Filter Summary Report: CG,TIA,simple,Z3,Z4,Z5

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10.683 INVALID-ORDER-683 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 96

10.684 INVALID-ORDER-684 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 96

10.685 INVALID-ORDER-685 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 96

10.686 INVALID-ORDER-686 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 96

10.687 INVALID-ORDER-687 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 96

10.688 INVALID-ORDER-688 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 96

10.689 INVALID-ORDER-689 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 96

10.690 INVALID-ORDER-690 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 96

10.691 INVALID-ORDER-691 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + \frac{1}{C_4 s}, \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 97

10.692 INVALID-ORDER-692 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$ 97

10.693 INVALID-ORDER-693 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 97

10.694 INVALID-ORDER-694 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 97

10.695 INVALID-ORDER-695 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 97

10.696 INVALID-ORDER-696 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 97

10.697 INVALID-ORDER-697 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 97

10.698 INVALID-ORDER-698 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 97

10.699 INVALID-ORDER-699 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 97

10.700 INVALID-ORDER-700 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 98

10.701 INVALID-ORDER-701 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$ 98

10.702 INVALID-ORDER-702 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 98

10.703 INVALID-ORDER-703 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 98

10.704 INVALID-ORDER-704 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 98

10.705 INVALID-ORDER-705 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 98

10.706 INVALID-ORDER-706 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 98

10.707 INVALID-ORDER-707 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 98

10.708 INVALID-ORDER-708 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 98

10.709 INVALID-ORDER-709 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 98

10.710 INVALID-ORDER-710 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 99

10.711 INVALID-ORDER-711 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)$ 99

10.712 INVALID-ORDER-712 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 99

10.713 INVALID-ORDER-713 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 99

10.714 INVALID-ORDER-714 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 99

10.715 INVALID-ORDER-715 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 99

10.716 INVALID-ORDER-716 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 99

10.717 INVALID-ORDER-717 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 99

10.718 INVALID-ORDER-718 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 99

10.719 INVALID-ORDER-719 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 100

10.720 INVALID-ORDER-720 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$ 100

10.721 INVALID-ORDER-721 $Z(s) = \left(\infty, \infty, \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$ 100

1 Examined $H(z)$ for CG TIA simple Z3 Z4 Z5: $\frac{Z_3 Z_4 Z_5 g_m - Z_3 Z_4}{2 Z_3 Z_4 g_m + 2 Z_3 Z_5 g_m + 2 Z_3 + Z_4 Z_5 g_m + Z_4}$

$$H(z) = \frac{Z_3 Z_4 Z_5 g_m - Z_3 Z_4}{2 Z_3 Z_4 g_m + 2 Z_3 Z_5 g_m + 2 Z_3 + Z_4 Z_5 g_m + Z_4}$$

2 HP

3 BP

3.1 BP-1 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty \right)$

$$H(s) = \frac{s \left(L_4 R_3 R_5 g_m - L_4 R_3 \right)}{2 R_3 R_5 g_m + 2 R_3 + s^2 \left(2 C_4 L_4 R_3 R_5 g_m + 2 C_4 L_4 R_3 \right) + s \left(2 L_4 R_3 g_m + L_4 R_5 g_m + L_4 \right)}$$

Parameters:

Q: $\frac{2 C_4 R_3 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + 2 C_4 R_3 \sqrt{\frac{1}{C_4 L_4}}}{2 R_3 g_m + R_5 g_m + 1}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_4 L_4}} \left(2 R_3 g_m + R_5 g_m + 1 \right)}{2 C_4 R_3 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + 2 C_4 R_3 \sqrt{\frac{1}{C_4 L_4}}}$

K-LP: 0

K-HP: 0

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

Qz: None

Wz: None

3.2 BP-2 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5, \ \infty \right)$

$$H(s) = \frac{s \left(L_4 R_3 R_4 R_5 g_m - L_4 R_3 R_4 \right)}{2 R_3 R_4 R_5 g_m + 2 R_3 R_4 + s^2 \left(2 C_4 L_4 R_3 R_4 R_5 g_m + 2 C_4 L_4 R_3 R_4 \right) + s \left(2 L_4 R_3 R_4 g_m + 2 L_4 R_3 R_5 g_m + 2 L_4 R_3 + L_4 R_4 R_5 g_m + L_4 R_4 \right)}$$

Parameters:

Q: $\frac{2 C_4 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + 2 C_4 R_3 R_4 \sqrt{\frac{1}{C_4 L_4}}}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_4 L_4}} \left(2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 \right)}{2 C_4 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + 2 C_4 R_3 R_4 \sqrt{\frac{1}{C_4 L_4}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4}$

Qz: None

Wz: None

3.3 BP-3 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty \right)$

$$H(s) = \frac{s \left(L_4 R_5 g_m - L_4 \right)}{2 L_4 g_m s + 2 R_5 g_m + s^2 \left(C_3 L_4 R_5 g_m + C_3 L_4 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 \right) + 2}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2 \sqrt{2} C_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2 \sqrt{2} C_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{2 g_m}$

wo: $\sqrt{2} \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}$

bandwidth: $\frac{2 \sqrt{2} g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{\sqrt{2} C_3 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2 \sqrt{2} C_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2 \sqrt{2} C_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_5 g_m - 1}{2 g_m}$
Qz: None
Wz: None

3.4 BP-4 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2 R_4 R_5 g_m + 2 R_4 + s^2\left(C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 + 2 C_4 L_4 R_4 R_5 g_m + 2 C_4 L_4 R_4\right) + s\left(2 L_4 R_4 g_m + 2 L_4 R_5 g_m + 2 L_4\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{2 R_4 g_m + 2 R_5 g_m + 2}$

wo: $\sqrt{2}\sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}$

bandwidth: $\frac{\sqrt{2}(2 R_4 g_m + 2 R_5 g_m + 2)\sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{\sqrt{2} C_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_4 R_5 g_m - R_4}{2 R_4 g_m + 2 R_5 g_m + 2}$
Qz: None
Wz: None

3.5 BP-5 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3 R_3 s + 1},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_4 R_3 R_5 g_m - L_4 R_3\right)}{2 R_3 R_5 g_m + 2 R_3 + s^2\left(C_3 L_4 R_3 R_5 g_m + C_3 L_4 R_3 + 2 C_4 L_4 R_3 R_5 g_m + 2 C_4 L_4 R_3\right) + s\left(2 L_4 R_3 g_m + L_4 R_5 g_m + L_4\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 R_3 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{2 R_3 g_m + R_5 g_m + 1}$

wo: $\sqrt{2}\sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}$

bandwidth: $\frac{\sqrt{2}(2 R_3 g_m + R_5 g_m + 1)\sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{\sqrt{2} C_3 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 R_3 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_3 R_5 g_m - R_3}{2 R_3 g_m + R_5 g_m + 1}$
Qz: None
Wz: None

3.6 BP-6 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3 R_3 s + 1},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_4 R_3 R_4 R_5 g_m - L_4 R_3 R_4\right)}{2 R_3 R_4 R_5 g_m + 2 R_3 R_4 + s^2\left(C_3 L_4 R_3 R_4 R_5 g_m + C_3 L_4 R_3 R_4 + 2 C_4 L_4 R_3 R_4 R_5 g_m + 2 C_4 L_4 R_3 R_4\right) + s\left(2 L_4 R_3 R_4 g_m + 2 L_4 R_3 R_5 g_m + 2 L_4 R_3 + L_4 R_4 R_5 g_m + L_4 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 R_3 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4}$

wo: $\sqrt{2}\sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}$

bandwidth: $\frac{\sqrt{2}(2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4)\sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}{\sqrt{2} C_3 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + \sqrt{2} C_3 R_3 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}} + 2\sqrt{2} C_4 R_3 R_4 \sqrt{\frac{1}{C_3 L_4 + 2 C_4 L_4}}}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4}$
Qz: None
Wz: None

3.7 BP-7 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ R_4,\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{R_4 R_5 g_m + R_4 + s^2\left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4\right) + s\left(2 L_3 R_4 g_m + 2 L_3 R_5 g_m + 2 L_3\right)}$$

Parameters:

Q: $\dfrac{C_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_4 \sqrt{\frac{1}{C_3 L_3}}}{2 R_4 g_m + 2 R_5 g_m + 2}$

wo: $\sqrt{\frac{1}{C_3 L_3}}$

bandwidth: $\dfrac{\sqrt{\frac{1}{C_3 L_3}}\left(2 R_4 g_m + 2 R_5 g_m + 2\right)}{C_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_4 \sqrt{\frac{1}{C_3 L_3}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_4 R_5 g_m - R_4}{2 R_4 g_m + 2 R_5 g_m + 2}$

Qz: None

Wz: None

3.8 BP-8 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3 R_5 g_m - L_3\right)}{2 L_3 g_m s + R_5 g_m + s^2\left(C_3 L_3 R_5 g_m + C_3 L_3 + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3\right) + 1}$$

Parameters:

Q: $\dfrac{C_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + C_3 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}}{2 g_m}$

wo: $\sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}$

bandwidth: $\dfrac{2 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}}{C_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + C_3 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}}$

K-LP: 0

K-HP: 0

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

Qz: None

Wz: None

3.9 BP-9 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \frac{R_4}{C_4 R_4 s + 1},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{R_4 R_5 g_m + R_4 + s^2\left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_4 L_3 R_4 R_5 g_m + 2 C_4 L_3 R_4\right) + s\left(2 L_3 R_4 g_m + 2 L_3 R_5 g_m + 2 L_3\right)}$$

Parameters:

Q: $\dfrac{C_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + C_3 R_4 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 R_4 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}}{2 R_4 g_m + 2 R_5 g_m + 2}$

wo: $\sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}$

bandwidth: $\dfrac{\left(2 R_4 g_m + 2 R_5 g_m + 2\right)\sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}}{C_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + C_3 R_4 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}} + 2 C_4 R_4 \sqrt{\frac{1}{C_3 L_3 + 2 C_4 L_3}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_4 R_5 g_m - R_4}{2 R_4 g_m + 2 R_5 g_m + 2}$

Qz: None

Wz: None

3.10 BP-10 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3 L_4 R_5 g_m - L_3 L_4\right)}{2L_3 L_4 g_m s + 2L_3 R_5 g_m + 2L_3 + L_4 R_5 g_m + L_4 + s^2\left(C_3 L_3 L_4 R_5 g_m + C_3 L_3 L_4 + 2C_4 L_3 L_4 R_5 g_m + 2C_4 L_3 L_4\right)}$$

Parameters:

Q: $\dfrac{C_3 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + C_3 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}{2g_m}$

wo: $\sqrt{\dfrac{2L_3 + L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}$

bandwidth: $\dfrac{2g_m \sqrt{\frac{2L_3 + L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}{C_3 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + C_3 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}$

K-LP: 0

K-HP: 0

K-BP: $\dfrac{R_5 g_m \sqrt{\frac{2}{C_3 L_4 + 2C_4 L_4} + \frac{1}{C_3 L_3 + 2C_4 L_3}} - \sqrt{\frac{2}{C_3 L_4 + 2C_4 L_4} + \frac{1}{C_3 L_3 + 2C_4 L_3}}}{2g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}$

Qz: None

Wz: None

3.11 BP-11 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3 L_4 R_4 R_5 g_m - L_3 L_4 R_4\right)}{2L_3 R_4 R_5 g_m + 2L_3 R_4 + L_4 R_4 R_5 g_m + L_4 R_4 + s^2\left(C_3 L_3 L_4 R_4 R_5 g_m + C_3 L_3 L_4 R_4 + 2C_4 L_3 L_4 R_4 R_5 g_m + 2C_4 L_3 L_4 R_4\right) + s\left(2L_3 L_4 R_4 g_m + 2L_3 L_4 R_5 g_m + 2L_3 L_4\right)}$$

Parameters:

Q: $\dfrac{C_3 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + C_3 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}{2R_4 g_m + 2R_5 g_m + 2}$

wo: $\sqrt{\dfrac{2L_3 + L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}$

bandwidth: $\dfrac{\sqrt{\frac{2L_3 + L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}\left(2R_4 g_m + 2R_5 g_m + 2\right)}{C_3 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + C_3 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}$

K-LP: 0

K-HP: 0

K-BP: $\dfrac{R_4 R_5 g_m \sqrt{\frac{2}{C_3 L_4 + 2C_4 L_4} + \frac{1}{C_3 L_3 + 2C_4 L_3}} - R_4 \sqrt{\frac{2}{C_3 L_4 + 2C_4 L_4} + \frac{1}{C_3 L_3 + 2C_4 L_3}}}{2R_4 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2\sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}$

Qz: None

Wz: None

3.12 BP-12 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ R_4,\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3 R_3 R_4 R_5 g_m - L_3 R_3 R_4\right)}{R_3 R_4 R_5 g_m + R_3 R_4 + s^2\left(C_3 L_3 R_3 R_4 R_5 g_m + C_3 L_3 R_3 R_4\right) + s\left(2L_3 R_3 R_4 g_m + 2L_3 R_3 R_5 g_m + 2L_3 R_3 + L_3 R_4 R_5 g_m + L_3 R_4\right)}$$

Parameters:

Q: $\dfrac{C_3 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_3 R_4 \sqrt{\frac{1}{C_3 L_3}}}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

wo: $\sqrt{\dfrac{1}{C_3 L_3}}$

bandwidth: $\dfrac{\sqrt{\frac{1}{C_3 L_3}}\left(2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4\right)}{C_3 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + C_3 R_3 R_4 \sqrt{\frac{1}{C_3 L_3}}}$

K-LP: 0

K-HP: 0

K-BP: $\dfrac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

Qz: None

Wz: None

3.13 **BP-13** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \frac{1}{C_4s},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3R_3R_5g_m - L_3R_3\right)}{R_3R_5g_m + R_3 + s^2\left(C_3L_3R_3R_5g_m + C_3L_3R_3 + 2C_4L_3R_3R_5g_m + 2C_4L_3R_3\right) + s\left(2L_3R_3g_m + L_3R_5g_m + L_3\right)}$$

Parameters:

Q: $\dfrac{C_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+C_3R_3\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3\sqrt{\frac{1}{C_3L_3+2C_4L_3}}}{2R_3g_m+R_5g_m+1}$

wo: $\sqrt{\frac{1}{C_3L_3+2C_4L_3}}$

bandwidth: $\dfrac{(2R_3g_m+R_5g_m+1)\sqrt{\frac{1}{C_3L_3+2C_4L_3}}}{C_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+C_3R_3\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3\sqrt{\frac{1}{C_3L_3+2C_4L_3}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1}$

