5}C_{L}R_{5}(2R_{1}R_{L}g_{m}r_{o}+4R_{L}R_{1}r_{o}+R_{L}r_{o}})}\\ wo: \sqrt{\frac{2R_{1}g_{m}r_{o}+4R_{1}+R_{5}+r_{o}}{C_{5}C_{L}R_{5}(2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}}\\ bandwidth: \frac{2C_{5}R_{1}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o}}{C_{5}C_{L}R_{5}(2R_{1}R_{L}g_{m}r_{o}+4C_{L}R_{1}R_{5}+2C_{L}R_{1}R_{5}+2C_{L}R_{1}R_{L}g_{m}r_{o}+4C_{L}R_{1}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{1}R_{5}+2C_{L}R_{1}R_{L}g_{m}r_{o}+4C_{L}R_{1}R_{L}+C_{L}R_{1}r_{o}+C_{L}R_{5}r_{o}+C_{L}R_{1}r_{o}+C_{L}R_{1}R_{5}+2C_{L}R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{1}R_{5}+2C_{L}R_{1}R_{1}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}\\ K-LP: \frac{R_{1}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{2R_{1}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o}}\\ K-HP: -\frac{R_{1}R_{L}r_{o}}{2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o}}}\\ R_{1}(-C_{5}R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{L}r_{o})\\ K-BP: \frac{R_{1}(-C_{5}R_{5}r_{o}+C_{L}R_{1}R_{5}+r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{1}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{1}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{1}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}R_{L}+C_{L}R_{5}R_{L}+C_{L}R_{5}R_{L}+C$

9.3 INVALID-WZ-3 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L s^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L R_5 r_o s^2 + C_5 C_L R_5 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 R_5 s + C_5 r_o s + C_L R_1 g_m r_o s$

Parameters:

$$\begin{array}{c} \text{Q:} & \frac{C_5C_L\sqrt{\frac{1}{C_5C_L(R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+R_5R_L+R_5r_o+R_Lr_o)}{2C_5R_1g_mr_o+4C_5R_1+C_5R_5+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o}} \\ \text{Wo:} & \frac{1}{C_5C_L(R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o)} \\ \text{bandwidth:} & \frac{2C_5R_1g_mr_o+4C_5R_1+C_5R_5+C_5r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o}{C_5C_L(R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o)} \\ \text{K-LP:} & R_1\left(g_mr_o+1\right) \\ \text{K-HP:} & \frac{R_1R_L(R_5g_mr_o+R_5-r_o)}{R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_5R_L+R_5r_o+R_Lr_o} \\ \text{K-BP:} & \frac{R_1\left(C_5R_5g_mr_o+4R_5R_5-C_5r_o+C_LR_1g_mr_o+C_LR_1\right)}{2C_5R_1g_mr_o+4C_5R_1+C_5R_5-C_5r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o} \\ \text{Qz:} & \frac{C_5C_LR_L\sqrt{\frac{1}{C_5C_L(R_1R_5g_mr_o+R_1R_5+2R_1R_Lg_mr_o+R_1R_1R_1+R_1r_o+R_5R_L+R_5r_o+R_Lr_o)}}{C_5R_5g_mr_o+C_5R_5-C_5r_o+C_LR_1g_mr_o+C_LR_L} \\ \text{Wz:} & \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-r_o)}}{C_5C_LR_L(R_5g_mr_o+R_5-r_o)}} \\ \end{array}$$

9.4 INVALID-WZ-4 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

$$\begin{array}{l} \text{Q:} & \frac{\sqrt{2}C_{1}C_{L}\sqrt{\frac{g_{m}r_{o}+2}{C_{1}C_{L}\left(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}\right)}{2C_{1}R_{1}g_{m}r_{o}+4C_{1}R_{1}+C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}} \\ \text{wo:} & \frac{g_{m}r_{o}+2}{C_{1}C_{L}\left(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}\right)} \\ \text{bandwidth:} & \frac{2C_{1}R_{1}g_{m}r_{o}+4C_{1}R_{1}+C_{1}R_{5}+C_{1}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}{C_{1}C_{L}\left(R_{1}R_{5}g_{m}r_{o}+R_{1}R_{5}+2R_{1}R_{L}g_{m}r_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{5}R_{L}+R_{5}r_{o}+R_{L}r_{o}\right)} \\ \text{K-LP:} & \frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2\left(g_{m}r_{o}+2\right)} \end{array}$$

9.5 INVALID-WZ-5 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_1 C_5 R_1 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 R_L s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_5 R_L r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

Parameters:

$$Q: \frac{C_1C_5\sqrt{\frac{g_mr_o+1}{C_1C_5(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)}}}{C_1R_1g_mr_o+4R_1R_L+R_1r_o+R_Lr_o)} (2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)} \\ Wo: \sqrt{\frac{g_mr_o+1}{C_1C_5(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)}}} \\ bandwidth: \frac{C_1R_1g_mr_o+C_1R_1+C_1R_L+C_1r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_1C_5(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)} \\ K-LP: R_L \\ K-HP: -\frac{R_1R_Lr_o}{2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o} \\ K-BP: \frac{R_LC_1R_1g_mr_o+C_1R_1+C_1R_1-C_5r_o)}{C_1C_5(2R_1R_Lg_mr_o+C_1R_1-C_5r_o)} \\ Qz: -\frac{C_1C_5R_1r_o\sqrt{\frac{g_mr_o+1}{C_1C_5(2R_1R_Lg_mr_o+4R_1R_L+R_1r_o+R_Lr_o)}}}{C_1R_1g_mr_o+C_1R_1-C_5r_o} \\ Wz: \sqrt{\frac{-g_mr_o-1}{C_1C_5R_1r_o}}$$

9.6 INVALID-WZ-6 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

 $H(s) = -\frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{2 C_1 C_5 R_1 R_5 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 R_1 R_5 g_m r_o s + C_1 R_1 R_5 g_m r_o s + 4 C_1 R_1 R_L s + C_1 R_1 r_o s +$

Parameters:

$$Q: \frac{C_{1}C_{5}R_{5}\sqrt{\frac{R_{5}gmr_{o}+R_{5}+2R_{L}gmr_{o}+4R_{L}+r_{o}}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{L}+R_{1}r_{o}+R_{L}r_{o})}}}}{C_{1}R_{1}R_{5}gmr_{o}+C_{1}R_{1}R_{5}+2C_{1}R_{1}R_{L}gmr_{o}+4C_{1}R_{1}R_{L}+C_{1}R_{1}r_{o}+C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+2C_{5}R_{5}R_{L}gmr_{o}+4C_{5}R_{5}R_{L}+C_{5}R_{5}r_{o}}}}$$

$$wo: \sqrt{\frac{R_{5}gmr_{o}+R_{5}+2R_{L}gmr_{o}+4R_{L}+r_{o}}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}}}}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o}})}}}$$

$$bandwidth: \frac{C_{1}R_{1}R_{5}gmr_{o}+C_{1}R_{1}R_{5}+2C_{1}R_{1}R_{L}gmr_{o}+4C_{1}R_{1}R_{L}+C_{1}R_{1}r_{o}+C_{1}R_{5}R_{L}+C_{1}R_{5}r_{o}+C_{1}R_{L}r_{o}+2C_{5}R_{5}R_{L}gmr_{o}+4C_{5}R_{5}R_{L}+C_{5}R_{5}r_{o}}}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}}$$

$$K-LP: \frac{R_{L}(R_{5}gmr_{o}+R_{5}-r_{o})}{R_{5}gmr_{o}+R_{5}+2R_{L}gmr_{o}+4R_{L}+r_{o}}}$$

$$K-HP: -\frac{R_{1}R_{L}r_{o}}{2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o}}}{C_{1}R_{1}R_{5}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+C_{1}R_{1}R_{5}-C_{1}R_{1}r_{o}-C_{5}R_{5}r_{o}}}$$

$$K-BP: \frac{R_{L}(C_{1}R_{1}R_{5}gmr_{o}+C_{1}R_{1}R_{5}-C_{1}R_{1}r_{o}-C_{5}R_{5}r_{o})}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}}$$

$$Qz: -\frac{C_{1}C_{5}R_{1}R_{5}r_{o}}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}{C_{1}C_{5}R_{5}(2R_{1}R_{L}gmr_{o}+4R_{1}R_{L}+R_{1}r_{o}+R_{L}r_{o})}}}$$

$$Wz: \sqrt{\frac{-R_{5}gmr_{o}-R_{5}+r_{o}}{C_{1}C_{5}R_{1}R_{5}r_{o}}}}}$$

9.7 INVALID-WZ-7
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$$

 $H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 R_1 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 R_L s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_L r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + C_5 R_5 g_m r_o s + C_$

$$\text{Wo: } \sqrt{\frac{g_m r_o + 1}{C_1 C_5 (R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)} } \\ \text{bandwidth: } \frac{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + C_5 R_5 g_m r_o + C_5 R_5 + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o}{C_1 C_5 (R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)} \\ \text{K-LP: } R_L \\ \text{K-HP: } \frac{R_1 R_L (R_5 g_m r_o + R_5 - r_o)}{R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o} \\ \text{K-BP: } \frac{R_L (C_1 R_1 g_m r_o + C_1 R_1 + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 r_o + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o)} \\ \text{Qz: } \frac{C_1 C_5 R_1 \sqrt{\frac{g_m r_o + 1}{C_1 C_5 (R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o)}}{C_1 R_1 g_m r_o + C_1 R_1 + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o}} \\ \text{Wz: } \sqrt{\frac{g_m r_o + 1}{C_1 C_5 R_1 (R_5 g_m r_o + R_5 - r_o)}}}$$

10 INVALID-ORDER

10.1 INVALID-ORDER-1 $Z(s) = (R_1, \infty, \infty, \infty, R_5, R_L)$

$$H(s) = \frac{R_1 R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}$$

10.2 INVALID-ORDER-2 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 s + C_L R_1 r_o s + C_L R_5 r_o s + 2 R_1 g_m r_o + 4 R_1 + R_5 + r_o}$$

10.3 INVALID-ORDER-3 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

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

10.4 INVALID-ORDER-4 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

10.5 INVALID-ORDER-5 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_1 R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 R_L s + C_5 R_1 r_o s + C_5 R_L r_o s + R_1 g_m r_o + R_1 + R_L + r_o}$$

10.6 INVALID-ORDER-6 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L L_L R_1 g_m r_o s^3 + 4 C_5 C_L L_L R_1 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

10.7 INVALID-ORDER-7 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.8 INVALID-ORDER-8 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2C_5 C_L L_L R_1 g_m r_o s^3 + 4C_5 C_L L_L r_o s^3 + 2C_5 C_L R_1 R_L g_m r_o s^2 + 4C_5 C_L R_1 r_o s^2 + C_5 C_L R_1 r_o s^2 + 2C_5 R_1 g_m r_o s + 4C_5 R_1 s + C_5 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_L R_1 s + C_L R_1 s + C_L R_2 s + C_L R_1 g_m r_o s +$$

10.9 INVALID-ORDER-9 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_1 R_L s \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_L R_1 R_L r_o s^3 + 2 C_5 L_L R_1 R_L g_m r_o s^2 + 4 C_5 L_L R_1 r_o s^2 + C_5 L_L R_1 r_o s^2 + C_5 L_L R_1 r_o s^2 + C_L L_L R_1 R_L g_m r_o s^2 + C_L L_L R_1 R_L g_m r_o s^2 + L_L R_1 g_m r_o s + L_L R_1 s + L_L$$

10.10 INVALID-ORDER-10 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{R_1 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{2C_5 C_L L_L R_1 R_L g_m r_o s^3 + 4C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + 2C_5 L_L R_1 g_m r_o s^2 + 4C_5 L_L R_1 s^2 + C_5 L_L r_o s^2 + 2C_5 R_1 R_L g_m r_o s + 4C_5 R_1 r_o s + C_5 R_L r_o s + C_5 R_L r_o s + C_5 R_L r_o s^2 + C_L L_L R_1 g_m r_o s^2 + C_L R_1 g_m r_o s^2 + C_L$$

10.11 INVALID-ORDER-11 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L L_L R_1 R_L g_m r_o s^3 + 4 C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L R_1 R_L r_o s^2 + 2 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 r_o s + C_5 R_L r_o$$

10.12 INVALID-ORDER-12 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{R_1 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{2 C_5 R_1 R_5 R_L g_m r_o s + 4 C_5 R_1 R_5 R_L s + C_5 R_1 R_5 r_o s + C_5 R_5 R_L r_o s + R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}$$

10.13 INVALID-ORDER-13 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = -\frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{2 C_5 C_L L_L R_1 R_5 g_m r_o s^3 + 4 C_5 C_L L_L R_5 r_o s^3 + C_5 C_L L_L R_5 r_o s^3 + C_5 C_L R_1 R_5 r_o s^2 + 2 C_5 R_1 R_5 g_m r_o s + 4 C_5 R_1 R_5 s + C_5 R_5 r_o s + 2 C_L L_L R_1 g_m r_o s^2 + 4 C_L L_L R_1 s^2 + C_L L_L R_5 s^2 + C_L L_L R_5 g_m r_o s + C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 r_o s + 2 C_L R_1 R_5 r_o s + 2$$

10.14 INVALID-ORDER-14 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_1 s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_L R_1 R_5 r_o s^3 + 2 C_5 L_L R_1 R_5 g_m r_o s^2 + 4 C_5 L_L R_1 R_5 r_o s^2 + C_5 L_L R_5 r_o s^2 + C_L L_L R_1 R_5 g_m r_o s^2 + C_L L_L R_1 R_5 r_o s^2 + C_L L_L R_1 r_o s^2 + C_L L_L$$

10.15 INVALID-ORDER-15 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = -\frac{R_1 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{2 C_5 C_L L_L R_1 R_5 g_m r_o s^3 + 4 C_5 C_L L_L R_1 R_5 s^3 + C_5 C_L L_L R_5 r_o s^2 + 2 C_5 R_1 R_5 R_L r_o s^2 + 2 C_5 R_1 R_5 g_m r_o s^3 + 4 C_5 L_L R_1 g_m r_o s^2 + 4 C_5 L_L R$$

10.16 INVALID-ORDER-16 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_1 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_L R_1 R_5 R_L r_o s^3 + 2 C_5 L_L R_1 R_5 R_L g_m r_o s^2 + 4 C_5 L_L R_1 R_5 r_o s^2 + C_5 L_L R_1 R_5 R_L r_o s^2 + C_5 L_L R_1 R_5 R_L r_o s^2 + C_5 L_L R_1 R_5 R_L r_o s^2 + C_L L_L R_1 R_5 R$

10.17 INVALID-ORDER-17 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $R_1\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)\left(C_5R_5r_os\right)$

 $\frac{1}{2C_5C_LL_LR_1R_5R_Lg_mr_os^3 + 4C_5C_LL_LR_1R_5R_Ls^3 + C_5C_LL_LR_1R_5r_os^3 + 2C_5L_LR_1R_5g_mr_os^2 + 4C_5L_LR_1R_5g_mr_os^2 + 4C_5L_LR_$

10.18 INVALID-ORDER-18 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

 $R_1R_L (C_LL_Ls^2+1) (C_5R_5r_os-R_5g_mr_o$

 $\frac{1}{2C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}r_{o}s^{2}+2C_{5}R_{1}R_{5}R_{L}r_{o}s+4C_{5}R_{1}R_{5}r_{o}s+C$

10.19 INVALID-ORDER-19 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

10.20 INVALID-ORDER-20 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L L_L R_1 g_m r_o s^3 + 4 C_5 C_L L_L R_5 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 R_5 s + C_5 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1 C_L R_1 r_o s^2 + C_2 R_1 r_o s^2 + C_3 R_1 r_o s^2 + C_5 R_1 r_o s^2 +$

10.21 INVALID-ORDER-21 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_L R_1 R_5 g_m r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 g_m r_o s^2 + 4 C_5 L_L R_1 s^2 + C_5 L_L R_5 s^2 + C_5 L_L R_1 s^3 + C_5 C_L L_L R_1 g_m r_o s^2 + C_L R_1 g_m$

10.22 INVALID-ORDER-22 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $\frac{R_1 \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{2 C_5 C_L L_L R_1 g_m r_o s^3 + 4 C_5 C_L L_L R_5 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_1 R_5 g_m r_o s^2 + 2 C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L s^2 + C_5 C_L R_5 R_L s^2 + C_5 C_L R_5 r_o s^2 + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 R_5 s + C_5 R_5 r_o s^2 + C_5 C_L R_5 r_o s^2 +$

10.23 INVALID-ORDER-23 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_5} + \frac{1}{L_5 s}}\right)$

 $L_L R_1 R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)$

 $H(s) = \frac{\frac{L_L L_1 L_L C_3 \left(\nabla_{5} L_1 C_5 g_m r_o s^3 + C_5 C_L L_L R_1 R_5 g_m r_o s^3 + C_5 C_L L_L R_1 R_5 g_m r_o s^3 + C_5 C_L L_L R_1 R_5 g_m r_o s^3 + C_5 L_L R_1 R_5 g_m r_o$

10.24 INVALID-ORDER-24 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $R_1 \left(C_L L_L R_L s^2 + L_L s + R_L \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)$ $H(s) = \frac{K_1 \left(C_L L_L K_L s^2 + L_L s + K_L \right) \left(C_5 K_5 g_m r_o s + C_5 K_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_L R_1 R_5 g_m r_o s^3 + C_5 C_L L_L R_1 R_2 s^3 + C_5 C_L L_L R_1 r_o s^3 +$

10.25 INVALID-ORDER-25 $Z(s) = \left(R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $R_1 R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s^2 \right)$ $H(s) = \frac{T_{11}t_{L} \left(\bigtriangledown_{L}D_{L}s + 1 \right) \left(\bigtriangledown_{5}D_{L}s + 1 \right) \left(\smile_{5}D_{L}s + 1 \right)$

10.26 INVALID-ORDER-26 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 r_o s^3 + C_5 C_L R_1 r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$

10.27 INVALID-ORDER-27 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_1 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 R_L g_m r_o s^3 + C_5 C_L L_5 R_1 R_L s^3 + C_5 C_L L_5 R_1 R_L r_o s^2 + C_5 L_5 R_1 g_m r_o s^2 + C_5 L_5 R_1 r_o s + C_5 R_1 r_$

10.28 INVALID-ORDER-28 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_L s^3 + C_5 C_L L_5 r_o s^3 + 2 C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 r_o s^2 + C_5 C_L R_$

10.29 INVALID-ORDER-29 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + 2 C_5 C_L L_L R_1 g_m r_o s^3 + 4 C_5 C_L L_L R_1 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_1 r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_$

10.30 INVALID-ORDER-30 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_{5.8}}, \frac{L_L s}{C_{7.L} L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_5 L_L R_1 g_m r_o s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 L_L R_1 r_o s^3 + C_5 L_5 R_1 g_m r_o s^2 + C_5 L_5 R_1 r_o s^2 + C_5 L_5$

10.31 INVALID-ORDER-31 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_4 R_1 g_m r_o s^3 + 4 C_5 C_L L_4 R_1 g_m r_o s^3 + 2 C_5 C_L R_1 R_L g_m r_o s^3 + 2 C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L g^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L R_1$

10.32 INVALID-ORDER-32 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_5 L_L R_1 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_1 R_L r_o s^4 + C_5 C_L L_5 L_L R_1 R_L r_o s^3 + C_5 L_5 L_L R_1 g_m r_o s^3 + C_5 L_5 R_1 R_L g_m r_o s^2 + C_5 L_5 R_1 R_L g_m$

10.33 INVALID-ORDER-33 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{R_1 \left(C_L L_L R_L s^2 + L_L s + R_L \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 L_L R_1 g_m r_o s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 L_L R_1 r_o s^3 + C_5 L_L L_6 r_o s^3 + C_5 L_5 L_4 r_o s^3 + C_5 L_5 L_5 r_o s^2 + C_5 L_5 R_1 g_m r_o s^3 + C_$

10.34 INVALID-ORDER-34 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_1 R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 L_1 R_1 s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 R_1 R_L g_m r_o s^3 + C_5 C_L L_5 R_1 R_L g_m r_o s^3 + C_5 C_L L_2 R_1 R_L g_m r_o s^3 + C_5 C_L R_1 R_L$

10.35 INVALID-ORDER-35 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

10.36 INVALID-ORDER-36 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

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

10.37 INVALID-ORDER-37 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_5 C_L L_5 R_1 R_L g_m r_o s^3 + 4 C_5 C_L L_5 R_1 r_o s^3 + C_5 C_L L_5 R_1 r_o s^3 + 2 C_5 L_5 R_1 g_m r_o s^2 + 4 C_5 L_5 R_1 g_m r_o s^2 + C_L L_5 R_1 g_m r_o s^2 + C_L L_5 R_1 s^2 + C_L$

10.38 INVALID-ORDER-38 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_5 C_L L_5 L_L R_1 g_m r_o s^4 + 4 C_5 C_L L_5 L_L r_o s^4 + C_5 C_L L_5 R_1 r_o s^3 + 2 C_5 L_5 R_1 g_m r_o s^2 + 4 C_5 L_5 R_1 s^2 + C_L L_5 R_1 g_m r_o s^2$

10.39 INVALID-ORDER-39 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

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10.40 INVALID-ORDER-40 Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
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$$H(s) = -\frac{R_1 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_5 C_L L_5 L_L R_1 g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 R_1 R_L g_m r_o s^3 + 4 C_5 C_L L_5 R_1 R_L s^3 + C_5 C_L L_5 R_1 r_o s^3 + 2 C_5 L_5 R_1 g_m r_o s^2 + 4 C_5 L_5 R_1 s^2 + C_5 L_5 R_1 g_m r_o s^2 + C_L L_5 R_1 g_m r_o s^2 + C$$

10.41 INVALID-ORDER-41
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.42 INVALID-ORDER-42
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{R_1 \left(C_L L_L R_L s^2 + L_L s + R_L \right) \left(C_5 L_5 r_{cr} + C_5 L_L L_L R_L R_L r_{cr} + C_5 L_L L_L R_L r_{cr} + C_5 L_L R_L r_{c$$

10.43 INVALID-ORDER-43
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{R_1R_L\left(C_LL_Ls^2 + 1\right)\left(C_5L_5r_os^2 - L_5g_nr_os^4 + 4C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5R_1R_Lr_os^3 + 2C_5L_5R_1R_Lg_mr_os^2 + 4C_5L_5R_1r_os^2 + C_5L_5R_1r_os^2 + C_5L_5R_1r_os^2 + C_5L_5R_1r_os^3 + C_5L_5R_1r_os^3 + C_5L_5R_1r_os^3 + C_5R_1r_os^2 + C_5L_5R_1r_os^3 + C_5R_1r_os^3 + C_5R_$$

10.44 INVALID-ORDER-44
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 R_5 s^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L R_5 r_o s^2 + C_5 L_5 r_o s^2 + C_$$

10.45 INVALID-ORDER-45
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 R_L g_m r_o s^3 + C_5 C_L L_5 R_1 R_L g_m r_o s^2 + C_5 C_L R_1 R_5 R_L g_o$$

10.46 INVALID-ORDER-46
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L s^2 + C_5 C_L R_5 R_L s^2 + C_5 C_L R_5 r_o s^2 + C_5 C_L R_5 r_o$$

$$C_5C_LL_5R_1g_mr_os^3 + C_5C_LL_5R_1s^3 + C_5C_LL_5R_2s^3 + C_5C_LL_5r_os^3 + C_5C_LR_1R_5g_mr_os^2 + C_5C_LR_1R_5s^2 + 2C_5C_LR_1R_Lg_mr_os^2 + 4C_5C_LR_1R_Ls^2 + C_5C_LR_1r_os^2 + C_5C_LR_1R_5g_mr_os^2 + C_5C_LR_1R_5s^2 + 2C_5C_LR_1R_2s^2 + C_5C_LR_1R_2s^2 + C$$

10.47 INVALID-ORDER-47
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + 2 C_5 C_L L_2 R_1 g_m r_o s^3 + 4 C_5 C_L L_2 R_1 s^3 + C_5 C_L L_2 R_1 s^3 + C_5 C_L L_2 R_1 s^3 + C_5 C_L L_2 R_1 r_o s^2 + C_5 C_L R_1 r_o s^2 + C_5 C_L$$

10.48 INVALID-ORDER-48 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_1 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_L R_1 g_m r_o s^4 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 L_L R_1 g_m r_o s^2 + C_5 L_5 R_1 g^2 + C_5 L_5 R_1 g^2 + C_5 L_5 R_1 g^2 + C_5 L_L R_1 g_m r_o s^2 + C_5 L_L R_1 g_m r_o s^2$$

10.49 INVALID-ORDER-49 $Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.50 INVALID-ORDER-50
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{}{C_5C_LL_5L_LR_1R_Lg_mr_os^4 + C_5C_LL_5L_LR_1R_Ls^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_LR_1R_5R_Lg_mr_os^3 + C_5C_LL_LR_1R_5R_Ls^3 + C_5C_LL_LR_1R_Lr_os^3 + C_5C_LL_LR_1R_Lr_os^3 + C_5L_LR_1g_mr_os^3 + C_5L_5L_LR_1s^3 + C_5L_5L_1s^3 + C_5L_5L_$$

10.51 INVALID-ORDER-51
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_1 \left(C_L L_L R_1 - R_1 R_2 R_3 + C_5 C_L L_L R_1 R_1 R_2 R_3 + C_5 C_L L_L R_1 R_2 R_2 R_2 R_3 + C_5 C_L L_L R_1 R_$$

10.52 INVALID-ORDER-52
$$Z(s) = \left(R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_5C_LL_5L_LR_1g_mr_os^4 + C_5C_LL_5L_LR_1s^4 + C_5C_LL_5L_LR_1s^4 + C_5C_LL_5L_LR_1s^4 + C_5C_LL_5R_1R_Lg_mr_os^3 + C_5C_LL_5R_1R_Ls^3 + C_5C_LL_5R_1R_Ls^3 + C_5C_LL_5R_1R_Ls^3 + C_5C_LL_5R_1R_2s^3 + C_5C$$

10.53 INVALID-ORDER-53
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_5 C_L L_5 R_1 R_5 r_o s^3 + 2 C_5 L_5 R_1 R_5 g_m r_o s^2 + 4 C_5 L_5 R_1 R_5 s^2 + C_L L_5 R_1 R_5 g_m r_o s^2 + C_L L_5 R_1 R_5 s^2 + C_L L_5 R_1 R_5 r_o s^2 + C_L R_1 R_5 r_o s^2 + C$$

10.54 INVALID-ORDER-54
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_5 C_L L_5 R_1 R_5 R_L r_o s^3 + 2 C_5 L_5 R_1 R_5 R_L r_o s^2 + C_5 L_5 R_1 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C$$

10.55 INVALID-ORDER-55
$$Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 R_5 r_o s^2 - L_5 R_5 g_m r_o s - L_5 R_5 s + L_5 r_o s + R_5 r_o s + L_5 r_o s + R_5 r_o s + L_5 r_o s$$

10.56 INVALID-ORDER-56 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$

 $R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 r_o s^2 - L_5 R_5 g_m r_o s - L_5 R_5 s + L_5 r_o s + R_5 r_o s + L_5 r$

 $H(s) = -\frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 r_o s^2 - L_5 R_5 g_m r_o s^2 + R_5 r_o s^2 + R_5$

10.57 INVALID-ORDER-57 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_{\kappa}} + \frac{1}{L_{\kappa} s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

 $L_L R_1 s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)$

 $\frac{L_L R_1 s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{C_5 C_L L_5 L_L R_1 R_5 r_o s^4 + 2 C_5 L_5 L_L R_1 R_5 g_m r_o s^3 + 4 C_5 L_5 L_L R_1 R_5 r_o s^3 + C_L L_5 L_L R_1 R_5$

10.58 INVALID-ORDER-58 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.59 INVALID-ORDER-59 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, \frac{1}{C_L s + \frac{1}{R_r} + \frac{1}{L_r s}} \right)$

 $H(s) = \frac{L_L r_{01} r_{02} r_{03}}{C_5 C_L L_5 L_L R_1 R_5 R_L r_o s^4 + 2 C_5 L_5 L_L R_1 R_5 R_L g_m r_o s^3 + 4 C_5 L_5 L_L R_1 R_5 R_L s^3 + C_5 L_5 L_L R_1 R_5 R_L r_o s$

10.60 INVALID-ORDER-60 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

 $H(s) = -\frac{1}{2C_5C_LL_5L_LR_1R_5R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_1R_5r_os^4 + C_5C_LL_5L_LR_1R_5r_os^4 + 2C_5L_5L_LR_1R_5g_mr_os^3 + 4C_5L_5L_LR_1R_5s^3 + C_5L_5L_LR_1R_5r_os^3 + 2C_5L_5R_1R_5R_Lg_mr_os^2 + 4C_5L_5R_1R_5R_Lg_mr_os^2 + 4C_5L_5R_1R_5r_os^2 + C_5L_5R_1R_5r_os^2 + C_5L_$

10.61 INVALID-ORDER-61 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_z} + \frac{1}{L_z s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{1}{2C_5C_LL_5L_LR_1R_5R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_1R_5R_Ls^4 + C_5C_LL_5L_LR_1R_5r_os^4 + C_5C_LL_5L_LR_1R_5R_Lr_os^4 + C_5C_LL_5R_1R_5R_Lr_os^4 + C_5C_LL_5R_1R_5R_Lr_os$

10.62 INVALID-ORDER-62 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_4 s}\right)$

 $\frac{R_1 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^2 + 4 C_5 L_5 R_1 s^2 + C_5 L_5 R_5 s^2 + C_5 L_5 R_1 g_m r_o s^2 + C_L R_1 R_5 g_m r_o s^2 + C$

10.63 INVALID-ORDER-63 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_5 C_L L_5 R_1 R_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_1 R_5 R_L s^3 + C_5 C_L L_5 R_1 R_L r_o s^3 + C_5 L_L R_5 R_L r_o s^3 + C_5 L_L R_5 R_L r_o s^3 + C_5 L_5 R_1 R_L g_m r_o s^2 + C_5 L_5 R_1 R_L g_m r_$

10.64 INVALID-ORDER-64 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 r_o s^2 + C_5 L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_$

10.65 INVALID-ORDER-65 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s^2 + C_5 L_5 R_1 R_5 g_m r_o s^2 + C_5 L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_$

10.66 INVALID-ORDER-66 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 R_1 r_o s^2 + C_5 L_5 R_1 R_5 g_m r_o s^2 + C$

10.67 INVALID-ORDER-67 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + C_2 C_L L_5 L_L R_1 g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 L_L R_5 s^4 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + 4 C_5 C_L L_5 R_1 R_L g_m r_o s^3 + 4 C_5 C_L L_5 R_1 R_L s^3 + C_5 C_L L_5 R_1 R_5 s^3 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L$

10.68 INVALID-ORDER-68 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_1R_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_1R_5R_Ls^4 + C_5C_LL_5L_LR_1R_Lr_os^4 + C_5C_LL_5L_LR_1R_5g_mr_os^3 + C_5L_5L_LR_1R_5g_mr_os^3 + C_5L_5L_LR_1R_Lg_mr_os^3 + C_5L_5L_LR_1R_Ls^3 + C_5L_5L_LR_1R_2s^3 + C_5L_5L_2R_1R_2s^3 + C_5L_5L_2R_1R_2s^3 + C_5L_5L_2R_2s^3 + C_5L_5L_2R_1R_2s^3 + C_5L_5L_2R_2s^3 + C_5L_5L_2R_2s^3 + C$

10.69 INVALID-ORDER-69 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_1R_5g_mr_os^4 + C_5C_LL_5L_LR_1R_5s^4 + 2C_5C_LL_5L_LR_1R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_5r_os^4 + C_5C_LL_5L_LR_5r_os^4 + C_5C_LL_5L_LR_1r_os^4 + 2C_5L_5L_LR_1g_mr_os^3 + 4C_5L_5L_LR_1s^3 + C_5L_5L_LR_1s^3 + C_5L_5L_RR_1s^3 + C_5L_5$

10.70 INVALID-ORDER-70 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_1R_5g_mr_os^4 + C_5C_LL_5L_LR_1R_5s^4 + 2C_5C_LL_5L_LR_1R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_5R_Ls^4 + C_5C_LL_5L_LR_5r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_RR_1r_os^4 + C_5C_LL_5R_1r_os^4 + C_5C_LL_5R_1r_$

10.71 INVALID-ORDER-71 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_1 r_o s^3 + C_5 C_L L_5 R_5 r_o s^3 + C_5 C_L L_5 R_5 r_o s^3 + C_5 C_L L_5 R_5 r_o s^2 + 2 C_5 L_5 R_1 g_m r_o s^2 + 4 C_5 L_5 R_5 s^2 + C_5 L_5 r_o s^2 + 2 C_5 R_1 R_5 g_m r_o s + 4 C_5 R_1 R_5 r_o s + C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 r_o s + C_L R_$

10.72 INVALID-ORDER-72 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_1 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s^2 + C_5 L_5 R_1 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_$

10.73 INVALID-ORDER-73 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$

- $H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L R_5 R_1 R_5 g_m r_o s^3 + C_5 C_L R_5 R_5$
- 10.74 INVALID-ORDER-74 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_5 C_L L_5 R_1 R_5 g_m r_o s^3 + C_5 C_L L_5 R_$

10.75 INVALID-ORDER-75 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s^2 -$

- 10.76 INVALID-ORDER-76 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_5C_LL_5L_LR_1g_mr_os^4 + 4C_5C_LL_5L_LR_1s^4 + C_5C_LL_5L_LR_5s^4 + C_5C_LL_5R_1R_5g_mr_os^3 + C_5C_LL_5R_1R_5s^3 + 2C_5C_LL_5R_1R_Lg_mr_os^3 + 4C_5C_LL_5R_1R_Ls^3 + C_5C_LL_5R_1r_os^3 + C_5C_LL_5R_1R_ss^3 + C_5C_LL_5R_1R_s$
- 10.77 INVALID-ORDER-77 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$
- $H(s) = \frac{1}{C_5C_LL_5L_LR_1R_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_1R_5R_Ls^4 + C_5C_LL_5L_LR_1R_Lr_os^4 + C_5C_LL_5L_LR_1R_5R_Lr_os^4 + C_5C_LL_5L_LR_1R_5g_mr_os^3 + C_5L_5L_LR_1R_5g_mr_os^3 + C_5L_5L_RR_1g_mr_os^3 + C_5L_5L$
- 10.78 INVALID-ORDER-78 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_5 C_L L_5 L_L R_1 R_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_1 R_5 s^4 + 2 C_5 C_L L_5 L_L R_1 R_L g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_1 R_L s^4 + C_5 C_L L_5 L_L R_1 r_o s^4 + C_5 C_L L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 L_L R_1 r_o s^4 + 2 C_5 C_L L_5 L_L R_1 R_5 R_L s^3 + C_5 C_L L_5 L_L R_1 R_5 R_L s^4$
- 10.79 INVALID-ORDER-79 $Z(s) = \left(R_1, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$
- $H(s) = \frac{1}{C_5 C_L L_5 L_L R_1 R_5 q_m r_o s^4 + C_5 C_L L_5 L_L R_1 R_5 s^4 + 2 C_5 C_L L_5 L_L R_1 R_L q_m r_o s^4 + 4 C_5 C_L L_5 L_L R_1 R_L s^4 + C_5 C_L L_5 L_L R_1 r_o s^4 + C_5 C_L L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 L_L R_1 r_o s^4 + C_$

10.80 INVALID-ORDER-80 $Z(s) = (L_1 s, \infty, \infty, \infty, R_5, R_L)$

$$H(s) = \frac{L_1 R_L s \left(R_5 g_m r_o + R_5 - r_o \right)}{L_1 R_5 g_m r_o s + L_1 R_5 s + 2 L_1 R_L g_m r_o s + 4 L_1 R_L s + L_1 r_o s + R_5 R_L + R_5 r_o + R_L r_o}$$

10.81 INVALID-ORDER-81 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.82 INVALID-ORDER-82 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_1 L_L s^2 \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L L_1 L_L R_5 g_m r_o s^3 + C_L L_1 L_L R_5 s^3 + C_L L_1 L_L r_o s^3 + C_L L_L R_5 r_o s^2 + 2 L_1 L_L g_m r_o s^2 + 4 L_1 L_L s^2 + L_1 R_5 g_m r_o s + L_1 R_5 s + L_1 r_o s + L_L R_5 s + L_L r_o s + R_5 r_o s^2 + 2 L_1 L_L g_m r_o s^2 + 4 L_1 L_L s^2 + L_1 R_5 g_m r_o s + L_1 R_5 s + L_1 r_o s + L_2 R_5 s + L_2 r_o s + R_5 r_o s^2 + 2 L_1 L_2 r_o s^3 + C_2 r_o$$

10.83 INVALID-ORDER-83 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.84 INVALID-ORDER-84 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_1 L_L R_5 s^2 \left(R_5 g_m r_o + R_5 - r_o\right)}{C_L L_1 L_L R_5 R_L g_m r_o s^3 + C_L L_1 L_L R_5 R_L s^3 + C_L L_1 L_L R_5 R_L r_o s^2 + L_1 L_L R_5 g_m r_o s^2 + L_1 L_L R_5 s^2 + 2L_1 L_L R_1 g_m r_o s^2 + L_1 L_L R_5 R_L g_m r_o s + L_1 R_5 R_L s + L_1 R_5 r_o s + L_1 R_5 r$$

10.85 INVALID-ORDER-85 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.86 INVALID-ORDER-86 $Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

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

10.87 INVALID-ORDER-87 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_5 s}\right)$

$$H(s) = \frac{L_1 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_1 r_o s^3 + 2 C_5 L_1 g_m r_o s^2 + 4 C_5 L_1 s^2 + C_5 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L r_o s + 1}$$

10.88 INVALID-ORDER-88 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

10.89 INVALID-ORDER-89 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.90 INVALID-ORDER-90 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.91 INVALID-ORDER-91 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.92 INVALID-ORDER-92 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.93 INVALID-ORDER-93 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_1 L_L R_L s^2 \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_1 L_L R_L r_o s^4 + 2 C_5 L_1 L_L R_L g_m r_o s^3 + 4 C_5 L_1 L_L R_L s^3 + C_5 L_1 L_L r_o s^2 + C_5 L_1 R_L r_o s^2 + C_L L_1 L_L R_L g_m r_o s^3 + C_L L_1 R_L g_m r_o s^3 + C_L R_L$$

10.94 INVALID-ORDER-94 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.95 INVALID-ORDER-95 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

$$H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{2 C_5 C_L L_1 L_L R_L g_m r_o s^4 + 4 C_5 C_L L_1 L_L r_o s^4 + C_5 C_L L_1 R_L r_o s^3 + 2 C_5 L_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_L s^2 + C_5 L_1 r_o s^2 + C_5 L_1 R_L g_m r_o s^3 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 R_L g_m r_o s^3 +$$

10.96 INVALID-ORDER-96 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

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

10.97 INVALID-ORDER-97 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{L_1 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_1 R_5 R_L r_o s^3 + 2 C_5 L_1 R_5 R_L g_m r_o s^2 + 4 C_5 L_1 R_5 r_o s^2 + C_5 L_1 R_5 r_o s^2 + C_L L_1 R_5 R_L g_m r_o s + L_1 R_5 g_m r_o s + L_1$$

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H(s) = -\frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{2C_{5}C_{L}L_{1}R_{5}R_{L}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{1}R_{5}r_{o}s^{3}+C_{5}C_{L}R_{5}R_{L}r_{o}s^{2}+2C_{5}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{5}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}r_{o}s^{2}+4C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}r_{o}s^{2}+4C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{5}s^{2}+C_{L}L_{1}R_{
10.99 INVALID-ORDER-99 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = -\frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{2C_{5}C_{L}L_{1}L_{L}R_{5}g_{m}r_{o}s^{4}+4C_{5}C_{L}L_{1}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{L}R_{5}r_{o}s^{3}+2C_{5}L_{1}R_{5}g_{m}r_{o}s^{2}+4C_{5}L_{1}L_{L}g_{m}r_{o}s^{3}+4C_{L}L_{1}L_{L}s^{3}+C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{o}s^{2}+C_{L}L_{1}r_{
10.100 INVALID-ORDER-100 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_1 L_L s^2 \left( -C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 C_L L_1 L_L R_5 r_o s^4 + 2 C_5 L_1 L_L R_5 g_m r_o s^3 + 4 C_5 L_1 L_L R_5 r_o s^2 + C_5 L_L R_5 r_o s^2 + C_L L_1 L_L R_5 g_m r_o s^3 + C_L L_1 L_L R_5 r_o s^3 + C_L L_1 L_L R_5 r_o s^2 + 2 L_1 L_L g_m r_o s^2 + 4 L_1 L_L s^2 + L_1 R_5 g_m r_o s + L_1 R_5 s + L_1 r_o s + L_2 R_5 r_o s^2 + 2 L_3 L_4 R_5 r_o s^2 + 2 L_4 L
10.101 INVALID-ORDER-101 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L_1s\left(C_LL_Ls^2 + C_LR_Ls + 1\right)\left(C_5R_5r_os - R_5g_mr_o - R_5 + r_o\right)
H(s) = -\frac{L_1s\left(C_LL_Ls^2 + C_LR_Ls + 1\right)\left(C_5R_5r_os - R_5g_mr_o - R_5 + r_o\right)}{2C_5C_LL_1L_LR_5g_mr_os^4 + 4C_5C_LL_1L_LR_5s^4 + 2C_5C_LL_1R_5R_Lg_mr_os^3 + 4C_5C_LL_1R_5r_os^3 + C_5C_LL_1R_5r_os^3 + C_5C_LL_1R_5g_mr_os^2 + 4C_5L_1R_5g_mr_os^2 + 4C_5L_1L_2g_mr_os^3 + 4C_5L_1L_2g_mr_os^3 + 4C_5L_1L_2g_mr_os^3 + 4C_5L_4R_5g_mr_os^3 + C_5C_4R_5R_4r_os^3 + C_5C_4R_5R_4r_os^2 + 2C_5L_4R_5g_mr_os^2 + 4C_5L_4R_5g_mr_os^3 + 4C_5L_4R_5g_mr_o
10.102 INVALID-ORDER-102 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
H(s) = \frac{L_1 L_L R_L s^2 \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_1 L_L R_5 R_L r_o s^4 + 2 C_5 L_1 L_L R_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_L R_5 R_L s^3 + C_5 L_1 L_L R_5 R_L r_o s^2 + C_5 L_1 R_5 R_L r_o s^2 + C_5 L_1 L_L R_5 R_L r_o s^3 + C_L L_1 L_L R_5 R_L r_o s^3 + C_L L_1 L_L R_5 R_L r_o s^3 + C_L L_1 L_L R_5 R_L r_o s^2 + L_1 L_L R_5 r_o s^3 + C_L L_1 L_L R
10.103 INVALID-ORDER-103 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = -\frac{L_{1}s\left(C_{L}L_{L}R_{S}^{2} + L_{L}s + R_{L}\right)\left(C_{5}R_{L}R_{S}^{2} + L_{L}S + R_{L}\right)\left(C_{5}R_{L}R_{S}R_{L}S^{2} + C_{5}L_{L}L_{L}R_{S}S^{2} + C_{5}L_{L}L_{L}R_{S}S^{2} + C_{5}L_{L}L_{L}R_{S}S^{2} + C_{5}L_{L}R_{S}S^{2} + C_{5}L_{L}R_{S}S^
10.104 INVALID-ORDER-104 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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{2}{2} \frac{2}{C_5 C_L L_1 L_L R_5 R_L g_m r_o s^4 + 4C_5 C_L L_1 L_L R_5 r_o s^4 + C_5 C_L L_1 L_L R_5 r_o s^3 + C_5 L_1 R_5 R_L r_o s^3 + C_5 L_1 R_5 R_
10.105 INVALID-ORDER-105 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_{55}}, \frac{1}{C_{L5}}\right)
                                                                                                                                                                                                                                                  H(s) = \frac{L_{1}s\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{5}C_{L}L_{1}r_{o}s^{3} + C_{5}C_{L}R_{5}r_{o}s^{2} + 2C_{5}L_{1}g_{m}r_{o}s^{2} + 4C_{5}L_{1}s^{2} + C_{5}R_{5}s + C_{5}r_{o}s + C_{L}L_{1}g_{m}r_{o}s^{2} + C_{L}L_{1}s^{2} + C_{L}r_{o}s + 1}
10.106 INVALID-ORDER-106 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{L_1 R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_1 R_5 R_L g_m r_o s^3 + C_5 C_L L_1 R_L r_o s^3 + C_5 C_L R_5 R_L r_o s^2 + C_5 L_1 R_5 g_m r_o s^2 + C_5 L_1 R_L g_m r_o s^2 + C_5 R_L r_o s + C_5 R_L r_o
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10.98 INVALID-ORDER-98 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

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10.107 INVALID-ORDER-107 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
   H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{5}C_{L}L_{1}R_{L}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{1}R_{L}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}R_{5}r_{o}s^{2}+C_{5}C_{L}R_{5}r_{o}s^{2}+2C_{5}L_{1}g_{m}r_{o}s^{2}+4C_{5}L_{1}s^{2}+C_{5}R_{5}s+C_{5}r_{o}s+C_{L}L_{1}g_{m}r_{o}s^{2}+C_{L}L_{1}s^{2}+C_{L}R_{L}s+C_{L}r_{o}s+1}{C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{1
10.108 INVALID-ORDER-108 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
  H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{2C_{5}C_{L}L_{1}L_{L}g_{m}r_{o}s^{4}+4C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{5}C_{L}L_{1}R_{5}s^{3}+C_{5}C_{L}L_{L}r_{o}s^{3}+C_{5}C_{L}L_{L}r_{o}s^{3}+C_{5}C_{L}L_{L}r_{o}s^{3}+C_{5}C_{L}L_{L}r_{o}s^{3}+C_{5}C_{L}L_{L}r_{o}s^{3}+C_{5}C_{L}L_{1}g_{m}r_{o}s^{2}+4C_{5}L_{1}s^{2}+C_{5}R_{5}s+C_{5}r_{o}s+C_{L}L_{1}g_{m}r_{o}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+C_{L}L_{1}s^{2}+
10.109 INVALID-ORDER-109 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_1 L_L s^2 \left( C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_1 L_L R_5 g_m r_o s^4 + C_5 C_L L_1 L_L r_o s^4 + C_5 C_L L_L L_R s_r s^3 + 2 C_5 L_1 L_L g_m r_o s^3 + 4 C_5 L_1 L_L s^3 + C_5 L_1 R_5 g_m r_o s^2 + C_5 L_1 R_5 s^2 + C_5 L_L r_o s^2 + C_5 L_L r_o s^2 + C_5 L_L r_o s^3 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L 
10.110 INVALID-ORDER-110 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{2C_{5}C_{L}L_{1}L_{L}g_{m}r_{o}s^{4} + 4C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{5}C_{L}L_{1}R_{5}s^{3} + 2C_{5}C_{L}L_{1}R_{5}s^{3} + 2C_{5}C_{L}L_{1}R_{5}s^{3} + C_{5}C_{L}L_{1}r_{o}s^{3} + C_{5}C_{L}L_{1}r_{o}s^{3} + C_{5}C_{L}L_{1}r_{o}s^{3} + C_{5}C_{L}R_{5}r_{o}s^{2} + C_{5}C_{L}R_{5}r_{o}s^{2} + 2C_{5}L_{1}g_{m}r_{o}s^{2} + 4C_{5}L_{1}s^{2} + C_{5}R_{5}s + C_{5}C_{L}R_{5}r_{o}s^{2} + C_{5}C_{L}R_{5
10.111 INVALID-ORDER-111 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_s} + \frac{1}{L_s s}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L_1L_LR_Ls^2(C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1)
10.112 INVALID-ORDER-112 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{C_{5}C_{L}L_{1}L_{L}R_{5}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{1}L_{L}R_{5}s^{4} + 2C_{5}C_{L}L_{1}L_{L}R_{5}s^{4} + 2C_{5}C_{L}L_{1}L_{L}R_{5}s^{4} + 2C_{5}C_{L}L_{1}L_{L}R_{5}s^{4} + C_{5}C_{L}L_{1}L_{L}R_{5}s^{4} + C_{5}C_{L}L_{1}L_{1}R_{5}s^{4} + C_{5}C_{L}L_{1}L_{1}R_
10.113 INVALID-ORDER-113 Z(s) = \left(L_1 s, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L_1 R_L s \left( C_L L_L s^2 + 1 \right) \left( C_5 R_5 g_m r_o s + C_5 \right)
10.114 INVALID-ORDER-114 Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                                                              H(s) = \frac{L_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 L_1 L_5 q_m r_o s^3 + C_5 L_1 L_5 s^3 + 2 C_5 L_1 R_L q_m r_o s^2 + 4 C_5 L_1 R_L s^2 + C_5 L_1 r_o s^2 + C_5 L_5 R_L s^2 + C_5 L_5 r_o s^2 + C_5 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o r_o s^2 + C_5 R_L r_o s^2 + C_5 R_L
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10.115 INVALID-ORDER-115 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.116 INVALID-ORDER-116 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{L_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_5 R_L s^4 + C_5 C_L L_1 R_L r_o s^3 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 R_L g_m r_o s^2 + C_5 L_5 R_L s^2 + C_5 L_$$

10.117 INVALID-ORDER-117 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.118 INVALID-ORDER-118 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.119 INVALID-ORDER-119 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_1 L_1 s^2 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_1 L_5 L_2 g_m r_o s^5 + C_5 C_L L_1 L_2 L_2 s^5 + C_5 C_L L_1 L_2 r_o s^4 + C_5 C_L L_5 L_2 r_o s^4 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 L_2 g_m r_o s^3 + 4 C_5 L_1 L_2 s^3 + C_5 L_1 r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5$$

10.120 INVALID-ORDER-120 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.121 INVALID-ORDER-121 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_1 L_L R_L s^2 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_1 L_5 L_L R_L g_m r_o s^5 + C_5 C_L L_1 L_L R_L s^5 + C_5 C_L L_1 L_L R_L r_o s^4 + C_5 L_1 L_5 L_L g_m r_o s^4 + C_5 L_1 L_5 R_L g_m r_o s^3 + C_5 L_1 L_L R_L g_m r_o s^3 + C_5 L_1 R_L$$

10.122 INVALID-ORDER-122 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.123 INVALID-ORDER-123 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 C_L L_1 L_5 L_L g_m r_o s^4 + C_5 C_L L_1 L_5 L_L g_m r_o s^4 + C_5 C_L L_1 L_L R_L g_m r_o s^4 + C_5 C_L L_1 R_L r_o s^4 + C_5 C_L R_L r_o s^4 + C_5$

10.124 INVALID-ORDER-124 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{2C_5 L_1 L_5 R_L g_m r_o s^3 + 4C_5 L_1 L_5 R_L s^3 + C_5 L_1 L_5 r_o s^3 + C_5 L_5 R_L r_o s^2 + L_1 L_5 g_m r_o s^2 + L_1 L_5 s^2 + 2L_1 R_L g_m r_o s + 4L_1 R_L s + L_1 r_o s + L_5 R_L s + L_5 r_o s + R_L r_o s^2 + L_5 R_L s + R_L r_o s^2 + L_5 R_L s + R_L r_o s^2 + L_5 R_L s + R_L r_o s^2 + R_L r_o s^2$

10.125 INVALID-ORDER-125 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

10.126 INVALID-ORDER-126 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_5 C_L L_1 L_5 R_L r_o s^4 + 2 C_5 L_1 L_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 R_L s^3 + C_5 L_1 L_5 r_o s^2 + C_L L_1 L_5 R_L g_m r_o s^3 + C_L L_1 L_5 R_L r_o s^2 + C_L L_5 R_L r_o s^2 + L_1 L_5 g_m r_o s^2 + L_1 L$

10.127 INVALID-ORDER-127 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

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

10.128 INVALID-ORDER-128 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.129 INVALID-ORDER-129 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{C_5 C_L L_1 L_5 L_L r_o s^4 + 2 C_5 L_1 L_5 L_L g_m r_o s^3 + 4 C_5 L_1 L_5 r_o s^2 + C_5 L_5 L_L r_o s^2 + C_L L_1 L_5 L_L g_m r_o s^3 + C_L L_1 L_5 L_L r_o s^2 + C_L L_5 L_L r_o s^2 + L_1 L_5 g_m r_o s + L_1 L_5 s + 2 L_1 L_L g_m r_o s + 4 L_1 L_L s + L_1 r_o + L_5 L_L s + L_5 r_o + L_1 r_o + L_5 L_L r_o s^2 + L$

10.130 INVALID-ORDER-130 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $L_1s\left(C_LL_Ls^2 + C_LR_Ls + 1\right)\left(C_5L_5r_os^2 - L_5g_mr_os - L_5s + r_o\right)$ $\frac{2C_5C_LL_1L_5L_Lg_mr_os^5 + 4C_5C_LL_1L_5R_Lg_mr_os^4 + 4C_5C_LL_1L_5R_Lg_mr_os^4 + 4C_5C_LL_1L_5R_Ls^4 + C_5C_LL_1L_5r_os^4 + C_5C_LL_5R_Lr_os^4 + C_5C_LL_5R_Lr_os^3 + 2C_5L_1L_5g_mr_os^3 + 4C_5L_1L_5g_mr_os^3 + 4C_$ 10.131 INVALID-ORDER-131 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$L_1L_LR_{LS}\left(-C_5L_5r_os^2+L_5g_mr_os+L_5s-r_o\right)$$

10.132 INVALID-ORDER-132 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $L_1 s \left(C_L L_L R_L s^2 + L_L s + R_L \right) \left(C_5 L_5 \right)$ $-\frac{2C_5C_LL_1L_5L_LR_Lg_mr_os^5 + 4C_5C_LL_1L_5L_LR_Ls^5 + C_5C_LL_1L_5L_LR_Lr_os^5 + C_5C_LL_5L_LR_Lr_os^4 + 2C_5L_1L_5L_Lg_mr_os^4 + 4C_5L_1L_5L_Ls^4 + 2C_5L_1L_5R_Lg_mr_os^3 + 4C_5L_1L_5R_Ls^3 + C_5L_5L_Lr_os^3 + C_5L_5L_Lr$

10.133 INVALID-ORDER-133 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{L_1 R_L s \left(C_L L_L s + 1\right) \left(C_5 L_5 r_o s - L_5 L_1 L_5 L_L R_L r_o s^5 + C_5 C_L L_1 L_5 L_L R_L r_o s^4 + C_5 C_L L_1 L_5 L_L R_L r_o s^4 + C_5 C_L L_1 L_5 L_L R_L r_o s^4 + C_5 L_1 L_5 R_L r_o s^4 + C_5 R_L r_$

10.134 INVALID-ORDER-134 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 R_5 g_m r_o s^2 + C_5 L_1 R_5 g^2 + 2 C_5 L_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_L s^2 + C_5 L_1 R_0 s^2 + C_5 L_5 R_L s^2 + C_5 L_5 R_L s^2 + C_5 L_5 R_0 s^2 + C_5 R_5 R_L s + C_5 R_5 r_o s + C_5 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o r_o s^2 + C_5 R_0 r_o s^2 + C_5 R_0$

10.135 INVALID-ORDER-135 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.136 INVALID-ORDER-136 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $L_1R_Ls\left(C_5L_5g_mr_os^2+C_5L_5s^2+C_5R_5g_mr_os+C_5R_5s-C_5r_os+g_mr_o+1\right)$ $H(s) = \frac{L_1 L_1 C_1 C_2 L_2 g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 R_5 R_L g_m r_o s^3 + C_5 C_L L_1 R_5 R_L g_m r_o s^3 + C_5 C_L L_1 R_5 R_L g_m r_o s^3 + C_5 C_L L_1 R_5 R_L g_m r_o s^3 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 R_5 g_m r_o s^3 + C_5 L_1 R_5$

10.137 INVALID-ORDER-137 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.138 INVALID-ORDER-138 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.139 INVALID-ORDER-139 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L s^2 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_1 L_5 L_L g_m r_o s^5 + C_5 C_L L_1 L_L R_5 g_m r_o s^4 + C_5 C_L L_1 L_L r_o s^4 + C_5 C_L L_1$

10.140 INVALID-ORDER-140 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.141 INVALID-ORDER-141 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L R_L g_m r_o s^5 + C_5 C_L L_1 L_5 L_L R_L s^5 + C_5 C_L L_1 L_L R_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_L R_5 R_L s^4 + C_5 C_L L_1 L_L R_5 R_L s^4 + C_5 C_L L_1 L_L R_5 R_L r_o s^4 + C_5 C_L L_1 L_5 L_L R_5 R_L r_o s^4 + C_5 C_L L_1 L_5 L_L R_5 R_L r_o s^4 + C_5 C_L L_1 L_5 L_L R_5 R_L r_o s^4 + C_5 L_1 L_5 L_L R_5 R_L r_o s^4 + C_5 L_1 L_5 L_L R_5 R_L r_o s^4 + C_5 L_4 L_5 L_L R_5 R_L r_o s^4 + C_5 L_5 L_4 L_5 L_L R_5 R_L r_o s^4 + C_5 L_5 L_5 L_4 R_5 R_L r_o s^4 + C_5 L_5 L_5 L_5 R_L r_o s^4 + C_5 L_5 L_5 L_5 R_L r_o s^4 + C_5 L_5 L_5 L_5 R_L r_o s^4 + C_5 R_L r_o s^4 +$

10.142 INVALID-ORDER-142 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{L_1 s \left(C_L L_L \right)}{C_5 C_L L_1 L_5 L_L g_m r_o s^5 + C_5 C_L L_1 L_L R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 L_1 R_5 g_m r_o s^4 + C_5 C_L L_1 R_5 g_m r_$

10.143 INVALID-ORDER-143 $Z(s) = \left(L_1 s, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L g_m r_o s^5 + C_5 C_L L_1 L_5 L_L s^5 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_L R_5 g_m r_o s^4 + C_5 C_L L_1 R_$

10.144 INVALID-ORDER-144 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{2 C_5 L_1 L_5 R_5 g_m r_o s^3 + 4 C_5 L_1 L_5 R_5 r_o s^3 + C_5 L_5 R_5 r_o s^2 + L_1 L_5 R_5 g_m r_o s^2 + L_1 L_5 R_5 g^2 + 2 L_1 L_5 R_5 g^2 +$

10.145 INVALID-ORDER-145 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1s\left(-C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s - L_5r_os - R_5r_o\right)}{C_5C_LL_1L_5R_5r_os^4 + 2C_5L_1L_5R_5g_mr_os^3 + 4C_5L_1L_5R_5s^3 + C_5L_5R_5r_os^2 + C_LL_1L_5R_5g_mr_os^3 + C_LL_1L_5r_os^3 + C_LL_1L_5r_os^3 + C_LL_1R_5r_os^2 + 2L_1L_5g_mr_os^2 + 4L_1L_5s^2 + 2L_1R_5g_mr_os + 4L_1R_5s + L_5R_5s + L_5r_os + R_5r_os^2 + 2L_5R_5r_os^2 + 2L_5R_5r_os^$

10.146 INVALID-ORDER-146 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{C_5 C_L L_1 L_5 R_5 R_L r_o s^4 + 2 C_5 L_1 L_5 R_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 R_5 R_L s^3 + C_5 L_1 L_5 R_5 R_L g_m r_o s^3 + C_L L_1 L_5 R_5 R_L r_o s^3 + C_L L_1 L_5 R_5 R_L r_o s^3 + C_L L_1 L_5 R_5 R_L r_o s^2 + L_1 L_5 R_5 g_m r_o s^2 + L_1 L_5$

10.147 INVALID-ORDER-147 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $L_{1}s\left(C_{L}R_{L}s+1\right)\left(C_{5}L_{5}R_{5}r_{o}s^{2}-L_{5}R_{5}g_{m}r_{o}s-L_{5}R_{5}s+L_{5}r_{o}s+R_{5}r_{o}s\right)$

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

10.148 INVALID-ORDER-148 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, L_L s + \frac{1}{C_L s}\right)$

 $L_{1}s\left(C_{L}L_{L}s^{2}+1
ight)\left(C_{5}L_{5}R_{5}r_{o}s^{2}-L_{5}R_{5}g_{m}r_{o}s-L_{5}R_{5}s+L_{5}r_{o}s+R_{5}r_$

 $\frac{L_{1}s\left(C_{L}L_{L}s+1\right)\left(C_{5}L_{5}n_{5}r_{o}s-L_{5}n_{5}g_{m}$

10.149 INVALID-ORDER-149 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.150 INVALID-ORDER-150 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_s} + \frac{1}{L_s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{2C_5C_LL_1L_5L_LR_5g_mr_os^5 + 4C_5C_LL_1L_5L_LR_5s^5 + 2C_5C_LL_1L_5R_5R_Lg_mr_os^4 + 4C_5C_LL_1L_5R_5r_os^4 + C_5C_LL_5L_LR_5r_os^4 + C_5C_LL_5L_5R_5R_Lr_os^3 + 2C_5L_1L_5R_5g_mr_os^3 + 4C_5L_1L_5R_5s^3 + C_5L_5R_5r_os^4 + 4C_5L_4L_5R_5r_os^4 + C_5C_LL_5L_5R_5r_os^4 + C_5C_LL_5R_5r_os^4 + C_5C_LL_5R_5r_os^$

10.151 INVALID-ORDER-151 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_1 L_L R_L}{C_5 C_L L_1 L_5 L_L R_5 R_L r_o s^4 + 2 C_5 L_1 L_5 L_L R_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 L_L R_5 R_L s^3 + C_5 L_1 L_5 R_L R_5 R_L r_o s^2 + C_5 L_5 L_L R_5 R_L r_o s^2 + C_L L_1 L_5 L_L R_5 R_L g_m r_o s^3 + C_L L_1 L_5 L_L R_5 R_L r_o s^3 + C_L L_1$

10.152 INVALID-ORDER-152 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $-\frac{2C_5C_LL_1L_5L_LR_5R_Lg_mr_os^5 + 4C_5C_LL_1L_5L_LR_5R_Ls^5 + C_5C_LL_1L_5L_LR_5r_os^5 + C_5C_LL_5L_LR_5R_Lr_os^4 + 2C_5L_1L_5L_LR_5g_mr_os^4 + 4C_5L_1L_5R_5R_Lg_mr_os^3 + 4C_5L_1L_5R_5R_Ls^3 + C_5L_1L_5R_5r_os^3 + C_5L_5L_LR_5r_os^3 + C_5L_5L_LR_5r_os^4 + 2C_5L_1L_5L_LR_5g_mr_os^4 + 4C_5L_1L_5R_5R_Lg_mr_os^3 + 4C_5L_1L_5R_5R_Ls^3 + C_5L_5L_LR_5r_os^3 + C_5L_5L_LR_5r_os^3 + C_5L_5L_LR_5r_os^4 + 2C_5L_5L_LR_5r_os^4 + 2C_5L_5L_LR_5r_os^4 + 2C_5L_5L_LR_5r_os^4 + 2C_5L_5L_LR_5r_os^4 + 2C_5L_5L_LR_5r_os^4 + 2C_5L_5L_Rr_os^4 + 2C_5L_Rr_os^4 + 2C_$

10.153 INVALID-ORDER-153 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_z} + \frac{1}{L_z s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{L_z s}}\right)$

 $\frac{1}{2C_5C_LL_1L_5L_LR_5R_Lq_mr_os^5 + 4C_5C_LL_1L_5L_LR_5R_Ls^5 + C_5C_LL_1L_5L_LR_5r_os^5 + C_5C_LL_1L_5L_LR_5R_Lr_os^4 + C_5C_LL_5L_LR_5R_Lr_os^4 + 2C_5L_1L_5R_5R_Lq_mr_os^3 + 4C_5L_1L_5R_5R_Ls^3 + C_5L_5R_5R_Lr_os^3 + C_5L_5R_5R_Lr_os^4 + C_5L_4L_5L_LR_5R_Lr_os^4 + C_5L_4L_5R_5R_Lr_os^4 + 2C_5L_4L_5R_5R_Lr_os^4 + 2C_5L_4R_5R_Lr_os^4 + 2C_$

10.154 INVALID-ORDER-154 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 L_1 L_5 R_5 g_m r_o s^3 + C_5 L_1 L_5 R_5 g_a r_o s^3 + 4 C_5 L_1 L_5 R_L s^3 + C_5 L_1 L_5 r_o s^3 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + L_1 L_5 g_m r_o s^2 + L_1 L_5 g_m r_o s + L_1 R_5 s + 2 L_1 R_L g_m r_o s + 4 L_1 R_L s + L_1 r_o s + L_5 R_L s + L_5 r_o s + R_5 R_L + R_5 r_o s + R_5 R_L s + R_5 r_o s + R_5 r_o s + R_5 R_L s + R_5$

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10.155 INVALID-ORDER-155 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)
```

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

10.156 INVALID-ORDER-156
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_1 R_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 R_5 r_o s^2$$

10.157 INVALID-ORDER-157
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.158 INVALID-ORDER-158
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.159 INVALID-ORDER-159
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_1 L_L s^2 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_4 L_5 L_4 R_5 r_o s^4 + C_5 L_4 L_5 L_5 R_5 r_o s^4 + C_5 L_5 R_5 r_o s^4 + C_5 L_5 L_5 R_5 r_o s^4 + C_5 L$$

10.160 INVALID-ORDER-160
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 s \left(C_L L_L s^2 + C_2 C_L L_1 L_5 L_L g_m r_o s^5 + 4 C_5 C_L L_1 L_5 L_L s^5 + C_5 C_L L_1 L_5 R_5 g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + 4 C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L g_s r_o s^4 + C_5 C_L L_5 R_L g_m r_o s^4 + C_5$$

10.161 INVALID-ORDER-161
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L R_5 R_L g_m r_o s^5 + C_5 C_L L_1 L_5 L_L R_5 R_L s^5 + C_5 C_L L_1 L_5 L_L R_5 R_L r_o s^5 + C_5 C_L L_5 L_L R_5 R_L r_o s^4 + C_5 L_1 L_5 L_L R_5 g_m r_o s^4 + C_5 L_1 L_5 L_$$

10.162 INVALID-ORDER-162
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L R_5 g_m r_o s^5 + C_5 C_L L_1 L_5 L_L R_5 s^5 + 2 C_5 C_L L_1 L_5 L_L R_5 g_m r_o s^5 + 4 C_5 C_L L_1 L_5 L_L R_5 s^5 + C_5 C_L L_1 L_5 L_L R_5 s^5 + C_5 C_L L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 L_L R_5 r_o s^4 + 4 C_5 L_1 L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 L_L R_5 r_o s^4 +$$

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10.163 INVALID-ORDER-163 Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
```

 $H(s) = \frac{1}{C_5C_LL_1L_5L_LR_5g_mr_os^5 + C_5C_LL_1L_5L_LR_5s^5 + 2C_5C_LL_1L_5L_LR_2g_mr_os^5 + 4C_5C_LL_1L_5L_LR_2s^5 + C_5C_LL_1L_5L_LR_2s^5 + C_5C_LL_1L_5R_5R_Lg_mr_os^4 + C_5C_LL_1L_5R_5R_Ls^4 + C_5C_LL_1L_5R_Lr_os^4 + C_5C_LL_5L_LR_5r_os^4 + C_5C_LL_5L_Rs_5r_os^4 + C_5C_LL_5L_Rs_5r_os^$

10.164 INVALID-ORDER-164
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 L_1 L_5 R_5 g_m r_o s^3 + C_5 L_1 L_5 R_5 g_m r_o s^3 + 4 C_5 L_1 L_5 R_L s^3 + C_5 L_1 L_5 r_o s^3 + 2 C_5 L_1 R_5 R_L g_m r_o s^2 + 4 C_5 L_1 R_5 R_L s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_L r_o s^2 + C_5 R_5 R_L r_o s + L_1 R_5 g_m r_o s + L_1 R_5 g_$

10.165 INVALID-ORDER-165
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$$

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

10.166 INVALID-ORDER-166
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

 $L_1 R_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s^2 \right)$

 $H(s) = \frac{L_1 K_L s \left(C_5 L_5 K_5 g_m r_o s^2 + C_5 L_5 K_5 s^2 - C_5 L_5 r_o s^2 + C_5 L_4 L_5 r_o s^3 + C_5 L_4 r_o$

10.167 INVALID-ORDER-167
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

 $L_1s(C_LR_Ls+1)(C_5L_5R_5g_mr_os^2+C_5L_5R_5s^2-C_5g_mr_os^2+C_5L_5g_mr_os^2+C_5g$

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

10.168 INVALID-ORDER-168
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{L_1s\left(C_LL_Ls + 1\right)\left(C_5L_5R_5g_mr_os + C_5L_5R_5s - C_5L_5L_5R_5s - C_5L_5L_5L_5R_5s - C_5L_5L_5R_5s - C_5L_5L_5L_5R_5s - C_5L_5L_5L_5R_5s - C_5L_5L_5L_5R_5s - C_5L_5L_5R_5s - C_5L_5L_5L_5R_5s - C_5L_5L_5R_5s - C_5L_5R_5s - C_5L_5L_5R_5s - C_5L_5L_$

10.169 INVALID-ORDER-169
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{C_5C_LL_1L_5L_LR_5g_mr_os^5 + C_5C_LL_1L_5L_LR_5s^6 + C_5C_LL_1L_5L_LR_5r_os^4 + C_5C_LL_5L_LR_5r_os^4 + C_5C_LL_5L_Rr_os^4 + C_5C_LL_5L_Rr_os^4$

10.170 INVALID-ORDER-170
$$Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{2C_5C_LL_1L_5L_Lg_mr_os^5 + 4C_5C_LL_1L_5L_Ls^5 + C_5C_LL_1L_5R_5g_mr_os^4 + C_5C_LL_1L_5R_Lg_mr_os^4 + 4C_5C_LL_1L_5R_Ls^4 + C_5C_LL_1L_5R_Ls^4 + C_5C_LL_1L_5R_Ls$

10.171 INVALID-ORDER-171 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L R_5 R_L g_m r_o s^5 + C_5 C_L L_1 L_5 L_L R_5 R_L s^5 + C_5 C_L L_1 L_5 L_L R_5 R_L r_o s^4 + C_5 C_L L_5 L_L R_5 R_L r_o s^4 + C_5 L_1 L_5 L_L R_5 g_m r_o s^4 + C_5 L_1 L_5 L_$

10.172 INVALID-ORDER-172 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L R_5 g_m r_o s^5 + C_5 C_L L_1 L_5 L_L R_5 s^5 + 2 C_5 C_L L_1 L_5 L_L R_5 r_o s^5 + 4 C_5 C_L L_1 L_5 L_L R_5 r_o s^5 + 2 C_5 C_L L_1 L_5 L_L R_5 r_o s^5 + 2 C_5 C_L L_1 L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 L_L R_5$

10.173 INVALID-ORDER-173 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_5 C_L L_1 L_5 L_L R_5 g_m r_o s^5 + C_5 C_L L_1 L_5 L_L R_5 s^5 + 2 C_5 C_L L_1 L_5 L_L R_L g_m r_o s^5 + 4 C_5 C_L L_1 L_5 L_L R_L s^5 + C_5 C_L L_1 L_5 L_L R_5 g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + 2 C_5 C_L L_1 L_5 R_L g_m r_o s^4 + 4 C_5 C_L L_1 L_5 R_L g_m r_o s^4 + C_5 C_L L_1 L_5 R_L g_m r_o s^4 + 2 C_5 C_L L_1 L_5 R_L$

10.174 INVALID-ORDER-174 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L\right)$

$$H(s) = \frac{R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 R_5 R_L s + C_1 R_5 r_o s + C_1 R_L r_o s + R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}$$

10.175 INVALID-ORDER-175 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_L R_5 s^3 + C_1 C_L L_L r_o s^3 + C_1 C_L R_5 r_o s^2 + C_1 R_5 s + C_1 r_o s + 2 C_L L_L g_m r_o s^2 + 4 C_L L_L s^2 + C_L R_5 g_m r_o s + C_L R_5 s + C_L r_o s + 2 g_m r_o + 4 C_L R_5 r_o s^2 + C_L R_5 r_o s^2$$

10.176 INVALID-ORDER-176 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_L R_5 r_o s^3 + C_1 L_L R_5 s^2 + C_1 L_L r_o s^2 + C_1 R_5 r_o s + C_L L_L R_5 g_m r_o s^2 + C_L L_L R_5 s^2 + C_L L_L r_o s^2 + 2 L_L g_m r_o s + 4 L_L s + R_5 g_m r_o + R_5 + r_o}$$

10.177 INVALID-ORDER-177 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.178 INVALID-ORDER-178 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_L R_5 R_L r_o s^3 + C_1 L_L R_5 r_o s^2 + C_L L_L R_5 r_o s^2 + L_L R_5 r_o s^2 +$$

10.179 INVALID-ORDER-179 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.180 INVALID-ORDER-180 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_L R_5 r_o s^3 + C_1 C_L L_L R_5 r_o s^3 + C_1 C_L L_R r_o s^3 + C_1 C_L R_5 R_L r_o s^2 + C_1 R_5 R_L s + C_1 R_5 r_o s + C_1 R_L r_o s + C_L L_L R_5 g_m r_o s^2 + C_L R_5 R_L g_m r_o s + C_L R_5 R_L g_m r_o s + C_L R_5 R_L g_m r_o s^2 + C_L R_5 R_L g_$

10.181 INVALID-ORDER-181 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_5 r_o s + g_m r_o + 1}{s \left(C_1 C_5 r_o s + C_1 C_L r_o s + C_1 + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L \right)}$

10.182 INVALID-ORDER-182 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.183 INVALID-ORDER-183 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{s \left(C_1 C_5 C_L L_L r_o s^3 + C_1 C_5 r_o s + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1 + 2 C_5 C_L L_L g_m r_o s^2 + 4 C_5 C_L L_L s^2 + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L\right)}$$

10.184 INVALID-ORDER-184 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_L r_o s^3 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + C_5 C_L L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L s^2 + g_m r_o + 1}$$

10.185 INVALID-ORDER-185 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{s \left(C_1 C_5 C_L L_L r_o s^3 + C_1 C_5 C_L R_L r_o s^2 + C_1 C_5 r_o s + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1 + 2 C_5 C_L L_L g_m r_o s^2 + 4 C_5 C_L L_L s^2 + 2 C_5 C_L R_L g_m r_o s + 4 C_5 C_L R_L s + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L\right)}$$

10.186 INVALID-ORDER-186 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_L R_L r_o s^3 + C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_L s^2 + C_1 L_L r_o s^2 + C_5 L_L R_L r_o s^3 + 2 C_5 L_L R_L g_m r_o s^2 + 4 C_5 L_L R_L s^2 + C_5 L_L r_o s^2 + C_5 L_L R_L g_m r_o s^2 + C_L R_L g_m r$$

10.187 INVALID-ORDER-187 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{\left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_1 C_5 C_L L_L R_L r_o s^4 + C_1 C_5 L_L r_o s^3 + C_1 C_5 L_L R_L s^3 + C_1 C_L L_L R_L s^3 + C_1 C$$

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H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( -C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_L R_L r_o s^4 + C_1 C_5 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^3 + C_1 C_L L_L r_o s^3 + C_1 C_L L_L R_L s^3 + C_5 C_L L_L R_L g_m r_o s^3 + 4 C_5 C_L L_L R_L g_m r_o s^3 + 4 C_5 C_L L_L R_L g_m r_o s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_L r_o s^3 + C_5 C
10.189 INVALID-ORDER-189 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
H(s) = -\frac{\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{1}C_{5}C_{L}R_{5}R_{L}r_{o}s^{3}+C_{1}C_{5}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_
10.190 INVALID-ORDER-190 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = -\frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4}+C_{1}C_{5}R_{5}r_{o}s^{2}+C_{1}C_{L}L_{L}r_{o}s^{3}+C_{1}C_{L}L_{c}r_{o}s^{2}+C_{1}R_{5}s+C_{1}r_{o}s+2C_{5}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{L}R_{5}r_{o}s^{2}+2C_{5}R_{5}g_{m}r_{o}s+4C_{5}R_{5}s+2C_{L}L_{L}g_{m}r_{o}s^{2}+4C_{L}L_{L}s^{2}+C_{L}R_{5}g_{m}r_{o}s+C_{L}R_{5}s+C_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}L_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{L}r_{o}s+2C_{
10.191 INVALID-ORDER-191 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                   H(s) = \frac{L_L s \left( -C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 L_L R_5 r_o s^3 + C_1 L_L R_5 r_o s^3 + C_1 L_L R_5 s^2 + C_1 L_L r_o s^2 + C_1 R_5 r_o s + C_5 L_L R_5 r_o s^3 + 2 C_5 L_L R_5 g_m r_o s^2 + 4 C_5 L_L R_5 g_m r_o s^2 + C_L R_5 g
10.192 INVALID-ORDER-192 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = -\frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}R_{5}r_{o}s - R_{5}g_{m}r_{o} - R_{5} + r_{o}\right)}{C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}R_{5}R_{L}r_{o}s^{3} + C_{1}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{L}L_{L}r_{o}s^{2} + C_{1}C_{L}R_{5}r_{o}s^{2} + C_{1}C_{L}R_{5}r_
10.193 INVALID-ORDER-193 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_5 L_L R_5 R_L r_o s^3 + C_1 L_L R_5 R_L s^2 + C_1 L_L R_5 r_o s^2 + C_1 L_L R_5 r_o s^2 + C_1 L_L R_5 R_L r_o s^3 + 2 C_5 L_L R_5 R_L g_m r_o s^2 + 4 C_5 L_L R_5 R_L r_o s^3 + C_5 L_L R_5 R_L r_o s^3 + C_1 L_L R_5 R_L r_o s^2 + C_1 L_L R_5 R_L r_o s^2 + C_1 L_L R_5 R_L r_o s^3 + 2 C_5 L_L R_5 R_L r_o s^3 + 2 C_5 L_L R_5 R_L r_o s^3 + C_5 L_L R_5 R_L r_o s^3 +
10.194 INVALID-ORDER-194 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = -\frac{\left(C_{L}L_{L}R_{2}^{2} + L_{L}s + R_{L}\right)\left(C_{5}R_{5}r_{o}s - R_{5}g_{m}r_{o}s - R_{5}g_{m}r_{o}s
10.195 INVALID-ORDER-195 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R_L \left( C_L L_L s^2 + 1 \right) \left( C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)
                                                  -\frac{R_L \left(C_L L_L S_1 + I\right) \left(C_5 R_5 R_L r_o S^2 + C_1 C_L L_L R_5 R_L S^3 + C_1 C_L L_L R_5 r_o S^3 + C_1 C_L R_5 r_o S
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10.188 INVALID-ORDER-188 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1}{s \left(C_1 C_5 C_L R_5 r_o s^2 + C_1 C_5 R_5 s + C_1 C_5 r_o s + C_1 + C_5 C_L R_5 g_m r_o s + C_5 C_L R_5 s + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L \right)}$ 10.197 INVALID-ORDER-197 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$ $H(s) = \frac{R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L R_5 R_L r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_5 r_o s^2 + C_1 C_4 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_5 C_L R_5 R_L g_m r_o s^2 + C_5 C_L R_5 R_L s^2 + C_5 C_L R_5 R_L s^2 + C_5 R_5 g_m r_o s + C_5 R_5 g_m r_$ **10.198** INVALID-ORDER-198 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{5}C_{L}R_{L}r_{o}s^{2}+C_{1}C_{5}R_{5}s+C_{1}C_{5}r_{o}s+C_{1}C_{L}R_{L}s+C_{1}C_{L}r_{o}s+C_{1}+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+4C_{5}C_{L}R_{L}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+4C_{5}C_{L}R_{5}g_{m}r_{o}s+4C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{$ **10.199** INVALID-ORDER-199 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{s}^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}L_{L}r_{o}s^{3}+C_{1}C_{5}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{5}R_{5}s+C_{1}C_{5}r_{o}s+C_{1}C_{L}L_{s}s^{2}+C_{1}C_{L}r_{o}s+C_{1}+2C_{5}C_{L}L_{L}g_{m}r_{o}s^{2}+4C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}$ 10.200 INVALID-ORDER-200 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_L R_5 r_o s^4 + C_1 C_5 L_L R_5 s^3 + C_1 C_5 L_L r_o s^3 + C_1 C_5 L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + C_5 C_L L_L R_5 g_m r_o s^3 + C_5 C_L L_L R_5 s^3 + C_5 C_L L_L R_5 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L r_o s^3 + C_5$ **10.201** INVALID-ORDER-201 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_{1.8}}\right)$ $H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{1}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{5}C_{L}R_{5}r_{o}s^{2} + C_{1}C_{5}C_{L}R_{5}r_{o}s^{2} + C_{1}C_{5}R_{5}s + C_{1}C_{5}r_{o}s + C_{1}C_{L}L_{L}s^{2} + C_{1}C_{L}R_{L}s + C_{1}C_{L}R_{c}s + C_{1}C_{L}R_{c}s$ 10.202 INVALID-ORDER-202 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_L s}}\right)$ $H(s) = \frac{L_L R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_L R_5 R_L r_o s^4 + C_1 C_5 L_L R_5 r_o s^3 + C_1 C_$ 10.203 INVALID-ORDER-203 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $(C_L L_L R_L s^2 + L_L s + R_L) (C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1)$ $H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_L R_5 R_L s^4 + C_1 C_5 C_L L_L R_5 r_o s^4 + C_1 C_5 L_L R_5 r_o s^4 + C_1 C_5 L_L R_5 r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 L_L R_5 r_o s^3 + C_1 L_L R_5 r_o s^3$ 10.204 INVALID-ORDER-204 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$ $R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o \right)$ $H(s) = \frac{C_1C_5C_LL_LR_5R_Ls^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5R_5r_os^2 + C_1C_5R_5r_os^2 + C_1C_LL_LR_5s^3 + C_1C_LL_LR_5s$

10.196 INVALID-ORDER-196 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

10.205 INVALID-ORDER-205 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_5 R_L s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

10.206 INVALID-ORDER-206 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1}{s\left(C_1C_5C_LL_5r_os^3 + C_1C_5L_5s^2 + C_1C_5r_os + C_1C_Lr_os + C_1 + C_5C_LL_5g_mr_os^2 + C_5C_LL_5s^2 + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$$

10.207 INVALID-ORDER-207 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 R_L r_o s^4 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^2 + C_5 L_5 g_m r_o$$

10.208 INVALID-ORDER-208 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_1 C_5 C_L L_5 R_L s^3 + C_1 C_5 C_L L_5 r_o s^3 + C_1 C_5 C_L R_L r_o s^2 + C_1 C_5 L_5 s^2 + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + C_5 C_L L_5 g_m r_o s^2 + C_5 C_L L_5 g_m r_o s^2 + C_5 C_L R_L g_m r_o s + 4 C_5 C_L R_L s + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o s + C_1 C_2 r_o s + C_2$$