Qz: None

Wz: None

3.14 **BP-14** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3R_3R_4R_5g_m - L_3R_3R_4\right)}{R_3R_4R_5g_m + R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m + C_3L_3R_3R_4 + 2C_4L_3R_3R_4R_5g_m + 2C_4L_3R_3R_4\right) + s\left(2L_3R_3R_4g_m + 2L_3R_3R_5g_m + 2L_3R_3 + L_3R_4R_5g_m + L_3R_4\right)}$$

Parameters:

Q: $\dfrac{C_3R_3R_4R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+C_3R_3R_4\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3R_4R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3R_4\sqrt{\frac{1}{C_3L_3+2C_4L_3}}}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

wo: $\sqrt{\frac{1}{C_3L_3+2C_4L_3}}$

bandwidth: $\dfrac{(2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4)\sqrt{\frac{1}{C_3L_3+2C_4L_3}}}{C_3R_3R_4R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+C_3R_3R_4\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3R_4R_5g_m\sqrt{\frac{1}{C_3L_3+2C_4L_3}}+2C_4R_3R_4\sqrt{\frac{1}{C_3L_3+2C_4L_3}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

Qz: None

Wz: None

3.15 **BP-15** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \frac{L_4s}{C_4L_4s^2+1},\ R_5,\ \infty\right)$

$$H(s) = \frac{s\left(L_3L_4R_3R_5g_m - L_3L_4R_3\right)}{2L_3R_3R_5g_m + 2L_3R_3 + L_4R_3R_5g_m + L_4R_3 + s^2\left(C_3L_3L_4R_3R_5g_m + C_3L_3L_4R_3 + 2C_4L_3L_4R_3R_5g_m + 2C_4L_3L_4R_3\right) + s\left(2L_3L_4R_3g_m + L_3L_4R_5g_m + L_3L_4\right)}$$

Parameters:

Q: $\dfrac{C_3R_3R_5g_m\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+C_3R_3\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+2C_4R_3R_5g_m\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+2C_4R_3\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}}{2R_3g_m+R_5g_m+1}$

wo: $\sqrt{\frac{2L_3+L_4}{C_3L_3L_4+2C_4L_3L_4}}$

bandwidth: $\dfrac{\sqrt{\frac{2L_3+L_4}{C_3L_3L_4+2C_4L_3L_4}}(2R_3g_m+R_5g_m+1)}{C_3R_3R_5g_m\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+C_3R_3\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+2C_4R_3R_5g_m\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+2C_4R_3\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}}$

K-LP: 0

K-HP: 0

K-BP: $\dfrac{R_3R_5g_m\sqrt{\frac{2}{C_3L_4+2C_4L_4}+\frac{1}{C_3L_3+2C_4L_3}}-R_3\sqrt{\frac{2}{C_3L_4+2C_4L_4}+\frac{1}{C_3L_3+2C_4L_3}}}{2R_3g_m\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+R_5g_m\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}+\sqrt{\frac{2L_3}{C_3L_3L_4+2C_4L_3L_4}+\frac{L_4}{C_3L_3L_4+2C_4L_3L_4}}}$

Qz: None

Wz: None

3.16 BP-16 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5, \ \infty\right)$

$$H(s) = \frac{s\left(L_3 L_4 R_3 R_4 R_5 g_m - L_3 L_4 R_3 R_4\right)}{2L_3 R_3 R_4 R_5 g_m + 2L_3 R_3 R_4 + L_4 R_3 R_4 R_5 g_m + L_4 R_3 R_4 + s^2\left(C_3 L_3 L_4 R_3 R_4 R_5 g_m + C_3 L_3 L_4 R_3 R_4 + 2C_4 L_3 L_4 R_3 R_4 R_5 g_m + 2C_4 L_3 L_4 R_3 R_4\right) + s\left(2L_3 L_4 R_3 R_4 g_m + 2L_3 L_4 R_3 R_5 g_m + 2L_3 L_4 R_3 + L_3 L_4 R_4 R_5 g_m + L_3 L_4 R_4\right)}$$

Parameters:

Q: $\frac{C_3 R_3 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + C_3 R_3 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_3 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_3 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

wo: $\sqrt{\frac{2L_3 + L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}$

bandwidth: $\frac{\sqrt{\frac{2L_3 + L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}\left(2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4\right)}{C_3 R_3 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + C_3 R_3 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_3 R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2C_4 R_3 R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_3 R_4 R_5 g_m \sqrt{\frac{2}{C_3 L_4 + 2C_4 L_4} + \frac{1}{C_3 L_3 + 2C_4 L_3}} - R_3 R_4 \sqrt{\frac{2}{C_3 L_4 + 2C_4 L_4} + \frac{1}{C_3 L_3 + 2C_4 L_3}}}{2R_3 R_4 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2R_3 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + 2R_3 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + R_4 R_5 g_m \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}} + R_4 \sqrt{\frac{2L_3}{C_3 L_3 L_4 + 2C_4 L_3 L_4} + \frac{L_4}{C_3 L_3 L_4 + 2C_4 L_3 L_4}}}$

Qz: None

Wz: None

4 LP

5 BS

5.1 BS-1 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^2\left(C_4 L_4 R_3 R_5 g_m - C_4 L_4 R_3\right)}{2R_3 g_m + R_5 g_m + s^2\left(2C_4 L_4 R_3 g_m + C_4 L_4 R_5 g_m + C_4 L_4\right) + s\left(2C_4 R_3 R_5 g_m + 2C_4 R_3\right) + 1}$$

Parameters:

Q: $\frac{2L_4 R_3 g_m \sqrt{\frac{1}{C_4 L_4}} + L_4 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + L_4 \sqrt{\frac{1}{C_4 L_4}}}{2R_3 R_5 g_m + 2R_3}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_4 L_4}}\left(2R_3 R_5 g_m + 2R_3\right)}{2L_4 R_3 g_m \sqrt{\frac{1}{C_4 L_4}} + L_4 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + L_4 \sqrt{\frac{1}{C_4 L_4}}}$

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

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

K-BP: 0

Qz: None

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

5.2 BS-2 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3 R_4 R_5 g_m - R_3 R_4 + s^2\left(C_4 L_4 R_3 R_4 R_5 g_m - C_4 L_4 R_3 R_4\right)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^2\left(2C_4 L_4 R_3 R_4 g_m + 2C_4 L_4 R_3 R_5 g_m + 2C_4 L_4 R_3 + C_4 L_4 R_4 R_5 g_m + C_4 L_4 R_4\right) + s\left(2C_4 R_3 R_4 R_5 g_m + 2C_4 R_3 R_4\right)}$$

Parameters:

Q: $\frac{2L_4 R_3 R_4 g_m \sqrt{\frac{1}{C_4 L_4}} + 2L_4 R_3 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + 2L_4 R_3 \sqrt{\frac{1}{C_4 L_4}} + L_4 R_4 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + L_4 R_4 \sqrt{\frac{1}{C_4 L_4}}}{2R_3 R_4 R_5 g_m + 2R_3 R_4}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_4 L_4}}\left(2R_3 R_4 R_5 g_m + 2R_3 R_4\right)}{2L_4 R_3 R_4 g_m \sqrt{\frac{1}{C_4 L_4}} + 2L_4 R_3 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + 2L_4 R_3 \sqrt{\frac{1}{C_4 L_4}} + L_4 R_4 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + L_4 R_4 \sqrt{\frac{1}{C_4 L_4}}}$

K-LP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

K-HP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

K-BP: 0

Qz: None

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

5.3 BS-3 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4\right)}{2R_4 g_m + 2R_5 g_m + s^2 \left(2C_3 L_3 R_4 g_m + 2C_3 L_3 R_5 g_m + 2C_3 L_3\right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4\right) + 2}$$

Parameters:

Q: $\frac{2L_3 R_4 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 \sqrt{\frac{1}{C_3 L_3}}}{R_4 R_5 g_m + R_4}$

wo: $\sqrt{\frac{1}{C_3 L_3}}$

bandwidth: $\frac{\sqrt{\frac{1}{C_3 L_3}}(R_4 R_5 g_m + R_4)}{2L_3 R_4 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 \sqrt{\frac{1}{C_3 L_3}}}$

K-LP: $\frac{R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + 2}$

K-HP: $\frac{R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + 2}$

K-BP: 0

Qz: None

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

5.4 BS-4 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3 L_3 s^2 + 1\right)}{C_3 L_3 s^2 + C_3 R_3 s + 1},\ R_4,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_3 L_3 R_3 R_4 R_5 g_m - C_3 L_3 R_3 R_4\right)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^2 \left(2C_3 L_3 R_3 R_4 g_m + 2C_3 L_3 R_3 R_5 g_m + 2C_3 L_3 R_3 + C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m + C_3 R_3 R_4\right)}$$

Parameters:

Q: $\frac{2L_3 R_3 R_4 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 R_3 \sqrt{\frac{1}{C_3 L_3}} + L_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + L_3 R_4 \sqrt{\frac{1}{C_3 L_3}}}{R_3 R_4 R_5 g_m + R_3 R_4}$

wo: $\sqrt{\frac{1}{C_3 L_3}}$

bandwidth: $\frac{\sqrt{\frac{1}{C_3 L_3}}(R_3 R_4 R_5 g_m + R_3 R_4)}{2L_3 R_3 R_4 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 R_3 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + 2L_3 R_3 \sqrt{\frac{1}{C_3 L_3}} + L_3 R_4 R_5 g_m \sqrt{\frac{1}{C_3 L_3}} + L_3 R_4 \sqrt{\frac{1}{C_3 L_3}}}$

K-LP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

K-HP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

K-BP: 0

Qz: None

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

6 GE

6.1 GE-1 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_3 R_4 g_m s^2 - C_5 R_3 R_4 s + R_3 R_4 g_m}{2R_3 g_m + R_4 g_m + s^2 \left(2C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m\right) + s \left(2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4\right)}$$

Parameters:

Q: $\frac{2L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_4 g_m \sqrt{\frac{1}{C_5 L_5}}}{2R_3 R_4 g_m + 2R_3 + R_4}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_5 L_5}}(2R_3 R_4 g_m + 2R_3 + R_4)}{2L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_4 g_m \sqrt{\frac{1}{C_5 L_5}}}$

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

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

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

Qz: $-L_5 g_m \sqrt{\frac{1}{C_5 L_5}}$

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

6.2 GE-2 $Z(s) = \left(\infty, \ \infty, \ R_3, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_5 R_3 R_4 s^2 + L_5 R_3 R_4 g_m s - R_3 R_4}{2R_3 R_4 g_m + 2R_3 + R_4 + s^2 \left(2C_5 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 + C_5 L_5 R_4\right) + s \left(2L_5 R_3 g_m + L_5 R_4 g_m\right)}$$

Parameters:

Q: $\frac{2C_5 R_3 R_4 g_m \sqrt{\frac{1}{C_5 L_5}} + 2C_5 R_3 \sqrt{\frac{1}{C_5 L_5}} + C_5 R_4 \sqrt{\frac{1}{C_5 L_5}}}{2R_3 g_m + R_4 g_m}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_5 L_5}} \left(2R_3 g_m + R_4 g_m\right)}{2C_5 R_3 R_4 g_m \sqrt{\frac{1}{C_5 L_5}} + 2C_5 R_3 \sqrt{\frac{1}{C_5 L_5}} + C_5 R_4 \sqrt{\frac{1}{C_5 L_5}}}$

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

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

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

Qz: $-\frac{C_5 \sqrt{\frac{1}{C_5 L_5}}}{g_m}$

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

6.3 GE-3 $Z(s) = \left(\infty, \ \infty, \ R_3, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_5 R_3 R_4 g_m s^2 + R_3 R_4 g_m + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4\right)}{2R_3 g_m + R_4 g_m + s^2 \left(2C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m\right) + s \left(2C_5 R_3 R_4 g_m + 2C_5 R_3 R_5 g_m + 2C_5 R_3 + C_5 R_4 R_5 g_m + C_5 R_4\right)}$$

Parameters:

Q: $\frac{2L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_4 g_m \sqrt{\frac{1}{C_5 L_5}}}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_5 L_5}} \left(2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4\right)}{2L_5 R_3 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_4 g_m \sqrt{\frac{1}{C_5 L_5}}}$

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

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

K-BP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

Qz: $\frac{L_5 g_m \sqrt{\frac{1}{C_5 L_5}}}{R_5 g_m - 1}$

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

6.4 GE-4 $Z(s) = \left(\infty, \ \infty, \ R_3, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_5 R_3 R_4 R_5 s^2 - R_3 R_4 R_5 + s \left(L_5 R_3 R_4 R_5 g_m - L_5 R_3 R_4\right)}{2R_3 R_4 R_5 g_m + 2R_3 R_5 + R_4 R_5 + s^2 \left(2C_5 L_5 R_3 R_4 R_5 g_m + 2C_5 L_5 R_3 R_5 + C_5 L_5 R_4 R_5\right) + s \left(2L_5 R_3 R_4 g_m + 2L_5 R_3 R_5 g_m + 2L_5 R_3 + L_5 R_4 R_5 g_m + L_5 R_4\right)}$$

Parameters:

Q: $\frac{2C_5 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + 2C_5 R_3 R_5 \sqrt{\frac{1}{C_5 L_5}} + C_5 R_4 R_5 \sqrt{\frac{1}{C_5 L_5}}}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_5 L_5}} \left(2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4\right)}{2C_5 R_3 R_4 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + 2C_5 R_3 R_5 \sqrt{\frac{1}{C_5 L_5}} + C_5 R_4 R_5 \sqrt{\frac{1}{C_5 L_5}}}$

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

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

K-BP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

Qz: $-\frac{C_5R_5\sqrt{\frac{1}{C_5L_5}}}{R_5g_m-1}$

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

6.5 GE-5 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4,\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_5R_3R_4g_ms + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_5L_5R_3R_4R_5g_m - C_5L_5R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^2\left(2C_5L_5R_3R_4g_m + 2C_5L_5R_3R_5g_m + 2C_5L_5R_3 + C_5L_5R_4R_5g_m + C_5L_5R_4\right) + s\left(2L_5R_3g_m + L_5R_4g_m\right)}$$

Parameters:

Q: $\frac{2C_5R_3R_4g_m\sqrt{\frac{1}{C_5L_5}}+2C_5R_3R_5g_m\sqrt{\frac{1}{C_5L_5}}+2C_5R_3\sqrt{\frac{1}{C_5L_5}}+C_5R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}+C_5R_4\sqrt{\frac{1}{C_5L_5}}}{2R_3g_m+R_4g_m}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_5L_5}}\left(2R_3g_m+R_4g_m\right)}{2C_5R_3R_4g_m\sqrt{\frac{1}{C_5L_5}}+2C_5R_3R_5g_m\sqrt{\frac{1}{C_5L_5}}+2C_5R_3\sqrt{\frac{1}{C_5L_5}}+C_5R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}+C_5R_4\sqrt{\frac{1}{C_5L_5}}}$