10.209 INVALID-ORDER-209 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.210 INVALID-ORDER-210 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_5 L_L r_o s^5 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 L_L r_o s^3 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + C_5 C_L L_5 L_L g_m r_o s^4 + C_5 C_L L_5 L_L g_m r_o s^2 + C_5 L_5 g_m r_o s^2 +$$

10.211 INVALID-ORDER-211 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.212 INVALID-ORDER-212 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_5 L_L R_L r_o s^5 + C_1 C_5 L_5 L_L R_L r_o s^4 + C_1 C_5 L_5 L_L R_L r_o s^3 + C_1 L_L R_L r_o s^$$

10.213 INVALID-ORDER-213 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.214 INVALID-ORDER-214 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s^3 + C_1 C_5 L_L L_L R_L s^3 + C_1 C_L R_L r_o s^4 + C_1 C_L L_L R_L s^3 + C_1 C_L R_L r_o s^4 + C_1$

10.215 INVALID-ORDER-215 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

10.216 INVALID-ORDER-216 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_5L_5r_os^2 + L_5g_mr_os + L_5s - r_o}{C_1C_5L_5r_os^3 + C_1L_5r_os^3 + C_1L_5s^2 + C_1r_os + C_5C_LL_5r_os^3 + 2C_5L_5g_mr_os^2 + 4C_5L_5s^2 + C_LL_5g_mr_os^2 + C_LL_5s^2 + C_Lr_os + 2g_mr_o + 4C_5L_5s^2 + C_LL_5g_mr_os^2 + C_LL_5s^2 + C_LL_5s^$

10.217 INVALID-ORDER-217 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

10.218 INVALID-ORDER-218 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{C_1 C_5 C_L L_5 R_L r_o s^4 + C_1 C_5 L_5 r_o s^3 + C_1 C_L L_5 r_o s^3 +$

10.219 INVALID-ORDER-219 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.220 INVALID-ORDER-220 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_5 L_L r_o s^4 + C_1 L_L L_5 L_L r_o s^4 + C_1 L_L r_o s^2 + C_1 L_L r_o s^2 + C_5 L_L L_5 L_L r_o s^4 + 2 C_5 L_5 L_L g_m r_o s^3 + 4 C_5 L_5 L_L s^3 + C_5 L_5 r_o s^2 + C_L L_5 L_L g_m r_o s^3 + C_L L_5 L_L s^3 + C_L L_5 L_L s^3 + C_L L_5 L_L r_o s^4 + C_1 L_5 L_L r_o s^4$

10.221 INVALID-ORDER-221 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.222 INVALID-ORDER-222 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_5 L_L R_L r_o s^4 + C_1 L_L L_L r_o s^4 + C_1 L_5 L_L R_L r_o s^3 + C_1 L_5 L_L R_L r_o s^2 + C_5 L_L L_L R_L r_o s^4 + 2 C_5 L_5 L_L R_L g_m r_o s^3 + 4 C_5 L_5 L_L R_L s^3 + C_5 L_5 L_L R_L r_o s^4 + C_5 L_5 L_L R_L r_o$

10.223 INVALID-ORDER-223 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.224 INVALID-ORDER-224 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_{5s}}{C_5 L_{5s}^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

10.225 INVALID-ORDER-225 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_5 R_L s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5$

10.226 INVALID-ORDER-226 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1}{s\left(C_1C_5C_LL_5r_os^3 + C_1C_5C_LR_5r_os^2 + C_1C_5L_5s^2 + C_1C_5R_5s + C_1C_Lr_os + C_1 + C_5C_LL_5g_mr_os^2 + C_5C_LL_5s^2 + C_5C_LR_5g_mr_os + C_5C_LR_5s + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$

10.227 INVALID-ORDER-227 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 R_L r_o s^4 + C_1 C_5 C_L R_5 R_L r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 C_L R_L r_o s^3 + C_5 C_L R_5 R_L g_m r_o s^3 +$

10.228 INVALID-ORDER-228 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.229 INVALID-ORDER-229 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{s}^{2}+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}+C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}L_{5}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{5}r_{o}s^{3}+C_{1}C_{5}C_{L}L_{5}r_{o}s^{3}+C_{1}C_{5}C_{L}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}s^{2}+C_{1}C_{5}R_{5}s+C_{1}C_{L}L_{5}s^{2}+C_{1}C_{L}L_{5}s^{2}+C_{5}C_{L}L_{5}g_{m}r_{o}s^{$ **10.230** INVALID-ORDER-230 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_L L_r c_s s^3 + C_1 C_5 L_L L_r c_s s^3 + C_1 C_5 L_L r_o s^3 + C_1 C_$ 10.231 INVALID-ORDER-231 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} + C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{1}C_{5}C_{L}L_{5}L_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{c}s^{3} + C_{1}C_{5}C_{L}L_{5}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{5}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{5}r_{o}s^{2} + C_{1}C_{5}C_{L}R_{5}r_{o}s^{2} + C_{1}C_{5}C_{L}R_{5}r_{o}s^{2} + C_{1}C_{5}R_{5}s + C_{1}C_{5}r_{o}s + C_{1}C_{L}L_{5}s^{2} + C_{1}C_{5}L_{5}s^{2} + C_{1}C_{5}C_{L}L_{5}s^{2} + C_{1}C_{5}C_{L}L_{5}s^$ 10.232 INVALID-ORDER-232 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$ $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_Lr_os^5 + C_1C_5C_LL_LR_5R_Lr_os^4 + C_1C_5L_5L_LR_Ls^4 + C_1C_5L_5L_Lr_os^4 + C_1C_5L_5R_Lr_os^3 + C_1C_5L_LR_5r_os^3 + C_1C_5L_LR_5r_os^3 + C_1C_5L_LR_Lr_os^3 + C_1C$ 10.233 INVALID-ORDER-233 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{(\lor_L \iota_L \iota_L s_1)}{C_1 C_5 C_L L_5 L_L R_L s_5 + C_1 C_5 C_L L_5 L_L r_o s_5 + C_1 C_5 C_L L_L R_5 r_o s_4 + C_1 C_5 C_L L_L R_5 r_o s_4 + C_1 C_5 L_L R_5 r_o s_$ 10.234 INVALID-ORDER-234 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$ $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{5}L_{L}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{$ 10.235 INVALID-ORDER-235 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, R_L\right)$ $H(s) = \frac{R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_1 C_5 L_5 R_5 R_L r_o s^3 + C_1 L_5 R_5 r_o s^2 + C_1 L_5 R_L r_o s^2 + C_1 R_5 R_L r_o s^2 + C_1 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L s^2 + C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s + 2 L_5 R_L g_m r_o s + 4 L_5 R_L s + L_5 r_o s + 2 R_5 R_L g_m r_o s + 4 R_5 R_L + R_5 r_o s^2 + 2 R_5 R_L g_m r_o s +$

10.237 INVALID-ORDER-237 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_1 C_5 L_5 R_5 R_L r_o s^3 + C_1 C_L L_5 R_5 R_L r_o s^3 + C_1 L_5 R_5 R_L r_o s^2 + C_1 L_5 R_5 R_L r$

10.238 INVALID-ORDER-238 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$

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

10.239 INVALID-ORDER-239 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, L_L s + \frac{1}{C_L s}\right)$

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

10.240 INVALID-ORDER-240 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_F} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{C_1 C_5 L_5 L_L R_5 r_o s^4 + C_1 L_L L_5 L_L R_5 r_o s^4 + C_1 L_5 L_L R_5 r_o s^2 + C_1 L_L R_5 r_o s^2 + C_5 L_L L_5 L_L R_5 r_o s^4 + 2 C_5 L_5 L_L R_5 r_o s^4 + 2 C_5 L_5 L_L R_5 r_o s^3 + 4 C_5 L_5 L_L R_5 r_o s^3 + C_5 L_5 L_L$

10.241 INVALID-ORDER-241 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_5r_os^5 + C_1C_5C_LL_5R_5R_Lr_os^4 + C_1C_5L_5R_5r_os^3 + C_1C_LL_5L_Lr_os^4 + C_1C_LL_5R_5r_os^3 + C_1$

10.242 INVALID-ORDER-242 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{L_L \kappa_L s \left(- C_5 L_5 \kappa_5 r_o s^2 + L_5 \kappa_5 g - L_5 \kappa_5 r_o s^2 + L_5 \kappa_5 g - L_5 \kappa_5 r_o s^2 + L_5 \kappa_5 r_o$

10.243 INVALID-ORDER-243 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_LR_5r_os^4 + C_1C_5L_5R_Lr_os^3 + C_1L_5L_LR_5r_os^4 + C_1C_LL_5L_LR_5r_os^4 + C_1C_LL_5L_LR_5$

10.244 INVALID-ORDER-244 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{L_E s}}\right)$

 $\overline{C_1C_5C_LL_5L_LR_5R_Lr_os^5 + C_1C_5L_5R_5R_Lr_os^3 + C_1C_LL_5L_LR_5R_Ls^4 + C_1C_LL_5L_LR_5r_os^4 + C_1C_LL_5L_LR_5r_os^4 + C_1C_LL_5R_5R_Lr_os^3 + C_1L_LR_5R_Lr_os^3 + C_1L_5R_5R_Ls^2 + C_1L_5R_5R_Ls^2 + C_1L_5R_5R_Lr_os^2 + C_1L_5R_5R_Lr_os^4 + C_1C_LL_5L_LR_5R_Lr_os^4 + C_1C_LL_5R_5R_Lr_os^3 + C_1C_LL_5R_5R_Lr_os^3 + C_1L_5R_5R_Lr_os^3 + C_1L_5R_5R_Lr_os^$

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10.245 INVALID-ORDER-245 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)
```

$$H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 L_5 R_5 r_o s^3 + C_1 C_5 L_5 R_5 r_o s^3 + C_1 L_5 R_L s^2 + C_1 L_5 r_o s^2 + C_1 R_5 R_L s + C_1 R_5 r_o s + C_1 R_L r_o s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^2 + C_5 L_5 R_$$

10.246 INVALID-ORDER-246
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 - C_5L_5r_os^2 + L_5g_mr_os + L_5s + R_5g_mr_o + R_5 - r_o}{C_1C_5C_LL_5R_5r_os^4 + C_1C_5L_5r_os^3 + C_1C_LL_5r_os^3 + C_1C_LL_5$$

10.247 INVALID-ORDER-247
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_1 C_5 L_5 R_5 r_o s^3 + C_1 C_4 L_5 R_4 r_o s^3 + C_1$$

10.248 INVALID-ORDER-248
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.249 INVALID-ORDER-249
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.250 INVALID-ORDER-250
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_5 L_5 R_5 r_o s^3 +$$

10.251 INVALID-ORDER-251
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.252 INVALID-ORDER-252
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_1C_5C_LL_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_LR_5R_Ls^4 + C_1C_5L_5L_LR_5r_os^4 + C_1C_5L_5L_LR_Lr_os^4 + C_1C_5L_5R_5R_Lr_os^3 + C_1L_LL_Rs_RL_rs^3 + C_1L_5L_LR_ss^3 + C_1L_5L_sL_ss^3 + C_1L_5L_sL_ss^3 + C_1L_5L_sL_ss$$

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10.253 INVALID-ORDER-253 Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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$$H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_5 R_L s^5 + C_1 C_5 C_L L_5 L_L R_5 r_o s^5 + C_1 C_5 L_L L_L R_5 r_o s^5 + C_1 C_5 L_5 L_L R_5 s^4 + C_1 C_5 L_5 L_L R_5 s^4 + C_1 C_5 L_5 R_5 R_L s^3 + C_1 C_5 L_5 R_5 R_L s^3 + C_1 C_5 L_5 R_L r_o s^3 + C_1 C_L L_L R_5 R_L s^4 + C_1 C_L L_L R_5 R_L s^4 + C_1 C_L L_L R_5 R_L s^3 + C_1 C_L L_L R_5 R_L s^3 + C_1 C_L L_L R_5 R_L s^4 + C_1 C_L R_L R_L s^4 + C_1 C_L$$

10.254 INVALID-ORDER-254
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_1C_5C_LL_5L_LR_5R_Ls^5 + C_1C_5C_LL_5L_LR_5r_os^5 + C_1C_5C_LL_5L_RL_ros^5 + C_1C_5C_LL_5R_5R_Lr_os^4 + C_1C_5L_5R_5r_os^3 + C_1C_5L_5R_Lr_os^3 + C_1C_LL_5L_LR_ss^4 + C_1C_LL_5R_Lr_os^4 + C_1C_LL_5R_Lr_o$$

10.255 INVALID-ORDER-255
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 L_5 R_5 R_L s^3 + C_1 C_5 L_5 R_5 r_o s^3 + C_1 C_5 L_5 R_L r_o s^3 + C_1 C_5 R_5 R_L r_o s^2 + C_1 R_5 R_L s + C_1 R_5 r_o s + C_1 R_L r_o s + C_5 L_5 R_5 g_m r_o s^2 + 2 C_5 L_5 R_L g_m r_o s^2 + 2 C_5 R_5 R_L g_m r_o s + 4 C_5 R_5 R_L g_m r_o s +$$

10.256 INVALID-ORDER-256
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 - C_5L_5r_os^2 - C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{C_1C_5C_LL_5R_5r_os^4 + C_1C_5L_5r_os^3 + C_1C_5L_5r_os^3 + C_1C_5R_5r_os^2 + C_1R_5s + C_1r_os + C_5C_LL_5R_5g_mr_os^3 + C_5C_LL_5R_5s^3 + C_5C_LL_5r_os^3 + C_5C_LL_$$

10.257 INVALID-ORDER-257
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 r_o s + R_5 g_m r_o s^2 + C_5 L_5 R_5 R_L r_o s^4 + C_1 C_5 L_5 R_5 R_L r_o s^4 + C_1 C_5 L_5 R_5 R_L r_o s^3 + C_1 C_5 L_5 R_5 R_L r_o s^3 + C_1 C_5 L_5 R_5 R_L r_o s^3 + C_1 C_5 R_5 R_L r_$$

10.258 INVALID-ORDER-258
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 L_5 r_o s^2 - C_5 L_5 r_o s^2 + C_1 C_L R_5 R_L s^4 + C_1 C_5 C_L L_5 R_5 r_o s^4 + C_1 C_5 C_L L_5 R_5 r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 C_L R_5 r_o s$$

10.259 INVALID-ORDER-259
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + C_1 C_5 L_5 L_5 r_o s^3 + C_1 C_5 r$$

10.260 INVALID-ORDER-260
$$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 g_m r_o s^2 + C_5 L_5 L_5 R_5 r_o s^3 + C_1 L_5 R_5 r_o s^3$$

10.261 INVALID-ORDER-261 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_5s^5 + C_1C_5C_LL_5L_Lr_os^5 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_5r$

10.262 INVALID-ORDER-262 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_LR_5R_Ls^4 + C_1C_5L_5L_LR_5r_os^4 + C_1C_5L_5L_LR_5r_os^4 + C_1C_5L_5R_5R_Lr_os^3 + C_1C_LL_LR_5R_Lr_os^3 + C_1L_LR_5R_Ls^2 + C_1L_LR_5r_os^2 + C_1L_LR_5r_os^2 + C_1L_LR_5r_os^4 + C_1C_5L_5L_LR_5r_os^4 + C_1C_5L_5L_Rs_6r_os^3 + C_1C_5L_LR_5r_os^3 + C_1L_LR_5r_os^3 + C_1L_LR_5r_os$

10.263 INVALID-ORDER-263 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_5R_Ls^5 + C_1C_5C_LL_5L_LR_5r_os^5 + C_1C_5C_LL_5L_LR_5r_os^4 + C_1C_5L_5L_LR_5s^4 + C_1C_5L_5L_LR_5s^4 + C_1C_5L_5R_5R_Ls^3 + C_1C_5L_5R_5r_os^3 + C_1C_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os^3$

10.264 INVALID-ORDER-264 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_5R_Ls^5 + C_1C_5C_LL_5L_LR_5r_os^5 + C_1C_5C_LL_5L_LR_Lr_os^5 + C_1C_5C_LL_5R_5R_Lr_os^4 + C_1C_5C_LL_5R_5R_Lr_os^4 + C_1C_5L_5R_5R_Ls^3 + C_1C_5L$

10.265 INVALID-ORDER-265 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, R_L\right)$

$$H(s) = \frac{R_1 R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 R_1 R_5 R_L s + C_1 R_1 R_5 r_o s + C_1 R_1 R_L r_o s + R_1 R_5 g_m r_o + R_1 R_5 + 2 R_1 R_L g_m r_o + 4 R_1 R_L + R_1 r_o + R_5 R_L + R_5 r_o + R_L r_o}$$

10.266 INVALID-ORDER-266 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_L R_1 R_5 s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 R_5 r_o s^2 + C_1 R_1 R_5 s + C_1 R_1 r_o s + 2 C_L L_L R_1 g_m r_o s^2 + 4 C_L L_L R_1 s^2 + C_L L_L R_5 s^2 + C_L L_L r_o s^2 + C_L R_1 R_5 g_m r_o s + C_L R_1 r_o s + C_L R_1 r_o s + 2 C_L R_1 r_o s +$$

10.267 INVALID-ORDER-267 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_1 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_L R_1 R_5 r_o s^3 + C_1 L_L R_1 R_5 s^2 + C_1 L_L R_1 r_o s^2 + C_L L_L R_1 R_5 g_m r_o s^2 + C_L L_L R_1 r_o s^2 +$$

10.268 INVALID-ORDER-268 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_L R_1 r_o s^3 + C_1 C_L L_R R_5 r_o s^2 + C_1 C_L R_1 R_5 r_o s^2 + C_1 R_1 R_5 s + C_1 R_1 r_o s^2 + C_1 R_1 r_o s^2 + C_1 L_L R_1 r_o s^2 + C_1 L_R r_o$$

10.269 INVALID-ORDER-269 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_1 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_L R_1 R_5 R_L r_o s^3 + C_1 L_L R_1 R_5 r_o s^2 + C_1 L_L R_1 R_5 r_o s^2 + C_1 L_L R_1 R_5 R_L r_o s^2 + C_L L_L R_1 R_5 R_L r_o s^2 + C_L L_L R_1 R_5 R_L r_o s^2 + C_L L_L R_1 R_5 r_o s^2 + L_L R_1$

10.270 INVALID-ORDER-270 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $R_1 \left(R_5 g_m r_o + R_5 - r_o \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)$ $H(s) = \frac{n_1 \left(n_5 g_m r_o + n_5 - r_{o} \right) \left(\bigcirc_L L_L R_1 R_5 r_o s^3 + C_1 L_L R_1 R_5 r_o$

10.271 INVALID-ORDER-271 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $R_1 R_L \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)$ $H(s) = \frac{1011 L_1 \left(\nabla_L L_L R_1 R_5 R_L s^3 + C_1 C_L L_L R_1 R_5 r_o s^3 + C_1 C_L L_L R_1 R_5 R_L s + C_1 R_1 R_5 r_o s^3 + C_1 C_L L_L R_1 R_5 r_o s^3$

10.272 INVALID-ORDER-272 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L R_1 R_L r_o s^3 + C_1 C_5 R_1 r_o s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_L s + 2 C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L s^2 + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s$

10.273 INVALID-ORDER-273 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + 2 C_5 C_L L_L R_1 g_m r_o s^3 + 4 C_5 C_L L_L R_1 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + C_L R_1 r_o s^2 + C_L R_1 r_o s$

10.274 INVALID-ORDER-274 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_L R_1 r_o s^3 + C_1 L_L R_1 r_o s^3 + C_1 L_L R_1 r_o s + C_5 C_L L_L R_1 r_o s^3 + 2 C_5 L_L R_1 g_m r_o s^2 + 4 C_5 L_L R_1 s^2 + C_5 L_L r_o s^2 + C_5 R_1 r_o s + C_L L_L R_1 g_m r_o s^2 + C_L L_L R_1 s^2 + C_L L_L R_1$

10.275 INVALID-ORDER-275 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $\frac{R_{1}\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)}{C_{1}C_{5}C_{L}L_{L}R_{1}r_{o}s^{4}+C_{1}C_{5}C_{L}R_{1}R_{L}r_{o}s^{3}+C_{1}C_{5}R_{1}r_{o}s^{2}+C_{1}C_{L}L_{R}s^{3}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{3}+4C_{5}C_{L}L_{L}R_{1}s^{3}+C_{5}C_{L}L_{L}R_{1}s^{3}+C_{5}C_{L}L_{L}R_{1}s^{3}+C_{5}C_{L}R_{1}R_{L}s^{2}+C_{5}C_{L}R_{1}R_{L}s^{2}+C_{5}C_{L}R_{1}r_{o}s^{2}+C_{5}C_{L}R_{1}R_{L}s^{2}+C_{5}C_$

10.276 INVALID-ORDER-276 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $L_L R_1 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)$ $H(s) = \frac{L_L r_1 r_L s \left(- \cup_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_L r_o s^2 + C_1 L_L R_1 R_L r_o s^2 + C_5 L_L R_1 R_L r_o s^3 + 2 C_5 L_L R_1 R_L r_o s^2 + 4 C_5 L_L R_1 R_L r_o s^2 + C_5 L_L R_1 r_o s^2 + C_5 L_L R_1 R_L r_o s^2 + C_5 L_L R_$ **10.277** INVALID-ORDER-277 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{R_1 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{C_1 C_5 C_L L_L R_1 R_L r_o s^4 + C_1 C_5 L_L R_1 r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 C$

10.278 INVALID-ORDER-278 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_1 R_L \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_L R_1 R_L r_o s^4 + C_1 C_5 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_1 R_L s^3 + C_5 C_L L_L R_1 R_L s^3 + C_5 C_L L_L R_1 R_L r_o s^3 + C_5 C_L R_1 R_L r_o s^3$

10.279 INVALID-ORDER-279 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{C_1 C_5 C_L R_1 R_5 R_L r_o s^3 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_L R_1 R_5 r_o s^2 + C_1 C$

10.280 INVALID-ORDER-280 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_1 \left(C_L L_L s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{C_1 C_5 C_L L_L R_1 R_5 r_o s^4 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 r_o s^3 + C_1 C$

10.281 INVALID-ORDER-281 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_5 L_L R_1 R_5 r_o s^3 + C_1 L_L R_1 R_5 r_o s^3 + C_1 L_L R_1 R_5 r_o s^3 + C_1 L_L R_1 R_5 r_o s^3 + C_5 L_L R_1 R_5 r_o s^3 + C_5 L_L R_1 R_5 r_o s^2 +$

10.282 INVALID-ORDER-282 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5C_LR_1R_5R_Lr_os^3 + C_1C_5R_1R_5r_os^2 + C_1C_LL_LR_1r_os^3 + C_1C_LL_LR_1r_os^3 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R_5r_os^3 + C_1$

10.283 INVALID-ORDER-283 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L K_1 K_L s \left(-C_5 K_5 r_o s + K_5 g_m R_5 R_L r_o s^3 + C_1 C_L L_L R_1 R_5 R_L r_o s^3 + C_1 C_L L_R R_1 R_5 R_L r_o s^2 + C_1 L_L R_1 R_5 R_L r_o s^2 + C_1 L_L R_1 R_5 R_L r_o s^2 + C_1 L_L R_1 R_5 R_L r_o s^3 + 2 C_5 L_L R_1 R_5 R_L r_o s^2 + 4 C_5 L_L R_1 R_5 R_L r_o s^2 + C_5 L_L R_1 R_$

10.284 INVALID-ORDER-284 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_LR_1R_5R_Lr_os^4 + C_1C_5L_LR_1R_5r_os^3 + C_1C_5R_1R_5R_Lr_os^2 + C_1C_LL_LR_1R_5r_os^3 + C_1C_LL_LR_1R_5r_os^3 + C_1L_LR_1R_5r_os^3 + C_1L_LR_1r_os^3 + C_1L_LR_1r_o$

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10.285 INVALID-ORDER-285 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 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)
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10.286 INVALID-ORDER-286
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L R_1 R_5 r_o s^3 + C_1 C_5 R_1 R_5 s^2 + C_1 C_5 R_1 r_o s^2 + C_1 R_1 s + C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 r_o s^2 + C_5$$

10.287 INVALID-ORDER-287
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L R_1 R_5 R_L r_o s^3 + C_1 C_5 R_1 R_5 R_L s^2 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 C_4 R_1 R_L r_o s^2 + C_1 R_1 R_5 r_o s^2 + C_5 C_L R_1 R_5 R_L r_o s^2 + C_5 C_L R_1 R_5 R_L r_o s^2 + C_5 C_L R_1 R_5 r_o s^2 + C_5 C_L R_1 R_5 r_o s^2 + C_5 R_5$$

10.288 INVALID-ORDER-288
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L R_1 R_5 r_o s^3 + C_1 C_5 C_L R_1 R_5 r_o s^3 + C_1 C_5 R_1 R_5 s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_2 C_L R_1 R_5 r_o s^2 + C_5 C_L R_1 r_o s^2$$

10.289 INVALID-ORDER-289
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_L R_1 R_5 s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 C_L R_1 R_5 r_o s^3 + C_1 C_5 R_1 R_5 s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_L L_R r_o s^2 + C_1 R_1 s + 2 C_5 C_L L_L R_1 g_m r_o s^3 + 4 C_5 C_L L_L R_1 s^3 + C_5 C_L L_L R_5 s^3 + C_5 C_L L_L R_5 g_m r_o s^2 + C_5 C_L R_1 R_5 s^2$$

10.290 INVALID-ORDER-290
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_1 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_L R_1 R_5 r_o s^4 + C_1 C_5 L_L R_1 r_o s^3 + C_1 C_5 L_L R_1 r_o s^3 + C_1 C_5 L_L R_1 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_$$

10.291 INVALID-ORDER-291
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.292 INVALID-ORDER-292
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.293 INVALID-ORDER-293
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_1C_5C_LL_LR_1R_5R_Ls^4 + C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5C_LL_LR_1R_Lr_os^4 + C_1C_5L_LR_1R_5s^3 + C_1C_5L_LR_1r_os^3 + C_1C_5R_1R_5r_os^2 + C_1C_5R_1R_5r_os^2 + C_1C_5R_1R_Lr_os^3 + C_1C_LL_RR_1r_os^3 + C_1L_LR_1s^3 + C_1C_LL_RR_1s^3 + C_1C_LL_RR$$

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10.294 INVALID-ORDER-294 Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 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)
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 $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{3} + C_{1}C_{5}R_{1}R_{5}r_{o}s^{2} + C_{1}C_{5}R_{1}R_{5}r_{o}s^{2} + C_{1}C_{5}R_{1}R_{5}r_{o}s^{2} + C_{1}C_{5}R_{1}R_{5}r_{o}s^{2} + C_{1}C_{L}L_{L}R_{1}r_{o}s^{3} + C_{1}C_{L}L_{L}R_{1}r_{o}s^{2} + C_{1}C_{L}L_$

10.295 INVALID-ORDER-295 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_1 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_5 R_1 R_L s^3 + C_1 C_5 L_5 R_1 r_o s^3 + C_1 C_5 R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + C_5 L_5 R_1 g_m r_o s^2 + C_5 L_5 R_1 s^2 + C_5 L_5 R_1 s^2 + C_5 L_5 r_o s^2 + 2 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 r_o s + C_5 R_1 r_o s + C_5 R_1 r_o s + R_1 g_m r_o + R_1 + R_L + r_o r_o s + R_1 r_o s + R_2 r_o s + R_2 r_o s + R_3 r_o s +$$

10.296 INVALID-ORDER-296 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 R_1 r_o s^4 + C_1 C_5 L_5 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

10.297 INVALID-ORDER-297 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_1 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 R_1 R_L r_o s^4 + C_1 C_5 L_5 R_1 R_L r_o s^3 + C_1 C_5 R_1 R_L r_o s^2 + C_1 R_1 R_L r_o s^2 + C_1 R_1 R_L r_o s^2 + C_1 R_1 R_L r_o s^3 + C_5 C_L L_5 R_1 R_L r_o s^3 + C_5 C_L L_5 R_1 R_L r_o s^3 + C_5 C_L L_5 R_1 R_L r_o s^3 + C_5 C_L R_1 R_L r_o s^2 + C_5 L_5 R_1 r_o s^3 + C_5 C_L R_1 R_L r_o s^3 + C_$$

10.298 INVALID-ORDER-298 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_1 r_o s^4 + C_1 C_5 C_L R_1 R_L r_o s^3 + C_1 C_5 R_1 r_o s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_1 r_o s^2 + C_1 C_L R_1 r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L g_m r_o s^2 + 4 C_5 C_L R_1 R_L g_m r_o s^2 + C_5 C_L$$

10.299 INVALID-ORDER-299 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 L_L R_1 s^5 + C_1 C_5 C_L L_5 R_1 r_o s^4 + C_1 C_5 L_5 R_1 s^3 + C_1 C_5 R_1 r_o s^2 + C_1 C_L L_R R_1 s^3 + C_1 C_L L_R R_1 r_o s^2 + C_1 R_1 s + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + 2 C_5 C_L L_L R_1 g_m r_o s^3 + 2 C_5 C_L R_1 g_m r_o s^3 + 2 C_$$

10.300 INVALID-ORDER-300 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_1 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_5 L_L R_1 r_o s^5 + C_1 C_5 L_5 L_L R_1 s^4 + C_1 C_5 L_5 R_1 r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 L_L R_1 s^2 + C_1 R_1 r_o s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 L_L R_1 r_o s^3 + C_5 L_5 L_L s^3 + C_5 L_5 R_1 g_m r_o s^2 + C_5 L_5 R_1 g_m r_o s^$$

10.301 INVALID-ORDER-301 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 L_L R_1 R_1 s^3 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_1 R_2 s^4 + C_1 C_5 C_L L_5 R_1 R_2 s^3 + C_1 C_5 R_1 R_2 s^3 + C_1 C_5 R_1 R_2 s^3 + C_1 C_4 R_1$$

10.302 INVALID-ORDER-302 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Lr_os^5 + C_1C_5L_5L_LR_1R_Ls^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5R_1R_Lr_os^3 + C_1C_LL_LR_1R_Lr_os^3 + C_1L_LR_1R_Ls^2 + C_1L_LR_1R_Lr_os^3 + C_1L_LR_1R_Lr_os^4 + C_5C_LL_5L_LR_1R_Ls^4 + C_5C_LL_5L_LR_1R_Ls^4 + C_5C_LL_5L_LR_1R_Lr_os^3 + C_1L_LR_1R_Ls^2 + C_1L_LR_1R_Ls^2 + C_1L_LR_1R_Ls^2 + C_1L_LR_1R_Ls^2 + C_1L_LR_1R_Ls^3 + C_5C_LL_5L_LR_1R_Ls^4 + C_5C_LL_5L_LR_1R_Ls^4 + C_5C_LL_5L_LR_1R_Ls^4 + C_5C_LL_5L_LR_1R_Ls^3 + C_5C_LL_5L_Rs^3 + C$

10.303 INVALID-ORDER-303 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_LR_1R_Lr_os^4 + C_1C_5L_5R_1R_Ls^3 + C_1C_5L_LR_1r_os^3 + C_1C_5L_LR_1r_os^3$

10.304 INVALID-ORDER-304 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5L_5R_1R_Ls^3 + C_1C_5R_1R_Ls^3 + C$

10.305 INVALID-ORDER-305 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

10.306 INVALID-ORDER-306 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{C_1 C_5 L_5 R_1 r_o s^3 + C_1 L_5 R_1 r_o s^3 + C_1 L_5 R_1 s^2 + C_1 R_1 r_o s + C_5 C_L L_5 R_1 r_o s^3 + 2 C_5 L_5 R_1 g_m r_o s^2 + 4 C_5 L_5 R_1 s^2 + C_5 L_5 r_o s^2 + C_L L_5 R_1 g_m r_o s^2 + C_L L_5 R$

10.307 INVALID-ORDER-307 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_1 R_L \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{C_1 C_5 L_5 R_1 R_L r_o s^3 + C_1 C_L L_5 R_1 R_L r_o s^3 + C_1 L_5 R_1 R_L r_o s^2 + C_1 R_1 R_L r_o s^2 + C_5 L_5 R_1 R_L g_m r_o s^2 + 4 C_5 L_5 R_1 r_o s^2 + C_5 L_5 R_1 r_o s^2 + C_L L_5 R_1 R_L g_m r_o s^2 + C_L L_5 R_1 R_L g_m r_o s^2 + C_L L_5 R_1 R_L r_o s^2 + C_L L_5 R_1 R$

10.308 INVALID-ORDER-308 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{C_1 C_5 C_L L_5 R_1 R_L r_o s^4 + C_1 C_5 L_5 R_1 r_o s^3 + C_1 C_L L_5 R_1 R_L s^3 + C_1 C_L L_5 R_1 R_L r_o s^2 + C_1 L_5 R_1 r_o s^3 + C_5 C_L L_5 R_1 R_L r_o s^3 + C_5 C_L L_5 R_1 r_o s$

10.309 INVALID-ORDER-309 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{C_1 C_5 C_L L_5 L_L R_1 r_o s^5 + C_1 C_5 L_5 R_1 r_o s^3 + C_1 C_L L_5 R_1 r_o s^3$

10.310 INVALID-ORDER-310 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_5 L_L R_1 r_o s^4 + C_1 L_L L_R r_o s^4 + C_1 L_5 L_L R_1 r_o s^2 + C_5 L_L L_R r_o s^4 + 2 C_5 L_5 L_L R_1 g_m r_o s^3 + 4 C_5 L_5 L_L R_1 s^3 + C_5 L_5 L_L R_1 g_m r_o s^3 + C_5 L_5 L_L R_1 g$

10.311 INVALID-ORDER-311 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5L_5R_1r_os^3 + C_1C_LL_5R_1R_Ls^3 + C_1C_LL_5R_1r_os^3 + C_1$

10.312 INVALID-ORDER-312 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{\frac{L_L R_1 R_L r_o s^4 + C_1 C_L L_5 L_L R_1 R_L r_o s^4 + C_1 L_5 L_L R_1 R_L r_o s^4$

10.313 INVALID-ORDER-313 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_Lr_os^5 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5R_1R_Lr_os^3 + C_1L_LL_RR_1R_Lr_os^4 + C_1C_LL_LR_1R_Lr_os^4 + C_1C_LL_LR_1R_Lr_os^4 + C_1L_LR_1R_Lr_os^4 + C_1L_LR_1R_L$

10.314 INVALID-ORDER-314 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_Lr_os^5 + C_1C_5L_5R_1R_Lr_os^3 + C_1C_LL_5L_LR_1R_Ls^4 + C_1C_LL_5L_LR_1r_os^4 + C_1C_LL_5R_1R_Lr_os^3 + C_1L_5R_1R_Ls^2 + C_1R_1R_Ls^2 +$

10.315 INVALID-ORDER-315 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_1 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_5 R_1 R_L s^3 + C_1 C_5 L_5 R_1 R_5 r_o s^2 + C_1 C_5 R_1 R_5 r_o s^2 + C_1 R_5 R_1 R_5 r_o s^2 + C_5 L_5 R_1 r_o s^2 + C_5 R_1 R_5 r_o s^2 + C_5 R_5$

10.316 INVALID-ORDER-316 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_5 R_1 r_o s^4 + C_1 C_5 C_L R_1 R_5 r_o s^3 + C_1 C_5 R_1 R_5 s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 C_L R_1 r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L R_1 R_5 g_m r_o s^2 + C_5 C_L R_1 R_5 r_o s^2 + C_5 C_L R_1 r_o s^$

10.317 INVALID-ORDER-317 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5C_LR_1R_5R_Lr_os^3 + C_1C_5L_5R_1R_Ls^3 + C_1C_5L_5R_1r_os^3 + C_1C_5R_1R_5r_os^2 + C_1C_5R_1R_Lr_os^2 + C_1C_5R_1R_Lr_os^2 + C_1C_4R_1R_Lr_os^2 + C_1C_4R_1R_Lr_os^2 + C_1C_4R_1R_Lr_os^3 + C_5C_LL_5R_1R_Ls^3 + C_5C$

10.318 INVALID-ORDER-318 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_1 r_o s^4 + C_1 C_5 C_L R_1 R_5 r_o s^3 + C_1 C_5 C_L R_1 R_L r_o s^3 + C_1 C_5 L_5 R_1 r_o s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_4 R_1 r_o s^2 + C_1 C_4 R_1 r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 g_m r_o s^3 + C_5 C_L L_5 R_1 r_o s^3$

10.319 INVALID-ORDER-319 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s_a r_o s^2 + C_5 L_5 s_a r_o s^2 + C_5 L_5 r_o s^2 + C_1 C_5 L_L R_1 r_o s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_$

10.320 INVALID-ORDER-320 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s}{C_1 C_5 C_L L_5 L_L R_1 r_o s^5 + C_1 C_5 C_L L_L R_1 R_5 r_o s^4 + C_1 C_5 L_5 L_L R_1 s^4 + C_1 C_5 L_5 R_1 r_o s^3 + C_1 C_5 L_L R_1 r_o s^3 + C_1 C_5 L_L R_1 r_o s^3 + C_1 L_L R_1 r_o s^3 + C_1$

10.321 INVALID-ORDER-321 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5R_1R_Ls^4 + C_1C_5C_LL_5R_1r_os^4 + C_1C_5C_LL_LR_1r_os^4 + C_1C_5C_LL_RR_1r_os^4 + C_1C_5C_LR_1R_5r_os^3 + C_1C_5C_LR_1R_5r_os^3 + C_1C_5L_RR_1s^3 + C_1C_5R_1r_os^4 + C_1C_5R_1r_os^4 + C_1C_5C_LR_1R_5r_os^4 + C_1C_5C_LR_1R_5r_os^3 + C_1C_5C_LR$

10.322 INVALID-ORDER-322 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_s} + \frac{1}{L_s s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Lr_os^5 + C_1C_5C_LL_LR_1R_5R_Lr_os^4 + C_1C_5L_5L_LR_1R_Ls^4 + C_1C_5L_5R_1R_Lr_os^4 + C_1C_5L_LR_1R_5R_Ls^3 + C_1C_5L_LR_1R_5r_os^3 + C_1C$

10.323 INVALID-ORDER-323 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_LR_1R_5R_Ls^4 + C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5L_LR_1s^4 + C_1C_5L_5R_1R_Ls^3 + C_1C_5L_LR_1R_5s^3 + C_1C_5L_LR_1r_os^3 + C_1C_5L_LR_1r_os^4 + C_1C_5L_LR_1r_os$

10.324 INVALID-ORDER-324 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5C_LL_LR_1R_5r_os^4 + C_1C_5C_LL_RR_1R_5r_os^4 + C_1C_5C_LR_1R_5r_os^4 + C_1C_5C_LR_1R_5r_os^4$

10.325 INVALID-ORDER-325 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$

 $H(s) = \frac{R_1 R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_1 C_5 L_5 R_1 R_5 R_L r_o s^3 + C_1 L_5 R_1 R_5 r_o s^2 + C_5 L_5 R_1 R_5 r_o s^2 + C_5 L_5 R_1 R_5 r_o s^2 + L_5 R_1 R$

10.326 INVALID-ORDER-326 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_1 C_5 L_5 R_1 R_5 r_o s^3 + C_1 L_L E_R R_1 R_5 r_o s^3 + C_1 L_5 R_1 R_5 r_o s^2 + C_1 L_5 R_1 R_5 r_o s^3 + 2 C_5 L_5 R_1 R_5 g_m r_o s^2 + 4 C_5 L_5 R_1 R_5 s^2 + C_L L_5 R_1 R_5 g_m r_o s^2 + C_L L_5 R_1 R_5 r_o s^2 + C_L L_5 R$

10.327 INVALID-ORDER-327 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_1 R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 R_5 r_o s^2 + L_5 R_5 R_5$

10.328 INVALID-ORDER-328 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5R_1R_5R_Lr_os^4 + C_1C_5L_5R_1R_5r_os^3 + C_1C_LL_5R_1R_5r_os^3 + C_1C_LL_5$

10.329 INVALID-ORDER-329 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5L_5R_1R_5r_os^3 + C_1C_LL_5L_LR_1r_os^4 + C_1C_LL_5R_1R_5r_os^3 + C_1L_5R_1R_5r_os^3 + C_1L_5R_1R_5r_os^3$

10.330 INVALID-ORDER-330 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_1 s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 g_m r_o s^2 + L_5 R_5 g_m r_o s^2 + L_5 R_5 g_m r_o s^2 + L_5 R_5 g_m r_o s^3 + L_5 R_5 r_o s^2 + L_5 R_5 r_o s^$

10.331 INVALID-ORDER-331 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5C_LL_5R_1R_5R_Lr_os^4 + C_1C_LL_5L_RR_1R_5s^4 + C_1C_LL_5L_RR_1r_os^4 + C_1C_LL_5R_1R_5r_os^3 + C_1$

10.332 INVALID-ORDER-332 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5L_5L_LR_1R_5R_Lr_os^4 + C_1C_LL_5L_LR_1R_5R_Lr_os^4 + C_1L_5L_LR_1R_5R_Ls^3 + C_1L_5L_LR_1R_5r_os^3 + C_1L_5L_LR_1R_5R_Lr_os^2 + C_1L_LR_1R_5R_Lr_os^2 + C_5L_LL_RR_1R_5R_Lr_os^4 + C_5L_5L_LR_1R_5R_Lr_os^4 + C_5L_5L_LR$

10.333 INVALID-ORDER-333 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_{\kappa}} + \frac{1}{L_{\kappa} s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $\overline{C_1C_5C_LL_5L_LR_1R_5R_Lr_os^5 + C_1C_5L_5L_LR_1R_5r_os^4 + C_1C_5L_5R_1R_5R_Lr_os^3 + C_1L_5L_LR_1R_5r_os^4 + C_1C_LL_5L_LR_1R_5r_os^4 + C_1C_LL_5L_RR_1R_5r_os^4 + C_1C_LL_5L_RR_$

- 10.334 INVALID-ORDER-334 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Lr_os^5 + C_1C_5L_5R_1R_5R_Lr_os^3 + C_1C_LL_5L_LR_1R_5r_os^4 + C_1C_LL_5L_LR_1R_5r_os^4 + C_1C_LL_5R_1R_5R_Lr_os^3 + C_1C_LL_5R_1R_5R_Lr_os^3 + C_1L_5R_1R_5R_Lr_os^3 + C_1L_5R_1R_5R_L$
- **10.335** INVALID-ORDER-335 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_1 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 r_o \right)}{C_1 C_5 L_5 R_1 R_5 R_L s^3 + C_1 C_5 L_5 R_1 R_5 r_o s^3 + C_1 C_5 L_5 R_1 R_L r_o s^3 + C_1 L_5 R_1 R_L s^2 + C_1 L_5 R_1 r_o s^2 + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s^2 + C_5 L_5 R_1 R_5 r_o s^2 + C_5$
- **10.336** INVALID-ORDER-336 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_1 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 r_o \right)}{C_1 C_5 C_L L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_5 R_1 R_5 s^3 + C_1 C_L L_5 R_1 r_o s^3 + C_1 C_L$
- 10.337 INVALID-ORDER-337 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5R_Lr_os^4 + C_1C_5L_5R_1R_5R_Ls^3 + C_1C_5L_5R_1R_5r_os^3 + C_1C_LL_5R_1R_Lr_os^3 + C_1C_LL_5R_1R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^2 + C_1L_5R_1R_Ls^2 + C_1L_5R_1R_5r_os^2 + C_1R_1R_5r_os + C_1R_1R_5r_os + C_1R_1R_5r_os + C_1R_1R_5r_os + C_1R_1R_5r_os^3 + C_1C_LL_5R_1R_5r_os^3 + C_1C_LL_5$
- 10.338 INVALID-ORDER-338 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_5r_os^4 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5L_5R_1R_5s^3 + C_1C_LL_5R_1R_Ls^3 + C_1C_LL_5R_1r_os^3 + C_1C_LL_5R_1r_os^3 + C_1C_LL_5R_1r_os^3 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R_5r_os^2$
- **10.339** INVALID-ORDER-339 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_1 R_5 s^5 + C_1 C_5 C_L L_5 L_L R_1 r_o s^5 + C_1 C_5 C_L L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_5 R_1 R_5 s^3 + C_1 C_L L_5 L_L R_1 s^4 + C_1 C_L L_5 R_1 r_o s^3 + C_1 C_L L_L R_1 R_5 s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L L_R R_5 r_o s^2 + C_1 L_5 R_1 r_o s^3 + C_1 C_L L_2 R_1 R_5 r_o s^3 + C_1 C_L L_2 R_1 R_5 r_o s^3 + C_1 C_L L_3 R_1 r_o s^3 + C_1 C_L L_4 R_1 r_o s^3 + C_1 C_L L_4 R_1 r_o s^3 + C_1 C_L L_5 R_1 r_o s^3 + C_$
- 10.340 INVALID-ORDER-340 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5L_5L_LR_1R_5s^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5R_1R_5r_os^3 + C_1L_LR_1r_os^4 + C_1C_LL_LR_1r_os^4 + C$
- 10.341 INVALID-ORDER-341 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}L_{5}R_{1}R_{5}s^{3} + C_{1}C_{L}L_{5}L_{L}R_{1}s^{4} + C_{1}C_{L}L_{5}R_{1}r_{o}s^{3} + C_{1}C_{L}L_{5}R_{1}R_{5}s^{3} + C_{1}C_{L}L_$

- **10.342** INVALID-ORDER-342 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_1 R_5 R_L r_o s^5 + C_1 C_5 L_5 L_L R_1 R_5 R_L s^4 + C_1 C_5 L_5 L_L R_1 R_5 r_o s^4 + C_1 C_5 L_5 L_L R_1 R_L r_o s^4 + C_1 C_5 L_5 L_L R_1 R_L r_o s^4 + C_1 C_4 L_L R_1 R_5 R_L r_o s^4 + C_1 C_4 L_L R_1 R_5 R_L r_o s^4 + C_1 C_5 L_5 L_L R_1 R_5 R_L r_o s^4 + C_1 C_4 L_L R_1 R_5 R_L r_o s^4 + C_1 C_5 L_5 L_L R_1 R_5 R_L r_o s^4 + C_1 C_5 L_5 R_1 R_5 R_L r_o s^4 + C_1 C_5 L_$
- **10.343** INVALID-ORDER-343 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5C_LL_5L_LR_1R_5s^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_Lr_os^3 + C_1C_5L_5R_1R_Lr_os^3 + C_1C_5L_5R_1R_Lr_os^4 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5R_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os^3 + C_1C_5R_5R_5r_os$
- 10.344 INVALID-ORDER-344 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \ \infty, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5C_LL_5L_LR_1R_Lr_os^5 + C_1C_5C_LL_5R_1R_5R_Ls^3 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_Lr_os^3 + C_1C_LL_5L_LR_1R_Ls^4 + C_1C_LL_5L_LR_1r_os^4 + C_1C_LL_5R_1R_Lr_os^3 + C_1C_LL_5R_1R_Lr_os^4 + C_1C_LL_5R_1R_Lr_os$
- **10.345** INVALID-ORDER-345 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{R_1 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 C_5 R_5 r_o s + R_5 g_m r_o + R_5 r_o \right)}{C_1 C_5 L_5 R_1 R_5 R_L s^3 + C_1 C_5 L_5 R_1 R_5 r_o s^3 + C_1 C_5 L_5 R_1 R_5 r_o s^2 + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s + C_1 R_1 R_5 r_o s^2 + C_5 L_5 R_1 R_5 g_m r_o s^2 + C_5 L_5 R_1 R_L s^2 +$
- 10.346 INVALID-ORDER-346 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_1 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 C_5 R_5 r_o s + R_5 g_m r_o + R_5 r_o \right)}{C_1 C_5 C_L L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_5 R_1 r_o s^3 + C_5 C_L L_5$
- 10.347 INVALID-ORDER-347 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5R_Lr_os^4 + C_1C_5L_5R_1R_5R_Ls^3 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_5R_Lr_os^3 + C_1C_5R_1R_5R_Lr_os^2 + C_1R_1R_5R_Ls + C_1R_1R_5r_os + C_1R_1R_5r_os + C_5C_LL_5R_1R_5R_Ls^3 + C_5C_LL_5R_1R_5R_Ls^3 + C_5C_LL_5R_1R_5R_Lr_os^3 + C_5C_LL_5R_1R_Lr_os^3 + C_5C_LL_5R_1R_5R_Lr_os^3 + C_5C_LL_5R_1R_5R_Lr_os^3 + C$
- 10.348 INVALID-ORDER-348 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_5r_os^4 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5C_LR_1R_5R_Lr_os^3 + C_1C_5L_5R_1R_5s^3 + C_1C_5L_5R_1R_5r_os^2 + C_1C_LR_1R_5r_os^2 + C_1C_LR_1R$
- 10.349 INVALID-ORDER-349 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5s^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5R_1R_5r_os^4 + C_1C_5C_LL_2R_1R_5r_os^4 + C_1C_5L_5R_1R_5s^3 + C_1C_5L_5R_1r_os^3 + C_1C_5L_4R_1r_os^3 + C_1C_4L_4R_1r_os^3 + C_1C_4R_1r_os^3 + C$

10.350 INVALID-ORDER-350 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5L_5L_LR_1R_5s^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5R_1R_5r_os^3 + C_1L_LR_1R_5r_os^3 + C_1L_LR_1R_5s^2 + C_1L_LR_1r_os^2 + C_1R_1R_5r_os + C_5C_LL_5L_LR_1R_5s^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_LR_1r_os^4 + C_5C_LL_5L_RR_1r_os^4 + C_5C_LL_5$

10.351 INVALID-ORDER-351 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5s^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5R_1R_5r_os^4 + C_1C_5C$

10.352 INVALID-ORDER-352 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Lr_os^5 + C_1C_5L_5L_LR_1R_5R_Ls^4 + C_1C_5L_5L_LR_1R_5r_os^4 + C_1C_5L_5L_LR_1R_5R_Lr_os^3 + C_1C_LL_LR_1R_5R_Lr_os^3 + C_1C_LL_RR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^3 + C_1C_LL_RR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr_os^3 + C_1C_LR_1R_5R_Lr$

10.353 INVALID-ORDER-353 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5C_LL_5L_LR_1R_5R_Lr_os^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_5r_os^3 + C_1C_5L_5R_1R_5r_os^4 + C_1C_5R_1R_5r_os^4 + C_1C_5R_1R_5r$

10.354 INVALID-ORDER-354 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

10.355 INVALID-ORDER-355 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L\right)$

10.356 INVALID-ORDER-356 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_{Ls}}\right)$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_L L_L s^2 + 1) (R_5 g_m r_o + R_5 - r_o)}{(C_1 R_1 s + 1) (R_5 g_m r_o + R_5 - r_o)}$$

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

10.357 INVALID-ORDER-357 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_L R_1 R_5 g_m r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + 2 C_1 L_L R_1 g_m r_o s^2 + 4 C_1 L_L R_1 s^2 + C_1 L_L R_5 g_m r_o s + C_1 R_1 R_5 g_m r_o s + C_1 R_1 R_5 g_m r_o s + C_1 R_1 R_5 g_m r_o s^2 + C_1 L_L R_5 g_m r_o s^2 + C_1 L_L R_5 g_m r_o s + C_1 R_1 R_5 g_$$

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H(s) = \frac{L_L K_L s \left(C_1 K_1 s + 1\right) \left(K_5 g_m r_o + K_5 - r_o\right)}{C_1 C_L L_L R_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_L R_1 R_5 r_o s^3 + C_1 C_L L_L R_1 R_5 g_m r_o s^2 + C_1 L_L R_1 R_5 
10.360 INVALID-ORDER-360 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (C_1R_1s+1)(R_5g_mr_o+R_5-r_o)(C_LL_LR_Ls)
H(s) = \frac{(C_1R_1s + 1)(R_5g_mr_o + R_5 - r_o)(C_LL_LR_1s + R_5g_mr_o + R_5 - r_o)(C_LR_1s + R_5g_mr_o + R_5g_mr_
10.361 INVALID-ORDER-361 Z(s) = \left( R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \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_1 R_1 s + 1 \right) \left( C_2 R_2 R_3 R_5 R_3 + C_1 C_L L_L R_1 R_5 R_3 + 2 C_1 C_L L_L R_1 R_L R_3 + C_1 C_L L_L R_1 R_2 R_3 + C_1 C_L R_1 R_3 R_3 + C_1 
10.362 INVALID-ORDER-362 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                 H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}R_{1}r_{o}s^{2}+2C_{1}C_{5}R_{1}g_{m}r_{o}s+4C_{1}C_{5}R_{1}s+C_{1}C_{5}r_{o}s+C_{1}C_{L}R_{1}g_{m}r_{o}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}r_{o}s+C_{1}+C_{5}C_{L}r_{o}s+2C_{5}g_{m}r_{o}+4C_{5}+C_{L}g_{m}r_{o}+C_{L}\right)}
10.363 INVALID-ORDER-363 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_L \left( C_1 R_1 s + 1 \right) \left( -C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L R_1 R_L r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 R_L s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_L R_1 R_L g_m r_o s^2 + C_1 C_L R_1 R_L g_m r_o s^2 + C_1 R_L g_m r_o s + C_1 R_L g_m
10.364 INVALID-ORDER-364 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}R_{L}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{1}C_{5}C_{L}R_{1}R_{L}g_{m}r_{o}s^{2}+4C_{1}C_{5}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{5}C_{L}R_{1}r_{o}s^{2}+2C_{1}C_{5}R_{1}g_{m}r_{o}s+4C_{1}C_{5}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_{1
10.365 INVALID-ORDER-365 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{1}C_{5}C_{L}L_{L}R_{1}g_{m}r_{o}s^{3}+4C_{1}C_{5}C_{L}L_{L}r_{o}s^{3}+C_{1}C_{5}C_{L}R_{1}r_{o}s^{2}+2C_{1}C_{5}R_{1}g_{m}r_{o}s+4C_{1}C_{5}R_{1}s+C_{1}C_{L}R_{1}s^{2}+C_{1}C_{L}R_{1}s+C_{1}C_{L}r_{o}s+C_{1}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}g_{m}r_{o}s^{2}+4C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{5}C_{L}L_{L}s^{2}+C_{
10.366 INVALID-ORDER-366 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_{L}s\left(C_{1}R_{1}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{1}C_{5}C_{L}L_{L}R_{1}r_{o}s^{4}+2C_{1}C_{5}L_{L}R_{1}s^{3}+C_{1}C_{5}L_{L}r_{o}s^{3}+C_{1}C_{5}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}g_{m}r_{o}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}L_{L}R_{1}s^{3}+C_{1}C_{L}
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 $H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{2C_{1}C_{L}L_{L}R_{1}g_{m}r_{o}s^{3}+4C_{1}C_{L}L_{L}R_{5}s^{3}+C_{1}C_{L}L_{L}r_{o}s^{3}+C_{1}C_{L}R_{1}R_{5}g_{m}r_{o}s^{2}+C_{1}C_{L}R_{1}R_{L}g_{m}r_{o}s^{2}+4C_{1}C_{L}R_{1}R_{c}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{5}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s$

 $L_L R_L s \left(C_1 R_1 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)$

10.358 INVALID-ORDER-358 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

10.359 INVALID-ORDER-359 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_s} + \frac{1}{L_s s}}\right)$

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H(s) = \frac{L_L R_L s \left(C_1 R_1 s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_L R_1 R_L r_o s^4 + 2 C_1 C_5 L_L R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_L R_1 R_L s^3 + C_1 C_5 L_L R_1 R_L r_o s^3 + C_1 C_5 L_L R_1 R_L r_o s^3 + C_1 C_L L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_L r_o s
10.369 INVALID-ORDER-369 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{(C_1R_1S + I)(-C_5I_oS + g_mr_o + I)(-C_5I_oS + g_mr_o + I)(-C_5I_oS + g_mr_o + I)(-C_5I_oS + g_mr_o + I)(-C_5I_oS + 
10.370 INVALID-ORDER-370 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 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{n_L \left( \bigcirc 1 n_1 s + 1 \right)}{2 C_1 C_5 C_L L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_5 C_L L_L R_1 R_L s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 C_L R_1 R_L r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 r_o s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_5 R_L r_o s^3 + C_1 C_L L_L R_1 g_m r_o s^3 + C_1 C_L R_1 g_m r_o s^3 
10.371 INVALID-ORDER-371 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
H(s) = -\frac{\left(C_{1}R_{1}s+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{1}C_{5}C_{L}R_{1}R_{5}r_{o}s^{3}+2C_{1}C_{5}R_{1}R_{5}g_{m}r_{o}s^{2}+4C_{1}C_{5}R_{1}R_{5}s^{2}+C_{1}C_{L}R_{1}R_{5}g_{m}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{L}R
10.372 INVALID-ORDER-372 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R_L (C_1 R_1 s + 1) (C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o)
                                                    \frac{R_L \left( C_1 R_1 s + 1 \right) \left( C_5 R_5 r_o s - R_5 g_m r_o s - R_5 r_o s - R_5 g_m r_o - R_5 + r_o s \right)}{C_1 C_5 C_L R_1 R_5 R_L r_o s^3 + 2 C_1 C_5 R_1 R_5 R_L r_o s^2 + 4 C_1 C_5 R_1 R_5 R_L s^2 + C_1 C_5 R_1 R_5 R_L r_o s^2 + C_1 C_L R_1 R_5 R
10.373 INVALID-ORDER-373 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
10.374 INVALID-ORDER-374 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
                                                     -\frac{({\color{blue}}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)}{}^{(1)
10.375 INVALID-ORDER-375 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   L_L s \left( C_1 R_1 s + 1 \right) \left( C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)
H(s) = -\frac{-L^{2} + L^{2} + L
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 $H(s) = \frac{\left(C_{1}R_{1}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)}{s\left(2C_{1}C_{5}C_{L}L_{L}R_{1}g_{m}r_{o}s^{3}+4C_{1}C_{5}C_{L}L_{L}r_{o}s^{3}+2C_{1}C_{5}C_{L}R_{1}R_{L}g_{m}r_{o}s^{2}+4C_{1}C_{5}C_{L}R_{1}r_{o}s^{2}+C_{1}C_{5}C_{L}R_{1}r_{o}s^{2}+2C_{1}C_{5}R_{1}g_{m}r_{o}s+4C_{1}C_{5}R_{1}s+C_{1}C_{L}L_{L}s^{2}+C_{1}C_{L}R_{1}g_{m}r_{o}s+C_{1}C_{L}R_{1}s+C_{1}C_{L}R_$

 $(C_1R_1s+1)(-C_5r_os+g_mr_o+1)(C_LL_Ls^2+C_LR_Ls+1)$

10.367 INVALID-ORDER-367 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.368 INVALID-ORDER-368 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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10.376 INVALID-ORDER-376 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
```

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

10.377 INVALID-ORDER-377
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_1C_5C_LL_LR_1R_5R_Lr_os^4 + 2C_1C_5L_LR_1R_5R_Lg_mr_os^3 + 4C_1C_5L_LR_1R_5R_Ls^3 + C_1C_5L_LR_1R_5r_os^3 + C_1C_5L_LR_1R_5R_Lr_os^3 + C_1C$$

10.378 INVALID-ORDER-378
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.379 INVALID-ORDER-379
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{3} + 2C_{1}C_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{2} + 4C_{1}C_{5}R_{1}R_{5}R_{L}s^{2} + C_{1}C_{5}R_{5}R_{L}r_{o}s^{2} + C_{1}C_{5}R_{5}R_{L}r_{o}s^{3} + C_{1}C_{L}L_{L}R_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{L}R_{1}R_{5}r_{o}s^{2} + C_{1}C_{5}R_{1}R_{5}R_{L}r_{o}s^{2} + C_{1}C_{5}R_{1}R_{5}R$$

10.380 INVALID-ORDER-380
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.381 INVALID-ORDER-381
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 R_5 r_o s + C_5 R_5$$

10.382 INVALID-ORDER-382
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.383 INVALID-ORDER-383
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.384 INVALID-ORDER-384
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_1 R_1 s + 1\right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 R_5 r_o s + C_5 R_5 r$$

10.385 INVALID-ORDER-385 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_1R_1s + 1)(C_LL_Ls + 1)(C_LL_L$

10.386 INVALID-ORDER-386 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_LR_1R_5R_Lg_mr_os^4 + C_1C_5C_LL_LR_1R_5R_Ls^4 + C_1C_5C_LL_LR_1R_Lr_os^4 + C_1C_5L_LR_1R_5g_mr_os^3 + C_1C_5L_LR_1R_5s^3 + 2C_1C_5L_LR_1R_Lg_mr_os^3 + 4C_1C_5L_LR_1R_Ls^3 + C_1C_5L_LR_1r_os^3 + C_1C_5L_LR_1r_os^4 +$

10.387 INVALID-ORDER-387 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_LR_1R_5g_mr_os^4 + C_1C_5C_LL_LR_1R_5s^4 + 2C_1C_5C_LL_LR_1R_Lg_mr_os^4 + 4C_1C_5C_LL_LR_1r_os^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5C_LL_LR_1r_os^4 + C_1C_5C_LL_Rr_os^4 + C_1C_5C_LL_Rr_$

10.388 INVALID-ORDER-388 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_LR_1R_5g_mr_os^4 + C_1C_5C_LL_LR_1R_5s^4 + 2C_1C_5C_LL_LR_1R_Lg_mr_os^4 + 4C_1C_5C_LL_LR_1r_os^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5C_LL_LR_5r_os^4 + C_1C_5C_LL_LR_1r_os^4 + C_1C_5C_LL_Rr_os^4 + C_1C_5C_LL_Rr_$

10.389 INVALID-ORDER-389 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_{5s}}, R_L\right)$

 $H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_5 R_1 g_m r_o s^3 + C_1 C_5 L_5 R_1 s^3 + C_1 C_5 L_5 r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 r_o s^2 + C_1 C_5 R_1 r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1 C_5 R_1 r_o s^2 + C_$

10.390 INVALID-ORDER-390 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_5 s} + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_1R_1s+1)\left(C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1\right)}{s\left(C_1C_5C_LL_5R_1g_mr_os^3 + C_1C_5C_LL_5r_os^3 + C_1C_5C_LL_5r_os^3 + C_1C_5C_LR_1r_os^2 + C_1C_5L_5s^2 + 2C_1C_5R_1g_mr_os + 4C_1C_5R_1s + C_1C_LR_1g_mr_os + C_1C_LR_1s + C_1C_Lr_os + C_1 + C_5C_LL_5g_mr_os^2 + C_5C_LL_5s^2 + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_os^2 + C_5C_Lr_os + C$

10.391 INVALID-ORDER-391 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{RL\left(\text{C}_{1}R_{1}s+1\right)\left(\text{C}_{5}L_{5}g_{m}r_{o}s^{2}+\text{C}_{5}L_{5}s-\text{C}_{5}R_{1}r_{o}s^{2}+\text{C}_{5}L_{5}s^{2}+\text{C}_$

10.392 INVALID-ORDER-392 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.393 INVALID-ORDER-393 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.394 INVALID-ORDER-394 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.395 INVALID-ORDER-395 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_1R_1S + I_2)(C_LL_2S + C_1C_5C_LL_3R_1g_mr_os^3 + C_1C_5C_LL_5R_1g_mr_os^3 + C_1C_5C_LL_5R_1s^3 + C_$

10.396 INVALID-ORDER-396 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_2R_1R_Lr_os^4 + C_1C_5L_5L_LR_1g_mr_os^4 + C_1C_5L_5L_LR_1s^4 + C_1C_5L_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s$

10.397 INVALID-ORDER-397 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_1 g_m r_o s^5 + C_1 C_5 C_L L_5 L_L R_1 s^5 + C_1 C_5 C_L L_5 L_L R_1 s^5 + C_1 C_5 C_L L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_5 C_L L_L R_1 R_L s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 C_L L_L R_1 r_o s^4 + C_1 C_5 L_L L_R r_o s^4 + C_1 C_5 L_L R_1 r_o s^4 + C_1 C_5 L_$

10.398 INVALID-ORDER-398 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1g_mr_os^5 + C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5R_1R_Lg_mr_os^4 + C_1C_5C_LL_5R_1R_Ls^4 + C_1C$

10.399 INVALID-ORDER-399 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = -\frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_1 C_5 L_5 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_5 R_1 R_L s^3 + C_1 C_5 L_5 R_1 r_o s^3 + C_1 L_5 R_1 g_m r_o s^2 + C_1 L_5 R_1 s^2 + C_1 L$

10.400 INVALID-ORDER-400 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

 $(C_1R_1s+1)(C_5L_5r_os^2-L_5g_mr_os-L_5s+r_o)$ $\frac{(C_1R_1S_1+I_1)(C_5D_5r_os-D_5gm$ 10.401 INVALID-ORDER-401 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = -\frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{C_1 C_5 C_L L_5 R_1 R_L r_o s^4 + 2 C_1 C_5 L_5 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_5 R_1 R_L s^3 + C_1 C_L L_5 R_1 R_L g_m r_o s^3 + C_1 C_L L_5 R_1 R_L g_m$

10.402 INVALID-ORDER-402 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

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

10.403 INVALID-ORDER-403 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.404 INVALID-ORDER-404 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.405 INVALID-ORDER-405 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.406 INVALID-ORDER-406 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_Lr_os^5 + 2C_1C_5L_5L_LR_1R_Lg_mr_os^4 + 4C_1C_5L_5L_LR_1R_Ls^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5L_LR_1R_Lr_os^4 + C_1C_5L_5L_Rr_os^4 + C_1C_5L_5L_Rr_os$

10.407 INVALID-ORDER-407 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.408 INVALID-ORDER-408 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

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

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10.409 INVALID-ORDER-409 Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)
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$$H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_5 R_1 g_m r_o s^3 + C_1 C_5 L_5 R_1 s^3 + C_1 C_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 R_1 R_5 g_m r_o s^2 + 4 C_1 C_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 R_1 R_5 g_m r_$$

10.410 INVALID-ORDER-410
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.411 INVALID-ORDER-411
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_5 C_L L_5 R_1 R_L g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_L r_o s^4 + C_1 C_5 C_L R_1 R_5 R_L g_m r_o s^3 + C_1 C_5 C_L R_1 R_L r_o s^3 + C_1 C_5 C_L R_1 R_L r_o s^3 + C_1 C_5 L_5 R_1 g_m r_o s^3 + C_1 C_$$

10.412 INVALID-ORDER-412
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.413 INVALID-ORDER-413
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.414 INVALID-ORDER-414
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1g_mr_os^5 + C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5L_Lr_os^5 + C_1C_5C_LL_LR_1R_5g_mr_os^4 + C_1C_5C_LL_LR_1r_os^4 + C_1C_5C_LL_LR_1r_os^4 + C_1C_5L_LR_1s^4 + C_1C_5L_LR_1s^4 + C_1C_5L_5R_1g_mr_os^3 + C_1C_5L_5R_1s^3 + C_1C_5L_5R_1g_mr_os^3 + C_1C_5R_1g_mr_os^3 + C$$

10.415 INVALID-ORDER-415
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.416 INVALID-ORDER-416
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

- 10.417 INVALID-ORDER-417 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_1 g_m r_o s^5 + C_1 C_5 C_L L_5 L_L R_1 s^5 + C_1 C_5 C_L L_5 L_L R_1 s^5 + C_1 C_5 C_L L_L R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_L R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_L R_1 R_L g_m r_o s^$
- 10.418 INVALID-ORDER-418 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_1 g_m r_o s^5 + C_1 C_5 C_L L_5 L_L R_1 R_2 g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_L g_m r_o s^4 +$
- **10.419** INVALID-ORDER-419 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 R_5 r_o s^2 L_5 R_5 g_m r_o s L_5 R_5 g_m r_o s L_5 R_5 s + L_5 r_o s^3 + 4 C_1 C_5 L_5 R_1 R_5 R_L g_m r_o s^3 + 4 C_1 C_5 L_5 R_1 R_5 R_L g_m r_o s^3 + 4 C_1 L_5 R_1 R_5 g_m r_o s^3 + C_1 L_5 R_1 R_5 g_m$
- 10.420 INVALID-ORDER-420 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_{1}R_{1}s+1\right)\left(C_{5}L_{5}R_{5}r_{o}s^{2}-L_{5}R_{5}g_{m}r_{o}s-L_{5}R_{5}s+L_{5}r_{o}s+R_{5}r_{o}\right)}{C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4}+2C_{1}C_{5}L_{5}R_{1}R_{5}g_{m}r_{o}s^{3}+4C_{1}C_{5}L_{5}R_{1}R_{5}s^{3}+C_{1}C_{L}L_{5}R_{1}R_{5}s^{3}+C_{1}C_{L}L_{5}R_{1}R_{5}r_{o}s^{3}+C_{1}C_{L}L_{5}R_{1}r_{o}s^{3}+C_{1}C_{L}L$
- 10.421 INVALID-ORDER-421 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_5R_1R_5R_Lr_os^4 + 2C_1C_5L_5R_1R_5R_Lg_mr_os^3 + 4C_1C_5L_5R_1R_5R_Ls^3 + C_1C_5L_5R_1R_5R_Lr_os^3 + C_1C_LL_5R_1R_5R_Lg_mr_os^3 + C_1C_LL_5R_1R_5R_Ls^3 + C_1C_LL_5R_1R_5R_Lr_os^3 + C$
- 10.422 INVALID-ORDER-422 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{5}R_{1}R_{5}s^{3} + C_{1}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{3} + C_$
- 10.423 INVALID-ORDER-423 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}R_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{5}R_{1}R_{5}s^{3} + C_{1}C_{5}L_{5}L_{L}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{L}L_{5}L_{L}R_{1}s^{4} + C_{1}C_{L}L_{5}L_{L}R_{5}s^{4} + C_{1}C_{L$
- 10.424 INVALID-ORDER-424 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_5r_os^5 + 2C_1C_5L_5L_LR_1R_5g_mr_os^4 + 4C_1C_5L_5L_LR_1R_5s^4 + C_1C_5L_5L_LR_1R_5r_os^4 + C_1C_LL_5L_LR_1R_5r_os^4 + C_1C_LL_5L_RR_1R_5r_os^4 + C$

- 10.425 INVALID-ORDER-425 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_$
- **10.426** INVALID-ORDER-426 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Lr_os^5 + 2C_1C_5L_5L_LR_1R_5R_Lg_mr_os^4 + 4C_1C_5L_5L_LR_1R_5R_Ls^4 + C_1C_5L_5L_LR_1R_5r_os^4 + C_1C_5L_5L_LR_1R_5R_Lr_os^4 + C_1C_5L_5L_LR_1R_5R$
- 10.427 INVALID-ORDER-427 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}s^{4} + C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}s^{4} + C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4$
- 10.428 INVALID-ORDER-428 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}$
- 10.429 INVALID-ORDER-429 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 g_m r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_1 C_5 L_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 L_5 R_5 g_m r_o s^3 + C_1 C_5$
- 10.430 INVALID-ORDER-430 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_1R_1s + 1)\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 C_5L_5r_os^2 + C_5L_5R_5s^2 C_5L_5r_os^2 + C_5L_5R_5s^3 + C_1C_5L_5R_1R_5g_mr_os^4 + C_1C_5L_5R_1R_5s^4 + C_1C_5L_5R_1r_os^4 + C_1C_5L_5R_1s^3 + C$
- 10.431 INVALID-ORDER-431 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5R_Lg_mr_os^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5L_5R_1R_5g_mr_os^3 + C_1C_5L_5R_1R_5g_mr_os^3 + C_1C_5L_5R_1R_Lg_mr_os^3 + C$
- 10.432 INVALID-ORDER-432 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5q_mr_os^4 + C_1C_5C_LL_5R_1R_5s^4 + 2C_1C_5C_LL_5R_1R_Lq_mr_os^4 + 4C_1C_5C_LL_5R_1R_Ls^4 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_1r_os^4 + 2C_1C_5L_5R_1q_mr_os^3 + 4C_1C_5L_5R_1s^3 + C_1C_5L_5R_5s^3 + C_1C_5$

- **10.433** INVALID-ORDER-433 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}r_{o}s^{4$
- 10.434 INVALID-ORDER-434 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{L}R_{1}r$
- 10.435 INVALID-ORDER-435 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{$
- **10.436** INVALID-ORDER-436 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_5r_os^5 + C_1C_5L_5L_LR_1R_5g_mr_os^4 + C_1C_5L_5L_RR_1R_5g_mr_os^4 + C_1C_5L_5L_RR_1R$
- 10.437 INVALID-ORDER-437 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_5 L_L R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_5 L_L R_1 R_5 s^5 + 2 C_1 C_5 C_L L_5 L_L R_1 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_5 L_L R_1 R_L s^5 + C_1 C_5 C_L L_5 L_L R_1 r_o s^5 + C_1 C_$
- 10.438 INVALID-ORDER-438 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5s^5 + 2C_1C_5C_LL_5L_LR_1R_Lg_mr_os^5 + 4C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_$
- **10.439** INVALID-ORDER-439 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{R_L \left(C_1 R_1 s + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 L_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 L_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 L_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_5 R_5 R_5 g_m r_o s^$
- 10.440 INVALID-ORDER-440 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_1R_1s + 1)\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_1R_5g_mr_os^2 + C_5L_5R_1R_5g_mr_os^2 + C_5L_5R_1R_5g_mr_os^2 + C_5L_5R_1R_5g_mr_os^2 + C_1C_5L_5R_1R_5g_mr_os^2 + C_1C_5L_5R_1R_5g_mr_os^2 + C_1C_5R_1R_5g_mr_os^2 + C$

- 10.441 INVALID-ORDER-441 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- 10.442 INVALID-ORDER-442 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5R_1R_5g_mr_os^4 + C_1C_5C_LL_5R_1R_5s^4 + 2C_1C_5C_LL_5R_1R_Lg_mr_os^4 + 4C_1C_5C_LL_5R_1r_os^4 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_1r_os^4 + 2C_1C_5C_LR_1R_5R_Lg_mr_os^3 + 4C_1C_5C_LR_1R_5R_Ls^3 + C_1C_5C_LR_1R_5r_os^4 + C_1C_5C_LL_5R_1r_os^4 + C_1C_5C_LL_5R_1r_o$
- **10.443** INVALID-ORDER-443 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}s^{4$
- 10.444 INVALID-ORDER-444 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5s^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^4 + C_1C_5L_5L_LR_1s^4 + C_1C_5L_5L$
- 10.445 INVALID-ORDER-445 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{c}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{c}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{$
- **10.446** INVALID-ORDER-446 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_Lr_os^5 + C_1C_5C_LL_5L_LR_1R_5R_Lr_os^5 + C_1C_5C_LL_5L_RR_1R_5R_Lr_os^5 + C_1C_5C_LL_5L_RR_1R_5R$
- 10.447 INVALID-ORDER-447 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5s^5 + 2C_1C_5C_LL_5L_LR_1R_Lg_mr_os^5 + 4C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_$
- 10.448 INVALID-ORDER-448 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_5L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5s^5 + 2C_1C_5C_LL_5L_LR_1R_Lg_mr_os^5 + 4C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_$

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

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

10.450 INVALID-ORDER-450 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 C_L L_1 R_L r_o s^2 + C_1 L_1 R_5 g_m r_o s^2 + C_1 L_1 R_5 g_m r_o s^2 + C_1 L_1 R_L g_m r_o s^2 + C_1 R_5 R_L s + C_1 R_5 R_L g_m r_o s + C_L R_5 R_L g_m$$

10.451 INVALID-ORDER-451 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

10.452 INVALID-ORDER-452 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.453 INVALID-ORDER-453 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_5 g_m r_o s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_L R_5 r_o s^3 + 2 C_1 L_1 L_L g_m r_o s^3 + 4 C_1 L_1 L_L s^3 + C_1 L_1 R_5 g_m r_o s^2 + C_1 L_1 r_o s^2 + C_1 L_L r_o s^2 + C_1 L_L R_5 g_m r_o s^2 + C_1 L_L R_5 g_m$$

10.454 INVALID-ORDER-454 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.455 INVALID-ORDER-455 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_L s \left(C_1 L_1 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_5 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_5 R_L r_o s^4 + C_1 C_L L_L L_R r_o s^4 + C_1 C_L L_L R_5 R_L r_o s^3 + C_1 L_1 L_L R_5 r_o s^3 + C_1 L_1 R_5 r_$$

10.456 INVALID-ORDER-456 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.457 INVALID-ORDER-457
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right)}{C_1 C_L L_1 L_L R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_5 s^4 + 2 C_1 C_L L_1 L_L R_5 s^4 + 4 C_1 C_L L_1 L_L R_5 s^4 + C_1 C_L L_1 L_L R_5 r_o s^3 + C_1 C_L L_1 R_5 R_L s^3 + C_1 C_L R_5 R_L s^3 + C_1 C_$

10.458 INVALID-ORDER-458 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2C_1 C_5 L_1 R_L g_m r_o s^3 + 4C_1 C_5 L_1 R_L s^3 + C_1 C_5 L_1 r_o s^3 + C_1 C_5 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_L s + C_1 r_o s + 2C_5 R_L g_m r_o s + 4C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

10.459 INVALID-ORDER-459 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.460 INVALID-ORDER-460 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_1 R_L r_o s^4 + 2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_L s^3 + C_1 C_5 L_1 r_o s^3 + C_1 C_L L_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_L g_m r_o s^3 + C_1 C_L R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L$$

10.461 INVALID-ORDER-461 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.462 INVALID-ORDER-462 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.463 INVALID-ORDER-463 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.464 INVALID-ORDER-464 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

 $H(s) = \frac{(\vee_1 L_1 S - 1 - 1) (- \vee_2 S + 1) (- \vee_3 S + 1$ 10.467 INVALID-ORDER-467 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$ $H(s) = \frac{\kappa_L \left(C_1 L_1 S^5 + 1 \right)}{2 C_1 C_5 C_L L_1 L_L R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_L s^5 + C_1 C_5 C_L L_1 L_L r_o s^4 + C_1 C_5 C_L L_1 R_L r_o s^4 + 2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_L s^3 + C_1 C_5 R_L r_o s^3 + C_1 C_5 R_L r_o s^4 + C_1 C_L L_1 L_L g_m r_o s^4 + C_1 C_L L_1 L_L g_m r_o s^3 + C_1 C_5 L_1 R_L g_m r_o s^3 + C_1 C_5 R_L r_o s^4 + C_1 C_5 R_L r_$ **10.468** INVALID-ORDER-468 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$ $H(s) = -\frac{R_L \left(C_1 L_1 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{2 C_1 C_5 L_1 R_5 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_5 R_5 R_L r_o s^2 + C_1 L_1 R_5 g_m r_o s^2 + C_1 L_1 R_5 g_m r_o s^2 + 4 C_1 L_1 R_L g_m r_o s^2 + C_1 L_1 R_5 r_o s + C_1 R_L r_o s + 2 C_5 R_5 R_L g_m r_o s + 4 C_5 R_5 R_L s + C_5 R_5 r_o s + R_5 g_m r_o + 2 C_5 R_5 R_L g_m r_o s^2 + C_5 R_5 R_L g_m r_o$ 10.469 INVALID-ORDER-469 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_4 s}\right)$ $H(s) = -\frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{1}C_{5}C_{L}L_{1}R_{5}r_{o}s^{4}+2C_{1}C_{5}L_{1}R_{5}g_{m}r_{o}s^{3}+4C_{1}C_{5}L_{1}R_{5}g_{m}r_{o}s^{2}+C_{1}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{1}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{1}C_{L}L_{1}R_{5}r_{o}s^{2}+2C_{1}L_{1}g_{m}r_{o}s^{2}+4C_{1}L_{1}s^{2}+C_{1}R_{5}s+C_{1}r_{o}s+C_{5}C_{L}R_{5}r_{o}s^{2}+2C_{5}R_{5}g_{m}r_{o}s+4C_{5}R_{5}s+C_{L}R_{5}g_{m}r_{o}s+C_{L}R_{5}g_{m$ 10.470 INVALID-ORDER-470 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$ $H(s) = -\frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{C_1 C_5 C_L L_1 R_5 R_L r_o s^4 + 2 C_1 C_5 L_1 R_5 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_5 R_L s^3 + C_1 C_L L_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_1 R_5 R_L r_o s^3 +$ 10.471 INVALID-ORDER-471 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$ 10.472 INVALID-ORDER-472 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$ $-\frac{({\color{blue}}^{-1}{\color{blue}}^$

 $H(s) = \frac{L_L R_L s \left(C_1 L_1 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_L R_L r_o s^5 + 2 C_1 C_5 L_1 L_L R_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_L R_L s^4 + C_1 C_5 L_1 L_L R_L r_o s^3 + C_1 C_4 L_L L_L R_L g_m r_o s^4 + C_1 C_4 L_L R_L r_o s^3 + C_1 L_1 L_L R_L g_m r_o s^4 + C_1 C_4 L_L R_L r_o s^3 + C_1 L_1 R_L r_o s^3 + C_1 R_L r_o s$

10.465 INVALID-ORDER-465 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

10.466 INVALID-ORDER-466 $Z(s) = \left(L_1 s + \frac{1}{C_{1s}}, \infty, \infty, \infty, \frac{1}{C_{5s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.473 INVALID-ORDER-473 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)$ $H(s) = -\frac{L_L s \left(C_1 L_1 s + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{C_1 C_5 C_L L_1 L_L R_5 r_o s^5 + 2 C_1 C_5 L_1 L_L R_5 g_m r_o s^4 + 4 C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_5 L_1 L_L R_5 g_m r_o s^4 + C_1 C_L L_1 R_5 g_m r_o s^4 + C_1 C_L R_5 g_m r_o s^4 + C_1 C_L$

10.474 INVALID-ORDER-474 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.475 INVALID-ORDER-475 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

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

10.476 INVALID-ORDER-476 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.477 INVALID-ORDER-477 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}R_{L}r_{o}s^{4} + 2C_{1}C_{5}L_{1}R_{5}R_{L}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{1}R_{5}R_{L}s^{3} + C_{1}C_{5}L_{1}R_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{L}R_{5}R_{L}r_{o}s^{4} + C_{1}C$

10.478 INVALID-ORDER-478 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 R_5 g_m r_o s^3 + C_1 C_5 L_1 R_5 g^3 + 2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 C_5 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 g_m$

10.479 INVALID-ORDER-479 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.480 INVALID-ORDER-480 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{10L(c_1 L_1 R_5 R_L g_m r_o s^4 + C_1 C_5 L_L R_5 R_L g_m r_o s^4 + C_1 C_5 L_L R_5 R_L g_m r_o s^4 + C_1 C_5 L_L R_5 R_L g_m r_o s^3 + C_1 C_5 L_L R_5 R_L g_m r_o s^3 + C_1 C_5 L_L R_5 R_L g_m r_o s^3 + C_1 C_5 L_L R_5 R_L g_m r_o s^3 + C_1 C_5 R_L g_m r_o s^3 + C_1$