K-LP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-HP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

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

Qz: $\frac{C_5R_5g_m\sqrt{\frac{1}{C_5L_5}}-C_5\sqrt{\frac{1}{C_5L_5}}}{g_m}$

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

6.6 GE-6 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_5L_5R_3R_4R_5g_m - C_5L_5R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^2\left(2C_5L_5R_3R_4g_m + 2C_5L_5R_3R_5g_m + 2C_5L_5R_3 + C_5L_5R_4R_5g_m + C_5L_5R_4\right) + s\left(2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{2L_5R_3R_4g_m\sqrt{\frac{1}{C_5L_5}}+2L_5R_3R_5g_m\sqrt{\frac{1}{C_5L_5}}+2L_5R_3\sqrt{\frac{1}{C_5L_5}}+L_5R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}+L_5R_4\sqrt{\frac{1}{C_5L_5}}}{2R_3R_4R_5g_m+2R_3R_5+R_4R_5}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_5L_5}}\left(2R_3R_4R_5g_m+2R_3R_5+R_4R_5\right)}{2L_5R_3R_4g_m\sqrt{\frac{1}{C_5L_5}}+2L_5R_3R_5g_m\sqrt{\frac{1}{C_5L_5}}+2L_5R_3\sqrt{\frac{1}{C_5L_5}}+L_5R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}+L_5R_4\sqrt{\frac{1}{C_5L_5}}}$

K-LP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-HP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-BP: $-\frac{R_3R_4}{2R_3R_4g_m+2R_3+R_4}$

Qz: $\frac{-L_5R_5g_m\sqrt{\frac{1}{C_5L_5}}+L_5\sqrt{\frac{1}{C_5L_5}}}{R_5}$

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

6.7 GE-7 $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4s+R_4+\frac{1}{C_4s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3 + s^2\left(C_4L_4R_3R_5g_m - C_4L_4R_3\right) + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4\right)}{2R_3g_m + R_5g_m + s^2\left(2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4\right) + s\left(2C_4R_3R_4g_m + 2C_4R_3R_5g_m + 2C_4R_3 + C_4R_4R_5g_m + C_4R_4\right) + 1}$$

Parameters:

Q: $\frac{2L_4R_3g_m\sqrt{\frac{1}{C_4L_4}}+L_4R_5g_m\sqrt{\frac{1}{C_4L_4}}+L_4\sqrt{\frac{1}{C_4L_4}}}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_4L_4}}\left(2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4\right)}{2L_4R_3g_m\sqrt{\frac{1}{C_4L_4}}+L_4R_5g_m\sqrt{\frac{1}{C_4L_4}}+L_4\sqrt{\frac{1}{C_4L_4}}}$

K-LP: $\frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1}$

K-HP: $\frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1}$

K-BP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

Qz: $\frac{L_4\sqrt{\frac{1}{C_4L_4}}}{R_4}$

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

6.8 GE-8 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3R_4R_5g_m - R_3R_4 + s^2\left(C_4L_4R_3R_4R_5g_m - C_4L_4R_3R_4\right) + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^2\left(2C_4L_4R_3R_4g_m + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + C_4L_4R_4R_5g_m + C_4L_4R_4\right) + s\left(2L_4R_3g_m + L_4R_5g_m + L_4\right)}$$

Parameters:

Q: $\frac{2C_4R_3R_4g_m\sqrt{\frac{1}{C_4L_4}}+2C_4R_3R_5g_m\sqrt{\frac{1}{C_4L_4}}+2C_4R_3\sqrt{\frac{1}{C_4L_4}}+C_4R_4R_5g_m\sqrt{\frac{1}{C_4L_4}}+C_4R_4\sqrt{\frac{1}{C_4L_4}}}{2R_3g_m+R_5g_m+1}$

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

bandwidth: $\frac{\sqrt{\frac{1}{C_4L_4}}\left(2R_3g_m+R_5g_m+1\right)}{2C_4R_3R_4g_m\sqrt{\frac{1}{C_4L_4}}+2C_4R_3R_5g_m\sqrt{\frac{1}{C_4L_4}}+2C_4R_3\sqrt{\frac{1}{C_4L_4}}+C_4R_4R_5g_m\sqrt{\frac{1}{C_4L_4}}+C_4R_4\sqrt{\frac{1}{C_4L_4}}}$

K-LP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-HP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-BP: $\frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1}$

Qz: $C_4R_4\sqrt{\frac{1}{C_4L_4}}$

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

6.9 GE-9 $Z(s) = \left(\infty,\ \infty,\ L_3s+R_3+\frac{1}{C_3s},\ R_4,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_4R_5g_m - R_4 + s^2\left(C_3L_3R_4R_5g_m - C_3L_3R_4\right) + s\left(C_3R_3R_4R_5g_m - C_3R_3R_4\right)}{2R_4g_m + 2R_5g_m + s^2\left(2C_3L_3R_4g_m + 2C_3L_3R_5g_m + 2C_3L_3\right) + s\left(2C_3R_3R_4g_m + 2C_3R_3R_5g_m + 2C_3R_3 + C_3R_4R_5g_m + C_3R_4\right) + 2}$$

Parameters:

Q: $\frac{2L_3R_4g_m\sqrt{\frac{1}{C_3L_3}}+2L_3R_5g_m\sqrt{\frac{1}{C_3L_3}}+2L_3\sqrt{\frac{1}{C_3L_3}}}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

wo: $\sqrt{\frac{1}{C_3L_3}}$

bandwidth: $\frac{\sqrt{\frac{1}{C_3L_3}}\left(2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4\right)}{2L_3R_4g_m\sqrt{\frac{1}{C_3L_3}}+2L_3R_5g_m\sqrt{\frac{1}{C_3L_3}}+2L_3\sqrt{\frac{1}{C_3L_3}}}$

K-LP: $\frac{R_4R_5g_m-R_4}{2R_4g_m+2R_5g_m+2}$

K-HP: $\frac{R_4R_5g_m-R_4}{2R_4g_m+2R_5g_m+2}$

K-BP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

Qz: $\frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_3}$

Wz: $\sqrt{\frac{1}{C_3L_3}}$

6.10 GE-10 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3R_4R_5g_m - R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R_4\right) + s\left(L_3R_4R_5g_m - L_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_3R_4R_5g_m + C_3L_3R_4\right) + s\left(2L_3R_4g_m + 2L_3R_5g_m + 2L_3\right)}$$

Parameters:

Q: $\frac{2C_3R_3R_4g_m\sqrt{\frac{1}{C_3L_3}}+2C_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3}}+2C_3R_3\sqrt{\frac{1}{C_3L_3}}+C_3R_4R_5g_m\sqrt{\frac{1}{C_3L_3}}+C_3R_4\sqrt{\frac{1}{C_3L_3}}}{2R_4g_m+2R_5g_m+2}$

wo: $\sqrt{\frac{1}{C_3L_3}}$

bandwidth: $\frac{\sqrt{\frac{1}{C_3L_3}}\left(2R_4g_m+2R_5g_m+2\right)}{2C_3R_3R_4g_m\sqrt{\frac{1}{C_3L_3}}+2C_3R_3R_5g_m\sqrt{\frac{1}{C_3L_3}}+2C_3R_3\sqrt{\frac{1}{C_3L_3}}+C_3R_4R_5g_m\sqrt{\frac{1}{C_3L_3}}+C_3R_4\sqrt{\frac{1}{C_3L_3}}}$

K-LP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-HP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-BP: $\frac{R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + 2}$

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

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

7 AP

8 INVALID-NUMER

8.1 INVALID-NUMER-1 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_3 s + R_3 g_m}{2C_4 C_5 R_3 s^2 + g_m + s\left(2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_4 C_5 R_3 \sqrt{\frac{g_m}{C_4 C_5 R_3}}}{2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5}$

wo: $\frac{\sqrt{2}\sqrt{\frac{g_m}{C_4 C_5 R_3}}}{2}$

bandwidth: $\frac{2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5}{2C_4 C_5 R_3}$

K-LP: R_3

K-HP: 0

K-BP: $-\frac{C_5 R_3}{2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5}$

Qz: None

Wz: None

8.2 INVALID-NUMER-2 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_3 R_5 s + R_3 R_5 g_m - R_3}{2C_4 C_5 R_3 R_5 s^2 + 2R_3 g_m + R_5 g_m + s\left(2C_4 R_3 R_5 g_m + 2C_4 R_3 + 2C_5 R_3 R_5 g_m + C_5 R_5\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{2} C_4 C_5 R_3 R_5 \sqrt{\frac{2g_m}{C_4 C_5 R_5} + \frac{g_m}{C_4 C_5 R_3} + \frac{1}{C_4 C_5 R_3 R_5}}}{2C_4 R_3 R_5 g_m + 2C_4 R_3 + 2C_5 R_3 R_5 g_m + C_5 R_5}$

wo: $\frac{\sqrt{2}\sqrt{\frac{2R_3 g_m + R_5 g_m + 1}{C_4 C_5 R_3 R_5}}}{2}$

bandwidth: $\frac{\sqrt{\frac{2R_3 g_m + R_5 g_m + 1}{C_4 C_5 R_3 R_5}}\left(2C_4 R_3 R_5 g_m + 2C_4 R_3 + 2C_5 R_3 R_5 g_m + C_5 R_5\right)}{2C_4 C_5 R_3 R_5 \sqrt{\frac{2g_m}{C_4 C_5 R_5} + \frac{g_m}{C_4 C_5 R_3} + \frac{1}{C_4 C_5 R_3 R_5}}}$

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

K-HP: 0

K-BP: $-\frac{C_5 R_3 R_5}{2C_4 R_3 R_5 g_m + 2C_4 R_3 + 2C_5 R_3 R_5 g_m + C_5 R_5}$

Qz: None

Wz: None

8.3 INVALID-NUMER-3 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{R_3 g_m + s\left(C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^2\left(2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3\right) + s\left(2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_4 C_5 R_3 R_5 g_m \sqrt{\frac{g_m}{C_4 C_5 R_3 R_5 g_m + C_4 C_5 R_3}} + \sqrt{2} C_4 C_5 R_3 \sqrt{\frac{g_m}{C_4 C_5 R_3 R_5 g_m + C_4 C_5 R_3}}}{2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5}$

wo: $\sqrt{\frac{g_m}{2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3}}$

bandwidth: $\frac{\sqrt{\frac{g_m}{2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3}}\left(2C_4 R_3 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}{\sqrt{2} C_4 C_5 R_3 R_5 g_m \sqrt{\frac{g_m}{C_4 C_5 R_3 R_5 g_m + C_4 C_5 R_3}} + \sqrt{2} C_4 C_5 R_3 \sqrt{\frac{g_m}{C_4 C_5 R_3 R_5 g_m + C_4 C_5 R_3}}}$

K-LP: R_3
K-HP: 0
K-BP: $\frac{C_5R_3R_5g_m - C_5R_3}{2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5}$
Qz: None
Wz: None

8.4 INVALID-NUMER-4 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4s + R_3R_4g_m}{2C_4C_5R_3R_4s^2 + 2R_3g_m + R_4g_m + s\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{2}C_4C_5R_3R_4\sqrt{\frac{2g_m}{C_4C_5R_4} + \frac{g_m}{C_4C_5R_3}}}{2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4}$

wo: $\frac{\sqrt{2}\sqrt{\frac{2R_3g_m + R_4g_m}{C_4C_5R_3R_4}}}{2}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m + R_4g_m}{C_4C_5R_3R_4}}\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}{2C_4C_5R_3R_4\sqrt{\frac{2g_m}{C_4C_5R_4} + \frac{g_m}{C_4C_5R_3}}}$

K-LP: $\frac{R_3R_4}{2R_3 + R_4}$
K-HP: 0
K-BP: $-\frac{C_5R_3R_4}{2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4}$
Qz: None
Wz: None

8.5 INVALID-NUMER-5 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4}{2C_4C_5R_3R_4R_5s^2 + 2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s\left(2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{2}C_4C_5R_3R_4R_5\sqrt{\frac{2g_m}{C_4C_5R_5} + \frac{2g_m}{C_4C_5R_4} + \frac{2}{C_4C_5R_4R_5} + \frac{g_m}{C_4C_5R_3} + \frac{1}{C_4C_5R_3R_5}}}{2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5}$

wo: $\frac{\sqrt{2}\sqrt{\frac{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}{C_4C_5R_3R_4R_5}}}{2}$

bandwidth: $\frac{\sqrt{\frac{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}{C_4C_5R_3R_4R_5}}\left(2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}{2C_4C_5R_3R_4R_5\sqrt{\frac{2g_m}{C_4C_5R_5} + \frac{2g_m}{C_4C_5R_4} + \frac{2}{C_4C_5R_4R_5} + \frac{g_m}{C_4C_5R_3} + \frac{1}{C_4C_5R_3R_5}}}$

K-LP: $\frac{R_3R_4R_5g_m - R_3R_4}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}$
K-HP: 0
K-BP: $-\frac{C_5R_3R_4R_5}{2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5}$
Qz: None
Wz: None

8.6 INVALID-NUMER-6 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3R_4g_m + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^2\left(2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4\right) + s\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{2}C_4C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}} + \sqrt{2}C_4C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}}}{2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4}$

wo: $\sqrt{\frac{2R_3g_m + R_4g_m}{2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4}}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m + R_4g_m}{2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4}}\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}{\sqrt{2}C_4C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}} + \sqrt{2}C_4C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}}}$

K-LP: $\frac{R_3R_4}{2R_3 + R_4}$
K-HP: 0
K-BP: $\frac{C_5R_3R_4R_5g_m\sqrt{\frac{2g_m}{C_4C_5R_4R_5g_m + C_4C_5R_4} + \frac{g_m}{C_4C_5R_3R_5g_m + C_4C_5R_3}} - C_5R_3R_4\sqrt{\frac{2g_m}{C_4C_5R_4R_5g_m + C_4C_5R_4} + \frac{g_m}{C_4C_5R_3R_5g_m + C_4C_5R_3}}}{2C_4R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}} + 2C_5R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}} + 2C_5R_3R_5g_m\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}} + 2C_5R_3\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4} + \frac{R_4g_m}{C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4}} + C_5R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_4C_5R_3R_4}}}$
Qz: None