10.481 INVALID-ORDER-481 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{1}C_{5}C_{L}L_{1}R_{L}s^{3}+C_{1}C_{5}C_{L}L_{1}R_{c}s^{3$ **10.482** INVALID-ORDER-482 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{1}C_{5}C_{L}L_{1}L_{L}g_{m}r_{o}s^{4}+4C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3}+C_{1}C_{5}C_{L}L_{1}R_{5}s^{3}+C_{1}C_{5}C_{$ **10.483** INVALID-ORDER-483 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 R_5 r_o s^2 + C_1 C_5 L_L L_L R_5 g_m r_o s^4 + 2 C_1 C_5 L_L L_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_L s^4 + C_1 C_5 L_1 R_5 g_m r_o s^3 + C_1 C_5 L_L r_o s^3 + C_1 C_5 L_L r_o s^3 + C_1 C_5 L_L L_L g_m r_o s^4 + 2 C_1 C_5 L_L L_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_L g_m r_o s^4 + C_1 C_5 L_1 R_5 g_m r_o s^3 + C_1 C_5 L_1 R_5 g_m r_o s^3 + C_1 C_5 L_L r_o s^3 + C$ **10.484** INVALID-ORDER-484 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{(C_1L_1s^2 + 1) (C_LL_1s^2 + C_LL_1s^3 + C_1C_5C_LL_1R_2s^3 +$ 10.485 INVALID-ORDER-485 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$ $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_LR_5R_Ls^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_Rs_g_mr_os^4 + C_1C_5L_1L_LR_5s^4 + 2C_1C_5L_1L_LR_5s^4 + 2C_1C_5L_1L_1L_1S^4 + 2C_1C_5L_1L_1L_1S^4 + 2C_1C_5L_1L_1L_1S^4 + 2C_1C_5L_1L_1L_1S^4 + 2C_1C_5L_1L_1L_1S^4 + 2C_$ **10.486** INVALID-ORDER-486 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_5g_mr_os^5 + C_1C_5C_LL_1L_LR_5s^5 + 2C_1C_5C_LL_1L_LR_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_ss^5 + C_1C_5C_LL_1L_LR_ss^5 + C_1C_5C_LL_1L_LR_ss^5 + C_1C_5C_LL_1L_LR_ss^5 + C_1C_5C_LL_1L_Rs^6 + C_1C_5C_LL_1L_1L_1Rs^6 + C_1C_5C_LL_1L_1Rs^6 + C_1C_5C_LL_1L_1Rs^6 + C_1C_5C_LL_1L_1Rs^6 + C_1C_5C_LL_1L_1Rs^6 + C_1C_5C_LL_1L_1Rs^6 + C_1C_5C_LL_1L_$

10.487 INVALID-ORDER-487
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 s^5 + 2 C_1 C_5 C_L L_1 L_L R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_L s^5 + C_1 C_5 C_L L_1 L_L R_5 s^5 + C_1 C_5 C_L L_1 R_5 s^5 + C_1 C_5 C_L L_1$

10.488 INVALID-ORDER-488
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 L_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 s^4 + 2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 L_5 r_o s^3 + C_1 C_5 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_L s + C_1 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1 C_5 R_L r_o s^2 + C_5 R_L g_m r_o s^2 + C_5 R_L g_$

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10.490 INVALID-ORDER-490 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_L \left( C_1 L_1 s^2 + 1 \right) \left( C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 L_1 L_2 r_o s^4 + C_1 C_5 L_2 r_
10.491 INVALID-ORDER-491 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4}+C_{1}C_{5}C_{L}L_{1}R_{L}g_{m}r_{o}s^{3}+4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3}+C_{1}C_{5}C_{L}L_{1}r_{o}s^{3}+C_{1}C_{5}C_{L}L_{5}r_{o}s^{3}+C_{1}C_{5}C_{L}L_{5}r_{o}s^{2}+2C_{1}C_{5}L_{1}g_{m}r_{o}s^{2}+4C_{1}C_{5}L_{5}s^{2}+C_{1}C_{5}L_{5}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{2}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{2}+C_{1}C_{5}L_{5}r_{o}s^{
10.492 INVALID-ORDER-492 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+2C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+2C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+2C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L}L_{1}L_{5}s^{4}+C_{1}C_{5}C_{L
10.493 INVALID-ORDER-493 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
H(s) = \frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 L_1 L_5 L_1 g_m r_o s^4 + C_1 C_5 L_1 L_1 g_m r_o s^4 + C_1 C_5 L_1 L_2 g_m r_o s^4 + C_1 C_5 L_2 L_2 g_m r_o s^4 + C
10.494 INVALID-ORDER-494 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{(C_1L_1s^2 + 1)(C_LL_1s^2 + C_LR_Ls^3 + C_1C_5C_LL_1L_5g_mr_os^4 + C_1C_5C_LL_1L_5g_mr_os^4 + C_1C_5C_LL_1R_Lg_mr_os^4 + C_1C_5C_LL_1R_Lg_mr_os^3 + 4C_1C_5C_LL_1R_Ls^3 + C_1C_5C_LL_1R_Ls^3 + C_1C_5C_LL_5R_Ls^4 + C_1C_5C_LL_5R_Ls^3 + C_1C_5C_LL_5R_Ls^
10.495 INVALID-ORDER-495 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_Ls^6 + C_1C_5C_LL_1L_LR_Lr_os^5 + C_1C_5L_1L_5L_Lg_mr_os^5 + C_1C_5L_1L_5L_Ls^5 + C_1C_5L_1L_5L_Ls^6 + C_1C_5L_1L_5L_LR_Ls^6 + C_1C_5L_1L_LR_Ls^6 + C_1C_5L_1L_5L_LR_Ls^6 + C_1C_5L_1L_5L_Ls^6 + C_1C_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L_1L_5L
10.496 INVALID-ORDER-496 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L a_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L s^6 + 2 C_1 C_5 C_L L_1 L_L R_L a_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_L s^5 + C_1 C_5 C_L L_1 L_L R_L s^5 + C_1 C_5 C_L L_2 L_2 R_L s^5 + C_1 C_5 C_L L_2 R_L s^5 +
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 $H(s) = \frac{\left(C_{1}L_{1}s^{2} + 1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}r_{o}s^{3} + C_{1}C_{5}L_{L}r_{o}s^{3} + 2C_{1}C_{5}L_{1}g_{m}r_{o}s^{2} + 4C_{1}C_{5}L_{1}s^{2} + C_{1}C_{5}r_{o}s + C_{1}C_{L}L_{1}g_{m}r_{o}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{1}C_{L}L_{2}g_{m}r_{o}s^{2} + C_{5}C_{L}L_{5}g_{m}r_{o}s^{2} + C_{5}C_{L}L_{5}s^{2} + C_{5}C_{L}L_{5}s$

10.489 INVALID-ORDER-489 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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10.497 INVALID-ORDER-497 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 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)
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 $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{L}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R$

10.498 INVALID-ORDER-498 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

$$H(s) = -\frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_1 C_5 L_1 L_5 R_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_5 r_o s^4 + C_1 C_5 L_5 R_L r_o s^3 + C_1 L_1 L_5 g_m r_o s^3 + C_1 L_1 L_5 g^3 + 2 C_1 L_1 R_L g_m r_o s^2 + 4 C_1 L_1 R_L s^2 + C_1 L_5 r_o s^2 + C_1 L_5 r$$

10.499 INVALID-ORDER-499 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

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

10.500 INVALID-ORDER-500 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = -\frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + 2 C_1 C_5 L_1 L_5 R_L q_m r_o s^4 + 4 C_1 C_5 L_1 L_5 R_L r_o s^3 + C_1 C_L L_1 L_5 R_L q_m r_o s^4 + C_1 C_L L_1 L_5 R_L q_m r_o s^4 + C_1 C_L L_1 L_5 R_L q_m r_o s^4 + C_1 C_L L_1 L_5 R_L r_o s^3 + C_1 L_1 L_5 q_m r_o s^3 + C_1 L$$

10.501 INVALID-ORDER-501 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

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

10.502 INVALID-ORDER-502 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

10.503 INVALID-ORDER-503 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = -\frac{L_L s \left(C_1 L_1 s^2 + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o r_o s^2 - L_5 g_m r_o s - L_5 s + r_o r_o s^2 - L_5 g_m r_o s - L_5 s + r_o r_o s^2 - L_5 g_m r_o s - L_5 r_o s^4 + C_1 C_2 L_1 L_5 L_2 r_o s^4 + C_1 L_1 L_5 r_o s^4 + C_1 L_1 L_5 r_o s^4 + C_1 L_1 L_5 r_o s^4 + C_1 L_2 L_2 r_o s^4 + C_1 L_2 r_o s^4 +$$

10.504 INVALID-ORDER-504 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

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10.505 INVALID-ORDER-505 Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
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$$H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_Lr_os^6 + 2C_1C_5L_1L_5L_LR_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_Ls^5 + C_1C_5L_1L_5L_LR_Lr_os^4 + C_1C_5L_5L_LR_Lr_os^4 + C_1C_5L_5L_Rr_os^4 + C_1C_5L_Tr_os$$

10.506 INVALID-ORDER-506
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.507 INVALID-ORDER-507
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{1}L_{5}L_{L}g_{m}r_{o}s^{5} + C_{1}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{5} + C_{1}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}L_{L}g_{m}r_{o}s^{5} + C_{1}C_{5}L_{L}g_{m}r_{o}s^{5} + C_{1}C_{5}L_{L}g_{m}r_{o}s^{5} + C_{1}C_{5}L_{L}g$$

10.508 INVALID-ORDER-508
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 L_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 s^4 + C_1 C_5 L_1 R_5 g_m r_o s^3 + C_1 C_5 L_1 R_5 g_m r_o s^3 + 4 C_1 C_5 L_1 R_5 s^3 + 2 C_1 C_5 L_1 R_5 g_m r_o s^3 + 4 C_1 C_5 L_1 R_5 s^3 + C_1 C_5 L_5 R_5 s^3 + C_1 C_5 L_5 R_5 r_o s^3 + C_1 C_5 R_5 r_o s^2 + C_1 L_5 R_5 r_o s^2 + C_1 L_1 g_m r_o s^2$$

10.509 INVALID-ORDER-509
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.510 INVALID-ORDER-510
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 R_5 R_L g_m r_o s^4 + C_1 C_5 C_L L_1 R_5 R_L s^4 + C_1 C_$$

10.511 INVALID-ORDER-511
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.512 INVALID-ORDER-512
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

- 10.513 INVALID-ORDER-513 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L g_m r_o s^6 + C_1 C_5 C_L L_1 L_2 L_2 s^6 + C_1 C_5 C_L L_1 L_L R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 s^5 + C_1 C_5 C_L L_1 L_L r_o s^5 + C_1 C_5 C_L L_2 L_2 r_o s^5 + C_1 C_5 C_L r_o s^$
- **10.514** INVALID-ORDER-514 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + 2C_{1}C_{5}C_{L}L_{1}L_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}L_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}L_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}L_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + 4C_{1}C_{5}C_{L}L_{1}L_{L}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{5}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + 4C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{5}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + 4C_{1}C_{5}C_{L}L_{1}R$
- **10.515** INVALID-ORDER-515 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_Ls^6 + C_1C_5C_LL_1L_LR_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_2R_5r_os^5 + C_1C_5C_LL_1R_5r_os^5 + C_1C_5C_LL_1R$
- 10.516 INVALID-ORDER-516 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_LR_5g_mr_os^5 + C_1C_5C_LL_1L_LR_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_Ls^5 + C_1C_5C_LL_1L_LR_Ls^5 + C_1C_5C_LL_1L_Ls^5 + C_1C_5C_LL_1L_Ls^5 + C_1C_5C_LL_1L_Ls^5 + C_1C_5$
- 10.517 INVALID-ORDER-517 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_LR_5g_mr_os^5 + C_1C_5C_LL_1L_1R_5g_mr_os^5 + C_1C_5C_LL_1R_5g_mr_os^5 + C$
- 10.518 INVALID-ORDER-518 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_1 L_1 s^2 + 1\right) \left(C_5 L_5 R_5 r_o s^2 L_5 R_5 g_m r_o s L_5 R_5 s + L_5 r_o s$
- 10.519 INVALID-ORDER-519 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_F} + \frac{1}{L_F s}}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{5}L_{5}R_{5}r_{o}s^{2}-L_{5}R_{5}g_{m}r_{o}s-L_{5}R_{5}s+L_{5}r_{o}s+R_{5}r_{o}\right)}{C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}r_{o}s^{5}+2C_{1}C_{5}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4}+4C_{1}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4}+C_{1}C_{L}L_{1}L_{5}R_{5}s^{4}+C_$
- 10.520 INVALID-ORDER-520 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_5R_Lr_os^5 + 2C_1C_5L_1L_5R_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_5R_Ls^4 + C_1C_5L_1L_5R_5R_Lr_os^3 + C_1C_LL_1L_5R_5R_Lg_mr_os^4 + C_1C_LL_1L_5R_5R_Ls^4 + C_1C_LL_1L_5R_5R_Lr_os^4 + C_1C_LL_1R_5R_Lr_os^4 + C_1C_LL_1R_5R_Lr_os^4$

- 10.521 INVALID-ORDER-521 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{4}$
- 10.522 INVALID-ORDER-522 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- 10.523 INVALID-ORDER-523 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_5r_os^6 + 2C_1C_5L_1L_5L_LR_5g_mr_os^5 + 4C_1C_5L_1L_5L_LR_5r_os^4 + C_1C_5L_5L_LR_5r_os^4 + C_1C_LL_1L_5L_LR_5g_mr_os^5 + C_1C_LL_1L_5L_LR_5r_os^4 + C_1C_LL_1L_5L_1L_5L_1R_5r_os^4 + C_1C_LL_1L_5L_1R_5r_os^4 + C_1C_LL_1L_5L_1R_5r$
- **10.524** INVALID-ORDER-524 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}r_{o}s^{4} + 2C_{1}C_{5}L_{L}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{L}L_{5}R_{5}s^{4} + C_{1}C_{5}L_{L}L_{5}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{5}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{5}R_{5}r_{o}s^$
- 10.525 INVALID-ORDER-525 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_5R_Lr_os^6 + 2C_1C_5L_1L_5L_LR_5R_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_5R_Ls^5 + C_1C_5L_1L_5L_Rs_Rr_os^4 + C_1C_5L_1L_5L_Rs_Rr_os^4 + C_1C_5L_1L_5L_Rs_Rr_os^4 + C_1C_5L_5L_LR_5R_Lr_os^4 + C_1C_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_LR_5R_Lr_os^5 + C_1C_5L_5L_5L_5L_5R_5R_Lr_os^5 + C_1C_5L_5L_5L_5L_5R_5R_Lr_os^5 + C_1C_5L_5L_5L_5R_5R_Lr_os^5 + C_1C_5L_5L_5R_5R_Lr_os^5 + C_1C_5L_5L_5R_5R_Lr$
- 10.526 INVALID-ORDER-526 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}L_{L}R_{5}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{5}r_{o}s^{4} + C_{1}C_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L$
- 10.527 INVALID-ORDER-527 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}$
- **10.528** INVALID-ORDER-528 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_1 L_5 R_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^3 + C_1 L_1 L_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^3 + C_1 L_1 L_5 g_m r_o s^3 + C_1 L_1 R_5 g_m r_o s^$

10.529 INVALID-ORDER-529 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$

- $(C_1L_1s^2+1)(C_5L_5R_5g_mr_os^2+C_5L_5R_5s^2-C_5L_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5r_os^2-C_5$
- $H(s) = \frac{\left(C_{1}L_{1}s^{2}+1\right)\left(C_{5}L_{5}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}R_{5}s^{2}-C_{5}L_{5}r_{o}s^{2}+C_{5}L_$
- **10.530** INVALID-ORDER-530 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_5R_Ls^5 + C_1C_5C_LL_1L_5R_5R_Lr_os^4 + C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5R_5g_mr_os^4$
- 10.531 INVALID-ORDER-531 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_5s^5 + 2C_1C_5C_LL_1L_5R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_5R_Ls^5 + C_1C_5C_LL_1L_5r_os^5 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_5r_os^4 + C_1C_5C_LL_5R_5r_os^4 + 4C_1C_5L_5R_5r_os^4 + 4C_1C_5L_5R_5r_os^4$
- 10.532 INVALID-ORDER-532 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{c}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{5}R_{5}s^{5$
- 10.533 INVALID-ORDER-533 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_5L_LR_5r_os^5 + 2C_1C_5L_1L_5L_Lg_mr_os^5 + 4C_1C_5L_1L_5L_Ls^5 + C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5r_os^4 + C_1C_5L_1L_5L_Lr_os^6 + C_1C_5L_LL_5L_Lr_os^6 + C_1C_5L_Lr_os^6 + C_$
- **10.534** INVALID-ORDER-534 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_$
- 10.535 INVALID-ORDER-535 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$
- $\overline{C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{6}+C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}s^{6}+C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{L}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}L_{1}R_{5}g_{m}r_{o}s^{5}+C_{1}C_{5}L_{1}L_{5}L_{1}R_{5}g_{m}r_{o$
- 10.536 INVALID-ORDER-536 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5q_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_2g_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_5L_LR_5s^6 + C_1C_5C_LL_5L_5C_LR_5s^6 + C_1C_5C_LL_5C_LR_5s^6 + C_1C_5C_LL_5C_LR_5s^6 + C_1C_5C_LL_5c_LR_5s^6 + C_1C_5C_LL_5c_LR_5s^6 + C_1C_5C_LL_5c_LR_5s^6 + C_1C_5C_LL_5c_LR_5s^6 + C_1C_5C_LL_$

- 10.537 INVALID-ORDER-537 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_cs^6 + C_1C_5C_LL_1L_5L_LR_cs^6 + C_1C_5C_LL_1L_5L_LR_$
- 10.538 INVALID-ORDER-538 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_1 L_2 R_5 g_m r_o s^2 + C_5 L_1 L_2 R_5 g_m r_o s^2 + C_5 L_1 L_5 R_5 g_m r_o s^2 + C_5 L_1 L_5 R_5 g_m r_o s^3 + C_1 C_5 L_1 L_5 R_5 g_m r_o s^3 + C_1 C_5 L_1 R_5 R_L g_m$

10.539 INVALID-ORDER-539 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

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

10.540 INVALID-ORDER-540 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_5 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 R_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 R_$

10.541 INVALID-ORDER-541 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_5 s^5 + 2 C_1 C_5 C_L L_1 L_5 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 R_5 R_L s^4 + C_$

10.542 INVALID-ORDER-542 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$

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

10.543 INVALID-ORDER-543 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_5L_LR_5r_os^5 + 2C_1C_5L_1L_5L_Lg_mr_os^5 + 4C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5R_5s^4 + C_1C_5L_1L_5R_5s^6 + C_1C_5L_$

10.544 INVALID-ORDER-544 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.545 INVALID-ORDER-545 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5R_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5R_Ls^6 + C_1C_5C_LL_1L_5L_LR_5R_Lr_os^6 + C_1C_5C_LL_1L_5L_LR_5R_Lr_os^5 + C_1C_5L_1L_5L_LR_5g_mr_os^5 + C_1C_5L_1L_5L_Rg_mr_os^5 + C_1C$

10.546 INVALID-ORDER-546 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_2g_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_5s^6 + 4C_1C_5C_LL_1L_5L_LR_5s^6 + 4C_1C_5C_LL_1L_5L_Rs^6 + 4C_1C_5C_LL_1L_5$

10.547 INVALID-ORDER-547 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_Ls^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_Ls^6 + C_1C_$

10.548 INVALID-ORDER-548 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

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

10.549 INVALID-ORDER-549 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{L_1 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 R_5 R_L r_o s^3 + C_1 L_1 R_5 R_L s^2 + C_1 L_1 R_5 r_o s^2 + C_L L_1 R_5 R_L g_m r_o s^2 + C_L L_1 R_5 R_L s^2 + C_L L_1 R_5 R_L r_o s + L_1 R_5 g_m r_o s + L_1 R_$$

10.550 INVALID-ORDER-550 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

10.551 INVALID-ORDER-551 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.552 INVALID-ORDER-552 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_1 L_L s^2 \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_1 L_L R_5 r_o s^4 + C_1 L_1 L_L R_5 s^3 + C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L R_5 g_m r_o s^3 + C_L L_1 L_L R_5 r_o s^3 + C_L L_1 L_L R_5 r_o s^2 + 2 L_1 L_L g_m r_o s^2 + 4 L_1 L_L s^2 + L_1 R_5 g_m r_o s + L_1 R_5 s + L_1 r_o s + L_2 R_5 r_o s^2 + 2 L_1 L_2 r_o s^3 + C_2 L_1 L_2 r_o s^3 + C_2 r_o s^3 +$$

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10.553 INVALID-ORDER-553 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{1}C_{L}L_{1}L_{L}R_{5}s^{4} + C_{1}C_{L}L_{1}R_{5}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{5}r_{o}s^{3} + C_{1}L_{1}R_{5}s^{2} + C_{1}L_{1}r_{o}s^{2} + 2C_{L}L_{1}L_{L}g_{m}r_{o}s^{3} + 4C_{L}L_{1}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{1}R_{5}g_{m}r_{o}s^{2} + 4C_{L}L_{1}R_{L}s^{2} + C_{L}L_{1}R_{5}s^{2} + C_{L}L
10.554 INVALID-ORDER-554 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)
H(s) = \frac{L_1 L_L R_1 s^2 \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_5 R_L r_o s^4 + C_1 L_1 L_L R_5 r_o s^3 + C_1 L_
10.555 INVALID-ORDER-555 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{L_{1}s\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{1}C_{L}L_{1}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{5}r_{o}s^{4} + C_{1}L_{1}L_{L}R_{5}s^{3} + C_{1}L_{1}L_{L}r_{o}s^{3} + C_{1}L_{1}L_{L}R_{5}r_{o}s^{2} + C_{1}L_{1}R_{5}r_{o}s^{2} + C_{1}L_{1}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{L}L_{1}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{L}L_{1}L_{L}R_{5}r_{o}s^{4} + C_{1}L_{1}L_{L}R_{5}r_{o}s^{4} +
10.556 INVALID-ORDER-556 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5, \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_1 R_L s \left(C_L L_L s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_5 r_o s^4 + C_1 C_L L_1 L_L R_5 r_o s^4 + C_1 C_L L_1 R_5 r_o s^3 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^3 + C_L L_1 L_L R_5 r_o s^3 + C_L L_1 R_5 r_o s^3 
10.557 INVALID-ORDER-557 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)
                                                                                                                                                                                                                                        10.558 INVALID-ORDER-558 Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{1}{C_{5}s}, \frac{1}{C_{L}s}\right)
                                                                                                                                                                                                                                       H(s) = \frac{L_1 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 r_o s^3 + C_1 L_1 r_o s^3 + C_1 L_1 s^2 + C_5 C_L L_1 r_o s^3 + 2 C_5 L_1 q_m r_o s^2 + 4 C_5 L_1 s^2 + C_5 r_o s + C_L L_1 q_m r_o s^2 + C_L L_1 s^2 + C_L r_o s + 1}
10.559 INVALID-ORDER-559 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                                                     10.560 INVALID-ORDER-560 Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \infty, \infty, \infty, \frac{1}{C_{5}s}, R_{L} + \frac{1}{C_{L}s}\right)
   H(s) = \frac{L_{1}s\left(C_{L}R_{L}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{1}C_{5}C_{L}L_{1}R_{L}r_{o}s^{4}+C_{1}C_{5}L_{1}r_{o}s^{3}+C_{1}C_{L}L_{1}R_{c}s^{3}+C_{1}C_{L}L_{1}r_{o}s^{3}+C_{1}L_{1}s^{2}+2C_{5}C_{L}L_{1}R_{L}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{1}R_{c}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o}s^{3}+C_{5}C_{L}L_{1}r_{o
10.561 INVALID-ORDER-561 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
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 $H(s) = \frac{L_{1}s\left(C_{L}L_{L}s^{2}+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{1}C_{5}C_{L}L_{1}L_{L}r_{o}s^{5}+C_{1}C_{5}L_{1}r_{o}s^{3}+C_{1}C_{L}L_{1}L_{c}s^{4}+C_{1}C_{L}L_{1}r_{o}s^{3}+C_{1}L_{1}s^{2}+2C_{5}C_{L}L_{1}L_{L}g_{m}r_{o}s^{4}+4C_{5}C_{L}L_{1}L_{c}s^{4}+C_{5}C_{L}L_{1}r_{o}s^{3}+2C_{5}L_{1}g_{m}r_{o}s^{2}+4C_{5}L_{1}s^{2}+C_{5}r_{o}s+C_{L}L_{1}g_{m}r_{o}s^{2}+C_{L}L_{1}s$

10.562 INVALID-ORDER-562 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_1 L_L s^2 \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 L_L r_o s^4 + C_1 L_L L_L r_o s^4 + C_1 L_L L_L r_o s^2 + C_5 C_L L_1 L_L r_o s^4 + 2 C_5 L_1 L_L g_m r_o s^3 + 4 C_5 L_1 L_L s^3 + C_5 L_1 r_o s^2 + C_5 L_L L_L g_m r_o s^3 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L s$ **10.563** INVALID-ORDER-563 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{L_{1}s\left(-C_{5}r_{o}s + g_{m}r_{o} + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)}{C_{1}C_{5}C_{L}L_{1}L_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}r_{c}s^{3} + C_{1}C_{L}L_{1}L_{s}s^{4} + C_{1}C_{L}L_{1}L_{s}s^{3} + C_{1}C_{L}L_{1}L_{s}s^{4} + C_{1}C_{L}L_{1}$ **10.564** INVALID-ORDER-564 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$ $H(s) = \frac{L_1 L_L R_L s^2 \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_L r_o s^4 + 2 C_5 L_1 L_L R_L g_m r_o s^3 + 4 C_5 L_1 L_L R_L s^3 + C_5 L_1 L_L R_L r_o s^4 + C_5 L_1 R_L r_o s^4 + C$ 10.565 INVALID-ORDER-565 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $L_1s(-C_5r_os + g_mr_o + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)$ $H(s) = \frac{L_{15} \left(- \left(- \left(5\right) r_{o}s + \frac{1}{2} g_{u}r_{o}s + \frac{1}{2} \right) \left(\left(- \left(- \left(5\right) r_{o}s + \frac{1}{2} g_{u}r_{o}s + \frac{1}{2} \right) \left(\left(- \left(- \left(5\right) r_{o}s + \frac{1}{2} g_{u}r_{o}s + \frac{1}{2} \left(- \left(- \left(- \left(5\right) r_{o}s + \frac{1}{2} g_{u}r_{o}s + \frac{1}{2} r_{o}s + \frac{1}{2} r_$ **10.566** INVALID-ORDER-566 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$ $H(s) = \frac{L_1 R_L s \left(C_L L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_L R_L r_o s^5 + C_1 C_5 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 L_L R_L r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 C_L R_L r$ **10.567** INVALID-ORDER-567 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$ $H(s) = \frac{L_1 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_5 L_1 R_5 R_L r_o s^3 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^2 + 2 C_5 L_1 R_5 R_L q_m r_o s^2 + 4 C_5 L_1 R_5 R_L s^2 + C_5 L_1 R_5 r_o s^2 + C_5 R_5 R_L r_o s + L_1 R_5 q_m r_o s + L_1 R_5 q_m r_o s + 4 L_1 R_L q_m r_o s + 4 L_1 R_L s + L_1 r_o s + R_5 R_L + R_5 r_o + R_L r_o s^2 + C_5 R_5 R_L r_o s^2 + C_5 R_5 R_L r_o s^2 + C_5 R_5 R_L r_o s + L_1 R_5 q_m r_o s + L_1 R_5 q_m r_o s + 4 L_1 R_L q_m r_o s + 4 L_1 R_L q_m r_o s + R_5 R_L + R_5 r_o + R_L r_o s^2 + C_5 R_5 R_L r_o s^2 + C_5 R_5$ **10.568** INVALID-ORDER-568 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$ $H(s) = \frac{L_{1}s\left(-C_{5}R_{5}r_{o}s + R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{1}C_{5}L_{1}R_{5}r_{o}s^{3} + C_{1}L_{1}R_{5}s^{2} + C_{1}L_{1}r_{o}s^{2} + C_{5}C_{L}L_{1}R_{5}r_{o}s^{3} + 2C_{5}L_{1}R_{5}g_{m}r_{o}s^{2} + 4C_{5}L_{1}R_{5}s^{2} + C_{5}L_{1}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{1}R_{5}s^{2} + C_{L}L_{1}R_{5}s^{2}$ **10.569** INVALID-ORDER-569 $Z(s) = \left(\frac{L_{18}}{C_1 L_{18} s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_{58} s + 1}, \frac{R_L}{C_4 R_4 s + 1}\right)$ $L_1 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)$ $H(s) = \frac{L_1 \kappa_L s \left(-C_5 \kappa_5 r_o s + \kappa_5 g_m r_o + \kappa_5 - r_o \right)}{C_1 C_5 L_1 R_5 R_L r_o s^3 + C_1 L_1 R_5 R_L s^2 + C_1 L_1 R_5 r_o s^2 + C_5 L_1 R_5 R_L r_o s^3 + 2 C_5 L_1 R_5 R_L s^2 + C_5 L_1 R_5 r_o s^2 + C_5 R_5 R_L r_o s + C_L L_1 R_5 R_L g_m r_o s^2 + C_L L_1 R_5 R_L s^2 +$

 $H(s) = -\frac{L_{1}^{5}\left(C_{L}L_{L}S+L_{I}\right)\left(C_{S}L_{S}^{5}+C_{I}C_{L}L_{I}S+L_{I}\right)\left(C_{S}L_{S}^{5}+C_{I}C_{L}L_{I}S+L_{I$

 $L_1s(C_LR_Ls+1)(C_5R_5r_os-R_5g_mr_o-R_5+r_o)$

10.570 INVALID-ORDER-570 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

10.571 INVALID-ORDER-571 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.572 INVALID-ORDER-572 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L s^2 \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_5 L_1 L_L R_5 r_o s^4 + C_1 L_L L_L$

10.573 INVALID-ORDER-573 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1R_5R_Lr_os^4 + C_1C_5L_1R_5r_os^3 + C_1C_LL_1L_Lr_os^4 + C_1C_LL_1R_5r_os^3 + C_1C_LL_1R_5r_os^3 + C_1L_1R_5r_os^3 + C_1$

10.574 INVALID-ORDER-574 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_1L_LR_5R_c r_o s^4 + C_1C_2L_1L_LR_5R_Lr_o s^4 + C_1L_LL_Rs_r r_o s^4 + C_1L_L$

10.575 INVALID-ORDER-575 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_5R_Lr_os^5 + C_1C_5L_1L_LR_5r_os^4 + C_1C_5L_1R_5R_Lr_os^3 + C_1C_LL_1L_LR_5r_os^4 + C_1C_LL_1L_LR_5r_os^4 + C_1L_1L_LR_5r_os^4 + C_1L_1L_1L_Rr_os^4 + C_1L_1L_1L_1R_0s^4 + C_1L_1L_1L_1R_0s^4 + C_1L_1L_1L_1R_0s^4 + C_1L_1L_1L_1R_0s^4 + C_1L_1L_1L_1R_0s^4 + C_1L_1L_1L_1R_0s^4 + C_1L_1L_1L_1R_0$

10.576 INVALID-ORDER-576 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_5R_Lr_os^5 + C_1C_5L_1R_5R_Lr_os^3 + C_1C_LL_1L_LR_5R_Ls^4 + C_1C_LL_1L_LR_5r_os^4 + C_1C_LL_1L_LR_5r_os^4 + C_1C_LL_1R_5R_Ls^2 + C_1L_1R_5r_os^3 + C_1L_1R_5r_os^2 + C_1L_1R_5r_os^2 + C_1L_1R_5r_os^4 + C_1C_LL_1L_Rs_RL_s^4 + C_1C_LL_s^4 + C_1C_L$

10.577 INVALID-ORDER-577 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

10.578 INVALID-ORDER-578 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.579 INVALID-ORDER-579 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $L_1R_Ls\left(C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)$ **10.580** INVALID-ORDER-580 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.581 INVALID-ORDER-581 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.582 INVALID-ORDER-582 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_1 S^2 \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_1 L_L R_5 r_o s^5 + C_1 C_5 L_1 L_L R_5 s^4 + C_1 C_5 L_1 L_L r_o s^4 + C_1 C_5 L_1 L_L r_o s^4 + C_1 C_4 L_1 L_L r_o s^4 + C_5 C_4 L_1 L_L R_5 r_o s^5 + C_5 C_4 L_1 L_L R_5 r_$

10.583 INVALID-ORDER-583 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 s \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_L L_L R_S s^2 + C_L R_L s^2 + C_L R$

10.584 INVALID-ORDER-584 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

10.585 INVALID-ORDER-585 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_5R_Ls^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_LR_5s^4 + C_1C_5L_1L_Lr_os^4 + C_1C_5L_1R_5r_os^3 + C_1C_5L_1R_Lr_os^3 + C_1C_5L_1L_LR_5s^4 + C$

10.586 INVALID-ORDER-586 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_5 R_L s^5 + C_1 C_5 C_L L_1 L_L R_5 r_o s^5 + C_1 C_5 C_L L_1 L_L R_L r_o s^5 + C_1 C_5 L_L R_5 R_L r_o s^4 + C_1 C_5 L_1 R_5 R_L s^3 + C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_5 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 R_L r_o s^4 + C_1 C_L L_1 R_L r_o s^4 + C_1 C_L L_1 R_L r_o s^4 + C_1$

10.587 INVALID-ORDER-587 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 L_5 r_o s^4 + C_1 C_5 L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_L s^2 + C_5 L_5 R_L s^2 + C_5 L_5 r_o s^2 + C_5 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o r_o s^2 + C_5 R_L r_o s^$

10.588 INVALID-ORDER-588 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.589 INVALID-ORDER-589 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 L_5 r_o s^4 + C_1 C_5 L_1 L_5 r_o s^3 + C_1 L_1 R_L r_o s^3 + C_5 L_1 L_5 R_L r_o s^3 + C_5 L_5 R_L r_o s^3 +$

10.590 INVALID-ORDER-590 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.591 INVALID-ORDER-591 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.592 INVALID-ORDER-592 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L s^2 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_5 L_L r_o s^6 + C_1 C_5 L_1 L_5 r_o s^4 + C_1 L_5 L_5 r_o s^4 + C_5 L_5 r_o s^4 + C_5 L_5 L_5 r_o s^4 + C_5 L_5 L_5 r_o s^4 + C_5 L_5 r_o s^4 + C_5 L_5 L_5 r_o s^4 + C_5 L_5 r_o s^$

10.593 INVALID-ORDER-593 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.594 INVALID-ORDER-594 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Lr_os^6 + C_1C_5L_1L_5L_LR_Ls^5 + C_1C_5L_1L_5L_Lr_os^5 + C_1C_5L_1L_5R_Lr_os^4 + C_1C_5L_1L_LR_Lr_os^4 + C_1L_1L_LR_Ls^3 + C_1L_1L_LR_Ls^3 + C_1L_1L_LR_Lr_os^3 + C_1L_1L_LR_Lr_os^5 + C_5C_LL_1L_5L_LR_Ls^5 + C_5C_LL_1L_5L_LR_Ls^5 + C_5C_LL_1L_5L_LR_Lr_os^4 + C_1C_5L_1L_5L_LR_Lr_os^4 + C_1C_5L_1L_5L_Lr_os^4 + C_1C_5L_1L_5L_Lr_os^4 + C_1C_5L_1L_5L_Lr_os^4 + C_1C_5L_1L_5L$

10.595 INVALID-ORDER-595 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L r_o s^6 + C_1 C_5 C_L L_1 L_L R_L r_o s^5 + C_1 C_5 L_1 L_5 L_L s^5 + C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 L_5 r_o s^4 + C_1 C_5 L_1 L_L r_o s^4 + C_1 C_5 L_1 L_L R_L s^4 + C_1 C_4 L_1 L_L r_o s^4 + C_1 C_5 L_L r_o s^4 + C_1 C_5 L_L r_o s^4 + C_1 C_5 L_L r_$

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10.596 INVALID-ORDER-596 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 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)
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 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L r_o s^6 + C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 L_L L_1 L_5 R_L r_o s^5 + C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 L_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 R_L r_o s^5 + C_1 C_5 R_L r_o s^5 + C_1 C_5$

10.597 INVALID-ORDER-597 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_1 L_5 R_L r_o s^4 + C_1 L_1 L_5 r_o s^3 + C_1 L_1 L_5 r_o s^3 + C_1 L_1 R_L r_o s^2 + 2 C_5 L_1 L_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 r_o s^3 + C_5 L_5 r_o$

10.598 INVALID-ORDER-598 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

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

10.599 INVALID-ORDER-599 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_1 L_5 R_L r_o s^4 + C_1 L_1 L_5 R_L s^3 + C_1 L_1 L_5 r_o s^3 + C_1 L_1 L_5 R_L r_o s^4 + 2 C_5 L_1 L_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 R_L r_o s^3 + C_5 L_5 R$

10.600 INVALID-ORDER-600 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

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

10.601 INVALID-ORDER-601 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.602 INVALID-ORDER-602 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_1 L_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_1 L_5 L_L r_o s^4 + C_1 C_L L_1 L_5 L_L r_o s^4 + C_1 L_1 L_5 r_o s^2 + C_1 L_1 L_5 L_L r_o s^4 + 2 C_5 L_1 L_5 L_L r_o s^4 + 2 C_5 L_1 L_5 L_L r_o s^3 + 4 C_5 L_1 L_5 L_L r_o s^2 + C_5 L_5 L_L r_o s^3 + C_5 L_1 L_5 L_L r_o s^3 + C_5 L_5 L_L r_o s$

10.603 INVALID-ORDER-603 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5L_1L_5r_os^4 + C_1C_LL_1L_5R_Ls^5 + C_1C_LL_1L_5r_os^4 + C_1$

10.604 INVALID-ORDER-604 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_1 L_L R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_1 L_5 L_L R_L r_o s^4 + C_1 L_1 L_5 L_L R_L r_o s^4 + C_1 L_1 L_5 L_L R_L r_o s^2 + C_5 L_1 L_5 L_L R_L r_o s^4 + C_5 L_1 L_5 L_L R_L r_o s^3 + C_$

10.605 INVALID-ORDER-605 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_Lr_os^6 + C_1C_5L_1L_5L_Lr_os^5 + C_1C_5L_1L_5L_Lr_os^4 + C_1C_LL_1L_5L_Lr_os^5 + C_1C_LL_1L_5L_Lr_os^5 + C_1C_LL_1L_5L_Lr_os^4 + C_1L_1L_5L_Ls^4 + C_1L_1L_5R_Ls^3 + C_1L_1L_5r_os^3 + C_1L_1L_5r_os^3 + C_1L_1L_5r_os^3 + C_1L_1L_5r_os^4 + C_1L_1L_5$

10.606 INVALID-ORDER-606 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_Lr_os^6 + C_1C_5L_1L_5R_Lr_os^4 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_Lr_os^5 + C_1C_LL_1L_5R_Lr_os^4 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3 + C_1L_1R_Lr_os^4 + C_1L_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5R_Lr_os^4 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3 + C_1L_1R_Lr_os^4 + C_1L_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5L_LR_Ls^5 + C_1C_LL_1L_5R_Ls^5 + C_1C_LL_1L_5R_L$

10.607 INVALID-ORDER-607 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_5 L_1 R_5 r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_5 L_1 L_5 g_m r_o s^3 + C_5 L_1 R_5 g_m r_o s^3 + C_5 L_1 R_5 g_m r_o s^2 + C_5 L_1 R_5 g_m r_o$

10.608 INVALID-ORDER-608 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right)$

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

10.609 INVALID-ORDER-609 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_L s}{C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 R_L s^4 + C_1 C_5 L_1 L_5 r_o s^4 + C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_5 L_1 R_5 r_o s^3 + C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_L r_o s^3 +$

10.610 INVALID-ORDER-610 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 s \left(C_L R_L s + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 L_5 s^2 + C_5 L_5 r_o s^3 + C_1 C_5 L_1 L_5 r_o s^3 + C_1 C_5 L$

10.611 INVALID-ORDER-611 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{L_{1}s \left(\bigtriangledown_{L}L_{L}s + 1 \right) \left(\bigtriangledown_{5}L_{5}g_{m}r_{o}s + \bigtriangledown_{5}L_{5}g_{m}r_{o}s + r_{5}L_{5}g_{m}r_{o}s + r_{5}L_{5}g$

10.612 INVALID-ORDER-612 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L s}{C_1 C_5 C_L L_1 L_5 L_L r_o s^6 + C_1 C_5 C_L L_1 L_L R_5 r_o s^5 + C_1 C_5 L_1 L_5 L_L s^5 + C_1 C_5 L_1 L_L R_5 s^4 + C_1 C_5 L_1 L_L R_5 s^4 + C_1 C_5 L_1 L_L R_5 r_o s^4 + C_1 C_5 L_1 L_L R_$

10.613 INVALID-ORDER-613 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L s^6 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 L_L r_o s^5 + C_1 C_5 C_L L_1 L_L r_o s^5 + C_1 C_5 C_L L_1 R_5 r_o s^4 + C_1 C_5 C_L L_1 R_5 r_o s^4 + C_1 C_5 L_L R_5 r_o s^4 + C_1 C_$