8.7 INVALID-NUMER-7 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_5 R_4 s + R_4 g_m}{C_3 C_5 R_4 s^2 + 2g_m + s\left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4}}}{C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_4}}$

bandwidth: $\frac{C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5}{C_3 C_5 R_4}$

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

K-HP: 0

K-BP: $-\frac{C_5 R_4}{C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5}$

Qz: None

Wz: None

8.8 INVALID-NUMER-8 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 R_4 R_5 s + R_4 R_5 g_m - R_4}{C_3 C_5 R_4 R_5 s^2 + 2R_4 g_m + 2R_5 g_m + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5\right) + 2}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 C_5 R_4 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5} + \frac{g_m}{C_3 C_5 R_4} + \frac{1}{C_3 C_5 R_4 R_5}}}{C_3 R_4 R_5 g_m + C_3 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5}$

wo: $\sqrt{\frac{2R_4 g_m + 2R_5 g_m + 2}{C_3 C_5 R_4 R_5}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{2R_4 g_m + 2R_5 g_m + 2}{C_3 C_5 R_4 R_5}}\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5\right)}{2C_3 C_5 R_4 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5} + \frac{g_m}{C_3 C_5 R_4} + \frac{1}{C_3 C_5 R_4 R_5}}}$

K-LP: $\frac{R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + 2}$

K-HP: 0

K-BP: $-\frac{C_5 R_4 R_5}{C_3 R_4 R_5 g_m + C_3 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5}$

Qz: None

Wz: None

8.9 INVALID-NUMER-9 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_4 g_m + s\left(C_5 R_4 R_5 g_m - C_5 R_4\right)}{2g_m + s^2\left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4\right) + s\left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

Parameters:

Q: $\frac{\sqrt{2} C_3 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4}} + \sqrt{2} C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4}}}{C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4}}\left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}{\sqrt{2} C_3 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4}} + \sqrt{2} C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4}}}$

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

K-HP: 0

K-BP: $\frac{C_5 R_4 R_5 g_m - C_5 R_4}{C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5}$

Qz: None

Wz: None

8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_5 s + R_5 g_m - 1}{2g_m + s^2 \left(C_3 C_5 R_5 + 2C_4 C_5 R_5\right) + s\left(C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4 + 2C_5 R_5 g_m\right)}$$

Parameters:

Q: $\frac{\sqrt{2}C_3 C_5 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5}} + 2\sqrt{2}C_4 C_5 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5}}}{C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4 + 2C_5 R_5 g_m}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5}}\left(C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4 + 2C_5 R_5 g_m\right)}{\sqrt{2}C_3 C_5 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5}} + 2\sqrt{2}C_4 C_5 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5}}}$

K-LP: $\frac{R_5 g_m - 1}{2g_m}$

K-HP: 0

K-BP: $-\frac{C_5 R_5}{C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4 + 2C_5 R_5 g_m}$

Qz: None

Wz: None

8.11 INVALID-NUMER-11 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s+1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_4 s + R_4 g_m}{2g_m + s^2 \left(C_3 C_5 R_4 + 2C_4 C_5 R_4\right) + s\left(C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}$$

Parameters:

Q: $\frac{\sqrt{2}C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4}} + 2\sqrt{2}C_4 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4}}}{C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4}}\left(C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}{\sqrt{2}C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4}} + 2\sqrt{2}C_4 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4}}}$

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

K-HP: 0

K-BP: $-\frac{C_5 R_4}{C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5}$

Qz: None

Wz: None

8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s+1}, \ \frac{R_5}{C_5 R_5 s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_4 R_5 s + R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + s^2 \left(C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 R_4 R_5 g_m + 2C_4 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5\right) + 2}$$

Parameters:

Q: $\frac{\sqrt{2}C_3 C_5 R_4 R_5 \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}} + 2\sqrt{2}C_4 C_5 R_4 R_5 \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}}}{C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 R_4 R_5 g_m + 2C_4 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5}$

wo: $\sqrt{\frac{2R_4 g_m + 2R_5 g_m + 2}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}}$

bandwidth: $\frac{\sqrt{\frac{2R_4 g_m + 2R_5 g_m + 2}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}}\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 R_4 R_5 g_m + 2C_4 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5\right)}{\sqrt{2}C_3 C_5 R_4 R_5 \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}} + 2\sqrt{2}C_4 C_5 R_4 R_5 \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}}}$

K-LP: $\frac{R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + 2}$

K-HP: 0

K-BP: $-\frac{C_5 R_4 R_5 \sqrt{\frac{g_m}{C_3 C_5 R_5 + 2C_4 C_5 R_5} + \frac{g_m}{C_3 C_5 R_4 + 2C_4 C_5 R_4} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}}}{C_3 R_4 R_5 g_m \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}} + C_3 R_4 \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}} + 2C_4 R_4 R_5 g_m \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{1}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5}} + 2C_4 R_4 \sqrt{\frac{R_4 g_m}{C_3 C_5 R_4 R_5 + 2C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{C_3 C_5 R_4 R_5}}}$

Qz: None

Wz: None

8.13 INVALID-NUMER-13 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_4 g_m + s\left(C_5 R_4 R_5 g_m - C_5 R_4\right)}{2g_m + s^2\left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4\right) + s\left(C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

Parameters:

Q: $\dfrac{\sqrt{2}C_3 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}} + \sqrt{2}C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}} + 2\sqrt{2}C_4 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}} + 2\sqrt{2}C_4 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}}}{C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5}$

wo: $\sqrt{2}\sqrt{\dfrac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}}$

bandwidth: $\dfrac{\sqrt{2}\sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}}\left(C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}{\sqrt{2}C_3 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}} + \sqrt{2}C_3 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}} + 2\sqrt{2}C_4 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}} + 2\sqrt{2}C_4 C_5 R_4 \sqrt{\frac{g_m}{C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_4}}}$

K-LP: $\frac{R_4}{2}$
K-HP: 0
K-BP: $\frac{C_5 R_4 R_5 g_m - C_5 R_4}{C_3 R_4 g_m + 2C_4 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5}$
Qz: None
Wz: None

8.14 INVALID-NUMER-14 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s\left(C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2g_m + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4\right) + s\left(C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4\right)}$$

Parameters:

Q: $\dfrac{\sqrt{2}C_3 C_4 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4}} + \sqrt{2}C_3 C_4 R_4 \sqrt{\frac{g_m}{C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4}}}{C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4}$

wo: $\sqrt{2}\sqrt{\dfrac{g_m}{C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4}}$

bandwidth: $\dfrac{\sqrt{2}\sqrt{\frac{g_m}{C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4}}\left(C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4\right)}{\sqrt{2}C_3 C_4 R_4 R_5 g_m \sqrt{\frac{g_m}{C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4}} + \sqrt{2}C_3 C_4 R_4 \sqrt{\frac{g_m}{C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4}}}$

K-LP: $\frac{R_5 g_m - 1}{2g_m}$
K-HP: 0
K-BP: $\frac{C_4 R_4 R_5 g_m - C_4 R_4}{C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4}$
Qz: None
Wz: None

8.15 INVALID-NUMER-15 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_5 R_3 R_4 s + R_3 R_4 g_m}{C_3 C_5 R_3 R_4 s^2 + 2R_3 g_m + R_4 g_m + s\left(C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4\right)}$$

Parameters:

Q: $\dfrac{C_3 C_5 R_3 R_4 \sqrt{\frac{2g_m}{C_3 C_5 R_4} + \frac{g_m}{C_3 C_5 R_3}}}{C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4}$

wo: $\sqrt{\dfrac{2R_3 g_m + R_4 g_m}{C_3 C_5 R_3 R_4}}$

bandwidth: $\dfrac{\sqrt{\frac{2R_3 g_m + R_4 g_m}{C_3 C_5 R_3 R_4}}\left(C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4\right)}{C_3 C_5 R_3 R_4 \sqrt{\frac{2g_m}{C_3 C_5 R_4} + \frac{g_m}{C_3 C_5 R_3}}}$

K-LP: $\frac{R_3 R_4}{2R_3 + R_4}$
K-HP: 0
K-BP: $-\frac{C_5 R_3 R_4}{C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4}$
Qz: None
Wz: None

8.16 INVALID-NUMER-16 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4}{C_3C_5R_3R_4R_5s^2 + 2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s\left(C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3R_4R_5\sqrt{\frac{2g_m}{C_3C_5R_5} + \frac{2g_m}{C_3C_5R_4} + \frac{2}{C_3C_5R_4R_5} + \frac{g_m}{C_3C_5R_3} + \frac{1}{C_3C_5R_3R_5}}}{C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5}$

wo: $\sqrt{\frac{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}{C_3C_5R_3R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}{C_3C_5R_3R_4R_5}}\left(C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}{C_3C_5R_3R_4R_5\sqrt{\frac{2g_m}{C_3C_5R_5} + \frac{2g_m}{C_3C_5R_4} + \frac{2}{C_3C_5R_4R_5} + \frac{g_m}{C_3C_5R_3} + \frac{1}{C_3C_5R_3R_5}}}$

K-LP: $\frac{R_3R_4R_5g_m - R_3R_4}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}$

K-HP: 0

K-BP: $-\frac{C_5R_3R_4R_5}{C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5}$

Qz: None

Wz: None

8.17 INVALID-NUMER-17 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{R_3R_4g_m + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^2\left(C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4\right) + s\left(C_3R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}} + C_3C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}}}{C_3R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4}$

wo: $\sqrt{\frac{2R_3g_m + R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m + R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}}\left(C_3R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}{C_3C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}} + C_3C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}}}$

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

K-HP: 0

K-BP: $\frac{C_5R_3R_4R_5g_m\sqrt{\frac{2g_m}{C_3C_5R_4R_5g_m + C_3C_5R_4} + \frac{g_m}{C_3C_5R_3R_5g_m + C_3C_5R_3}} - C_5R_3R_4\sqrt{\frac{2g_m}{C_3C_5R_4R_5g_m + C_3C_5R_4} + \frac{g_m}{C_3C_5R_3R_5g_m + C_3C_5R_3}}}{C_3R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}} + 2C_5R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}} + 2C_5R_3R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}} + 2C_5R_3\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4}} + C_5R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5}} \cdots}$

Qz: None

Wz: None

8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{-C_5R_3s + R_3g_m}{g_m + s^2\left(C_3C_5R_3 + 2C_4C_5R_3\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3 + 2C_4C_5R_3}} + 2C_4C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3 + 2C_4C_5R_3}}}{C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5}$

wo: $\sqrt{\frac{g_m}{C_3C_5R_3 + 2C_4C_5R_3}}$

bandwidth: $\frac{\sqrt{\frac{g_m}{C_3C_5R_3 + 2C_4C_5R_3}}\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}{C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3 + 2C_4C_5R_3}} + 2C_4C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3 + 2C_4C_5R_3}}}$

K-LP: R_3

K-HP: 0

K-BP: $-\frac{C_5R_3}{C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5}$

Qz: None

Wz: None

8.19 INVALID-NUMER-19 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5R_3R_5s + R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + s^2\left(C_3C_5R_3R_5 + 2C_4C_5R_3R_5\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5g_m + C_5R_5\right) + 1}$$

Parameters:

Q: $\frac{C_3C_5R_3R_5\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}} + 2C_4C_5R_3R_5\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}}}{C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5g_m + C_5R_5}$

wo: $\sqrt{\frac{2R_3g_m + R_5g_m + 1}{C_3C_5R_3R_5 + 2C_4C_5R_3R_5}}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m + R_5g_m + 1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}}\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5g_m + C_5R_5\right)}{C_3C_5R_3R_5\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}} + 2C_4C_5R_3R_5\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}}}$

K-LP: $\frac{R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + 1}$

K-HP: 0

K-BP: $-\frac{C_5R_3R_5\sqrt{\frac{2g_m}{C_3C_5R_5+2C_4C_5R_5} + \frac{g_m}{C_3C_5R_3+2C_4C_5R_3} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}}}{C_3R_3R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}} + C_3R_3\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}} + 2C_4R_3R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{1}{C_3C_5R_3R_5+2C_4C_5R_3R_5}} + 2C_4R_3\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_5+2C_4C_5R_3R_5} + \frac{R_5g_m}{C_3C_5R_3R_5+2C_4C_5R}}}$

Qz: None

Wz: None

8.20 INVALID-NUMER-20 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{R_3g_m + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}} + C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}} + 2C_4C_5R_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}} + 2C_4C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}}}{C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5}$

wo: $\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3}}$

bandwidth: $\frac{\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}}\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}{C_3C_5R_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}} + C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}} + 2C_4C_5R_3R_5g_m\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}} + 2C_4C_5R_3\sqrt{\frac{g_m}{C_3C_5R_3R_5g_m+C_3C_5R_3+2C_4C_5R_3R_5g_m+2C_4C_5R_3}}}$

K-LP: R_3

K-HP: 0

K-BP: $\frac{C_5R_3R_5g_m - C_5R_3}{C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5}$

Qz: None

Wz: None

8.21 INVALID-NUMER-21 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4s + R_3R_4g_m}{2R_3g_m + R_4g_m + s^2\left(C_3C_5R_3R_4 + 2C_4C_5R_3R_4\right) + s\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}} + 2C_4C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}}}{C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4}$

wo: $\sqrt{\frac{2R_3g_m + R_4g_m}{C_3C_5R_3R_4 + 2C_4C_5R_3R_4}}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m + R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}}\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}{C_3C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}} + 2C_4C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}}}$

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

K-HP: 0

K-BP: $-\frac{C_5R_3R_4\sqrt{\frac{2g_m}{C_3C_5R_4+2C_4C_5R_4} + \frac{g_m}{C_3C_5R_3+2C_4C_5R_3}}}{C_3R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}} + 2C_4R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}} + 2C_5R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}} + 2C_5R_3\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}} + C_5R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4} + \frac{R_4g_m}{C_3C_5R_3R_4+2C_4C_5R_3R_4}}}$

Qz: None

Wz: None

8.22 INVALID-NUMER-22 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^2\left(C_3C_5R_3R_4R_5 + 2C_4C_5R_3R_4R_5\right) + s\left(C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3R_4R_5\sqrt{\frac{2R_3R_4g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}}+2C_4C_5R_3R_4R_5\sqrt{\frac{2R_3R_4g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4R_5g_m}{}+\cdots}}{C_3R_3R_4R_5g_m+C_3R_3R_4+2C_4R_3R_4R_5g_m+2C_4R_3R_4+2C_5R_3R_4R_5g_m+2C_5R_3R_5+C_5R_4R_5}$

wo: $\sqrt{\frac{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}}(C_3R_3R_4R_5g_m+C_3R_3R_4+2C_4R_3R_4R_5g_m+2C_4R_3R_4+2C_5R_3R_4R_5g_m+2C_5R_3R_5+C_5R_4R_5)}{C_3C_5R_3R_4R_5\sqrt{\frac{2R_3R_4g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}}+2C_4C_5R_3R_4R_5\sqrt{\frac{2R_3R_4g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\cdots}}$