10.614 INVALID-ORDER-614 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Lr_os^6 + C_1C_5L_LL_LR_5R_Lr_os^5 + C_1C_5L_1L_5L_LR_Ls^5 + C_1C_5L_1L_5R_Lr_os^4 + C_1C_5L_1L_LR_5r_os^4 + C_1C_5L_1L_1L_1R_5r_os^4 + C_1C_5L_1L_1R_5r_os^4 + C_1C_5L_1R_5r_os^4 + C_1C_5L_1R_5r_os$

10.615 INVALID-ORDER-615 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5L_Lr_0s^6 + C_1C_5C_LL_1L_LR_5R_Ls^5 + C_1C_5C_LL_1L_LR_5r_0s^5 + C_1C_5C_LL_1L_LR_5r_0s^5 + C_1C_5L_1L_5L_Ls^5 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_LR_5s^4 + C_1C_5L_1L_1L_1R_5s^4 + C_1C_5L_1L_1R_5s^4 + C_1C_5L$

10.616 INVALID-ORDER-616 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Ls^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_5R_Lr_os^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5R_Ls^3 + C_1C_5L_1R_5r_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_LR_5r_os^5 + C_1C_5C_LL_1L_5R_Ls^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5R_Ls^3 + C_1C_5L_1L_5R_Ls^5 + C_1C_5C_LL_1L_5R_Ls^5 + C_1C_5C_LL$

10.617 INVALID-ORDER-617 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{C_1 C_5 L_1 L_5 R_5 R_L r_o s^4 + C_1 L_1 L_5 R_5 r_o s^3 + C_1 L_1 L_5 R_5 r_o s^3 + C_1 L_1 R_5 R_L r_o s^2 + 2 C_5 L_1 L_5 R_5 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 R_5 R_L r_o s^3 + C_5 L_5 R_5 R_L r_o s^2 + L_1 L_5 R_5 g_m r_o s^2 + L_1 L_5 R_5 g_m r_o s^2 + 2 L_1 L_5 R_5 g_m r_o s^2 + 4 L_1 L$

10.618 INVALID-ORDER-618 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

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

10.619 INVALID-ORDER-619 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_1 C_5 L_1 L_5 R_5 R_L r_o s^4 + C_1 C_L L_1 L_5 R_5 R_L r_o s^4 + C_1 L_1 L_5 R_5 R_L r_o s^4 + C_1 L_1 L_5 R_5 R_L r_o s^3 + C_1 L_1 L_5 R_5 R_L r_o s^3 + C_1 L_1 L_5 R_5 R_L r_o s^3 + C_1 L_1 L_5 R_5 R_L r_o s^4 + C_2 L_1 L_5 R_5 R_L r_o s^4 + C_3 L_1 L_5 R_5 R_L r_o s^4 + C_5 L_1 L_5 R_5 R_L r_o s^4 + C_5 L_1 L_5 R_5 R_L r_o s^3 + C_5 L_5 R_5 R_L r_o s^4 + C_5$

- **10.620** INVALID-ORDER-620 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_5R_Lr_os^5 + C_1C_5L_1L_5R_5r_os^4 + C_1C_LL_1L_5R_5r_os^4 + C_1C_LL_1$
- **10.621** INVALID-ORDER-621 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_5r_os^6 + C_1C_5L_1L_5R_5r_os^4 + C_1C_LL_1L_5L_LR_5s^5 + C_1C_LL_1L_5L_Lr_os^5 + C_1C_LL_1L_5R_5r_os^4 + C_1L_1L_5R_5r_os^4 + C_1L_1L_5R_5r_o$
- 10.622 INVALID-ORDER-622 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_1 L_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 r_o s^2 + L_5 R_5 r_o$
- **10.623** INVALID-ORDER-623 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_5r_os^6 + C_1C_5C_LL_1L_5R_5R_Lr_os^5 + C_1C_LL_1L_5L_LR_5s^5 + C_1C_LL_1L_5L_Lr_os^5 + C_1C_LL_1L_5R_5r_os^4 + C_1$
- **10.624** INVALID-ORDER-624 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5L_LR_5R_Lr_os^4 + C_1C_LL_1L_5L_LR_5R_Lr_os^4 + C_1L_1L_5L_LR_5r_os^3 + C_1L_1L_5L_LR_5r_os^3 + C_1L_1L_5R_5R_Lr_os^2 + C_1L_1L_5L_LR_5R_Lr_os^2 + C_1L_1L_5L_LR_5R_Lr_os^4 + C_2L_1L_5L_LR_5R_Lr_os^3 + C_1L_1L_5L_LR_5r_os^3 + C_1L_5L_5L_5r_os^3 + C_1L_5L_5L_5r_os^3 + C_1L_5L_5L_5r_os^3 + C_1L$
- 10.625 INVALID-ORDER-625 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_RS_RL_ros^6 + C_1C_5L_1L_5L_RS_ros^5 + C_1C_5L_1L_5R_5R_Lros^4 + C_1C_LL_1L_5L_RS_ros^5 +$
- 10.626 INVALID-ORDER-626 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_RS_RL_ros^6 + C_1C_5L_1L_5R_5R_Lros^4 + C_1C_LL_1L_5L_RS_RL_s^5 + C_1C_LL_1L_5L_RS_ros^5 + C_1C_LL_1L_5L_RS_ros^5 + C_1C_LL_1L_5R_5R_Lros^4 + C_1C_LL_1L_5R_5R_Lros^4 + C_1L_1L_5R_5R_Lros^4 + C_1L_1L_5R_Lros^4 + C_1L_1L_5R_5R_Lros^4 + C_1L_1L_5R_5R_Lros^4 + C_1L_1L_5$
- **10.627** INVALID-ORDER-627 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{L_1 R_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 r_o\right)}{C_1 C_5 L_1 L_5 R_5 R_L s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^4 + C_1 L_5 L_5 R_5 r_o s^4 + C_1 L_1 L_5 r_o s^3 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^2 + C_1 L_1 R_5 r_o s^3 + C_5 L_1 L_5 R_5 g_m r_o s^3 + 2 C_5 L_1$

- **10.628** INVALID-ORDER-628 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_{1}s\left(C_{5}L_{5}R_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}R_{5}s^{2} C_{5}L_{5}r_{o}s^{2} + L_{5}g_{m}r_{o}s + L_{5}s + R_{5}g_{m}r_{o} + R_{5} r_{o}\right)}{C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}r_{o}s^{5} + C_{1}C_{5}L_{1}L_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}r_{o}s^$
- 10.629 INVALID-ORDER-629 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5R_Lr_os^5 + C_1C_5L_1L_5R_5R_Ls^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_LL_1L_5R_Lr_os^4 + C_1C_LL_1L_5R_Lr_os^4 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3 + C_1L_1R_5r_os^4 + C_1L_1R_5r_os^4 + C_1L_1L_5R_Ls^3 + C_1L_1L_5R_Ls^3$
- **10.630** INVALID-ORDER-630 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5R_Ls^5 + C_1C_5C_LL_1L_5R_5r_os^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5L_1L_5R_5s^4 + C_1C_LL_1L_5R_Ls^4 + C_1C_LL_1L_5R_Ls^4 + C_1C_LL_1R_5R_Ls^3 + C_1C_LL_1R_5r_os^3 + C_1L_1R_5s^3 + C$
- **10.631** INVALID-ORDER-631 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5R_5r_os^5 + C_1C_5L_1L_5R_5s^4 + C_1C_LL_1L_5r_os^4 + C_1C_LL_1L_5r_os^4$
- 10.632 INVALID-ORDER-632 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5r_os^6 + C_1C_5L_1L_5L_LR_5s^5 + C_1C_5L_1L_5L_Lr_os^5 + C_1C_5L_1L_5L_Lr_os^5 + C_1C_LL_1L_5L_Lr_os^5 + C_1C_LL_1L$
- 10.633 INVALID-ORDER-633 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_5 s^6 + C_1 C_5 C_L L_1 L_5 L_L r_o s^6 + C_1 C_5 C_L L_1 L_5 R_5 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 L_L L_5 R_L r_o s^5 + C_1 C_5 L_4 L_5 R_L r_o s^5 + C_1 C_5 L_5 R_L r_o$
- 10.634 INVALID-ORDER-634 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_RS_RL_ros^6 + C_1C_5L_1L_5L_RS_RL_s^5 + C_1C_5L_1L_5L_RS_ros^5 + C_1C_5L_1L_5L_RL_ros^5 +$
- 10.635 INVALID-ORDER-635 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_{I.} L_1 L_5 L_{I.} R_5 R_{I.} s^6 + C_1 C_5 C_{I.} L_1 L_5 L_{I.} R_5 r_o s^6 + C_1 C_5 L_1 L_5 L_{I.} R_5 r_o s^6 + C_1 C_5 L_1 L_5 L_{I.} R_5 r_o s^5 + C_1 C_5 L_1 L_5 L_{I.} r_o s^5 + C_1 C_5 L_1 L_5 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^4 + C_1 C_5 L_1 L_5 L_{I.} R_5 r_o s^4$

- 10.636 INVALID-ORDER-636 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_5 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_5 r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_L r_o s^6 + C_1 C_5 C_L L_1 L_5 R_L r_o s^6 + C_1 C_5 L_L r_o s^6$
- 10.637 INVALID-ORDER-637 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$

 $H(s) = \frac{L_1 R_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_5 r_o s$

10.638 INVALID-ORDER-638 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

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

10.639 INVALID-ORDER-639 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_5 R_L r_o s^5 + C_1 C_5 L_1 L_5 R_5 R_L s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_L r_o s^3 + C_1 L_1 R_5 R_L r_o s^3 + C_1 L_1 R_5 R_L s^2 + C_1 L_1 R_5 R_L s^2 + C_1 L_1 R_5 R_L s^3 + C_1 L_1 L_5 R_5 R_L s^4 + C_5 C_L L_1 L_5 R_5 R_L s^4 + C_5 C_L L_1 L_5 R_5 R_L r_o s^4 + C_5 C_L L_1 L_5 R_5 R_$

10.640 INVALID-ORDER-640 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_5 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_5 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 C_L L_1 L_5 R_5 r_o s^4 + C_1 C_5 L_5 L_5 R_5 r_o s^4 + C_1 C_$

10.641 INVALID-ORDER-641 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_5 s^6 + C_1 C_5 C_L L_1 L_5 L_L r_o s^6 + C_1 C_5 C_L L_1 L_5 R_5 r_o s^5 + C_1 C_5 L_L L_L R_5 r_o s^5 + C_1 C_5 L_L L_5 R_5 s^4 + C_1 C_5 L_1 L_5 R_5 s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^3 + C_1 L_1 L_2 R_5 r_o s^3 + C_1 L_1 L_2 R_5 r_o s^3 + C_1 L_2 L_2 L_2 R_5 r_o s^3 + C_1 L_2 L_2 L_2 R_5 r_o s^3 + C_1 L_2 R_5 r_$

10.642 INVALID-ORDER-642 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.643 INVALID-ORDER-643 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5R_5R_Ls^5 + C_1C_5C_LL_1L_5R_5r_os^5 + C_1C_5C$

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10.644 INVALID-ORDER-644 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
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 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5R_Lr_os^6 + C_1C_5L_1L_5L_LR_5r_os^5 + C_1C_5L_1L_5L_LR_5r_os^5 + C_1C_5L_1L_5L_LR_5r_os^5 + C_1C_5L_1L_5R_5R_Lr_os^4 + C_1C_5L_1L_LR_5R_Lr_os^4 + C$

10.645 INVALID-ORDER-645
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_5 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_5 r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_5 r_o s^6 + C_1 C_5 L_L L_L R_5 R_L r_o s^5 + C_1 C_5 L_1 L_5 L_L R_5 r_o s^5 + C_1 C_5 L_1 L_5 R_L r_o s^5 + C_1 C_5 L_1 L_5 R_L$

10.646 INVALID-ORDER-646
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5R_Ls^6 + C_1C_5C_LL_1L_5L_LR_5r_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5R_5R_Lr_os^5 + C_1C_5L_1L_5R_5R_Ls^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_5r$

10.647 INVALID-ORDER-647
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$$

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

10.648 INVALID-ORDER-648
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_1 R_5 R_L s^3 + C_1 C_L R_1 R_5 R_L g_m r_o s^2 + C_1 C_L R_1 R_5 R_L s^3 + C_1 C_L R_1 R_5 R_L g_m r_o s^2 + C_1 L_1 R_5 g_m r_$$

10.649 INVALID-ORDER-649
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.650 INVALID-ORDER-650
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.651 INVALID-ORDER-651
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_5 g_m r_o s^4 + C_1 C_L L_L L_L R_5 g_m r_o s^3 + C_1 C_L L_L R_1 R_5 g_m r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 r_o s^3 + C_1 C_$$

10.652 INVALID-ORDER-652 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_1L_1s^2 + C_1R_1s + 1)(r_1s^2 + C_1L_1L_1s^3 + C_1C_LL_1R_1s^3 + C_1C_$

10.653 INVALID-ORDER-653 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

10.654 INVALID-ORDER-654 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1 C_L L_1 L_L R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_5 s^4 + 2 C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 4 C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_L R_1 R_5 g_m r_o s^3 + C_1 C_L L_L R_1 R_2 g_m r_o s^3 + 4 C_1 C_L L_L R_1 R_L g_m r_o s^3 + 4 C_1 C_L L_L R_1 R_2 g_m r_o s^3 + C_1 C_L L_L R_1 R_2 g_m r_o s^3 + 4 C_1 C_L L_L R_1 R_2 g_m r_o s^3 + C_1 C_L R_$

10.655 INVALID-ORDER-655 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_1 C_L L_1 L_L R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_5 s^4 + 2 C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 4 C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_2 g_m r_o s^3 + C_1 C_L L_1 R_$

10.656 INVALID-ORDER-656 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 R_L s^2 + C_1 C_5 R_1 r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$

10.657 INVALID-ORDER-657 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.658 INVALID-ORDER-658 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_1 R_L r_o s^4 + C_1 C_5 C_L R_1 R_L r_o s^3 + 2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_L g_m r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^3 + 2 C_1 C_5 R_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_L g_m r_o s^3 + C_1 C_L R_1 R_L g_m r_o s^3 + C_1$

10.659 INVALID-ORDER-659 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $(C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (-C_5 r_o s + g_m r_o + 1)$ $\begin{aligned} & \textbf{10.660 INVALID-ORDER-660 } Z(s) = \left(L_{1}s + R_{1} + \frac{1}{C_{1}s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{5}s}, \ L_{L}s + \frac{1}{C_{L}s}\right) \\ & H(s) = \frac{\left(C_{L}L_{L}s^{2} + 1\right)\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(-C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(2C_{1}C_{5}C_{L}L_{L}L_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}g_{m}r_{o}s^{3} + 2C_{1}C_{5}C_{L}L_{L}R_{1}s^{3} + C_{1}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{1}C_{5}L_{L}r_{o}s^{3} + C_{1}C_{5}L_{L}g_{m}r_{o}s^{2} + 4C_{1}C_{5}L_{1}g_{m}r_{o}s^{2} + 4C_{1}C_{5}L_{1}s^{2} + C_{1}C_{5}R_{1}g_{m}r_{o}s + 4C_{1}C_{5}R_{1}s + C_{1}C_{5}r_{o}s + C_{1}C_{L}L_{1}g_{m}r_{o}s^{2} + C_{1}C_{L}L_{1}s^{2} + C_{1}C_{5}L_{1}s^{2} + C_{1}C_{5}L_{1}L_{1}s^{2} + C_{1}C_{5}L$

10.662 INVALID-ORDER-662 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_1L_1s^2 + C_2L_1L_2g_mr_os^4 + 4C_1C_5C_LL_1L_2s^4 + 2C_1C_5C_LL_1R_Lg_mr_os^3 + 4C_1C_5C_LL_1R_1g_mr_os^3 + 4C_1C_5C_LL_1R_1g_mr_os^3 + 4C_1C_5C_LL_1R_1g_mr_os^3 + 4C_1C_5C_LL_1R_1s^3 + C_1C_5C_LL_1R_1s^3 + C_1C_5C_LR_1R_1s^3 + C_1C_5C_LR_1s^3 + C_1C_5C_LR_1$

10.663 INVALID-ORDER-663 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_Lr_os^5 + C_1C_5C_LL_LR_1R_Lr_os^4 + 2C_1C_5L_1L_LR_Lg_mr_os^4 + 4C_1C_5L_1L_LR_us^4 + C_1C_5L_1L_Lr_os^4 + C_1C_5L_1R_Lr_os^3 + 2C_1C_5L_LR_1R_Lg_mr_os^3 + 4C_1C_5L_LR_1R_Ls^3 + C_1C_5L_LR_1r_os^3 + C_1C_5L_RR_1r_os^3 + C_1C_5L_R$

10.664 INVALID-ORDER-664 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.665 INVALID-ORDER-665 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

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

10.666 INVALID-ORDER-666 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

 $H(s) = -\frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{2 C_1 C_5 L_1 R_5 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_5 r_o s^3 + 2 C_1 C_5 R_1 R_5 R_L g_m r_o s^2 + 4 C_1 C_5 R_1 R_5 r_o s^2 + C_1 L_1 R_5 g_m r_o s^2 + C_1 L_1 R_5 g_m r_o s^2 + 4 C_1 L_1 R_L g_m r_o s^2 + C_1 L_1 R_L g_m r_o s^2 + C_1 L_1 R_L g_m r_o s^2 + C_1 R_1 R_5 g_m r_o s^2 + C_1$

10.667 INVALID-ORDER-667 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

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

- **10.668** INVALID-ORDER-668 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1R_5R_Lr_os^4 + C_1C_5C_LR_1R_5R_Lr_os^3 + 2C_1C_5L_1R_5R_Lg_mr_os^3 + 4C_1C_5L_1R_5R_Ls^3 + C_1C_5L_1R_5r_os^3 + 2C_1C_5R_1R_5R_Lg_mr_os^2 + 4C_1C_5R_1R_5r_os^2 + C_1C_5R_1R_5r_os^2 + C_1C_5R_1R_5r_os^2 + C_1C_5R_1R_5r_os^3 + C_1C_LL_1R_5R_Lg_mr_os^3 + C_1C_LL_1R_$
- 10.669 INVALID-ORDER-669 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}C_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{3} + 4C_{1}C_{5}C_{L}R_{1}R_{5}r_{o}s^{3} + 4C_{1}C_{5}C_{L}R_{1}R_$
- 10.670 INVALID-ORDER-670 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{L}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}$
- 10.671 INVALID-ORDER-671 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- **10.672** INVALID-ORDER-672 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + 2C_{1}C_{5}C_{L}L_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C$
- 10.673 INVALID-ORDER-673 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_5R_Lr_os^5 + C_1C_5C_LL_LR_1R_5R_Lr_os^4 + 2C_1C_5L_1L_LR_5R_Lg_mr_os^4 + 4C_1C_5L_1L_LR_5R_Ls^4 + C_1C_5L_1L_LR_5r_os^4 + C_1C_5L_1R_5R_Lr_os^3 + 2C_1C_5L_LR_1R_5R_Lg_mr_os^3 + 4C_1C_5L_LR_1R_5R_Ls^3 + C_1C_5L_LR_1R_5R_Lr_os^3 + C_$
- 10.674 INVALID-ORDER-674 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + 4C_{1}C_{5}L_{L}L_{R}R_{5}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}$
- 10.675 INVALID-ORDER-675 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{5}R_{L}r_{o}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R$

 $H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 R_5 g_m r_o s^3 + C_1 C_5 R_1 R_5 g_m r_o s^2 + C_1 C_5 R_1 R_$

10.683 INVALID-ORDER-683
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.682 INVALID-ORDER-682 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.676 INVALID-ORDER-676 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 R_L s^5 + C_1 C_5 C_L L_L R_1 R_5 R_L g_m r_o s^4 + C_1 C_5 C_L L_L R_1 R_5 R_L s^4 + C_1 C_5 C_$

 $H(s) = \frac{1}{s \cdot (2C_1C_5C_LL_1L_Lg_mr_os^4 + 4C_1C_5C_LL_1L_Ls^4 + C_1C_5C_LL_1R_5g_mr_os^3 + C_1C_5C_LL_1R_Lg_mr_os^3 + 4C_1C_5C_LL_1R_cs^3 + 2C_1C_5C_LL_1R_ss^3 + 2C_1C_5C_$

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10.684 INVALID-ORDER-684 Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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$$H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + 2C_{1}C_{5}C_{L}L_{1}L_{L}R_{2}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{2}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{2}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{2}s^{4} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}s^{4} + 2C_{1}C_{5}C_{L}L_{L}R_{1}R_{2}s^{4} + 4C_{1}C_{5}C_{L}L_{L}R_{1}R_{2}s^{4} +$$

10.685 INVALID-ORDER-685
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_1C_5C_LL_1L_LR_5g_mr_os^5 + C_1C_5C_LL_1L_LR_5s^5 + 2C_1C_5C_LL_1L_LR_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_cs^5 + C_1C_5C_LL_1L_LR_ss^5 + C_1C_5C_LL_1R_5R_Lg_mr_os^4 + C_1C_5C_LL_1R_5R_Ls^4 + C_1C_5C_LL_1R_Lr_os^4 + C_1C_5C_LL_1R_LR_ss^6 + C_1C_5C_LL_1R_LR_ss^6 + C_1C_5C_LL_1R_LR_ss^6 + C_1C_5C_LL_1R_ss^6 + C_1C_$$

10.686 INVALID-ORDER-686
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 L_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 s^4 + 2 C_1 C_5 L_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 r_o s^3 + C_1 C_5 L_5 R_1 g_m r_o s^3 + C_1 C_5 L_5 R_1 s^3 + C_1 C_5 L_5 R_1 s^3 + C_1 C_5 L_5 R_1 r_o s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_5 R_1 r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 C_5 R_1 r_o s^2 + C_1 C_$$

10.687 INVALID-ORDER-687
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.688 INVALID-ORDER-688
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 R_L r_o s^4 + C_1 C_5 C_L L_5 R_1 R_L g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_1 R_L r_o s^4 +$$

10.689 INVALID-ORDER-689
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1)^2}{s \cdot (C_1 C_5 C_L L_1 L_5 g_m r_o s^4 + C_1 C_5 C_L L_1 L_5 s^4 + 2 C_1 C_5 C_L L_1 R_L g_m r_o s^3 + 4 C_1 C_5 C_L L_1 R_L s^3 + C_1 C_5 C_L L_5 R_1 g_m r_o s^3 + C_1 C_5 C_L L_5 R_1 s^3 + C_1 C_5$$

10.690 INVALID-ORDER-690
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L L_L s^2 + C_L L_L L_S g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L L_L g_m r_o s^4 + C_1 C_5 C_L L_L R_L g_$$

10.691 INVALID-ORDER-691
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L s^6 + C_1 C_5 C_L L_1 L_L r_o s^5 + C_1 C_5 C_L L_5 L_L R_1 g_m r_o s^5 + C_1 C_5 C_L L_5 L_L R_1 s^5 + C_1 C_5 C_L L_5 L_L R_1 r_o s^4 + C_1 C_5 L_1 L_5 g_m r_o s^4 + C_1 C_5 L_5 L_5 g_m r_o s^4 + C_1 C_5 L_5 g_m r_o s^4 + C_1 C_5 L_5 g_m r_o s^4 + C_1 C_5 g_m r_o s^4 + C_1 C_5 g_m r_o s^4 + C_1 G_5 g_m$$

10.692 INVALID-ORDER-692 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.693 INVALID-ORDER-693 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_Ls^6 + C_1C_5C_LL_5L_LR_1R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1R_1R_1S^5 + C_1C_5C_LL_5L_1R_1R_1S^5 + C_1C_5C_LL_5L_1R_1S^5 + C_1C_5C_LL_5C_1R_1S^5 + C_1C_5C_LL_5C_1R_1S^5 + C_1C_5C_LL_5C_1R_1S^5 + C_1C_5C_1R_1S^5 + C_1C_5C_1R_1S^5 + C_1C_5C_1R$

10.694 INVALID-ORDER-694 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_Ls^6 + 2C_1C_5C_LL_1L_LR_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_Ls^5 + C_1C_5C_LL_5L_LR_1g_mr_os^5 + C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5L_RR_1s^5 + C_1C_5C_LL_5L_RR_1s^$

10.695 INVALID-ORDER-695 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

10.696 INVALID-ORDER-696 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = -\frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{2 C_1 C_5 L_1 L_5 R_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_5 r_o s^4 + 2 C_1 C_5 L_5 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_5 R_1 r_o s^3 + C_1 L_1 L_5 g_m r_o s^3 + C_1 L_1 R_1 g_m r_o s^3 +$

10.697 INVALID-ORDER-697 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

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

10.698 INVALID-ORDER-698 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_5R_1R_Lr_os^4 + 2C_1C_5L_1L_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5r_os^4 + 2C_1C_5L_5R_1R_Lg_mr_os^3 + 4C_1C_5L_5R_1R_Ls^3 + C_1C_5L_5R_1r_os^3 + C_1C_5L_5R_Lr_os^3 + C_1C_5L_5R_Lr_os^4 + C_1C_LL_5R_Lg_mr_os^4 + 4C_1C_5L_5R_Lg_mr_os^4 + 4C_1C_5L_5R_Lg_mr_o$

10.699 INVALID-ORDER-699 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

- 10.700 INVALID-ORDER-700 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + 4C_{1}C_{5}L_{L}L_{5}L_{c}s^{6} + 4C_{1}C_{5}L_{c}L_{5}L_{c}s^{6} + 4C_{1}C_{5}L_{c}L_{c}s^{6} + 4C_$
- 10.701 INVALID-ORDER-701 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_5L_LR_1r_os^5 + 2C_1C_5L_1L_5L_Lg_mr_os^5 + 4C_1C_5L_1L_5L_Ls^5 + C_1C_5L_1L_5r_os^4 + 2C_1C_5L_5L_LR_1g_mr_os^4 + 4C_1C_5L_5L_LR_1s^4 + C_1C_5L_5L_LR_1s^4 + C_1C_5L_5L_1s^4 + C_1C_5L_5L_1s^4 + C_1C_5L_5L_1s^4 + C_1C_5L_5L_1s^4 + C_1C_5L_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^4 + C_1C_5L_1s^$
- 10.702 INVALID-ORDER-702 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}s^{6} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5$
- 10.703 INVALID-ORDER-703 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_Lr_os^6 + C_1C_5C_LL_5L_LR_1R_Lr_os^5 + 2C_1C_5L_1L_5L_LR_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_Ls^5 + C_1C_5L_1L_5L_Lr_os^5 + C_1C_5L_1L_5L_LR_1r_os^4 + 2C_1C_5L_5L_LR_1R_Lg_mr_os^4 + 4C_1C_5L_5L_LR_1R_Ls^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5L_RR_1r_os^4 + C_1C_5L_RR_1r_os^4 + C_1C_$
- 10.704 INVALID-ORDER-704 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{s}s^{6} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{$
- 10.705 INVALID-ORDER-705 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{c}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1$
- 10.706 INVALID-ORDER-706 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 L_5 s^2 + C_5 L_5 s^2 + C_5 L_5 r_o s^3 + C_1 C_5 L_1 L_5 g_m r_o s^3 + C_1 C_5 L_1 R_5 g_m r_$
- 10.707 INVALID-ORDER-707 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{1}L_{1}s^{2} + C_{1}R_{1}s + 1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{$

- 10.708 INVALID-ORDER-708 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 R_5 R_L g_m r_o s^4 + C_1 C_5 C_L L_1 R_5 R_L g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_L g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_L s^4 + C_1 C_5 C_L L_5 R_1 R_L s^4 + C_1 C_5 C_L L_5 R_L s^4 + C_1$
- **10.709** INVALID-ORDER-709 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{L}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{$
- 10.710 INVALID-ORDER-710 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + 2C_{1}C_{5}C_{L}L_{1}L_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{5}R_{1}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}s^{3} + C_{1}C_{5}C_{L}L_{5}R_{5}s^{3} + C_{1}C_$
- 10.711 INVALID-ORDER-711 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_LR_5g_mr_os^5 + C_1C_5C_LL_1L_Lr_os^5 + C_1C_5C_LL_5L_LR_1g_mr_os^5 + C_1C_5C_LL_5L_LR_1s^5 + C_1C_5C_LL_5L_RR_1s^5 + C_1C_5C_LL_5L_RR_1s^5$
- 10.712 INVALID-ORDER-712 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{1}C_{5}C_{L}L_{1}L_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}L_{5}s^{4} + 2C_{1}C_{5}C_{L}L_{1}L_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{3} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{L}s^{$
- 10.713 INVALID-ORDER-713 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_Ls^6 + C_1C_5C_LL_1L_LR_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_LR_5R_Ls^5 + C_1C_5C_LL_1L_LR_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1R_Ls^5 + C_1C_5C_LL_5L_LR_1R_2s^5 + C_1C_5C_LL_5L_LR_1R_2s^5 + C_1C_5C_LL_5L_LR_1R_2s^5 + C_1C_5C_LL_5L_LR_1R_2s^5 + C_1C_5C_LL_5L_LR_1R_2s^5 + C_1C_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5L_RR_1R_2s^5 + C_1C_5C_LL_5L_2R_2s^5 + C_1C_5C_LL_5C$
- 10.714 INVALID-ORDER-714 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L g_m r_o s^6 + C_1 C_5 C_L L_1 L_L R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 s^5 + 2 C_1 C_5 C_L L_1 L_L R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 g_m r_o s^5 + C_1 C_5 C_L R_1 R_1 g_m r_o s^5 + C_1 C_5 C_$
- 10.715 INVALID-ORDER-715 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L s^6 + C_1 C_5 C_L L_1 L_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 g_$

- **10.716** INVALID-ORDER-716 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{5}R_{L}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{5}R_{1}R_{5}R_{L}s^{3} + C_{1}C_{5}L_{5}R_{1}R_{5}r_{o}s^{3} + C_{1}C_{5}L_{5}R_{1}R_{5}r_{o}s^{3} + C_{1}L_{1}L_{5}R_{5}g_{m}r_{o}s^{3} + C_{1}L_{1}L_{5}R_{5}s^{3} + 2C_{1}L_{1}L_{5}R_{5}s^{3} + 2C_{1}L_{1}L_{5}R_{5}s$
- 10.717 INVALID-ORDER-717 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_5r_os^5 + C_1C_5C_LL_5R_1R_5r_os^4 + 2C_1C_5L_1L_5R_5g_mr_os^4 + 4C_1C_5L_5R_1R_5g_mr_os^3 + 4C_1C_5L_5R_1R_5s^3 + C_1C_5L_5R_5r_os^3 + C_1C_LL_1L_5R_5g_mr_os^4 + C_1C_LL_1L_5R_5$
- 10.718 INVALID-ORDER-718 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_5R_Lr_os^5 + C_1C_5C_LL_5R_1R_5R_Lr_os^4 + 2C_1C_5L_1L_5R_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_5R_Ls^4 + C_1C_5L_5R_1R_5R_Lg_mr_os^4 + 4C_1C_5L_5R_1R_5R_Ls^4 + C_1C_5L_5R_1R_5R_Lg_mr_os^4 + 4C_1C_5L_5R_5R_Lg_mr_os^4 + 4C_1C_5L_5$
- 10.719 INVALID-ORDER-719 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{5}R_{5}R_{L}r_{o}s^{4} + 4C_{1}C_{5}L_{L}L_{5}R_{5}R_{L}r_{o}s^{4} + 4C_{1}C_{5}L_{L}L_{5}R_{5}R_{L}r_{$
- 10.720 INVALID-ORDER-720 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5$
- 10.721 INVALID-ORDER-721 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_5r_os^6 + C_1C_5L_LL_2L_Rs_5r_os^5 + 2C_1C_5L_1L_5L_Rs_5r_os^5 + 4C_1C_5L_1L_5L_Rs_5r_os^4 + 2C_1C_5L_5L_LR_1R_5g_mr_os^4 + 4C_1C_5L_5L_LR_1R_5s^4 + C_1C_5L_5L_LR_1r_os^4 + C_1C_5L_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_$
- 10.722 INVALID-ORDER-722 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{$
- 10.723 INVALID-ORDER-723 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

- 10.724 INVALID-ORDER-724 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 4C_{$
- 10.725 INVALID-ORDER-725 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}R_{L$
- 10.726 INVALID-ORDER-726 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5R_5s^4 + 2C_1C_5L_1L_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_Ls^4 + C_1C_5L_5R_1R_5g_mr_os^3 + C_1C_5L_5R_1R_Lg_mr_os^3 + 4C_1C_5L_5R_1R_Ls^3 + C_1C_5L_5R_1R_Ls^3 + C_1C_5L_5R$
- 10.727 INVALID-ORDER-727 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_5s^5 + C_1C_5C_LL_1L_5r_os^5 + C_1C_5C_LL_5R_1R_5g_mr_os^4 + C_1C_5C_LL_5R_1r_os^4 + C_1C_5C_LL_5R_1r_os^4 + C_1C_5C_LL_5R_5r_os^4 + 2C_1C_5L_1L_5g_mr_os^4 + 4C_1C_5L_1L_5s^4 + 2C_1C_5L_5R_1g_mr_os^3 + 4C_1C_5L_5R_1s^3 + C_1C_5L_5R_1s^3 + C_1C_5C_LL_5R_1r_os^4 + C_1C_5C_LL_5R_1r_o$
- 10.728 INVALID-ORDER-728 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_5R_Ls^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_5R_1R_5R_Lg_mr_os^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_Lr_os^4 + C_1C_5C_LL_5R_5R_Lr_os^4 + C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_5R_Lr_os^4 + C_1C_5C_LL_5R_Lr_os^4 + C_1C_5C_LL_5R_Lr_os^4 + C_1C_5C_LL_5R_Lr_os^4 + C_1C$
- 10.729 INVALID-ORDER-729 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_5 s^5 + 2 C_1 C_5 C_L L_1 L_5 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_5 R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_5 g_m r_o s^4 + 4 C_1 C_5 C_L L_5 R_1 R_5 g_m r_o s^4 + 4 C_1 C_5 C_L L_5 R_1 R_5 g_m r_o s^4 + 4 C_1 C_5 C_L L_5 R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_5 R_1 R_5 g_m r_o$
- 10.730 INVALID-ORDER-730 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{c}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{5}L_$
- 10.731 INVALID-ORDER-731 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_5L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_os^5 + C_1C_5C_LL_5L_RR_1r_os$

- 10.732 INVALID-ORDER-732 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m$
- 10.733 INVALID-ORDER-733 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5R_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5R_Ls^6 + C_1C_5C_LL_5L_LR_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_Rs^5 + C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_Rs^5 + C_1C_5C$
- 10.734 INVALID-ORDER-734 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_1g_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_5L_LR_1s^6 + C_1C_5C_LL_5L_Rs^6 + C_$
- 10.735 INVALID-ORDER-735 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_2g_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_2s^6 + C_1C_5C_LL_1L_5L_LR_2s^6 + C_1C_5C_LL_1L_5L_1L_2s^6 + C_1C_5C_LL_1L_3L_2s^6 + C_1C_5C_LL_1L_3L_2s^6 + C_1C_5C_LL_1L_3L_2s^6 + C_1C_5C_LL_1L_3L_2s^6 + C_1C_5C_LL_3L_3L_2s^6 + C_1C_5C_LL_3L_3L_3c^6 + C_1C_5C_LL_3L_3c^6 + C_1C_5C_LL_3c^6 +$
- 10.736 INVALID-ORDER-736 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_5g_mr_os^4 + C_1C_5L_1L_5R_5s^4 + 2C_1C_5L_1L_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5r_os^4 + 2C_1C_5L_1R_5R_Lg_mr_os^3 + 4C_1C_5L_1R_5R_Ls^3 + C_1C_5L_5R_1R_5g_mr_os^3 + C_1C_5L_5R_1R_5g_mr_os^3 + C_1C_5L_5R_1R_5g_mr_os^3 + 4C_1C_5L_5R_1R_5g_mr_os^3 + 4C_1C_5L_5R_5g_mr_os^3 + 4C$
- 10.737 INVALID-ORDER-737 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_5s^5 + C_1C_5C_LL_1L_5r_os^5 + C_1C_5C_LL_1R_5r_os^4 + C_1C_5C_LL_5R_1R_5g_mr_os^4 + C_1C_5C_LL_5R_1R_5s^4 + C_1C_5C_LL_5R_1r_os^4 + C_1C$
- 10.738 INVALID-ORDER-738 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_5R_Ls^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_1R_5R_Lr_os^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_5R_Ls^4 + C_1C_5C_LL_5R_1R_5R_Lr_os^4 + C_1C$
- **10.739** INVALID-ORDER-739 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_5s^5 + 2C_1C_5C_LL_1L_5R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_5r_os^5 + 2C_1C_5C_LL_1R_5R_Lg_mr_os^4 + 4C_1C_5C_LL_1R_5r_os^4 + C_1C_5C_LL_1R_5r_os^4 + C_1C_5C_LL_1R_5r_o$

- 10.740 INVALID-ORDER-740 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{c}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{5$
- 10.741 INVALID-ORDER-741 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_5L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5s^5 + C_1C_5C_LL_5L_LR_1r_os^5 + C_1C_5C_LL_5L_1r_os^5 + C_1C_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C$
- 10.742 INVALID-ORDER-742 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}g_{m}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{5}s^{6} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L$
- 10.743 INVALID-ORDER-743 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5R_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5R_Ls^6 + C_1C_5C_LL_1L_5L_LR_5R_Lr_os^6 + C_1C_5C_LL_5L_LR_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_5L_LR_1R_5R_Ls^5 + C_1C_5C_LL_5L_LR_1R_5R_Ls^6 + C_1C_5C_LL_5L_Rs^6 + C_1C_5C_LL$
- 10.744 INVALID-ORDER-744 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_5 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_5 s^6 + 2 C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + 4 C_1 C_5 C_L L_1 L_5 L_L R_5 r_o s^6 + 2 C_1 C_5 C_L L_1 L_L R_5 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 r_o s^5 + C_1 C_5$
- 10.745 INVALID-ORDER-745 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + 2C_1C_5C_LL_1L_5L_LR_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_LR_5s^6 + C_1C_5C_LL_1L_5L_RS_5s^6 + C_1C_5C_LL_1L_5C_LL_$
- **10.746** INVALID-ORDER-746 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_1 R_1 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 s^2 + C_L L_1 R_1 R_5 g_m r_o s^2 + C_L L_1 R_1 R_5 s^2 + C_L L_1 R_1 r_o s^2 +$$

- 10.747 INVALID-ORDER-747 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{L_1 R_1 R_L s \left(R_5 g_m r_o + R_5 r_o\right)}{C_1 C_L L_1 R_1 R_5 R_L r_o s^3 + C_1 L_1 R_1 R_5 R_L s^2 + C_1 L_1 R_1 R_5 r_o s^2 + C_L L_1 R_1 R_5 R_L g_m r_o s^2 + C_L L_1 R_1 R_5 R_L s^2 + C_L L_1 R_1 R_5 R_L r_o s^2 + C_L L_1 R_1 R_5$

10.748 INVALID-ORDER-748
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 R_1 s \left(C_L R_L s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 R_1 R_5 r_o s^3 + C_1 C_L L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 s^2 + C_L L_1 R_1 R_5 s^2 + C_L L_1 R_1 R_5 s^2 + 2C_L L_1 R_1 R_5 s^2 + 2C_L L_1 R_1 R_5 r_o s^2 + C_L L_1 R_1 r_o s^2$$

10.749 INVALID-ORDER-749
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 R_1 s \left(C_L L_L s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 r_o s^2 + 2 C_L L_1 L_L R_1 g_m r_o s^3 + 4 C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 R_1 R_5 s^2 + C_L L_1 R_1 r_o s^2 + C_L L_1 R_1$$

10.750 INVALID-ORDER-750
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_1 L_L R_1 s^2 \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_1 R_5 r_o s^4 + C_1 L_1 L_L R_1 r_o s^3 + C_1 L_1 L_L R_1 r_o s^3 + C_L L_1 r_o s^3 + C_L r_o s^$$

10.751 INVALID-ORDER-751
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_1 R_1 s \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(R_1 s \left(C_L L_L s + 1\right) \left(R_1 s \left(C$$

10.752 INVALID-ORDER-752
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_1 L_L R_1 R_5 r_L r_o s^4 + C_1 L_1 L_L R_1 R_5 r_L r_o s^3 +$$

10.753 INVALID-ORDER-753
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 R_L s^4 + C_1 C_L L_1 L_L R_1 R_5 r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 r_o s^4 + C_1 L_1 L_L R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 r_o s^2 + C_1 L_1 R_1 R_5 r_o s^2 + C_1 L_1 R_1 R_5 r_o s^3 + C_1 L_1 L_L R_1 R_5 r_$$

10.754 INVALID-ORDER-754
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 R_L s^4 + C_1 C_L L_1 L_L R_1 R_5 r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 r_o s^3 + C_1 L_1 L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 r_o s^3 + C_1 L_1 L_1 R_1 R_5 r_o s^3 + C_1$$

10.755 INVALID-ORDER-755
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{L_1 R_1 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + 2 C_5 L_1 R_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_1 R_L s^2 + C_5 L_1 R_1 r_o s^2 + C_5 L_1 R_L r_o s^2 + C_5 R_1 R_L r_o s + L_1 R_1 g_m r_o s + L_1 R_1 s + L_1 R_L s + L_1 r_o s + R_1 R_L + R_1 r_o s^2 + C_5 R_1 R_L r_o s^2 + C$$