K-LP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$
K-HP: 0

K-BP: $-\frac{}{C_3R_3R_4R_5g_m\sqrt{\frac{2R_3R_4g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}}+C_3R_3R_4\sqrt{\frac{2R_3R_4g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{2R_3}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\frac{R_4R_5g_m}{C_3C_5R_3R_4R_5+2C_4C_5R_3R_4R_5}+\cdots}}$
Qz: None
Wz: None

8.23 INVALID-NUMER-23 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3R_4g_m + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^2\left(C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4 + 2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4\right) + s\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}$$

Parameters:

Q: $\frac{C_3C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}+\frac{R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}+C_3C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}+\frac{R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}+2C_4C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+\cdots}}}{C_3R_3R_4g_m+2C_4R_3R_4g_m+2C_5R_3R_4g_m+2C_5R_3R_5g_m+2C_5R_3+C_5R_4R_5g_m+C_5R_4}$

wo: $\sqrt{\frac{2R_3g_m+R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4}}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m+R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}(C_3R_3R_4g_m+2C_4R_3R_4g_m+2C_5R_3R_4g_m+2C_5R_3R_5g_m+\cdots)}{C_3C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}+\frac{R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}+C_3C_5R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}+\frac{R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}+2C_4C_5R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+\cdots}}}$
K-LP: $\frac{R_3R_4}{2R_3+R_4}$
K-HP: 0

K-BP: $\frac{}{C_3R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}+\frac{R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}+2C_4R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}+\frac{R_4g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4C_5R_3R_4R_5g_m+2C_4C_5R_3R_4}}+2C_5R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_5R_3R_4R_5g_m+C_3C_5R_3R_4+2C_4\cdots}}}$
Qz: None
Wz: None

8.24 INVALID-NUMER-24 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3 + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4\right)}{2R_3g_m + R_5g_m + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_4g_m + 2C_4R_3R_5g_m + 2C_4R_3 + C_4R_4R_5g_m + C_4R_4\right) + 1}$$

Parameters:

Q: $\frac{C_3C_4R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}+C_3C_4R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}}{C_3R_3R_5g_m+C_3R_3+2C_4R_3R_4g_m+2C_4R_3R_5g_m+2C_4R_3+C_4R_4R_5g_m+C_4R_4}$

wo: $\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}$

bandwidth: $\frac{\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}(C_3R_3R_5g_m+C_3R_3+2C_4R_3R_4g_m+2C_4R_3R_5g_m+2C_4R_3+C_4R_4R_5g_m+C_4R_4)}{C_3C_4R_3R_4R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}+C_3C_4R_3R_4\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}}$
K-LP: $\frac{R_3R_5g_m-R_3}{2R_3g_m+R_5g_m+1}$
K-HP: 0

K-BP: $\frac{C_4R_3R_4R_5g_m\sqrt{\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{2g_m}{\cdots}+\cdots}}{C_3R_3R_5g_m\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}+C_3R_3\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}+2C_4R_3R_4g_m\sqrt{\frac{2R_3g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{R_5g_m}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}+\frac{1}{C_3C_4R_3R_4R_5g_m+C_3C_4R_3R_4}}+2C_4R_3R_5g_m\sqrt{\cdots}}$
Qz: None
Wz: None

8.25 INVALID-NUMER-25 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s\left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2g_m + s^2\left(2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3\right) + s\left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4\right)}$$

Parameters:

Q: $\frac{2C_3 C_4 R_3 R_5 g_m \sqrt{\frac{g_m}{C_3 C_4 R_3 R_5 g_m + C_3 C_4 R_3}} + 2C_3 C_4 R_3 \sqrt{\frac{g_m}{C_3 C_4 R_3 R_5 g_m + C_3 C_4 R_3}}}{2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4}$

wo: $\sqrt{\frac{g_m}{C_3 C_4 R_3 R_5 g_m + C_3 C_4 R_3}}$

bandwidth: $\frac{\sqrt{\frac{g_m}{C_3 C_4 R_3 R_5 g_m + C_3 C_4 R_3}}\left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4\right)}{2C_3 C_4 R_3 R_5 g_m \sqrt{\frac{g_m}{C_3 C_4 R_3 R_5 g_m + C_3 C_4 R_3}} + 2C_3 C_4 R_3 \sqrt{\frac{g_m}{C_3 C_4 R_3 R_5 g_m + C_3 C_4 R_3}}}$

K-LP: $\frac{R_5 g_m - 1}{2g_m}$

K-HP: 0

K-BP: $\frac{C_3 R_3 R_5 g_m - C_3 R_3}{2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4}$

Qz: None

Wz: None

8.26 INVALID-NUMER-26 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s\left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4\right)}{2R_4 g_m + 2R_5 g_m + s^2\left(2C_3 C_4 R_3 R_4 R_5 g_m + 2C_3 C_4 R_3 R_4\right) + s\left(2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 R_4 R_5 g_m + 2C_4 R_4\right) + 2}$$

Parameters:

Q: $\frac{2C_3 C_4 R_3 R_4 R_5 g_m \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}} + 2C_3 C_4 R_3 R_4 \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}}}{2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 R_4 R_5 g_m + 2C_4 R_4}$

wo: $\sqrt{\frac{R_4 g_m + R_5 g_m + 1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}}$

bandwidth: $\frac{\sqrt{\frac{R_4 g_m + R_5 g_m + 1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}}\left(2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 R_4 R_5 g_m + 2C_4 R_4\right)}{2C_3 C_4 R_3 R_4 R_5 g_m \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}} + 2C_3 C_4 R_3 R_4 \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}}}$

K-LP: $\frac{R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + 2}$

K-HP: 0

K-BP: $\frac{C_3 R_3 R_4 R_5 g_m \sqrt{\frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{g_m}{C_3 C_4 R_3 R_4 R_5 g_m}}}{2C_3 R_3 R_4 g_m \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}} + 2C_3 R_3 R_5 g_m \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}} + 2C_3 R_3 \sqrt{\frac{R_4 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{R_5 g_m}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4} + \frac{1}{C_3 C_4 R_3 R_4 R_5 g_m + C_3 C_4 R_3 R_4}} + C_3 R_4 R_5 g_m}$

Qz: None

Wz: None

9 INVALID-WZ

9.1 INVALID-WZ-1 $Z(s) = \left(\infty, \ \infty, \ R_3, \ R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 R_3 R_4 s^2 + R_3 g_m + s\left(C_4 R_3 R_4 g_m - C_5 R_3\right)}{g_m + s^2\left(2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4\right) + s\left(2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5\right)}$$

Parameters:

Q: $\frac{2C_4 C_5 R_3 R_4 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}} + 2C_4 C_5 R_3 \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}} + C_4 C_5 R_4 \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}}}{2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5}$

wo: $\sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}}$

bandwidth: $\frac{\sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}}\left(2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5\right)}{2C_4 C_5 R_3 R_4 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}} + 2C_4 C_5 R_3 \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}} + C_4 C_5 R_4 \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}}}$

K-LP: R_3

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

K-BP: $\frac{C_4 R_3 R_4 g_m - C_5 R_3}{2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5}$

Qz: None

Wz: $\sqrt{-\frac{g_m}{C_4 C_5 R_4}}$

9.2 INVALID-WZ-2 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 R_3 R_4 R_5 s^2 + R_3 R_5 g_m - R_3 + s\left(C_4 R_3 R_4 R_5 g_m - C_4 R_3 R_4 - C_5 R_3 R_5\right)}{2R_3 g_m + R_5 g_m + s^2\left(2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5\right) + s\left(2C_4 R_3 R_4 g_m + 2C_4 R_3 R_5 g_m + 2C_4 R_3 + C_4 R_4 R_5 g_m + C_4 R_4 + 2C_5 R_3 R_5 g_m + C_5 R_5\right) + 1}$$

Parameters:

Q: $\frac{2C_4 C_5 R_3 R_4 R_5 g_m \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}} + 2C_4 C_5 R_3 R_5 \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}} + C_4 C_5 R_4 R_5 \sqrt{\frac{1}{2C_4 C_5 R_3 R_4}}}{2C_4 R_3 R_4 g_m + 2C_4 R_3 R_5 g_m + 2C_4 R_3 + C_4 R_4 R_5 g_m + C_4 R_4 + 2C_5 R_3 R_5 g_m + C_5 R_5}$

wo: $\sqrt{\frac{2R_3 g_m + R_5 g_m + 1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}}$

bandwidth: $\frac{\sqrt{\frac{2R_3 g_m + R_5 g_m + 1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}}\left(2C_4 R_3 R_4 g_m + 2C_4 R_3 R_5 g_m + 2C_4 R_3 + C_4 R_4 R_5 g_m + C_4 R_4 + 2C_5 R_3 R_5 g_m + C_5 R_5\right)}{2C_4 C_5 R_3 R_4 R_5 g_m \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}} + 2C_4 C_5 R_3 R_5 \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}} + C_4 C_5 R_4 R_5 \sqrt{\ }}$

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

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

K-BP: $\frac{C_4 R_3 R_4 R_5 g_m \sqrt{\frac{1}{2C_4 C_5}}}{2C_4 R_3 R_4 g_m \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}} + 2C_4 R_3 R_5 g_m \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{R_5 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5} + \frac{1}{2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5}} + 2C_4 R_3 \sqrt{\frac{2R_3 g_m}{2C_4 C_5 R_3 R_4 R_5 g_m + 2}}}$

Qz: None

Wz: $\sqrt{\frac{-R_5 g_m + 1}{C_4 C_5 R_4 R_5}}$

9.3 INVALID-WZ-3 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3 g_m + s^2\left(C_4 C_5 R_3 R_4 R_5 g_m - C_4 C_5 R_3 R_4\right) + s\left(C_4 R_3 R_4 g_m + C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^2\left(2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4\right) + s\left(2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}$$

Parameters:

Q: $\frac{2C_4 C_5 R_3 R_4 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}} + 2C_4 C_5 R_3 R_5 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}} + 2C_4 C_5 R_3 \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}} + C_4 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}}}{2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5}$

wo: $\sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}}$

bandwidth: $\frac{\sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}}\left(2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}{2C_4 C_5 R_3 R_4 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}} + 2C_4 C_5 R_3 R_5 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}} + 2C_4 C_5 R_3 \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4}} + C_4 C_5 R_4 R_5 g_m \sqrt{\frac{g_m}{2C_4 C_5 R_3 R_4 g_m + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 C_5 R_4}}}$

K-LP: R_3

K-HP: $\frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4}$

K-BP: $\frac{C_4 R_3 R_4 g_m + C_5 R_3 R_5 g_m - C_5 R_3}{2C_4 R_3 g_m + C_4 R_4 g_m + 2C_5 R_3 g_m + C_5 R_5 g_m + C_5}$

Qz: None

Wz: $\sqrt{\frac{g_m}{C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4}}$

9.4 INVALID-WZ-4 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_3 C_5 R_3 R_4 s^2 + R_4 g_m + s\left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2g_m + s^2\left(2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4\right) + s\left(2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}$$

Parameters:

Q: $\frac{2\sqrt{2}C_3 C_5 R_3 R_4 g_m \sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}} + 2\sqrt{2}C_3 C_5 R_3 \sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}} + \sqrt{2}C_3 C_5 R_4 \sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}}}{2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}}\left(2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}{2\sqrt{2}C_3 C_5 R_3 R_4 g_m \sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}} + 2\sqrt{2}C_3 C_5 R_3 \sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}} + \sqrt{2}C_3 C_5 R_4 \sqrt{\frac{g_m}{2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4}}}$

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

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

K-BP: $\frac{C_3 R_3 R_4 g_m - C_5 R_4}{2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5}$

Qz: None

Wz: $\sqrt{-\frac{g_m}{C_3 C_5 R_3}}$

9.5 INVALID-WZ-5 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_5 R_3 R_4 R_5 s^2 + R_4 R_5 g_m - R_4 + s\left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 - C_5 R_4 R_5\right)}{2R_4 g_m + 2R_5 g_m + s^2\left(2C_3 C_5 R_3 R_4 R_5 g_m + 2C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5\right) + s\left(2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5\right) + 2}$$

Parameters:

Q: $\frac{2\sqrt{2}C_3C_5R_3R_4R_5g_m\sqrt{\frac{R_4g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{R_5g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{1}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}+2\sqrt{2}C_3C_5R_3R_5\sqrt{\frac{R_4g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{R_5g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{1}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}+\sqrt{2}C_3C_5R_4R_5\sqrt{2C_3\ldots}}{2C_3R_3R_4g_m+2C_3R_3R_5g_m+2C_3R_3+C_3R_4R_5g_m+C_3R_4+2C_5R_4R_5g_m+2C_5R_5}$

wo: $\sqrt{\frac{2R_4g_m+2R_5g_m+2}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{2R_4g_m+2R_5g_m+2}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}(2C_3R_3R_4g_m+2C_3R_3R_5g_m+2C_3R_3+C_3R_4R_5g_m+C_3R_4+2C_5R_4R_5g_m+2C_5R_5)}{2\sqrt{2}C_3C_5R_3R_4R_5g_m\sqrt{\frac{R_4g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{R_5g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{1}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}+2\sqrt{2}C_3C_5R_3R_5\sqrt{\frac{R_4g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{R_5g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{1}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}+\sqrt{2}C_3C_5\ldots}$

K-LP: $\frac{R_4R_5g_m-R_4}{2R_4g_m+2R_5g_m+2}$

K-HP: $-\frac{R_3R_4}{2R_3R_4g_m+2R_3+R_4}$

K-BP: $\frac{C_3R_3R_4R_5g_m\sqrt{\frac{1}{2C_3C\ldots}}}{2C_3R_3R_4g_m\sqrt{\frac{R_4g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{R_5g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{1}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}+2C_3R_3R_5g_m\sqrt{\frac{R_4g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{R_5g_m}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}+\frac{1}{2C_3C_5R_3R_4R_5g_m+2C_3C_5R_3R_5+C_3C_5R_4R_5}}+2C_3R_3\sqrt{\frac{1}{2C_3C_5R_3R_4R_5g_m+\ldots}}}$

Qz: None

Wz: $\sqrt{\frac{-R_5g_m+1}{C_3C_5R_3R_5}}$

9.6 INVALID-WZ-6 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_4 g_m + s^2\left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4\right) + s\left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2g_m + s^2\left(2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 R_5 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4\right) + s\left(2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

Parameters:

Q: $\frac{2\sqrt{2}C_3C_5R_3R_4g_m\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}+2\sqrt{2}C_3C_5R_3R_5g_m\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}+2\sqrt{2}C_3C_5R_3\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}+\sqrt{2}C_3C_5R_4R_5g_m\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4\ldots}}}{2C_3R_3g_m+C_3R_4g_m+2C_5R_4g_m+2C_5R_5g_m+2C_5}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}(2C_3R_3g_m+C_3R_4g_m+2C_5R_4g_m+2C_5R_5g_m+2C_5)}{2\sqrt{2}C_3C_5R_3R_4g_m\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}+2\sqrt{2}C_3C_5R_3R_5g_m\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}+2\sqrt{2}C_3C_5R_3\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5R_3+C_3C_5R_4R_5g_m+C_3C_5R_4}}+\sqrt{2}C_3C_5R_4R_5g_m\sqrt{\frac{g_m}{2C_3C_5R_3R_4g_m+2C_3C_5R_3R_5g_m+2C_3C_5\ldots}}}$

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

K-HP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-BP: $\frac{C_3R_3R_4g_m+C_5R_4R_5g_m-C_5R_4}{2C_3R_3g_m+C_3R_4g_m+2C_5R_4g_m+2C_5R_5g_m+2C_5}$

Qz: None

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

9.7 INVALID-WZ-7 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^2\left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4\right) + s\left(C_3 R_3 R_5 g_m - C_3 R_3 + C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2g_m + s^2\left(2C_3 C_4 R_3 R_4 g_m + 2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4\right) + s\left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4\right)}$$

Parameters:

Q: $\frac{2\sqrt{2}C_3C_4R_3R_4g_m\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}+2\sqrt{2}C_3C_4R_3R_5g_m\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}+2\sqrt{2}C_3C_4R_3\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}+\sqrt{2}C_3C_4R_4R_5g_m\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4\ldots}}}{2C_3R_3g_m+C_3R_5g_m+C_3+2C_4R_4g_m+2C_4R_5g_m+2C_4}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}$

bandwidth: $\frac{\sqrt{2}\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}(2C_3R_3g_m+C_3R_5g_m+C_3+2C_4R_4g_m+2C_4R_5g_m+2C_4)}{2\sqrt{2}C_3C_4R_3R_4g_m\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}+2\sqrt{2}C_3C_4R_3R_5g_m\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}+2\sqrt{2}C_3C_4R_3\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4R_3+C_3C_4R_4R_5g_m+C_3C_4R_4}}+\sqrt{2}C_3C_4R_4R_5g_m\sqrt{\frac{g_m}{2C_3C_4R_3R_4g_m+2C_3C_4R_3R_5g_m+2C_3C_4\ldots}}}$

K-LP: $\frac{R_5g_m-1}{2g_m}$

K-HP: $\frac{R_3R_4R_5g_m-R_3R_4}{2R_3R_4g_m+2R_3R_5g_m+2R_3+R_4R_5g_m+R_4}$

K-BP: $\frac{C_3R_3R_5g_m-C_3R_3+C_4R_4R_5g_m-C_4R_4}{2C_3R_3g_m+C_3R_5g_m+C_3+2C_4R_4g_m+2C_4R_5g_m+2C_4}$

Qz: None

Wz: $\sqrt{\frac{1}{C_3C_4R_3R_4}}$

10 INVALID-ORDER

10.1 INVALID-ORDER-1 $Z(s) = (\infty,\ \infty,\ R_3,\ R_4,\ R_5,\ \infty)$

$$H(s) = \frac{R_3R_4R_5g_m - R_3R_4}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4}$$

10.2 INVALID-ORDER-2 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4s + R_3R_4g_m}{2R_3g_m + R_4g_m + s\left(2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$$

10.3 INVALID-ORDER-3 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s\left(2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\right)}$$

10.4 INVALID-ORDER-4 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3R_4g_m + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s\left(2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}$$

10.5 INVALID-ORDER-5 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + s\left(2C_4R_3R_5g_m + 2C_4R_3\right) + 1}$$

10.6 INVALID-ORDER-6 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5L_5R_3g_m s^2 - C_5R_3 s + R_3g_m}{2C_4C_5L_5R_3g_m s^3 + g_m + s^2\left(2C_4C_5R_3 + C_5L_5g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$$

10.7 INVALID-ORDER-7 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{L_5 s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_5L_5R_3 s^2 + L_5R_3g_m s - R_3}{2C_4C_5L_5R_3 s^3 + 2R_3g_m + s^2\left(2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5\right) + s\left(2C_4R_3 + L_5g_m\right) + 1}$$

10.8 INVALID-ORDER-8 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5L_5R_3g_m s^2 + R_3g_m + s\left(C_5R_3R_5g_m - C_5R_3\right)}{2C_4C_5L_5R_3g_m s^3 + g_m + s^2\left(2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + C_5L_5g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$$

10.9 INVALID-ORDER-9 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{L_5R_5 s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_5L_5R_3R_5 s^2 - R_3R_5 + s\left(L_5R_3R_5g_m - L_5R_3\right)}{2C_4C_5L_5R_3R_5 s^3 + 2R_3R_5g_m + R_5 + s^2\left(2C_4L_5R_3R_5g_m + 2C_4L_5R_3 + 2C_5L_5R_3R_5g_m + C_5L_5R_5\right) + s\left(2C_4R_3R_5 + 2L_5R_3g_m + L_5R_5g_m + L_5\right)}$$

10.10 INVALID-ORDER-10 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_5R_3g_m s + R_3R_5g_m - R_3 + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^3\left(2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5R_3\right) + s^2\left(2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5\right) + s\left(2C_4R_3R_5g_m + 2C_4R_3 + L_5g_m\right) + 1}$$

10.11 INVALID-ORDER-11 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{1}{C_4 s}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_3 R_5 s + R_3 R_5 g_m - R_3 + s^2 \left(C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3\right)}{2R_3 g_m + R_5 g_m + s^3 \left(2C_4 C_5 L_5 R_3 R_5 g_m + 2C_4 C_5 L_5 R_3\right) + s^2 \left(2C_4 C_5 R_3 R_5 + 2C_5 L_5 R_3 g_m + C_5 L_5 R_5 g_m + C_5 L_5\right) + s \left(2C_4 R_3 R_5 g_m + 2C_4 R_3 + 2C_5 R_3 R_5 g_m + C_5 R_5\right) + 1}$$

10.12 INVALID-ORDER-12 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3 R_4 R_5 g_m - R_3 R_4}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s \left(2C_4 R_3 R_4 R_5 g_m + 2C_4 R_3 R_4\right)}$$

10.13 INVALID-ORDER-13 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_3 R_4 g_m s^2 - C_5 R_3 R_4 s + R_3 R_4 g_m}{2C_4 C_5 L_5 R_3 R_4 g_m s^3 + 2R_3 g_m + R_4 g_m + s^2 \left(2C_4 C_5 R_3 R_4 + 2C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m\right) + s \left(2C_4 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4\right)}$$

10.14 INVALID-ORDER-14 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_3 R_4 s^2 + L_5 R_3 R_4 g_m s - R_3 R_4}{2C_4 C_5 L_5 R_3 R_4 s^3 + 2R_3 R_4 g_m + 2R_3 + R_4 + s^2 \left(2C_4 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 + C_5 L_5 R_4\right) + s \left(2C_4 R_3 R_4 + 2L_5 R_3 g_m + L_5 R_4 g_m\right)}$$

10.15 INVALID-ORDER-15 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_3 R_4 g_m s^2 + R_3 R_4 g_m + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4\right)}{2C_4 C_5 L_5 R_3 R_4 g_m s^3 + 2R_3 g_m + R_4 g_m + s^2 \left(2C_4 C_5 R_3 R_4 R_5 g_m + 2C_4 C_5 R_3 R_4 + 2C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m\right) + s \left(2C_4 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 R_5 g_m + 2C_5 R_3 + C_5 R_4 R_5 g_m + C_5 R_4\right)}$$

10.16 INVALID-ORDER-16 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_3 R_4 R_5 s^2 - R_3 R_4 R_5 + s \left(L_5 R_3 R_4 R_5 g_m - L_5 R_3 R_4\right)}{2C_4 C_5 L_5 R_3 R_4 R_5 s^3 + 2R_3 R_4 R_5 g_m + 2R_3 R_5 + R_4 R_5 + s^2 \left(2C_4 L_5 R_3 R_4 R_5 g_m + 2C_4 L_5 R_3 R_4 + 2C_5 L_5 R_3 R_4 R_5 g_m + 2C_5 L_5 R_3 R_5 + C_5 L_5 R_4 R_5\right) + s \left(2C_4 R_3 R_4 R_5 + 2L_5 R_3 R_4 g_m + 2L_5 R_3 R_5 g_m + 2L_5 R_3 + L_5 R_4 R_5 g_m + L_5 R_4\right)}$$

10.17 INVALID-ORDER-17 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_5 R_3 R_4 g_m s + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_5 L_5 R_3 R_4 R_5 g_m - C_5 L_5 R_3 R_4\right)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^3 \left(2C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_5 R_3 R_4\right) + s^2 \left(2C_4 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 R_5 g_m + 2C_5 L_5 R_3 + C_5 L_5 R_4 R_5 g_m + C_5 L_5 R_4\right) + s \left(2C_4 R_3 R_4 R_5 g_m + 2C_4 R_3 R_4 + 2L_5 R_3 g_m + L_5 R_4 g_m\right)}$$

10.18 INVALID-ORDER-18 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_3 R_4 R_5 s + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_5 L_5 R_3 R_4 R_5 g_m - C_5 L_5 R_3 R_4\right)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^3 \left(2C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_5 R_3 R_4\right) + s^2 \left(2C_4 C_5 R_3 R_4 R_5 + 2C_5 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 R_5 g_m + 2C_5 L_5 R_3 + C_5 L_5 R_4 R_5 g_m + C_5 L_5 R_4\right) + s \left(2C_4 R_3 R_4 R_5 g_m + 2C_4 R_3 R_4 + 2C_5 R_3 R_4 R_5 g_m + 2C_5 R_3 R_5 + C_5 R_4\right)}$$

10.19 INVALID-ORDER-19 $Z(s) = \left(\infty, \ \infty, \ R_3, \ R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s \left(C_4 R_3 R_4 R_5 g_m - C_4 R_3 R_4\right)}{2R_3 g_m + R_5 g_m + s \left(2C_4 R_3 R_4 g_m + 2C_4 R_3 R_5 g_m + 2C_4 R_3 + C_4 R_4 R_5 g_m + C_4 R_4\right) + 1}$$

10.20 INVALID-ORDER-20 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_5 R_3 R_4 g_m s^3 + R_3 g_m + s^2 \left(-C_4 C_5 R_3 R_4 + C_5 L_5 R_3 g_m\right) + s \left(C_4 R_3 R_4 g_m - C_5 R_3\right)}{g_m + s^3 \left(2 C_4 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(2 C_4 C_5 R_3 R_4 g_m + 2 C_4 C_5 R_3 + C_4 C_5 R_4 + C_5 L_5 g_m\right) + s \left(2 C_4 R_3 g_m + C_4 R_4 g_m + 2 C_5 R_3 g_m + C_5\right)}$$

10.21 INVALID-ORDER-21 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_5 R_3 R_4 s^3 - R_3 + s^2 \left(C_4 L_5 R_3 R_4 g_m - C_5 L_5 R_3\right) + s \left(-C_4 R_3 R_4 + L_5 R_3 g_m\right)}{2 R_3 g_m + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_5 R_3 + C_4 C_5 L_5 R_4\right) + s^2 \left(2 C_4 L_5 R_3 g_m + C_4 L_5 R_4 g_m + 2 C_5 L_5 R_3 g_m + C_5 L_5\right) + s \left(2 C_4 R_3 R_4 g_m + 2 C_4 R_3 + C_4 R_4 + L_5 g_m\right) + 1}$$

10.22 INVALID-ORDER-22 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_5 R_3 R_4 g_m s^3 + R_3 g_m + s^2 \left(C_4 C_5 R_3 R_4 R_5 g_m - C_4 C_5 R_3 R_4 + C_5 L_5 R_3 g_m\right) + s \left(C_4 R_3 R_4 g_m + C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^3 \left(2 C_4 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(2 C_4 C_5 R_3 R_4 g_m + 2 C_4 C_5 R_3 R_5 g_m + 2 C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4 + C_5 L_5 g_m\right) + s \left(2 C_4 R_3 g_m + C_4 R_4 g_m + 2 C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}$$

10.23 INVALID-ORDER-23 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_5 R_3 R_4 R_5 s^3 - R_3 R_5 + s^2 \left(C_4 L_5 R_3 R_4 R_5 g_m - C_4 L_5 R_3 R_4 - C_5 L_5 R_3 R_5\right) + s \left(-C_4 R_3 R_4 R_5 + L_5 R_3 R_5 g_m - L_5 R_3\right)}{2 R_3 R_5 g_m + R_5 + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_3 R_5 + C_4 C_5 L_5 R_4 R_5\right) + s^2 \left(2 C_4 L_5 R_3 R_4 g_m + 2 C_4 L_5 R_3 R_5 g_m + 2 C_4 L_5 R_3 + C_4 L_5 R_4 R_5 g_m + C_4 L_5 R_4 + 2 C_5 L_5 R_3 R_5 g_m + C_5 L_5 R_5\right) + s \left(2 C_4 R_3 R_4 R_5 g_m + 2 C_4 R_3 R_5 + C_4 R_4 R_5 + 2 L_5 R_3 g_m + L_5 R_5 g_m + L_5\right)}$$

10.24 INVALID-ORDER-24 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^3 \left(C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_4 C_5 L_5 R_3 R_4\right) + s^2 \left(C_4 L_5 R_3 R_4 g_m + C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3\right) + s \left(C_4 R_3 R_4 R_5 g_m - C_4 R_3 R_4 + L_5 R_3 g_m\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 R_5 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(2 C_4 L_5 R_3 g_m + C_4 L_5 R_4 g_m + 2 C_5 L_5 R_3 g_m + C_5 L_5 R_5 g_m + C_5 L_5\right) + s \left(2 C_4 R_3 R_4 g_m + 2 C_4 R_3 R_5 g_m + 2 C_4 R_3 + C_4 R_4 R_5 g_m + C_4 R_4 + L_5 g_m\right) + 1}$$