10.756 INVALID-ORDER-756 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 R_1 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 R_1 r_o s^3 + C_1 L_L R_1 r_o s^3 + C_1 L_L R_1 r_o s^3 + 2 C_5 L_1 R_1 g_m r_o s^2 + 4 C_5 L_1 R_1 s^2 + C_5 L_1 r_o s^2 + C_5 L_1 r_o s + C_L L_1 R_1 g_m r_o s^2 + C_L L_1 R_1 s^2 + C_L L_1 r_o s^2 + C_L R_1 r_o s + L_1 s + R_1 r_o s^2 + C_1 R_1 r_o s^2 + C_2 R_1 r_o s^2$

10.757 INVALID-ORDER-757 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_1 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 R_1 R_L r_o s^3 + C_1 L_L R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_5 L_L R_1 R_L r_o s^3 + 2 C_5 L_1 R_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_1 R_L s^2 + C_5 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L g_m r_o s^2 + C_1 L_1 R_1 R_L r_o s^3 + C_1 L_1$

10.758 INVALID-ORDER-758 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 R_1 s \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_5 C_L L_1 R_1 R_L s^3 + C_5 C_L L_1 R_1 r_o s^3$

10.759 INVALID-ORDER-759 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 R_1 s \left(C_L L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_5 C_L L_1 L_L R_1 s^4 + C_5 C_L L_1 L_L R_1 r_o s^3 + C_5 C_L L_1 R_1 r_o s^3 + C_5 C_L R_1 r_o s^3 + C_5 C$

10.760 INVALID-ORDER-760 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L R_1 s^2 \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 L_L R_1 r_o s^4 + C_1 L_L L_L R_1 r_o s^4 + C_1 L_L L_L R_1 r_o s^4 + C_5 L_L L_L R_1 r_o s^4 + 2 C_5 L_L L_L R_1 g_m r_o s^3 + 4 C_5 L_1 L_L R_1 s^3 + C_5 L_1 L_L R_1 r_o s^2 + C_5 L_L L_L R_1 r_o s^3 + C_5 L_1 R$

10.761 INVALID-ORDER-761 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 R_1 s \left(-C_5 r_o s + g_m r_o + 1\right) \left(-C_5 r_o s + g_m r_o +$

10.762 INVALID-ORDER-762 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_1L_LR_1R_Lr_os^4 + C_1C_LL_1L_LR_1R_Lr_os^4 + C_1L_LL_Rr_0s^4 + C_1L_LL_Rr_0s^4 + C_1L_LL_Rr_0s^4 + C_1L_LL_Rr_0s^4 + C_2L_LL_Rr_0s^4 + C_3L_LL_Rr_0s^4 + C_3L_LL$

10.763 INVALID-ORDER-763 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_5 L_1 L_L R_1 r_o s^4 + C_1 C_5 L_1 R_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 L_L L_L R_1 r_o s^4$

- 10.764 INVALID-ORDER-764 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_Lr_os^5 + C_1C_5L_1R_1R_Lr_os^3 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_1r_os^4 + C_1C_LL_1R_1R_Ls^2 + C_1L_1R_1R_Ls^2 + C_1L_1R_1R_Ls^2 + C_1L_1R_1R_Ls^2 + C_1L_1R_1R_Ls^4 + C_5C_LL_1L_LR_1R_Ls^4 + C_5C_LL_1L_LR_1r_os^4 + C_5C_LL_1L_LR_1r_os^4 + C_5C_LL_1L_LR_1r_os^4 + C_5C_LL_1L_LR_1r_os^4 + C_5C_LL_1L_RR_1r_os^4 + C_5C_LL_1R_1r_os^4 + C_5C_LL_1R_1r$
- 10.765 INVALID-ORDER-765 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

10.766 INVALID-ORDER-766 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 R_1 s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_5 L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 r_o s^3 + 2 C_5 L_1 R_1 R_5 r_o s^3 + 2 C_5 L_1 R_1 R_5 r_o s^2 + 4 C_5 L_1 R_1 R_5 r_o s^2 + C_5 L_1 R_1 R_5 r_o$

- 10.767 INVALID-ORDER-767 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{L_1 n_1 n_L s \left(- \cup_5 n_5 r_o s + n_5 g_m r_o + n_5 r_o s + n_5 g_m r_o s +$
- 10.768 INVALID-ORDER-768 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1R_1R_5R_Lr_os^4 + C_1C_5L_1R_1R_5r_os^3 + C_1C_LL_1R_1R_5r_os^3 + C_1C_LL_1R_1R_5r_os^3 + C_1L_1R_1R_5s^2 + C_1L_1R_1r_os^2 + 2C_5C_LL_1R_1R_5R_Lg_mr_os^3 + 4C_5C_LL_1R_1R_5r_os^3 + C_5C_LL_1R_1R_5r_os^3 + C_5C_LL_1R_5r_os^3 + C_5C_LL_1R_5r_os$
- **10.769** INVALID-ORDER-769 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_1R_5r_os^5 + C_1C_5L_1R_1R_5r_os^3 + C_1C_LL_1L_LR_1r_os^4 + C_1C_LL_1L_LR_1r_os^4 + C_1C_LL_1R_1R_5r_os^3 + C_1L_1R_1r_os^4 + C_1C_LL_1L_Rr_os^4 + C_1C_LL_1R_1r_os^4 + C_1C_LL_1R_1r_os^4$
- 10.770 INVALID-ORDER-770 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_1L_LR_1s^{\sigma}(-C_5R_5r_os + R_5g_mr_o + R_$
- 10.771 INVALID-ORDER-771 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{1}R_{5}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{1}r_{o}s^{4} + C_{1}C_{L}L_{1}R_{1}R_{5}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{5}r_{o}s^{3} + C_{1}L_{1}R_{1}R_{5}r_{o}s^{3} + C_{1}L$

- 10.772 INVALID-ORDER-772 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_LR_1R_5R_Lr_os^4 + C_1C_LL_1L_LR_1R_5R_Lr_os^4 + C_1L_1L_LR_1R_5R_Ls^3 + C_1L_1L_LR_1R_5r_os^3 + C_1L_1L_RR_1R_5R_Lr_os^4 + C_5L_1L_LR_1R_5R_Lr_os^4 + C_5L_1L$
- 10.773 INVALID-ORDER-773 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_1R_5R_Lr_os^5 + C_1C_5L_1L_LR_1R_5r_os^4 + C_1C_5L_1R_1R_5R_Lr_os^3 + C_1L_LL_RR_1R_5r_os^4 + C_1L_LL_RR_1R_5r_os^4 + C_1L_LL_RR_1R_5r_os^4 + C_1L_LL_RR_1R_5r_os^4 + C_1L_LL_RR_1R_5r_os^4 + C_1L_LR_1R_5r_os^4 + C_1L_RR_1R_5r_os^4 + C_1L_RR_1R_5r_os^4$
- 10.774 INVALID-ORDER-774 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- 10.775 INVALID-ORDER-775 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{L_1 R_1 R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 R_1 R_5 r_o s^3 + C_1 C_5 L_1 R_1 R_5 r_o s^3 + C_1 L_1 R_1 R_5 r_o s^2 + C_5 L_1 R_1 R_5 g_m r_o s^2 + C_5 L_1 R_1 R_5 r_o s^2 + C_5 L_1 R_5 r_o s^$
- 10.776 INVALID-ORDER-776 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_1 R_1 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 R_1 R_5 r_o s^4 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_5 C_$
- 10.777 INVALID-ORDER-777 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_s} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1R_1R_5R_Lr_os^4 + C_1C_5L_1R_1R_5R_Ls^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_LL_1R_1R_Lr_os^3 + C_1L_1R_1R_Lr_os^3 + C_1L_1R_1R_2s^2 + C_1L_1R_1R_5R_Lg_mr_os^3 + C_5C_LL_1R_1R_5R_Ls^3 + C_5C_LL_1R_1R_5R_Ls^3 + C_5C_LL_1R_1R_5R_Lr_os^3 + C_5C_LL$
- 10.778 INVALID-ORDER-778 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_1 \kappa_1 s}{C_1 C_5 C_L L_1 R_1 R_5 R_L s^4 + C_1 C_5 C_L L_1 R_1 R_5 r_o s^4 + C_1 C_5 L_L R_1 R_L r_o s^4 + C_1 C_5 L_1 R_1 R_5 s^3 + C_1 C_L L_1 R_1 R_1 s^3 + C_1 C_L L_1 R_1 R_5 s^3 + C_1 C_L L_1 R_1 R_5 r_o s^3 + C_1 C_L L_1 R_1 R_$
- 10.779 INVALID-ORDER-779 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_s} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_1 r_1 s}{C_1 C_5 C_L L_1 L_L R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 s^4 + C_1 C_5 L_1 R_1 R_5 s^3 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_5 C_L L_1 L_L R_1 s^4 + C_$

- 10.780 INVALID-ORDER-780 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_L R_1 R_5 s^4 + C_1 C_5 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 r_o s^4 + C_2 C_L L_1 L_L R_1 r_o s^4 + C_5 C_L L_1 L_L R_1 r_o s^$
- 10.781 INVALID-ORDER-781 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5s^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1R_1R_5r_os^4 + C_1C_5C_LL_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5s^3 + C_1C_5L_1R_1r_os^3 + C_1C_LL_1R_1R_5s^3 + C_1C_LL_1R_1R_2s^3 + C_1C_LL_1R_1R_2s^3 + C_1C_LL_1R_1r_os^3 + C_1C_LL_1R_1r$
- 10.782 INVALID-ORDER-782 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{R_5} + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_5 R_L r_o s^5 + C_1 C_5 L_1 L_L R_1 R_5 R_L s^4 + C_1 C_5 L_1 L_L R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_L R_$
- 10.783 INVALID-ORDER-783 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5R_Ls^5 + C_1C_5C_LL_1L_LR_1R_5r_os^5 + C_1C_5L_1L_LR_1R_5s^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1L_LR_1R_5s^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1R_1r_os^4 + C_1C_5L_1R$
- 10.784 INVALID-ORDER-784 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5R_Ls^5 + C_1C_5C_LL_1L_LR_1R_5r_os^5 + C_1C_5C_LL_1L_LR_1R_5R_Lr_os^4 + C_1C_5L_1R_1R_5R_Ls^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1R_5r_os^3 + C_1C_5L_1R$
- 10.785 INVALID-ORDER-785 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{L_1 R_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 L_5 R_1 R_L s^4 + C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 C_5 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 r_o s^2 + C_5 L_1 L_5 R_1 g_m r_o s^3 + C_5 L_1 L_5 R_1 s^3 + C_5 L_1 L_5 R_1 s^3 + C_5 L_1 L_5 R_1 s^3 + C_5 L_1 R_1 R_L g_m r_o s^2 + 4 C_5 L_1 R_1 R_L s^2 + C_5 L_1 R_1 R_L s^2 + C_5 L_5 R_1 R_L s^2 +$
- **10.786** INVALID-ORDER-786 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_1 s} + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_1 R_1 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 L_1 L_5 R_1 s^4 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 L_1 R_1 r_o s^3 + C_1 L_1 R_1 r_o s^3 + C_1 L_1 L_5 R_1 g_m r_o s^4 + C_5 C_L L_1 L_5 R_1 s^4 + C_5 C_L L_1 L_5 R_1 s^4 + C_5 C_L L_1 L_5 R_1 r_o s^3 + C_5 L_5 L_5 R_1 r_o$
- 10.787 INVALID-ORDER-787 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_L r_o s^5 + C_1 C_5 L_1 L_5 R_1 R_L s^4 + C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 C_5 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L r_o s^4 + C_5 C_L L_1 L_5 R_1 R_L s^4 + C_5 C_L L_1 L_5 R_1 R_L r_o s^4 + C_5 C_L L_1 R_1 R_L r_o s^3 + C_5 C_L L_1 R_1 R_L r_o s^3 + C_5 C_L L_1 R_1 R_L r_o s^3 + C_5 C_L L_1 R_1 R_L r_o s^4 + C_5 C_L L_1 R_1 R_L r_$

10.788 INVALID-ORDER-788
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{L_1 R_1 s \left(c_1 + c_2 + c_3 + c_4 + c_5 + c_5 + c_4 + c_5 + c_5 + c_4 + c_5 + c$

10.789 INVALID-ORDER-789
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

10.790 INVALID-ORDER-790
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5L_1L_5L_LR_1s^5 + C_1C_5L_1L_5R_1r_os^4 + C_1C_LL_1L_LR_1r_os^4 + C_1L_LL_R_1r_os^4 + C_1L_LL_R_$

10.791 INVALID-ORDER-791
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1L_1R_1s^4 + C_1C_LL_1R_1R_Ls^3 + C_1C_LL_1R_1r_os^3 + C_1L_1R_1s^4 + C_1C_LL_1R_1r_os^4 + C_1C_LL_1R_1r_os^4$

10.792 INVALID-ORDER-792
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_L r_o s^6 + C_1 C_5 L_1 L_5 L_L R_1 R_L s^5 + C_1 C_5 L_1 L_5 L_L R_1 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_L R_1 R_L r_o s^4 + C_1 L_1 L_L R_1 R_L r_o$

10.793 INVALID-ORDER-793
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_LR_1R_Lr_os^5 + C_1C_5L_1L_5R_1R_Ls^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_1R_Ls^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_1r_os^4$

10.794 INVALID-ORDER-794
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.795 INVALID-ORDER-795
$$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{L_1 R_1 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_1 L_5 R_1 R_L r_o s^4 + C_1 L_1 L_5 R_1 R_L s^3 + C_1 L_1 R_1 R_L r_o s^2 + 2 C_5 L_1 L_5 R_1 R_L g_m r_o s^3 + 4 C_5 L_1 L_5 R_1 R_L s^3 + C_5 L_1 L_5 R_1 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_L$$

10.796 INVALID-ORDER-796 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_1 R_1 s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 L_1 L_5 R_1 s^3 + C_1 L_1 R_1 r_o s^2 + C_5 C_L L_1 L_5 R_1 r_o s^4 + 2 C_5 L_1 L_5 R_1 g_m r_o s^3 + 4 C_5 L_1 L_5 R_1 s^3 + C_5 L_1 L_5 R_1 g_m r_o s^3 + C_L L_1 L_5 R_1 r_o s^4 + C_L$

10.797 INVALID-ORDER-797 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_1 R_1 R_L s \left(-C_5 L_5 r_o s^4 + L_5 g_m r_o s +$

10.798 INVALID-ORDER-798 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_Lr_os^5 + C_1C_5L_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1r_os^4 + C_1C_LL_1$

10.799 INVALID-ORDER-799 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5L_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1r_os^4 + C_1L_1L_5R_1r_os^4 + C_1L_1L_5R_1r_os^4$

10.800 INVALID-ORDER-800 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_1 L_L R_1 s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o r_o s^2 + L_5 g_m r_o s + L_5 s - r_o r_o s + L_5 r_o s^2 + L_5 r_o$

10.801 INVALID-ORDER-801 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5R_1R_Lr_os^5 + C_1C_5L_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1R_Ls^4 + C_1C_LL_1L_5R_1r_os^4 + C_1$

10.802 INVALID-ORDER-802 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

10.803 INVALID-ORDER-803 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $\overline{C_1C_5C_LL_1L_5L_LR_1R_Lr_os^6 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5R_1R_Lr_os^4 + C_1L_LL_5L_LR_1r_os^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5L_LR_1r_os^4 + C_1L_1L_5R_1R_Ls^3 + C_1L_1L_5R_1r_os^3 + C_1L_1L_5R_1r_os^3 + C_1L_1L_5R_1r_os^4 + C_1L_1L_5R_1R_Ls^3 + C_1L_1L_5R_1R_Ls^3 + C_1L_1L_5R_1r_os^3 + C_$

- 10.804 INVALID-ORDER-804 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Lr_os^6 + C_1C_5L_1L_5R_1R_Lr_os^4 + C_1C_LL_1L_5L_LR_1R_Ls^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5R_1R_Lr_os^4 + C_1L_1L_5R_1R_Ls^3 + C_1L_1L_5R_1R_Ls^3 + C_1L_1L_5R_1R_Ls^3 + C_1L_1L_5R_1R_Lr_os^4 + C_1$
- **10.805** INVALID-ORDER-805 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

- $H(s) = \frac{L_1 R_1 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 L_1 R_1 R_2 s^2 + C_5 L_1 R_2 r_o s^3 + C_5 L$
- **10.806** INVALID-ORDER-806 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_1 R_1 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 r_o s^2 + C_5$
- 10.807 INVALID-ORDER-807 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_L s^4 + C_1 C_5 L_1 L_5 R_1 R_L s^4 + C_1 C_5 L_1 R_1 R_5 R_L s^3 + C_1 C_5 L_1 R_1 R_5 r_o s^3 + C_1 C_5 L_1 R_1 R_L r_o s^3 + C_1 C_$
- **10.808** INVALID-ORDER-808 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1R_1R_5r_os^4 + C_1C_5C_LL_1R_1R_5r_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1R_1R_5s^3 + C_1C_5L_1R_1r_os^3 + C_1C_LL_1R_1r_os^3 + C_1C_LL_1R_1r$
- **10.809** INVALID-ORDER-809 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1r_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1R_1r_os^3 + C_1C_LL_1L_LR_1s^4 + C_1C_5L_1L_1R_1s^4 + C_1C_5L_1L_1R_1s^4 + C_1C_5L_1L_1R_1s^4 + C_1C_5L_1L_1R_1s^4 + C_1C_5L_1R_1r_os^3 + C_1C_5L_1L_1R_1s^4 + C_1C_5L_1R_1r_os^3 + C_1C_5L$
- **10.810** INVALID-ORDER-810 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_5L_1L_1r_os^4 + C_1C_5L_1L_1r_os^4 + C_1C_5L_1L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C_5L_1r_os^4 + C_1C$
- 10.811 INVALID-ORDER-811 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 R_1 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 r_o s^4 + C_1 C_5 L_L R_1 R_5 r_o$

- 10.812 INVALID-ORDER-812 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Lr_os^6 + C_1C_5C_LL_1L_LR_1R_5R_Lr_os^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5R_1R_Lr_os^4 + C_1C_5L_1L_LR_1R_5r_os^4 + C_1C_5L_1L_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5r_os^4 + C_1C_5L$
- 10.813 INVALID-ORDER-813 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_LR_1R_5r_os^5 + C_1C_5C_LL_1L_LR_1R_5r_os^5 + C_1C_5L_1L_5R_1R_Ls^6 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_1r$
- 10.814 INVALID-ORDER-814 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5R_1R_Lr_os^5 + C_1C_5C_LL_1L_LR_1R_5r_os^5 + C_1C_5C_LL_1L_1R_1R_5r_os^5 + C_1C_5C_LL_1R_1R_5r_os^5 + C_1C_5C_LL_1R_5r_os^5 + C_1C_5C_LL_1R_5r_os^5 + C_1C_5C_LL_1R_5r_os^5 + C_1C_5C$
- **10.815** INVALID-ORDER-815 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = \frac{L_1 R_1 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + R_5 R_L r_o s^3 + C_1 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_1 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_1 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_2 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_1 L_5 R_1 R_5 R_L r_o s^3 + C_5 L_5 R_5 R_L r_o s^3 + C_$
- 10.816 INVALID-ORDER-816 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_1 R_1 s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s L_5 r_o s L_5 r_o s L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s L_5 r_o s$
- 10.817 INVALID-ORDER-817 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1R_5R_Lr_os^4 + C_1C_LL_1L_5R_1R_5R_Lr_os^4 + C_1L_1L_5R_1R_5R_Ls^3 + C_1L_1L_5R_1R_5r_os^3 + C_1L_1L_5R_1R_5R_Lr_os^4 + C_5C_LL_1L_5R_1R_5R_Lr_os^4 + C_5C_LL$
- 10.818 INVALID-ORDER-818 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lr_os^5 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_LL_1L_5R_1R_5r_os^4 +$
- 10.819 INVALID-ORDER-819 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_LL_1L_5L_LR_1R_5s^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5R_1R_5r_os^4 + C_1L_1L_5R_1R_5r_os^4 + C_1L_1L_5R_1R_5r_o$

- 10.820 INVALID-ORDER-820 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5L_LR_1R_5r_os^4 + C_1C_LL_1L_5L_LR_1R_5r_os^4 + C_1L_1L_5L_LR_1R_5s^3 + C_1L_1L_5L_LR_1r_os^3 + C_1L_1L_5R_1R_5r_os^2 + C_1L_1L_5L_LR_1R_5r_os^4 + 2C_5L_1L_5L_LR_1R_5r_os^4 + 2C_5L_1L_5L_RR_1R_5r_os^4 + 2C_5L_1L_5L_RR_1R_5r_os^4$
- 10.821 INVALID-ORDER-821 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5C_LL_1L_5R_1R_5R_Lr_os^5 + C_1C_LL_1L_5L_LR_1R_5s^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5R_1R_5r_os^4 + C_1C_LL_1L_5R_1R_5r_o$
- 10.822 INVALID-ORDER-822 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5L_LR_1R_5R_Lr_os^4 + C_1C_LL_1L_5L_LR_1R_5R_Lr_os^4 + C_1L_1L_5L_LR_1R_5R_Lr_os^3 + C_1L_1L_5L_RR_1R_5R_Lr_os^3 + C_1L_1L_5L_RR_1R$
- 10.823 INVALID-ORDER-823 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + C_1C_5L_1L_5L_LR_1R_5r_os^5 + C_1C_5L_1L_5L_LR_1R_5R_Lr_os^4 + C_1L_LL_5L_LR_1R_5r_os^5 + C_1C_LL_1L_5L_LR_1R_5r_os^5 + C_1C_LL_1L_5L_1R_5r_os^5 +$
- 10.824 INVALID-ORDER-824 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + C_1C_5L_1L_5R_1R_5R_Lr_os^4 + C_1C_LL_1L_5L_LR_1R_5r_os^5 + C_1C_LL_1L_5L_LR_1R_5r_os^5 + C_1C_LL_1L_5R_1R_5R_Lr_os^4 + C_1L_1L_5R_1R_5R_Lr_os^4 + C_1L_1L_5R_1$
- 10.825 INVALID-ORDER-825 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1L_5L_5R_1R_Ls^3 + C_1L_1L_5R_1R_Ls^3 + C_1L_1R_1R_5r_os^2 + C_1L_1R_1R_5r_os^2 + C_5L_1L_5R_1R_5g_mr_os^3 + C_5L_1L_5R_1R_5s^3 + 2C_5L_1L_5R_1R_Ls^3 + C_5L_5R_1R_5s^3 + 2C_5L_5R_1R_5s^3 + 2C_5L_5R_5R_5s^3 + 2C_5L_5R_5R_5R_5s^3 + 2C_5L_5R_5R_5s^3 + 2C_5L_5R_5R_5R_5s^3 + 2C_5L_5R_5R_5s^3 + 2C_5L_5R_5R_5s$
- 10.826 INVALID-ORDER-826 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_5 R_1 R_5 s^4 + C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 C_L L_1 L_$
- 10.827 INVALID-ORDER-827 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 R_L r_o s^5 + C_1 C_5 L_1 L_5 R_1 R_5 R_L s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_L L_1 L_5 R_1 R_L r_o s^4 + C_1 C_L L_1 L_5 R_1 R_L r_o s^4 + C_1 C_L L_1 L_5 R_1 R_L r_o s^4 + C_1 L_1 L_5 R_1 R_L$

- 10.828 INVALID-ORDER-828 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{1}R_{5}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{1}R_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}R_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}R_{1}R_{5}r_{o}s$
- 10.829 INVALID-ORDER-829 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 r_o s^6 + C_1 C_5 C_L L_1 L_5 R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_5 R_1 R_5 s^4 + C_1 C_L L_1 L_5 R_1 r_o s^4$
- 10.830 INVALID-ORDER-830 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5L_1R_1r_os^5 + C$
- 10.831 INVALID-ORDER-831 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5s^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5R_1R_5r_os^5 + C_1C_5C_LL_1L_5R_1R_5r_os^5 + C_1C_5L_LL_5R_1R_5s^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1R_1s^5 + C_1C_LL_1L_5R_1R_2s^4 + C_1C_LL_1L_5R_1R_5s^4 + C_1C_LL_1L_5R_1R$
- 10.832 INVALID-ORDER-832 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}R_{5}r_{o}s^{5} + C_{1}C$
- 10.833 INVALID-ORDER-833 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 r_o s^6 + C_1 C_5 L_L L_5 L_L R_1 R_5 r_o s^6 + C_1 C_5 L_1 L_5 L_L R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 L_L R_1 R_5 r_o s^6 + C_1 C_5 L_1 L_5 L_$
- 10.834 INVALID-ORDER-834 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5C_LL_1L_5L_LR_1R_Lr_os^6 + C_1C_5C_LL_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1L_5L_LR_1R_Ls^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1L_5L_LR_1R_5r_os^4 + C_1C_5L_1L_5L_LR_1R_5r_os^4 + C_1C_5L_1L_5L_RR_1R_5r_os^4 + C_1C_5L_1L_5L_RR_1R_5r_os^4 + C_1C_5L_1L_5L_RR_1R_5r_os^4 + C_1C_5L_1L_5L_RR_1R_5r_os^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1L_5L_RR_1R_5r_os^4 + C_1C$
- 10.835 INVALID-ORDER-835 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1L_5R_1R_Lr_os^4 + C_1C_5L_1L_5R_1R_5r_os^3 + C_1L_1R_1R_5r_os^2 + C_1L_1R_1R_5r_os^2 + C_1L_1R_1R_5r_os^3 + C_5L_1L_5R_1R_5s^3 + 2C_5L_1L_5R_1R_5s^3 + 2C_5L_1L_5R_1R_2s^3 + C_5L_1L_5R_1R_2s^3 + C_5L_1L_5R_1R_5s^3 + 2C_5L_1L_5R_1R_5s^3 + 2C_5L_1L_5R_1R_5$

10.836 INVALID-ORDER-836 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

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

10.837 INVALID-ORDER-837 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lr_os^5 + C_1C_5L_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1L_5R_1R_5R_Lr_os^3 + C_1L_1R_1R_5R_Lr_os^3 + C_1L_1R_1R_5R_Ls^2 + C_1L_1R_1R_5r_os^2 + C_1L_1R_1R_5r_os^2 + C_5C_LL_1L_5R_1R_5R_Lr_os^4 + C_5C_LL_1L_5R_1R_5R_Lr_os^4 + C_5C_LL_1L_5R_1R_5R_Lr_os^4 + C_5C_LL_1L_5R_1R_5R_Lr_os^4 + C_5C_LL_1L_5R_1R_5R_Lr_os^4 + C_5C_LL_1R_1R_5R_Lr_os^4 + C_5C$

10.838 INVALID-ORDER-838 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Ls^5 + C_1C_5C_LL_1L_5R_1R_5r_os^5 + C_1C_5C_LL_1L_5R_1R_5r_os^5 + C_1C_5C_LL_1R_1R_5R_Lr_os^4 + C_1C_5L_1L_5R_1R_5s^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_5L_1R_5R_5r_os^4 + C_1C_5L_1R_5r_os^4 + C_1C$

10.839 INVALID-ORDER-839 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 r_o s^6 + C_1 C_5 C_L L_1 L_5 R_1 R_5 r_o s^5 + C_1 C_5 L_L L_5 R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 r_o s^4 + C_1 C_5 L_5 L_5 R_1 R_5 r_o s^4 + C_1 C_5 R_1 R_5 r_o s^4$

10.840 INVALID-ORDER-840 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{L}L_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}L_{L}L_{L}R_{1}R_{5}r_{o}s^{4} + C_{1}L_{L}L$

10.841 INVALID-ORDER-841 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5s^6 + C_1C_5C_LL_1L_5L_RR_1r_os^6 + C_1C_5C_LL_1L_5R_1R_5r_os^5 + C_1C_5C_LL_1L_5R_1R_5r$

10.842 INVALID-ORDER-842 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 R_L r_o s^6 + C_1 C_5 L_1 L_5 L_L R_1 R_5 R_L s^5 + C_1 C_5 L_1 L_5 L_L R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_5 L_L R_1 R_5 r_o s^5 + C_1 C_5 L_1 L_5 L_L R_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 L_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 L_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_5 L_1 R_5 R_L r_o$

10.843 INVALID-ORDER-843 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + C_1C_5L_1L_5L_LR_1R_5r_os^6 + C_1C_5L_1L_5L_RR_1R_5r_os^6 + C_1C_5L_1L_5L_1R_1R_5r_os^6 + C_1C_5L_1L_5L_1R_1R_5r_os^6 + C_1C_5L_1L_5L_1R_5r_os^6 + C_1C_5L_1L_5L$

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10.844 INVALID-ORDER-844 Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 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)
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 $H(s) = \frac{1}{C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{1}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{$

10.845 INVALID-ORDER-845 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

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

10.846 INVALID-ORDER-846 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(R_5 g_m r_o + R_5 - r_o \right) \left(C_1 L_1 R_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_5 R_L s^3 + C_1 C_L L_1 R_1 R_5 g_m r_o s^2 + C_1 L_1 R_1 R_5 g_m r_o s^2 + C_1 L_1 R_1 R_2 g_m r_o s^2 + C_1 L_1 R_2 g_m r_o s^2 + C_1$

10.847 INVALID-ORDER-847 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right) \left(C_1 L_1 R_1 s^2 + L_1 s^2 + L_2 s^3 + C_1 C_L L_1 R_1 R_5 g_m r_o s^3 + C_1 C_L L_1 R_1 R_1 g_m r_o s^3 + C_1 C_L L_1$

10.848 INVALID-ORDER-848 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.849 INVALID-ORDER-849 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(R_5 g_m r_o + R_5 - r_o\right) \left(C_1 L_2 L_2 L_1 L_2 R_1 R_5 g_m r_o s^4 + C_1 L_2 L_1 L_2 R_1 R_5 g_m r_o s^4 + C_1 L_2 L_1 L_2 R_1 g_m r_o s^3 + 4 C_1 L_1 L_2 R_1 g_m r_o s^3 + 4 C_1 L_1 L_2 R_1 g_m r_o s^3 + C_1 L_1 L_2 R_1 g_m r_o s^3 + C_1 L_1 R_1 R_5 g_m r$

10.850 INVALID-ORDER-850 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

10.851 INVALID-ORDER-851 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 L_L L_L R_1 R_5 g_m r_o s^3 + C_1 L_1 L_L R_1 R_5 g_m r_o s^3 + C_1 L_1 L_L R_1 R_2 g_m r_o s^3 + C_1 L_1 L_L R_1 R_$

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10.852 INVALID-ORDER-852 Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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$$H(s) = \frac{1}{C_{1}C_{L}L_{1}L_{L}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{1}R_{5}s^{4} + 2C_{1}C_{L}L_{1}L_{L}R_{1}R_{c}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{1}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{1}r_{o}s^{4} + C_{1}C_$$

10.853 INVALID-ORDER-853
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 r_o s^4 + C_1 C_L L_$$

10.854 INVALID-ORDER-854
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1 \right)}{2 C_1 C_5 L_1 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 L_1 R_1 g_m r_o s^2 + C_1 L_1 R_1 s^2 + C_2 L_1 R_1 g_m r_o s^2 + 4 C_5 L_1 R_1 g_m r_o s + 4 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 R_L g_m r_o s + C_5 R_1 r$$

10.855 INVALID-ORDER-855
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(-C_5 r_o s + g_m r_o + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 C_5 C_L L_1 R_1 r_o s^4 + 2 C_1 C_5 L_1 R_1 g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 r_o s^3 + C_5 C_L R_1 r_o s^2 + 2 C_5 L_1 g_m r_o s^2 + 4 C_5 L_1 s^2 + 2 C_5 R_1 g_m r_o s^4 + 4 C_5 R_1 s + C_5 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 r_o s^3 + C_1 C_L L_1 r$$

10.856 INVALID-ORDER-856
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_1 L_1 R_1 s^2 + C_2 L_1 R_1 R_L r_o s^3 + C_1 C_2 L_1 R_1 R_L r_o s^3 + C_1$$

10.857 INVALID-ORDER-857
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L R_L s + 1\right) \left(C_L$$

10.858 INVALID-ORDER-858
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_2 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_2 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_4 L_L s^2 + 1\right) \left(-C_5$$

10.859 INVALID-ORDER-859
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_1 L_1 R_1 r_o s + C_1 C_2 L_1 L_L R_$$

- **10.860** INVALID-ORDER-860 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + 2C_{1}C_{5}L_{1}R_{1}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{1}R_{1}s^{3} + C_{1}C_{5}L_{1}R_{1}s^{3} + C_{1}C_{5}L_{1}L_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{1}r_{o$
- 10.861 INVALID-ORDER-861 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_L r_o s^5 + 2 C_1 C_5 L_1 L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_L R_1 R_L s^4 + C_1 C_5 L_1 L_L R_1 r_o s^4 + C_1 C_5 L_1 L_L R_1 R_L r_o s^4 + C_1 C_5 L_1 L_L R_1 R_L r_o s^4 + C_1 C_4 L_1 L_L R_1 R_L r_o s^4 + C_1 C_5 L_1 R_1 R_L r_o s^4 + C_1 C_$
- 10.862 INVALID-ORDER-862 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{L}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{L}R_{1}s^{4} + C_{1}C_{5}L_{1}L_{L}R_{1}r_{o}s^{4} + 4C_{1}C_{5}L_{1}R_{L}R_{1}s^{4} + C_{1}C_{5}L_{1}R_{L}R_{1}s^{4} + C_{1}C_{5}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}L_{1}R_{1}R_{L}$
- 10.863 INVALID-ORDER-863 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{L}r_{o}s^{4} + 2C_{1}C_{5}L_{1}R_{1}R_{L}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{1}R_{1}r_{o}s^{3} + C_{1}C_{5}L_{1}R_{L}r_{o}s^{3} + C_{1}C_{5}L_{1}L_{L}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}L_{L}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{1}R_{L}s^{3} + C_{1}C_{5}L_{1}R_{1}r_{o}s^{3} + C_{1}C_{5}L_{1}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{L}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{1}R_{L}s^{3} + C_{1}C_{5}L_{1}R_{1}r_{o}s^{3} + C_{1}C_{5}L_{1}R_{1}R_{L}s^{3} + C_{1}C_{5}L_{1}R_{1}R_{L}s^{3$
- 10.864 INVALID-ORDER-864 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$
- **10.865** INVALID-ORDER-865 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{5}R_{5}r_{o}s \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}s + R_{1}\right)\left(C_{5}R_{5}r_{o}s \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}s + R_{1}\right)\left(C_{5}R_{5}r_{o}s \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}s +$
- **10.866** INVALID-ORDER-866 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$
- 10.867 INVALID-ORDER-867 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{1}R_{1}R_{5}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{1}R_{1}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{1}R_{1}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{1}R_{1}R_{1}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{1}R_{1}g_{m}r_{o}s^{3} + C_{1}C_{L}L_{1}R_{1}R_{1$

- **10.868** INVALID-ORDER-868 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}R_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{1}R_{1}R_{5}r_{o}s^{4} + 4C_{1}C_{L}L_{1}L_{L}R_{1}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{5}s^{4} + C_{1}C_{L}L_{1}L_{L}R_{5$
- **10.869** INVALID-ORDER-869 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_1R_5r_os^5 + 2C_1C_5L_1L_LR_1R_5g_mr_os^4 + 4C_1C_5L_1L_LR_1R_5s^4 + C_1C_5L_1L_LR_1r_os^4 + C_1C_LL_1L_LR_1r_os^4 + C_1C_LL_1L_1r_os^4 + C_1C_LL_1L_1r_os^4 + C_1C_LL_1L_1r_os^4 + C_1C_LL_1L_1r_os^4 + C_1C_LL_1r_os^4 + C_1C_LL_1r_os^4 + C_1C_LL_1r_os^4 + C_1C_LL$
- 10.870 INVALID-ORDER-870 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}r_{o}s^{5} + 2C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}R_{1}R_{5}g_{m}r_{o}s^{3} + 4C_{1}C_{5}L_{1}R_{1}R_{5}s^{3} + C_{1}C_{5}L_{1}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}r_{o}s^{4} +$
- 10.871 INVALID-ORDER-871 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- 10.872 INVALID-ORDER-872 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}L_{L}L_{L}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{L}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{L}R_{5}r_{o}s^{4} + 4C_{1}C_{5}L_{1}R_{5}r_{o}s^{4} + 4C_{1}C$
- 10.873 INVALID-ORDER-873 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{$
- 10.874 INVALID-ORDER-874 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o s^2 + C_1 L_1 R_1 r_o s^3 + C_1 C_5 L_1 R_1 R_2 r_o s^3 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_5 L_1 r_o s^3 + C_1 C_5 L_$
- 10.875 INVALID-ORDER-875 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s + C_{1}C_{5}L_{1}R_{1}r_{o}s^{4} + C_{1}C_$

- 10.876 INVALID-ORDER-876 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 R_1 R_5 R_L g_m r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 R_L s^4 + C_1 C_5 C_L L_1 R_1 R_L r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 g_m r_o s^3 + C_1 C_5 L_1 R_1 R_5 g_m r_o s^3 + C_1 C_5 L_1 R_1 R_L g_m r_o s^3 + C_1 C_5 L_1 R_$
- 10.877 INVALID-ORDER-877 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 s^4 + 2 C_1 C_5 C_L L_1 R_1 R_L g_m r_o s^4 + 4 C_1 C_5 C_L L_1 R_1 R_L s^4 + C_1 C_5 C_L L_1 R_1 R_5 r_o s^4 + C_1 C_5 C_L L_1 R_1 r_o s^4 + C_1 C_5 C_L L_1 r_o s^4 + C_1 C_5 C_L L_1$
- 10.878 INVALID-ORDER-878 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}R_{1}r_{$
- 10.879 INVALID-ORDER-879 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1g_mr_os^4 + 4C_1C_5L_1L_LR_1s^4 + C_1C_5L_1L_LR_1s^4 + C_1C_5L_1L_1L_1s^4 + C_1C_5L_1L_1L_1s^4 + C_1C_5L_1L_1s^4 + C_1C_5L_1L_1s^4 + C_1C_5L_1L_1s^4 + C_1C_5L_1L_1s^4 + C_1C_5L_1L_1s^4 + C_1C_5L_1s^4 +$
- **10.880** INVALID-ORDER-880 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1$
- 10.881 INVALID-ORDER-881 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_LR_1R_5R_Ls^5 + C_1C_5C_LL_1L_LR_1R_1r_os^5 + C_1C_5L_1L_LR_1R_5g_mr_os^4 + C_1C_5L_1L_RR_1g_mr_os^4 + C_1C_5L_1L_RR_1g$
- 10.882 INVALID-ORDER-882 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_1L_LR_1R_5s^5 + 2C_1C_5C_LL_1L_LR_1R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1s^5 + C_1C_5C_LL_1s^$
- 10.883 INVALID-ORDER-883 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_1L_LR_1R_5s^5 + 2C_1C_5C_LL_1L_LR_1R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1R_1r_os^5 + C_1C_5C_LL_1R_$

10.884 INVALID-ORDER-884 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_a r_o s^2 + C_5 L_1 R_1 r_o s^3 + C_1 R_2 R_2 r_o s^3 + C_2 R_2 R_2 R_2 r_o s^3 + C_3 R_2 R_2 r_o s^3 + C_4 R_4 R_2 r_o s^3 + C_4 R_4 R_2 r_o s^3 + C_4 R_4 R_4 r_o s^3 + C_4 R_4 r_$

 $-C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1L_5r_os^4 + 2C_1C_5L_1R_1R_Lg_mr_os^3 + 4C_1C_5L_1R_1r_os^3 + C_1C_5L_1R_1r_os^3 + C_1L_1R_1g_mr_os^2 + C_1L_1R_1s^2 + C_1L_1R_1s^2 + C_1L_1R_1s^2 + C_1L_1R_1s^3 + C_1C_5L_1L_5r_os^3 + C_1C_5L_1R_1r_os^3 + C_1C_5L_1R_1r_os$

10.885 INVALID-ORDER-885 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

10.886 INVALID-ORDER-886 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_1R_1R_Lr_os^4 + C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C$

10.887 INVALID-ORDER-887 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 L_1 R_L g_m r_o s^4 + 4 C_1 C_5 C_L L_1 R_1 R_L s^4 + C_1 C_5 C_L L_1 R_1 r_o s^4 + C_1 C_5 C_L L_1 R_1 r_o s^4 + C_1 C_5 L_1 L_5 r_o s^5 + 2 C_1 C_5 L_1 R_1 r_o s^4 + 4 C_1 C_5 C_L L_1 R_1 r_o s^4 + C_1 C_5 L_1 L_5 r_o s^4 + 2 C_1 C_5 L_1 R_1 r_o s^4 + C_1 C_5 C_L L_$

10.888 INVALID-ORDER-888 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_LR_1g_mr_os^5 + 4C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1L_1s^5 + C_1C_5C_LL_1s^5 + C_1C_5$

10.889 INVALID-ORDER-889 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5L_Ls^5 + C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L$

10.890 INVALID-ORDER-890 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.891 INVALID-ORDER-891 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_{I.} L_1 L_5 L_{I.} R_1 R_{I.} q_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 r_o s^6 + C_1 C_5 L_L L_L R_1 R_L r_o s^5 + C_1 C_5 L_1 L_5 L_L R_1 s^5 + C_1 C_5 L_1 L_5 L_1 R_1 s^5 + C_1 C_5 L_1 L_5 L_1 R_1 s^5 + C_1 C_5 L_1 L_5 L_1 R_1 s^5 + C_1 C_5$