10.25 INVALID-ORDER-25 $Z(s) = \left(\infty,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^3 \left(C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_4 C_5 L_5 R_3 R_4\right) + s^2 \left(-C_4 C_5 R_3 R_4 R_5 + C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3\right) + s \left(C_4 R_3 R_4 R_5 g_m - C_4 R_3 R_4 - C_5 R_3 R_5\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 R_5 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(2 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5 + 2 C_5 L_5 R_3 g_m + C_5 L_5 R_5 g_m + C_5 L_5\right) + s \left(2 C_4 R_3 R_4 g_m + 2 C_4 R_3 R_5 g_m + 2 C_4 R_3 + C_4 R_4 R_5 g_m + C_4\ldots\right)}$$

10.26 INVALID-ORDER-26 $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 s^3 + C_4 L_4 R_3 g_m s^2 - C_5 R_3 s + R_3 g_m}{g_m + s^3 \left(2 C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4\right) + s^2 \left(2 C_4 C_5 R_3 + C_4 L_4 g_m\right) + s \left(2 C_4 R_3 g_m + 2 C_5 R_3 g_m + C_5\right)}$$

10.27 INVALID-ORDER-27 $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_5 s^3 - C_5 R_3 R_5 s + R_3 R_5 g_m - R_3 + s^2 \left(C_4 L_4 R_3 R_5 g_m - C_4 L_4 R_3\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(2 C_4 C_5 L_4 R_3 R_5 g_m + C_4 C_5 L_4 R_5\right) + s^2 \left(2 C_4 C_5 R_3 R_5 + 2 C_4 L_4 R_3 g_m + C_4 L_4 R_5 g_m + C_4 L_4\right) + s \left(2 C_4 R_3 R_5 g_m + 2 C_4 R_3 + 2 C_5 R_3 R_5 g_m + C_5 R_5\right) + 1}$$

10.28 INVALID-ORDER-28 $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 L_4 R_3 g_m s^2 + R_3 g_m + s^3 \left(C_4 C_5 L_4 R_3 R_5 g_m - C_4 C_5 L_4 R_3\right) + s \left(C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^3 \left(2 C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4 R_5 g_m + C_4 C_5 L_4\right) + s^2 \left(2 C_4 C_5 R_3 R_5 g_m + 2 C_4 C_5 R_3 + C_4 L_4 g_m\right) + s \left(2 C_4 R_3 g_m + 2 C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}$$

10.29 INVALID-ORDER-29 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4s + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_4C_5L_4L_5R_3g_ms^4 - C_4C_5L_4R_3s^3 - C_5R_3s + R_3g_m + s^2\left(C_4L_4R_3g_m + C_5L_5R_3g_m\right)}{C_4C_5L_4L_5g_ms^4 + g_m + s^3\left(2C_4C_5L_4R_3g_m + C_4C_5L_4 + 2C_4C_5L_5R_3g_m\right) + s^2\left(2C_4C_5R_3 + C_4L_4g_m + C_5L_5g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$$

10.30 INVALID-ORDER-30 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4L_5R_3s^4 + C_4L_4L_5R_3g_ms^3 + L_5R_3g_ms - R_3 + s^2\left(-C_4L_4R_3 - C_5L_5R_3\right)}{2R_3g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5\right) + s^3\left(2C_4C_5L_5R_3 + C_4L_4L_5g_m\right) + s^2\left(2C_4L_4R_3g_m + C_4L_4 + 2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5\right) + s\left(2C_4R_3 + L_5g_m\right) + 1}$$

10.31 INVALID-ORDER-31 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4s + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_4C_5L_4L_5R_3g_ms^4 + R_3g_m + s^3\left(C_4C_5L_4R_3R_5g_m - C_4C_5L_4R_3\right) + s^2\left(C_4L_4R_3g_m + C_5L_5R_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{C_4C_5L_4L_5g_ms^4 + g_m + s^3\left(2C_4C_5L_4R_3g_m + C_4C_5L_4R_5g_m + C_4C_5L_4 + 2C_4C_5L_5R_3g_m\right) + s^2\left(2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + C_4L_4g_m + C_5L_5g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$$

10.32 INVALID-ORDER-32 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4L_5R_3R_5s^4 - R_3R_5 + s^3\left(C_4L_4L_5R_3R_5g_m - C_4L_4L_5R_3\right) + s^2\left(-C_4L_4R_3R_5 - C_5L_5R_3R_5\right) + s\left(L_5R_3R_5g_m - L_5R_3\right)}{2R_3R_5g_m + R_5 + s^4\left(2C_4C_5L_4L_5R_3R_5g_m + C_4C_5L_4L_5R_5\right) + s^3\left(2C_4C_5L_5R_3R_5 + 2C_4L_4L_5R_3g_m + C_4L_4L_5R_5g_m + C_4L_4L_5\right) + s^2\left(2C_4L_4R_3R_5g_m + C_4L_4R_5 + 2C_4L_5R_3R_5g_m + 2C_4L_5R_3 + 2C_5L_5R_3R_5g_m + C_5L_5R_5\right) + s\left(2C_4R_3R_5 + 2L_5R_3g_m + L_5R_5g_m + L_5\right)}$$

10.33 INVALID-ORDER-33 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4s + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{C_4L_4L_5R_3g_ms^3 + L_5R_3g_ms + R_3R_5g_m - R_3 + s^4\left(C_4C_5L_4L_5R_3R_5g_m - C_4C_5L_4L_5R_3\right) + s^2\left(C_4L_4R_3R_5g_m - C_4L_4R_3 + C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_5g_m + C_4C_5L_4L_5\right) + s^3\left(2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5R_3 + C_4L_4L_5g_m\right) + s^2\left(2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4 + 2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5\right) + s\left(2C_4R_3R_5g_m + 2C_4R_3 + L_5g_m\right) + 1}$$

10.34 INVALID-ORDER-34 $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^4\left(C_4C_5L_4L_5R_3R_5g_m - C_4C_5L_4L_5R_3\right) + s^2\left(C_4L_4R_3R_5g_m - C_4L_4R_3 + C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_5g_m + C_4C_5L_4L_5\right) + s^3\left(2C_4C_5L_4R_3R_5g_m + C_4C_5L_4R_5 + 2C_4C_5L_5R_3g_m + 2C_4C_5L_5R_3\right) + s^2\left(2C_4C_5R_3R_5 + 2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4 + 2C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5\right) + s\left(2C_4R_3R_5g_m + 2\cdots\right)}$$

10.35 INVALID-ORDER-35 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{-C_5L_4R_3s^2 + L_4R_3g_ms}{2C_4C_5L_4R_3s^3 + 2R_3g_m + s^2\left(2C_4L_4R_3g_m + 2C_5L_4R_3g_m + C_5L_4\right) + s\left(2C_5R_3 + L_4g_m\right)}$$

10.36 INVALID-ORDER-36 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5L_4R_3R_5s^2 + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2C_4C_5L_4R_3R_5s^3 + 2R_3R_5g_m + 2R_3 + s^2\left(2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + 2C_5L_4R_3R_5g_m + C_5L_4R_5\right) + s\left(2C_5R_3R_5 + 2L_4R_3g_m + L_4R_5g_m + L_4\right)}$$

10.37 INVALID-ORDER-37 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{L_4R_3g_ms + s^2\left(C_5L_4R_3R_5g_m - C_5L_4R_3\right)}{2R_3g_m + s^3\left(2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3\right) + s^2\left(2C_4L_4R_3g_m + 2C_5L_4R_3g_m + C_5L_4R_5g_m + C_5L_4\right) + s\left(2C_5R_3R_5g_m + 2C_5R_3 + L_4g_m\right)}$$

10.38 **INVALID-ORDER-38** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 g_m s^3 - C_5 L_4 R_3 s^2 + L_4 R_3 g_m s}{2 C_4 C_5 L_4 L_5 R_3 g_m s^4 + 2 R_3 g_m + s^3 \left(2 C_4 C_5 L_4 R_3 + C_5 L_4 L_5 g_m\right) + s^2 \left(2 C_4 L_4 R_3 g_m + 2 C_5 L_4 R_3 g_m + C_5 L_4 + 2 C_5 L_5 R_3 g_m\right) + s \left(2 C_5 R_3 + L_4 g_m\right)}$$

10.39 **INVALID-ORDER-39** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_3 s^3 + L_4 L_5 R_3 g_m s^2 - L_4 R_3 s}{2 C_4 C_5 L_4 L_5 R_3 s^4 + 2 R_3 + s^3 \left(2 C_4 L_4 L_5 R_3 g_m + 2 C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5\right) + s^2 \left(2 C_4 L_4 R_3 + 2 C_5 L_5 R_3 + L_4 L_5 g_m\right) + s \left(2 L_4 R_3 g_m + L_4 + 2 L_5 R_3 g_m\right)}$$

10.40 **INVALID-ORDER-40** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 g_m s^3 + L_4 R_3 g_m s + s^2 \left(C_5 L_4 R_3 R_5 g_m - C_5 L_4 R_3\right)}{2 C_4 C_5 L_4 L_5 R_3 g_m s^4 + 2 R_3 g_m + s^3 \left(2 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_4 C_5 L_4 R_3 + C_5 L_4 L_5 g_m\right) + s^2 \left(2 C_4 L_4 R_3 g_m + 2 C_5 L_4 R_3 g_m + C_5 L_4 R_5 g_m + C_5 L_4 + 2 C_5 L_5 R_3 g_m\right) + s \left(2 C_5 R_3 R_5 g_m + 2 C_5 R_3 + L_4 g_m\right)}$$

10.41 **INVALID-ORDER-41** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_3 R_5 s^3 - L_4 R_3 R_5 s + s^2 \left(L_4 L_5 R_3 R_5 g_m - L_4 L_5 R_3\right)}{2 C_4 C_5 L_4 L_5 R_3 R_5 s^4 + 2 R_3 R_5 + s^3 \left(2 C_4 L_4 L_5 R_3 R_5 g_m + 2 C_4 L_4 L_5 R_3 + 2 C_5 L_4 L_5 R_3 R_5 g_m + C_5 L_4 L_5 R_5\right) + s^2 \left(2 C_4 L_4 R_3 R_5 + 2 C_5 L_5 R_3 R_5 + 2 L_4 L_5 R_3 g_m + L_4 L_5 R_5 g_m + L_4 L_5\right) + s \left(2 L_4 R_3 R_5 g_m + L_4 R_5 + 2 L_5 R_3 R_5 g_m + 2 L_5 R_3\right)}$$

10.42 **INVALID-ORDER-42** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_4 L_5 R_3 g_m s^2 + s^3 \left(C_5 L_4 L_5 R_3 R_5 g_m - C_5 L_4 L_5 R_3\right) + s \left(L_4 R_3 R_5 g_m - L_4 R_3\right)}{2 R_3 R_5 g_m + 2 R_3 + s^4 \left(2 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_3\right) + s^3 \left(2 C_4 L_4 L_5 R_3 g_m + 2 C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_5 g_m + C_5 L_4 L_5\right) + s^2 \left(2 C_4 L_4 R_3 R_5 g_m + 2 C_4 L_4 R_3 + 2 C_5 L_5 R_3 R_5 g_m + 2 C_5 L_5 R_3 + L_4 L_5 g_m\right) + s \left(2 L_4 R_3 g_m + L_4 R_5 g_m + L_4 + 2 L_5 R_3 g_m\right)}$$

10.43 **INVALID-ORDER-43** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_3 R_5 s^2 + s^3 \left(C_5 L_4 L_5 R_3 R_5 g_m - C_5 L_4 L_5 R_3\right) + s \left(L_4 R_3 R_5 g_m - L_4 R_3\right)}{2 R_3 R_5 g_m + 2 R_3 + s^4 \left(2 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_3\right) + s^3 \left(2 C_4 C_5 L_4 R_3 R_5 + 2 C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_5 g_m + C_5 L_4 L_5\right) + s^2 \left(2 C_4 L_4 R_3 R_5 g_m + 2 C_4 L_4 R_3 + 2 C_5 L_4 R_3 R_5 g_m + C_5 L_4 R_5 + 2 C_5 L_5 R_3 R_5 g_m + 2 C_5 L_5 R_3\right) + s \left(2 C_5 R_3 R_5 + 2 L_4 R_3 g_m + L_4 R_5 g_m + \cdots\right)}$$

10.44 **INVALID-ORDER-44** $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 s^3 + R_3 g_m + s^2 \left(-C_4 C_5 R_3 R_4 + C_4 L_4 R_3 g_m\right) + s \left(C_4 R_3 R_4 g_m - C_5 R_3\right)}{g_m + s^3 \left(2 C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4\right) + s^2 \left(2 C_4 C_5 R_3 R_4 g_m + 2 C_4 C_5 R_3 + C_4 C_5 R_4 + C_4 L_4 g_m\right) + s \left(2 C_4 R_3 g_m + C_4 R_4 g_m + 2 C_5 R_3 g_m + C_5\right)}$$

10.45 **INVALID-ORDER-45** $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_5 s^3 + R_3 R_5 g_m - R_3 + s^2 \left(-C_4 C_5 R_3 R_4 R_5 + C_4 L_4 R_3 R_5 g_m - C_4 L_4 R_3\right) + s \left(C_4 R_3 R_4 R_5 g_m - C_4 R_3 R_4 - C_5 R_3 R_5\right)}{2 R_3 g_m + R_5 g_m + s^3 \left(2 C_4 C_5 L_4 R_3 R_5 g_m + C_4 C_5 L_4 R_5\right) + s^2 \left(2 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5 + 2 C_4 L_4 R_3 g_m + C_4 L_4 R_5 g_m + C_4 L_4\right) + s \left(2 C_4 R_3 R_4 g_m + 2 C_4 R_3 R_5 g_m + 2 C_4 R_3 + C_4 R_4 R_5 g_m + C_4 R_4 + 2 C_5 R_3 R_5 g_m + C_5 R_5\right) + 1}$$

10.46 **INVALID-ORDER-46** $Z(s) = \left(\infty, \ \infty, \ R_3, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{R_3 g_m + s^3 \left(C_4 C_5 L_4 R_3 R_5 g_m - C_4 C_5 L_4 R_3\right) + s^2 \left(C_4 C_5 R_3 R_4 R_5 g_m - C_4 C_5 R_3 R_4 + C_4 L_4 R_3 g_m\right) + s \left(C_4 R_3 R_4 g_m + C_5 R_3 R_5 g_m - C_5 R_3\right)}{g_m + s^3 \left(2 C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4 R_5 g_m + C_4 C_5 L_4\right) + s^2 \left(2 C_4 C_5 R_3 R_4 g_m + 2 C_4 C_5 R_3 R_5 g_m + 2 C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4 + C_4 L_4 g_m\right) + s \left(2 C_4 R_3 g_m + C_4 R_4 g_m + 2 C_5 R_3 g_m + C_5 R_5 g_m + C_5\right)}$$