- **10.892** INVALID-ORDER-892 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_1 R_L s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5$
- 10.893 INVALID-ORDER-893 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 R_1 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_$
- 10.894 INVALID-ORDER-894 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_1 L_1 R_1 s^2 + L_1 s + R_1 \right) \left(C_5 L_5 L_2 L_2 R_1 R_2 s^4 + C_1 C_5 L_1 L_5 R_1 R_2 s^4 + C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 L_1 L_5 R_1 r_o s^4 + C_1 L_1 L_5 R_1 s^3 + C_1 L$
- **10.895** INVALID-ORDER-895 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_{1}L_{1}R_{1}s^{2} + L_{1}s + R_{1}\right)\left(C_{5}L_{5}r_{o}s^{2} C_{1}C_{5}L_{1}L_{5}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}r_{o}s^$
- **10.896** INVALID-ORDER-896 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_Lr_os^5 + 2C_1C_5L_1L_5R_1R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_1R_Ls^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1R_Lg_mr_os^4 + C$
- 10.897 INVALID-ORDER-897 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{L}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}s^{4} +$
- 10.898 INVALID-ORDER-898 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}L_{L}s^{5} + C_{1}C_{L}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + C_{1}C$
- 10.899 INVALID-ORDER-899 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1r_os^6 + 2C_1C_5L_1L_5L_LR_1g_mr_os^5 + 4C_1C_5L_1L_5L_LR_1s^5 + C_1C_5L_1L_5L_LR_1g_mr_os^5 + C_1C_LL_1L_5L_LR_1g_mr_os^5 + C_1C_LL_1L_5L_LR_1s^5 + C_1C_LL_1L_5L_1R_1s^5 + C_1C_LL_1L_1L_1R_1s^5 + C_1C_LL_1L_1L_1R_1s^5 + C_1C_LL_1L_1R_1s^5 + C_1C_LL_1L_1R_1s^5 + C_1C_LL_1L_1L_1R_1s^5 + C_1C_LL_1L_1R_1s^5 + C_1C_LL_1L_1R_1s^5 + C_1C_LL_1L_1R_1s^5 + C_1C$

- **10.900** INVALID-ORDER-900 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{L}L_{5}R_{1}s^{4} + C_{1}C_{5}L_{L}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} +$
- 10.901 INVALID-ORDER-901 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Lr_os^6 + 2C_1C_5L_1L_5L_LR_1R_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_RR_1r_os^5 + C_1C_5L_1L_5L_1R_1r_os^5 + C_1C_5L_1L_5L_1R_1r_os^5 + C_1C_5L_1L_5L_1R_1r_os^5 + C_1C_5L_1L_5L_1R_1r$
- **10.902** INVALID-ORDER-902 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + 2C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{1}R_{1$
- 10.903 INVALID-ORDER-903 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{L}L_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L$
- 10.904 INVALID-ORDER-904 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1L_5r_os^4 + C_1C_5L_1R_1R_5g_mr_os^3 + C_1C_5L_1R_1R_2s^3 + C_1C_5L_1R_1R_2s^3 + C_1C_5L_1R_1r_os^3 + C_1C_5L_1R_5r_os^3 + C_1C$
- 10.905 INVALID-ORDER-905 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_5r_os^5 + C_1C_5C_LL_1R_1R_5g_mr_os^4 + C_1C_5C_LL_1R_1r_os^4 + C_1C_5C_LL_1R_1r_os^4 + C_1C_5L_1L_5s^4 + 2C_1C_5L_1R_1g_mr_os^3 + 4C_1C_5L_1R_1s^3 + C_1C_5L_1R_5s^3 + C_1C_5L_1R_1s^3 + C_1C_5L_1R_1s^$
- **10.906** INVALID-ORDER-906 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_1R_1R_5R_Lg_mr_os^4 + C_1C_5C_LL_1R_1R_5R_Ls^4 + C_1C_5C_LL_1R_5R_Ls^4 + C$
- 10.907 INVALID-ORDER-907 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_5R_Ls^5 + C_1C_5C_LL_1L_5r_os^5 + C_1C_5C_LL_1R_1R_5g_mr_os^4 + C_1C_5C_LL_1R_1R_2s^4 + C_1C_5C_LL_1R_1R_Ls^4 + C_1C_5C_LL_1R_1r_os^4 + C_1C_5C_LL_1R_5r_os^4 + C_1C_5C_LL_1R_5r_os^4 + C_1C_5C_LL_1R_1r_os^4 + C_1C$

- **10.908** INVALID-ORDER-908 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_LR_1g_mr_os^5 + 4C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_1R_1s^5 + C_1C_5C_LL_1R_1s^5 +$
- **10.909** INVALID-ORDER-909 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_L R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 L_L L_$
- **10.910** INVALID-ORDER-910 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L s^6 + C_1 C_5 C_L L_1 L_5 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 s^5 + C_1 C_5 C_L L_1 L_4 R_1 s^5 + C_1 C_5 C_L L_1 L_4 R_1 s^5 + C_1 C_5 C_L L_1 L_4 R_1 s^5 + C_1 C_5 C_L L_4 L_4 R_1 s^5 + C_1 C_5 C_L L_$
- **10.911** INVALID-ORDER-911 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_L g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_L s^6 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L R_1 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L R_1 R_1 R_1 R_1 R_1 R_1$
- 10.912 INVALID-ORDER-912 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_L R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_2 g_m$
- 10.913 INVALID-ORDER-913 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 R_L R_2 s^6 + C_1 C_5 C_L L_1 L_5 R_1 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_L r_o s^5 + C_1 C_5 C_$
- **10.914** INVALID-ORDER-914 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}L_{1}L_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{1}R_{5}R_{L}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{1}R_{5}r_{o}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{3} + C_{1}L_{1}L_{5}R_{1}R_{5}g^{3} + 2C_{1}L_{1}L_{5}R_{1}R_{L}s^{3} + C_{1}L_{1}L_{5}R_{1}R_{5}s^{3} + C_{1}L_{1}L_{5}R_{1}R_{5}s$
- 10.915 INVALID-ORDER-915 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_5r_os^5 + 2C_1C_5L_1L_5R_1R_5g_mr_os^4 + 4C_1C_5L_1L_5R_1R_5s^4 + C_1C_LL_1L_5R_1R_5g_mr_os^4 + C_1C_LL_1L_5R_1R_5s^4 + C_1C_LL_1L_5R_1r_os^4 + C_1C_LL_1L_5R_1r_os$

- **10.916** INVALID-ORDER-916 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lr_os^5 + 2C_1C_5L_1L_5R_1R_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5r_os^4 + C_1C_LL_1L_5R_1R_5R_Lg_mr_os^4 + C_1C_LL_1R_5R_Lg_mr_os^4 + C_1C_LL_1R_5R_Lg_mr_os^4$
- **10.917** INVALID-ORDER-917 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{1}R_{5}s^{4} + C_{1}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_$
- 10.918 INVALID-ORDER-918 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- 10.919 INVALID-ORDER-919 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + 2C_1C_5L_1L_5L_LR_1R_5g_mr_os^5 + 4C_1C_5L_1L_5L_LR_1R_5s^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5L_LR_1r_os^5 + C_1C_LL_1L_5L_1R_1r_os^5 + C_1C_LL_1L_1L_1R_1r_os^5 + C_1C_LL_1L_1R_1r_os^5 + C_1C_LL_1L_1R_1r_os^5 + C_1C_LL_1R_1r_os^5 + C_1C$
- 10.920 INVALID-ORDER-920 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}r_{o}s^{6} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}R_{L$
- **10.921** INVALID-ORDER-921 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + 2C_1C_5L_1L_5L_LR_1R_5R_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_1R_5R_Ls^5 + C_1C_5L_1L_5L_LR_1R_5r_os^5 + C_1C_5L_1L_5L_LR_1R_5R_Lr_os^5 + C_1C_5L_1L_5L_Rr_os^5 + C_1C_5L_1L_5L_Rr$
- 10.922 INVALID-ORDER-922 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}R_{5}g_{m}r_{o}s^{5} + 4C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}R_{5}s^{5} + C_{1}C_{5}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}R_{5}$
- 10.923 INVALID-ORDER-923 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{L}L_{5}R_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{L}L_{5}R_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{L}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}L_{L}R_{5}R_{L}r_{o}s^{6}$

- 10.924 INVALID-ORDER-924 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 L_1 L_5 R_1 R_5 g_m r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_5 s^4 + 2 C_1 C_5 L_1 L_5 R_1 R_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_5 R_1 R_L s^4 + C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 C_5 L_1 L_5 R_5 r_o s^4 + C_1 C_5 L_1 L_5 R_1 r_o s^4 + C_1 L_5 L_5 R_1 r_o s^4 + C_1$
- 10.925 INVALID-ORDER-925 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 g_m r_o s^4 + 4 C_1 C_5 L_1 L_5 R_1 s^4 + C_1 C_5 L_1 L_5 R_1 s^4 + C_1 C_5 L_1 L_5 R_1 g_m r_o s^4 + C_1 C_L L_1 L_5 R_1 g_m r_o$
- **10.926** INVALID-ORDER-926 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_5R_Ls^5 + C_1C_5C_LL_1L_5R_1R_Lr_os^5 + C_1C_5L_LL_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R_1R_Lg_mr_os^4 + C_1C_5L_1L_5R_1R$
- 10.927 INVALID-ORDER-927 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_1R_5s^5 + 2C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1L_5R_1r_$
- 10.928 INVALID-ORDER-928 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_$
- 10.929 INVALID-ORDER-929 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5s^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_LR_1g_mr_os^5 + 4C_1C_5L_1L_5L_LR_1s^5 + C_1C_5L_1L_5L_LR_1s^5 + C_1C_5L_1L_5L_1R_1s^5 + C_1C_5$
- 10.930 INVALID-ORDER-930 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s$
- 10.931 INVALID-ORDER-931 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_{I.} L_1 L_5 L_{I.} R_1 R_5 R_{I.} q_m r_o s^6 + C_1 C_5 C_{I.} L_1 L_5 L_L R_1 R_5 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_L r_o s^6 + C_1 C_5 L_L L_5 L_L R_1 R_5 r_o s^6 + C_1 C_5 L_L L_5 L_L R_1$

- 10.932 INVALID-ORDER-932 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 s^6 + 2 C_1 C_5 C_L L_1 L_5 L_L R_1 R_L g_m r_o s^6 + 4 C_1 C_5 C_L L_1 L_5 L_L R_1 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_2 s^6$
- 10.933 INVALID-ORDER-933 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 s^6 + 2 C_1 C_5 C_L L_1 L_5 L_L R_1 R_L g_m r_o s^6 + 4 C_1 C_5 C_L L_1 L_5 L_L R_1 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_2 s^6$
- **10.934** INVALID-ORDER-934 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R_1R_5s^4 + 2C_1C_5L_1L_5R_1R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1R_1r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_$
- 10.935 INVALID-ORDER-935 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^4 + 2 C_1 C_5 L_1 L_5 R_1 r_o s^$
- 10.936 INVALID-ORDER-936 $Z(s) = \left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}, \infty, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{R_{L}}{C_{L}R_{L}s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_5R_Ls^5 + C_1C_5C_LL_1L_5R_1R_Lr_os^5 + C_1C_5C_LL_1L_5R_1R_5R_Lr_os^5 + C_1C_5C_LL_1R_1R_5R_Lr_os^5 + C_1C_5L_1L_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R$
- 10.937 INVALID-ORDER-937 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 s^5 + 2 C_1 C_5 C_L L_1 L_5 R_1 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_5 R_1 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 r_o s^5 + C_1 C_5 C_L r_o s^5 + C_1 C_5 C_$
- 10.938 INVALID-ORDER-938 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_$
- 10.939 INVALID-ORDER-939 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_Rr_os^6 + C_1C_5C_LL_1L_5C_Lr_os^6 + C_1C_5C_Lr_os^6 + C$

10.940 INVALID-ORDER-940 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.941 INVALID-ORDER-941 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lq_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + C_1C_5C_LL_1L_5L_RR_1R_5R_Lr_os^6 + C_1C_5C_LL_1R$

10.942 INVALID-ORDER-942 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5s^6 + 2C_1C_5C_LL_1L_5L_LR_1R_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_RR_1r_os^6 + C_1C_5C_$

10.943 INVALID-ORDER-943 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5s^6 + 2C_1C_5C_LL_1L_5L_LR_1R_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_Rr_os^6 + C_1C_$

10.944 INVALID-ORDER-944 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_1 s}\right)$

 $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_1 R_1 R_5 g_m r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 C_L L_1 R_5 r_o s^3 + C_1 C_L L_1 R_5 r_o s^3 + C_1 C_L L_1 R_5 r_o s^2 + 2 C_1 L_1 R_1 g_m r_o s^2 + 4 C_1 L_1 R_5 s^2 + C_1 L_1 r_o s^2 + C_1 R_1 R_5 s + C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 g_m r_o s + C_L R_1 R_5 r_o s + 2 R_1 g_m r_o s + 4 R_1 R_5 r_o s^2 + 2 R_1 R_5 r_$

10.945 INVALID-ORDER-945 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{\kappa_1 \kappa_L \left(C_1 L_1 s^2 + 1 \right) \left(\kappa_5 g_m r_o + \kappa_5 - r_o \right)}{C_1 C_L L_1 R_1 R_5 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_5 R_L r_o s^3 + C_1 C_L L_1 R_1 R_5 R_L r_o s^3 + C_1 C_L L_1 R_1 R_5 g_m r_o s^2 + C_1 L_1 R_5$

10.946 INVALID-ORDER-946 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_L R_L s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_1 C_L L_1 R_1 R_5 g_m r_o s^3 + C_1 C_L L_1 R_1 R_5 g^3 +$

10.947 INVALID-ORDER-947 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{2 C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 4 C_1 C_L L_1 L_L R_5 s^4 + C_1 C_L L_1 L_L R_5 g_m r_o s^3 + C_1 C_L L_1 R_1 R_5 g_$

10.948 INVALID-ORDER-948
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$L_L R_1 s \left(C_1 L_1 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)$$

$$H(s) = \frac{L_L R_1 s \left(C_1 L_1 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_1 C_L L_1 L_L R_1 R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 L_L R_1 r_o s^3 + 2 C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_1 s^3$$

10.949 INVALID-ORDER-949
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.950 INVALID-ORDER-950
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 R_L r_o s^4 + C_1 C_L L_L L_R R_5 R_L r_o s^4 + C_1 C_L L_L L_R R_5 R_L r_o s^3 + C_1 L_1 L_L R_1 R_5 g_m r_o s^3 + C_1 L_1 L_L R_1 R_1 R_5 g_m r_o s^3 + C_1 L_1 L_L R_1 R_5 g_m r_o s^3 + C_1 L_1 L_$$

10.951 INVALID-ORDER-951
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 L_1 R_1 r_o s^4 + C_1 C_L L_1 L_1 R_1 r_o s^4 + C_1 C_L L_1 L_1 R_1 r_o s^4 + C_$$

10.952 INVALID-ORDER-952
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_5 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_5 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 r_o s^4 + C_1 C_L L_$$

10.953 INVALID-ORDER-953
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$R_1 R_L \left(C_1 L_1 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)$$

$$H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_1 C_5 L_1 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_5 L_1 R_L r_o s^3 + C_1 C_5 R_1 R_L r_o s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + C_1 L_1 R_L s + C_1 R_1 r_o s + 2 C_5 R_1 R_L g_m r_o s + 4 C_5 R_1 R_L s + C_5 R_1 r_o s + C_5 R_1$$

10.954 INVALID-ORDER-954
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 C_L L_1 R_1 r_o s^4 + 2 C_1 C_5 L_1 R_1 g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 s^3 + C_1 C_5 L_1 r_o s^2 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L R_1 r_o s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_5 C_L R_1 r_o s^2 + 2 C_5 R_1 g_m r_o s + 4 C_5 R_1 s + C_5 r_o s + C_L R_1 g_m r_o s + C_L R_1 r_o s^2 + C_1 C_L R_1$$

10.955 INVALID-ORDER-955
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 R_1 R_L r_o s^4 + 2 C_1 C_5 L_1 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 R_L s^3 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_5 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 R_L r_o s^3$$

10.956 INVALID-ORDER-956
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_L R_L s + 1 \right) \left(-C_5 r_o s + g_m r_o + 2C_1 C_5 C_L L_1 R_1 R_L g_m r_o s^4 + 4C_1 C_5 C_L L_1 R_1 r_o s^4 + C_1 C_5 C_L L_1 R_1 r_o s^4 + C_1 C_5 C_L L_1 R_1 r_o s^3 + 2C_1 C_5 L_1 R_1 g_m r_o s^3 + 4C_1 C_5 L_1 R_1 g_m r_o s^3 + 4C_1 C_5 L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 +$

10.957 INVALID-ORDER-957
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 2C_1 C_5 L_L L_L R_1 g_m r_o s^3 + 4C_1 C_5 L_L L_L R_1 g_m r_o s^3 + 4C_1 C_5 L_L L_L R_1 g_m r_o s^3 + 4C_1 C_5 L_L L_L R_1 g_m r_o s^3 + 4C_1 C_5 L_L L_L R_1 g_m r_o s^3 + 4C_1 C_5 L_L R_1 r_o s^4 + 2C_1 C_5 L_L R_1 r_o s^4 + 2C_1$

10.958 INVALID-ORDER-958
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

 $H(s) = \frac{L_L R_1 s \left(C_1 L_1 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + 2 C_1 C_5 L_1 L_L R_1 g_m r_o s^4 + 4 C_1 C_5 L_1 L_L R_1 s^4 + C_1 C_5 L_1 L_L R_1 r_o s^3 + C_1 C_5 L_L R_1 r_o s^3 + C_1 C_4 L_L R_1 r_o s^3 + C_1 C_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 r_o s^4 + C_1 C_4 R_1 r_o$

10.959 INVALID-ORDER-959
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.960 INVALID-ORDER-960
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_L r_o s^5 + 2 C_1 C_5 L_1 L_L R_1 R_L g_m r_o s^4 + 4 C_1 C_5 L_1 L_L R_1 R_L s^4 + C_1 C_5 L_1 L_L R_1 r_o s^4 + C_1 C_5 L_1 L_L R_1 R_L r_o s^4 + C_1 C_5 L_1 R_1 R_L r_o s^$$

10.961 INVALID-ORDER-961
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

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

10.962 INVALID-ORDER-962
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

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

10.963 INVALID-ORDER-963
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$R_1 R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)$$

 $H(s) = -\frac{R_1R_L\left(C_1L_1s^2 + 1\right)\left(C_5R_5r_os - R_5g_mr_o - R_5 + r_o\right)}{2C_1C_5L_1R_1R_5R_Lg_mr_os^3 + 4C_1C_5L_1R_1R_5g_ur_os^3 + 4C_1C_5L_1R_1R_5g_ur_os^3 + 4C_1C_5L_1R_1R_5g_ur_os^3 + 4C_1L_1R_1R_5g_ur_os^3 + 4C_1L_1R_1R_1R_1G_ur_os^3 + 4C_1L_1R_1R_1R_1G_ur_os^3 + 4C_1L_1R_1R_1G_ur_os^3 + 4C_1L_1R_1R_1G_ur_os^3 +$

10.964 INVALID-ORDER-964
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{R_1 \left(C_1 L_1 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{C_1 C_5 C_L L_1 R_1 R_5 r_o s^4 + 2 C_1 C_5 L_1 R_1 R_5 g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 R_5 r_o s^3 + C_1 C_L L_1 R_1 R_5 g_m r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 C_L L$$

10.965 INVALID-ORDER-965
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = -\frac{1}{C_1C_5C_LL_1R_1R_5R_Lr_os^4 + 2C_1C_5L_1R_1R_5R_Lg_mr_os^3 + 4C_1C_5L_1R_1R_5R_Ls^3 + C_1C_5L_1R_1R_5R_Lr_os^3 + C_1C_5L_1R_5R_Lr_os^3 + C_1C_5L_1R_5R_Lr_os^3$$

10.966 INVALID-ORDER-966
$$Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

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

10.967 INVALID-ORDER-967
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + \frac{1}{C_Ls}\right)$$

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

10.968 INVALID-ORDER-968
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.969 INVALID-ORDER-969
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.970 INVALID-ORDER-970
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = -\frac{1}{C_1C_5C_LL_1L_LR_1R_5R_Lr_os^5 + 2C_1C_5L_1L_LR_1R_5R_Lg_mr_os^4 + 4C_1C_5L_1L_LR_1R_5R_Ls^4 + C_1C_5L_1L_LR_1R_5r_os^4 + C_1C_5L_1L_LR_1R_5R_Lr_os^3 + C_1C_5L_LR_1R_5R_Lr_os^3 + C_1C_5L_LR_1R_5R_Lr_os^3 + C_1C_5L_LR_1R_5R_Lr_os^4 + C_1C_5L_1L_LR_1R_5R_Lr_os^4 + C_1C_5L_1L_LR_1R_5R_Lr_os^3 + C_1C_5L_1L_LR_1R_5R_Lr_os^3 + C_1C_5L_1L_LR_1R_5R_Lr_os^4 + C_1C_5L_1L_RR_1R_5R_Lr_os^4 + C_1C_5L_1L_RR_1R_5R_Lr_os^4$$

10.971 INVALID-ORDER-971
$$Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}R_{L}q_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}R_{L}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{L}R_{1}R_{5}R_{L}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{L}R_{1}R_{5}q_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{L}R_{1}R_{5}s^{4} + C_{1}C_{5}L_{1}L_{L}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{L}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{1}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{1}R_{1}R_{5}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{1}R_{1$$

- 10.972 INVALID-ORDER-972 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}R_{5}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}R_{L}r_{o}s^{4} + C_{$
- 10.973 INVALID-ORDER-973 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1 \right)}{C_1 C_5 L_1 R_1 R_5 g_m r_o s^3 + C_1 C_5 R_1 R_5 g_m r_o s^3 + C_1$
- **10.974** INVALID-ORDER-974 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_1 s} + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + C_5 R_5 r_o s +$
- 10.975 INVALID-ORDER-975 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{R_5}{C_1 R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 R_1 R_5 R_L g_m r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 R_L s^4 + C_1 C_5 C_L L_1 R_1 R_L r_o s^4 + C_1 C_5 C_L L_1 R_5 R_L r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^4 + C_1 C_5 C_L R_1 R_5 R_L$
- **10.976** INVALID-ORDER-976 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1R_1R_5g_mr_os^4 + C_1C_5C_LL_1R_1R_5s^4 + 2C_1C_5C_LL_1R_1R_Lg_mr_os^4 + 4C_1C_5C_LL_1R_1r_os^4 + C_1C_5C_LL_1R_5r_os^4 + C_$
- 10.977 INVALID-ORDER-977 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}r_{o}s^{4$
- 10.978 INVALID-ORDER-978 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_5 r_o s^5 + C_1 C_5 C_L L_L R_1 R_5 r_o s^4 + 2 C_1 C_5 L_1 L_L R_1 g_m r_o s^4 + 4 C_1 C_5 L_1 L_L R_5 s^4 + C_1 C_5 L_1 L_L R_5 r_o s^4 + C_1 C_5 L_1 L_L R_1 r_o s^4 + C_1 C_5 L_1 R_1 r_o s^4 + C_1 C_$
- 10.979 INVALID-ORDER-979 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{L}R_{1}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{L}R_{5}s^{5} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}g_{m}r_{o}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{L}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{1}R_{5}s^{4} + C_{1}C_{5}C_{L}L_{1}R_{$

- **10.980** INVALID-ORDER-980 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L s^5 + C_1 C_5 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L r_o s^4 + C_1 C_5 L_1 L_L R_1 R_5 R_L r_o s^4 + C_$
- 10.981 INVALID-ORDER-981 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_1L_LR_1R_5s^5 + 2C_1C_5C_LL_1L_LR_1R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1R_1r_os^5 + C_$
- 10.982 INVALID-ORDER-982 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_L R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 s^5 + 2 C_1 C_5 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_1 R_L s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 r_o s^5 + C_1 C_5 C_L L_1 r_o s^5 + C_1 C_5 C_L r_o s^5 + C_1 C_5$
- 10.983 INVALID-ORDER-983 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_1 R_L \left(C_1 L_1 s^2 + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1\right)}{C_1 C_5 L_1 L_5 R_1 g_m r_o s^4 + C_1 C_5 L_1 L_5 R_1 s^4 + C_1 C_5 L_1 L_5 R_1 s^4 + C_1 C_5 L_1 R_1 R_L g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 R_L s^3 + C_1 C_5 L_1 R_1 R_L s^3 + C_1 C_5 L_5 R_1 R_L s^3 +$
- 10.984 INVALID-ORDER-984 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 2 C_5 L_1 L_2 R_1 g_m r_o s^3 + 4 C_1 C_5 L_2 L_1 L_2 R_1 g_m r_o s^3 + 4 C_1 C_5 L_2 L_1 L_2 R_1 g_m r_o s^3 + 4 C_1 C_5 L_2 L_1 R_1 g_m r_o s^3 + 4 C_1 C_5 L_2 L_1 R_1 g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 g_m r_o s^3 + 4 C_1 C_5 L_1 R_1 g_m r_o s^3 + C_1 C_5 L_2 L_1 R_1 g_m r_o s^3 + C_1 C_5 L_2 R_1 r_o s^4 + C_$
- 10.985 INVALID-ORDER-985 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_1R_1R_Lr_os^4 + C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C$
- **10.986** INVALID-ORDER-986 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_5r_os^5 + 2C_1C_5C_LL_1R_1R_Lg_mr_os^4 + 4C_1C_5C_LL_1R_1r_os^4 + C_1C_5C_LL_1R_1r_os^4 + C_$
- 10.987 INVALID-ORDER-987 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_LR_1g_mr_os^5 + 4C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_Rr_os^4 + C_1C_5C_LL_1L_1R_0s^4 + C_1C_5C_LL_1L_1R_0s^4 + C_1C_5C_LL_1L_1R_0s^4 + C_1C_5C_LL_1L_1R_0s^4 + C_1$

- 10.988 INVALID-ORDER-988 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^5 + C_1C_5L_LL_5L_LR_1r_os^5 + C_1C_5L_1L_5L_Ls^5 + C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1L_5R$
- 10.989 INVALID-ORDER-989 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L s^6 + C_1 C_5 C_L L_1 L_5 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 s^5 + C_1 C_5 C_L L_1 L_4 R_1 g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_4 R_1 g_m r_o s^5 + 4 C_1 C_5 C_L L_4 L_4 R_1 g_m r_o s^5 + 2 C_1 C_5 C_L L_4 L_4 R_1 g_m r_o s^5 + 2 C_1 C_5 C_L L_4 L_4 R_1 g_m r_o s^5 + 2 C_1 C_5 C_L L_4 L_4 R_4 g_m r_o s^5 + 2 C_1 C_5 C_L L_4 R_4 g_m r_o s^5 + 2 C_1 C_5 C_L L_4 R_4 g_m r_o s^5 + 2 C_1 C_5 C_L L_4$
- 10.990 INVALID-ORDER-990 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_LR_1R_Lr_os^5 + C_1C_5L_LL_5L_LR_1R_Lr_os^5 + C_1C_5L_1L_5L_LR_1g_mr_os^5 + C_1C_5L_1L_5L_LR_1s^5 + C_1C_5L_1L_5L_Rs^5 + C_1C_5L_1L_5L_Rs^5$
- 10.991 INVALID-ORDER-991 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 4 C_1 C_5 C_L L_1 L_L R_1 R_L s^5 + C_1 C_5 C_L L_1 R_1 R_L s^5 + C_1 C_5 C_L L_1 R_1 R_L s^5 + C_1 C_5 C_L L_1$
- 10.992 INVALID-ORDER-992 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- **10.993** INVALID-ORDER-993 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$
- $H(s) = -\frac{R_1 R_L \left(C_1 L_1 s^2 + 1\right) \left(C_5 L_5 r_o s^2 L_5 g_m r_o s L_5 s + r_o R_1 R_1 R_2 r_o s^3 + C_1 L_1 L_5 R_1 R_2 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_2 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_2 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_2 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_2 r_o s^4 + C_1 C_5 L_1 L_5 R_1 R_2 r_o s^4 + C_1 L_1 L_5 R_1 r_o s^4 + C_1 L_1 R_1 r_o s^4 + C_$
- 10.994 INVALID-ORDER-994 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{R_1 \left(C_1 L_1 s^2 + 1 \right) \left(C_5 L_5 r_o s^2 L_5 g_m r_o s L_5 s + r_o \right)}{C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + 2 C_1 C_5 L_1 L_5 R_1 g_m r_o s^4 + 4 C_1 C_5 L_1 L_5 R_1 s^4 + C_1 C_L L_1 L_5 R_1 g_m r_o s^4 + C_1 C_L L_1 L_5 R_1 s^4 + C_1 C_L L_1 L_5 R_1 r_o s^3 + C_1 L_1 L_5 R_1 r_o s^3 +$
- 10.995 INVALID-ORDER-995 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_Lr_os^5 + 2C_1C_5L_1L_5R_1R_Lq_mr_os^4 + 4C_1C_5L_1L_5R_1R_Ls^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_5R_1R_Lr_os^3 + C_1C_LL_1L_5R_1R_Lq_mr_os^4 + C_1C_LL_1R_1R_Lq_mr_os^4 + C_1C_LL_1R_1R_Lq_mr_os^4 + C_1C_LL_1R_1R_Lq_mr_os^4 + C_1C_LL_1R_1R_Lq_mr_os^4 + C_1C_LLq_1R_1R_Lq_mr_os^4 + C_1C_LLq_1R_1$

- **10.996** INVALID-ORDER-996 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}g_{m}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{4} + 2C_{1}C_{5}L_{1}L_{5}R_{1}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}L_{5}R_$
- 10.997 INVALID-ORDER-997 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{1}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{1}r_{o}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{1}r_{o}s^{3} + C_{1}C_{L}L_{1}L_{5}L_{L}s^{5} + C_{1}C_{L}L_{1}L_{5}L_{L}s^{5} + C_{1}C_{5}L_{L}L_{5}L_{L}s^{5} + C_{1}C_{5}L_{L}s^{5} + C_{1}C_{5}L_{L}L_{5}L_{L}s^{5} + C_{1}C_{5}L_{L}s^{5} + C_{$
- 10.998 INVALID-ORDER-998 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- 10.999 INVALID-ORDER-999 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{6} + 2C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}R_{g}r_{o}s^{5} + 4C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{L}r_{o$
- **10.1000** INVALID-ORDER-1000 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_Lr_os^6 + 2C_1C_5L_1L_5L_LR_1R_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_1R_Ls^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_LR_1r_os^5 + C_1C_5L_1L_5L_LR_1R_Lr_os^5 + C_1C_5L_1L_5L_Rr_os^5 + C$
- 10.1001 INVALID-ORDER-1001 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}L_{L}R_{1}r_{o}s^{6} +$
- 10.1002 INVALID-ORDER-1002 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{1}R_{L}g_{m}r_{o}s^{4} + 4C_{1}C_{5}L_{1}L_{5}R_{1}R_{L}s^{4} + C_{1}C_{5}L_{1}L_{5}R_{1}R_{L}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{1}L_{5}R_{1}R_{L}r_{o}s^{5} + 2C_{1}C$
- 10.1003 INVALID-ORDER-1003 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1g_mr_os^4 + C_1C_5L_1L_5R_1s^4 + C_1C_5L_1L_5R_Ls^4 + C_1C_5L_1R_1R_5g_mr_os^3 + C_1C_5L_1R_1R_5s^3 + 2C_1C_5L_1R_1R_Ls^3 + C_1C_5L_1R_1r_os^3 + C_1C_5L_1R_5r_os^3 + C_1$

10.1004 INVALID-ORDER-1004 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_5r_os^5 + C_1C_5C_LL_1R_1R_5g_mr_os^4 + C_1C_5C_LL_1R_1r_os^4 + C_1C$

10.1005 INVALID-ORDER-1005 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_Lr_os^5 + C_1C_5C_LL_1R_1R_5R_Lg_mr_os^4 + C_1C_5C_LL_1R_1R_5R_Ls^4 + C_1C_5C_LL_1R_1R_5R_Lr_os^4 + C_1C_5C_LL_1R_5R_Lr_os^4 + C_1C_5C_LL_1R_5R_Lr$

10.1006 INVALID-ORDER-1006 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 s^5 + C_1 C_5 C_L L_1 L_5 R_L s^5 + C_1 C_5 C_L L_1 R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_1 R_1 R_5 g_m r_o s^4 + C_1 C_5 C_L L_1 R_1 R_1 g_m r_o s^$

10.1007 INVALID-ORDER-1007 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_LR_1g_mr_os^5 + 4C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_1R_1s^5 + C_1C_5C_LL_1R_1s^5 +$

10.1008 INVALID-ORDER-1008 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5L_Lr_os^6 + C_1C_5C_LL_1L_LR_1R_5g_mr_os^5 + C_1C_5C_LL_1L_LR_1r_os^5 + C_1C_5C_LL_1L_1L_1R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1L_1R_1r_os^5 + C_1C_5C_LL_1R_1r_os^5 + C_1C_5C_LL_1R_1r$

10.1009 INVALID-ORDER-1009 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_Ls^6 + C_1C_5C_LL_1L_5R_1g_mr_os^5 + C_1C_5C_LL_1L_5R_1s^5 + C_1C_5C_LL_1L_5R_0s^5 + 2C_1C_5C_LL_1L_LR_1g_mr_os^5 + 4C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_LR_1s^5 + C_1C_5C_LL_1L_1R_1s^5 + C_1C_5C_LL_1R_1s^5 + C_1C_5C_LL_1R_1s^$

10.1010 INVALID-ORDER-1010 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_L g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_L s^6 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L s^5 + C_1 C_5 C_L L_1 L_L R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L R_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L R_1 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L R_1 R_1 R_5 R_$

10.1011 INVALID-ORDER-1011 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1s^6 + C_1C_5C_LL_1L_5L_1R_1s^6 + C$

10.1012 INVALID-ORDER-1012 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 s^6 + C_1 C_5 C_L L_1 L_5 R_1 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 R_L g_$

10.1013 INVALID-ORDER-1013 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L\right)$

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

10.1014 INVALID-ORDER-1014 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_5r_os^5 + 2C_1C_5L_1L_5R_1R_5g_mr_os^4 + 4C_1C_5L_1L_5R_1R_5s^4 + C_1C_LL_1L_5R_1R_5g_mr_os^4 + C_1C_LL_1L_5R_1R_5g_mr_os$

10.1015 INVALID-ORDER-1015 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lr_os^5 + 2C_1C_5L_1L_5R_1R_5R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_1R_5R_Ls^4 + C_1C_5L_1L_5R_1R_5R_Lr_os^4 + C_1C_5L_1L_5R_1R$

10.1016 INVALID-ORDER-1016 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$

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

10.1017 INVALID-ORDER-1017 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$

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

10.1018 INVALID-ORDER-1018 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5r_os^6 + 2C_1C_5L_1L_5L_LR_1R_5g_mr_os^5 + 4C_1C_5L_1L_5L_LR_1R_5s^5 + C_1C_5L_1L_5L_LR_1s_os^5 + C_1C_5L_1L_5L_RR_1s_os^5 + C_1C_5L_1L_5L_1L_5L_1R_1s_os^5 + C_1C_5L_1L_5L_1R_1s_os^5 + C_1C_5L_1L_5L_1R_1s_os^5 + C_1C_5L_1L_5L$

10.1019 INVALID-ORDER-1019 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

- **10.1020** INVALID-ORDER-1020 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + 2C_1C_5L_1L_5L_LR_1R_5R_Lg_mr_os^5 + 4C_1C_5L_1L_5L_LR_1R_5R_Ls^5 + C_1C_5L_1L_5L_LR_1R_5r_os^5 + C_1C_5L_1L_5L_LR_1R_5R_Lr_os^5 + C_1C_5L_1L_5L_RR_1R_5R_Lr_os^5 + C_1C_5L_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R_1R_5R$
- 10.1021 INVALID-ORDER-1021 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L_{L}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{5} + 2C_{1}C_{5}L$
- 10.1022 INVALID-ORDER-1022 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}R_{5}R_{L}r_{o}s^{6} +$
- 10.1023 INVALID-ORDER-1023 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R_1R_5s^4 + 2C_1C_5L_1L_5R_1R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1R_1r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_1r_os^4 + C_1C_$
- **10.1024** INVALID-ORDER-1024 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_$
- 10.1025 INVALID-ORDER-1025 $Z(s) = \left(\frac{R_1\left(L_1 s + \frac{1}{C_1 s}\right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 R_L g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 R_L s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_L r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 R_L r_o s^5 + C_1 C_5 C_L L_1 L_5$
- **10.1026** INVALID-ORDER-1026 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_1R_5s^5 + 2C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1L_5R_1r_os^5 + C_1C_5C_LL_1L_5R_1r_$
- 10.1027 INVALID-ORDER-1027 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}q_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}q_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}r_$

- 10.1028 INVALID-ORDER-1028 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_Rr_os^6 + C_1C_5C_LL_1L$
- 10.1029 INVALID-ORDER-1029 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}g_{m}r_{o}s^{6} + 4C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{1}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}R_{5}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}L_{L}r_{o}s^{6} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s^{5} + C_{1}C_{5}C_{L}L_{1}L_{5}R_{1}R_{5}g_{m}r_{o}s$
- **10.1030** INVALID-ORDER-1030 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + C_1C_5C_LL_1L_5L_RR_1R_5R_Lr_os^6 + C_1C_5C_LL_1R$
- 10.1031 INVALID-ORDER-1031 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5s^6 + 2C_1C_5C_LL_1L_5L_LR_1R_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_RR_1r_os^6 + C_1C_5C_$
- 10.1032 INVALID-ORDER-1032 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5s^6 + 2C_1C_5C_LL_1L_5L_LR_1R_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_RR_1r_os^6 + C_1C_5C_$
- 10.1033 INVALID-ORDER-1033 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L\right)$
- $H(s) = \frac{1}{C_1C_5L_1L_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R_1R_5s^4 + 2C_1C_5L_1L_5R_1R_Lg_mr_os^4 + 4C_1C_5L_1L_5R_1r_os^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_5r_os^4 + C_1C_5L_1L_5R_1r_os^4 + 2C_1C_5L_1R_1R_5R_Lg_mr_os^3 + 4C_1C_5L_1R_1R_5R_Ls^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5r_os^4 + C_1C_5L_1R_1R_5R_Lg_mr_os^3 + 4C_1C_5L_1R_1R_5R_Ls^3 + C_1C_5L_1R_1R_5r_os^3 + C_1C_5L_1R_1R_5R_Ls^3 + C_1C_5L_1R_$
- 10.1034 INVALID-ORDER-1034 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 R_1 R_5 g_m r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 R_5 s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^5 + C_1 C_5 C_L L_1 L_5 R_1 r_o s^4 + C_1 C_5 L_1 L_5 R_1$
- 10.1035 INVALID-ORDER-1035 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5R_Lg_mr_os^5 + C_1C_5C_LL_1L_5R_1R_5R_Ls^5 + C_1C_5C_LL_1L_5R_1R_Lr_os^5 + C_1C_5C_LL_1R_1R_5R_Lr_os^4 + C_1C_5C_LL_5R_1R_5R_Lr_os^4 + C_1C_5L_1L_5R_1R_5g_mr_os^4 + C_1C_5L_1L_5R_1R$

10.1036 INVALID-ORDER-1036 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5R_1R_5g_mr_os^5 + C_1C_5C_LL_1L_5R_1R_5s^5 + 2C_1C_5C_LL_1L_5R_1R_Lg_mr_os^5 + 4C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_1R_Ls^5 + C_1C_5C_LL_1L_5R_1R_5s^5 + C_1C_5C_LL_1L_5R_1R_$

10.1037 INVALID-ORDER-1037 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$

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

10.1038 INVALID-ORDER-1038 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_1R_1r_os^6 + C_1C_5C_LL_1R_1r_os^6 + C_1C_5C_LL_1R_1r_os^6 + C_1C_5C_LL_1R_1r_os^6 + C_1C_5C_LL_1R_1r_os^6 + C_1C_5C_LL$

10.1039 INVALID-ORDER-1039 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

10.1040 INVALID-ORDER-1040 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5R_Lg_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1R_5R_Lr_os^6 + C_1C_5C_LL_1L_5L_RR_1R_5R_Lr_os^6 + C_1C_5C_LL_1R_5R_Lr_os^6 + C_1C_5C_LL_1R_5R_Lr_os^6 + C_1C_5C_LL_1R_5R_Lr_os^6 + C_1C_5C$

10.1041 INVALID-ORDER-1041 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 g_m r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 s^6 + 2 C_1 C_5 C_L L_1 L_5 L_L R_1 R_L g_m r_o s^6 + 4 C_1 C_5 C_L L_1 L_5 L_L R_1 R_L s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_5 r_o s^6 + C_1 C_5 C_L L_1 L_5 L_L R_1 R_5 r_o s^6 + C_1 C_5 C_L L_1 L_5$

10.1042 INVALID-ORDER-1042 $Z(s) = \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{C_1C_5C_LL_1L_5L_LR_1R_5g_mr_os^6 + C_1C_5C_LL_1L_5L_LR_1R_5s^6 + 2C_1C_5C_LL_1L_5L_LR_1R_Lg_mr_os^6 + 4C_1C_5C_LL_1L_5L_LR_1R_Ls^6 + C_1C_5C_LL_1L_5L_LR_1r_os^6 + C_1C_5C_LL_1L_5L_RR_1r_os^6 + C_1C_5C_$