10.47 **INVALID-ORDER-47** $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + R_4 + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 R_3 g_m s^4 + R_3 g_m + s^3 \left(-C_4 C_5 L_4 R_3 + C_4 C_5 L_5 R_3 R_4 g_m\right) + s^2 \left(-C_4 C_5 R_3 R_4 + C_4 L_4 R_3 g_m + C_5 L_5 R_3 g_m\right) + s\left(C_4 R_3 R_4 g_m - C_5 R_3\right)}{C_4 C_5 L_4 L_5 g_m s^4 + g_m + s^3 \left(2 C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4 + 2 C_4 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(2 C_4 C_5 R_3 R_4 g_m + 2 C_4 C_5 R_3 + C_4 C_5 R_4 + C_4 L_4 g_m + C_5 L_5 g_m\right) + s\left(2 C_4 R_3 g_m + C_4 R_4 g_m + 2 C_5 R_3 g_m + C_5\right)}$$

10.48 **INVALID-ORDER-48** $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_3 s^4 - R_3 + s^3 \left(-C_4 C_5 L_5 R_3 R_4 + C_4 L_4 L_5 R_3 g_m\right) + s^2 \left(-C_4 L_4 R_3 + C_4 L_5 R_3 R_4 g_m - C_5 L_5 R_3\right) + s\left(-C_4 R_3 R_4 + L_5 R_3 g_m\right)}{2 R_3 g_m + s^4 \left(2 C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5\right) + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right) + s^2 \left(2 C_4 L_4 R_3 g_m + C_4 L_4 + 2 C_4 L_5 R_3 g_m + C_4 L_5 R_4 g_m + 2 C_5 L_5 R_3 g_m + C_5 L_5\right) + s\left(2 C_4 R_3 R_4 g_m + 2 C_4 R_3 + C_4 R_4 + L_5 g_m\right) + 1}$$

10.49 **INVALID-ORDER-49** $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 R_3 g_m s^4 + R_3 g_m + s^3 \left(C_4 C_5 L_4 R_3 R_5 g_m - C_4 C_5 L_4 R_3 + C_4 C_5 L_5 R_3 R_4 g_m\right) + s^2 \left(C_4 C_5 R_3 R_4 R_5 g_m - C_4 C_5 R_3 R_4 + C_4 L_4 R_3 g_m + C_5 L_5 R_3 g_m\right) + s\left(C_4 R_3 R_4 g_m + C_5 R_3 R_5 g_m - C_5 R_3\right)}{C_4 C_5 L_4 L_5 g_m s^4 + g_m + s^3 \left(2 C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4 R_5 g_m + C_4 C_5 L_4 + 2 C_4 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(2 C_4 C_5 R_3 R_4 g_m + 2 C_4 C_5 R_3 R_5 g_m + 2 C_4 C_5 R_3 + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4 + C_4 L_4 g_m + C_5 L_5 g_m\right) + s\left(2 C_4 R_3 g_m + C_4 R_4 g_m + 2 C_5 R_3 g_m + C_5 R_5 g_m + C\right.}$$

10.50 **INVALID-ORDER-50** $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_3 R_5 s^4 - R_3 R_5 + s^3 \left(-C_4 C_5 L_5 R_3 R_4 R_5 + C_4 L_4 L_5 R_3 R_5 g_m - C_4 L_4 L_5 R_3\right) + s^2 \left(-C_4 L_4 R_3 R_5 + C_4 L_5 R_3 R_4 R_5 g_m - C_4 L_5 R_3 R_4 - C_5 L_5 R_3 R_5\right) + s\left(-C_4 R_3 R_4 R_5 + \ldots\right)}{2 R_3 R_5 g_m + R_5 + s^4 \left(2 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_4 C_5 L_4 L_5 R_5\right) + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_3 R_5 + C_4 C_5 L_5 R_4 R_5 + 2 C_4 L_4 L_5 R_3 g_m + C_4 L_4 L_5 R_5 g_m + C_4 L_4 L_5\right) + s^2 \left(2 C_4 L_4 R_3 R_5 g_m + C_4 L_4 R_5 + 2 C_4 L_5 R_3 R_4 g_m + 2 C_4 L_5 R_3 R_5 g_m + 2 C_4 L_5 R_3 + C_4 L_5 R_4 R_5 g_m + \ldots\right.}$$

10.51 **INVALID-ORDER-51** $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^4 \left(C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_4 C_5 L_4 L_5 R_3\right) + s^3 \left(C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_4 C_5 L_5 R_3 R_4 + C_4 L_4 L_5 R_3 g_m\right) + s^2 \left(C_4 L_4 R_3 R_5 g_m - C_4 L_4 R_3 + C_4 L_5 R_3 R_4 g_m + C_5 L_5 R_3 R_5 g_m - C_5 L_5 R_3\right) + s\ldots}{2 R_3 g_m + R_5 g_m + s^4 \left(2 C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_5 g_m + C_4 C_5 L_4 L_5\right) + s^3 \left(2 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 R_5 g_m + C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right) + s^2 \left(2 C_4 L_4 R_3 g_m + C_4 L_4 R_5 g_m + C_4 L_4 + 2 C_4 L_5 R_3 g_m + C_4 L_5 R_4 g_m + 2 C_5 L_5 R_3\ldots\right.}$$

10.52 **INVALID-ORDER-52** $Z(s) = \left(\infty,\ \infty,\ R_3,\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3 R_5 g_m - R_3 + s^4 \left(C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_4 C_5 L_4 L_5 R_3\right) + s^3 \left(-C_4 C_5 L_4 R_3 R_5 + C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_4 C_5 L_5 R_3 R_4\right) + s^2 \left(-C_4 C_5 R_3 R_4 R_5 + C_4 L_4 R_3 R_5 g_m - C_4 L_4 R_3 + \ldots\right)}{2 R_3 g_m + R_5 g_m + s^4 \left(2 C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_5 g_m + C_4 C_5 L_4 L_5\right) + s^3 \left(2 C_4 C_5 L_4 R_3 R_5 g_m + C_4 C_5 L_4 R_5 + 2 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 R_5 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(2 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5 + 2 C_4 L\ldots\right.}$$

10.53 **INVALID-ORDER-53** $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_3 R_4 s^2 + L_4 R_3 R_4 g_m s}{2 C_4 C_5 L_4 R_3 R_4 s^3 + 2 R_3 R_4 g_m + s^2 \left(2 C_4 L_4 R_3 R_4 g_m + 2 C_5 L_4 R_3 R_4 g_m + 2 C_5 L_4 R_3 + C_5 L_4 R_4\right) + s\left(2 C_5 R_3 R_4 + 2 L_4 R_3 g_m + L_4 R_4 g_m\right)}$$

10.54 **INVALID-ORDER-54** $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_3 R_4 R_5 s^2 + s\left(L_4 R_3 R_4 R_5 g_m - L_4 R_3 R_4\right)}{2 C_4 C_5 L_4 R_3 R_4 R_5 s^3 + 2 R_3 R_4 R_5 g_m + 2 R_3 R_4 + s^2 \left(2 C_4 L_4 R_3 R_4 R_5 g_m + 2 C_4 L_4 R_3 R_4 + 2 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_5 L_4 R_3 R_5 + C_5 L_4 R_4 R_5\right) + s\left(2 C_5 R_3 R_4 R_5 + 2 L_4 R_3 R_4 g_m + 2 L_4 R_3 R_5 g_m + 2 L_4 R_3 + L_4 R_4 R_5 g_m + L_4 R_4\right)}$$

10.55 **INVALID-ORDER-55** $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_4 R_3 R_4 g_m s + s^2 \left(C_5 L_4 R_3 R_4 R_5 g_m - C_5 L_4 R_3 R_4\right)}{2 R_3 R_4 g_m + s^3 \left(2 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_3 R_4\right) + s^2 \left(2 C_4 L_4 R_3 R_4 g_m + 2 C_5 L_4 R_3 R_4 g_m + 2 C_5 L_4 R_3 R_5 g_m + 2 C_5 L_4 R_3 + C_5 L_4 R_4 R_5 g_m + C_5 L_4 R_4\right) + s\left(2 C_5 R_3 R_4 R_5 g_m + 2 C_5 R_3 R_4 + 2 L_4 R_3 g_m + L_4 R_4 g_m\right)}$$

10.56 **INVALID-ORDER-56** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 R_4 g_m s^3 - C_5 L_4 R_3 R_4 s^2 + L_4 R_3 R_4 g_m s}{2C_4 C_5 L_4 L_5 R_3 R_4 g_m s^4 + 2R_3 R_4 g_m + s^3 \left(2C_4 C_5 L_4 R_3 R_4 + 2C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_4 g_m \right) + s^2 \left(2C_4 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 + C_5 L_4 R_4 + 2C_5 L_5 R_3 R_4 g_m \right) + s \left(2C_5 R_3 R_4 + 2L_4 R_3 g_m + L_4 R_4 g_m \right)}$$

10.57 **INVALID-ORDER-57** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_3 R_4 s^3 + L_4 L_5 R_3 R_4 g_m s^2 - L_4 R_3 R_4 s}{2C_4 C_5 L_4 L_5 R_3 R_4 s^4 + 2R_3 R_4 + s^3 \left(2C_4 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 + C_5 L_4 L_5 R_4 \right) + s^2 \left(2C_4 L_4 R_3 R_4 + 2C_5 L_5 R_3 R_4 + 2L_4 L_5 R_3 g_m + L_4 L_5 R_4 g_m \right) + s \left(2L_4 R_3 R_4 g_m + 2L_4 R_3 + L_4 R_4 + 2L_5 R_3 R_4 g_m \right)}$$

10.58 **INVALID-ORDER-58** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 R_4 g_m s^3 + L_4 R_3 R_4 g_m s + s^2 \left(C_5 L_4 R_3 R_4 R_5 g_m - C_5 L_4 R_3 R_4 \right)}{2C_4 C_5 L_4 L_5 R_3 R_4 g_m s^4 + 2R_3 R_4 g_m + s^3 \left(2C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 R_3 R_4 + 2C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_4 g_m \right) + s^2 \left(2C_4 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 R_4 R_5 g_m + 2C_5 L_4 R_3 + C_5 L_4 R_4 R_5 g_m + C_5 L_4 R_4 + 2C_5 L_5 R_3 R_4 g_m \right) + s \left(2C_5 R_3 R_4 R_5 g_m + 2C_5 R_3 \right)}$$

10.59 **INVALID-ORDER-59** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_3 R_4 R_5 s^3 - L_4 R_3 R_4 R_5 s + s^2 \left(L_4 L_5 R_3 R_4 R_5 g_m - L_4 L_5 R_3 R_4 \right)}{2C_4 C_5 L_4 L_5 R_3 R_4 R_5 s^4 + 2R_3 R_4 R_5 + s^3 \left(2C_4 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 L_4 L_5 R_3 R_4 + 2C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_5 L_4 L_5 R_3 R_5 + C_5 L_4 L_5 R_4 R_5 \right) + s^2 \left(2C_4 L_4 R_3 R_4 R_5 + 2C_5 L_5 R_3 R_4 R_5 + 2L_4 L_5 R_3 R_4 g_m + 2L_4 L_5 R_3 R_5 g_m + 2L_4 L_5 R_3 + L_4 L_5 R_4 R_5 g_m + L_4 L_5 R_4 \right) + s \left(2L_4 \right.}$$

10.60 **INVALID-ORDER-60** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{L_4 L_5 R_3 R_4 g_m s^2 + s^3 \left(C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_5 L_4 L_5 R_3 R_4 \right) + s \left(L_4 R_3 R_4 R_5 g_m - L_4 R_3 R_4 \right)}{2R_3 R_4 R_5 g_m + 2R_3 R_4 + s^4 \left(2C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 R_3 R_4 \right) + s^3 \left(2C_4 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_5 g_m + 2C_5 L_4 L_5 R_3 + C_5 L_4 L_5 R_4 R_5 g_m + C_5 L_4 L_5 R_4 \right) + s^2 \left(2C_4 L_4 R_3 R_4 R_5 g_m + 2C_4 L_4 R_3 R_4 + 2C_5 L_5 R_3 R_4 R_5 g_m + 2C_5 L_5 R_3 R_4 \right.}$$

10.61 **INVALID-ORDER-61** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 R_3 R_4 R_5 s^2 + s^3 \left(C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_5 L_4 L_5 R_3 R_4 \right) + s \left(L_4 R_3 R_4 R_5 g_m - L_4 R_3 R_4 \right)}{2R_3 R_4 R_5 g_m + 2R_3 R_4 + s^4 \left(2C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 R_3 R_4 \right) + s^3 \left(2C_4 C_5 L_4 R_3 R_4 R_5 + 2C_5 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_5 g_m + 2C_5 L_4 L_5 R_3 + C_5 L_4 L_5 R_4 R_5 g_m + C_5 L_4 L_5 R_4 \right) + s^2 \left(2C_4 L_4 R_3 R_4 R_5 g_m + 2C_4 L_4 R_3 R_4 + 2C_5 L_4 R_3 R_4 R_5 g_m + 2C_5 L_4 R_3 R_5 \right.}$$

10.62 **INVALID-ORDER-62** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_4 s^3 + R_3 R_4 g_m + s^2 \left(C_4 L_4 R_3 R_4 g_m - C_5 L_4 R_3 \right) + s \left(-C_5 R_3 R_4 + L_4 R_3 g_m \right)}{2R_3 g_m + R_4 g_m + s^3 \left(2C_4 C_5 L_4 R_3 R_4 g_m + 2C_4 C_5 L_4 R_3 + C_4 C_5 L_4 R_4 \right) + s^2 \left(2C_4 L_4 R_3 g_m + C_4 L_4 R_4 g_m + 2C_5 L_4 R_3 g_m + C_5 L_4 \right) + s \left(2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4 + L_4 g_m \right)}$$

10.63 **INVALID-ORDER-63** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_4 R_5 s^3 + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_4 L_4 R_3 R_4 R_5 g_m - C_4 L_4 R_3 R_4 - C_5 L_4 R_3 R_5 \right) + s \left(-C_5 R_3 R_4 R_5 + L_4 R_3 R_5 g_m - L_4 R_3 \right)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^3 \left(2C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 R_3 R_5 + C_4 C_5 L_4 R_4 R_5 \right) + s^2 \left(2C_4 L_4 R_3 R_4 g_m + 2C_4 L_4 R_3 R_5 g_m + 2C_4 L_4 R_3 + C_4 L_4 R_4 R_5 g_m + C_4 L_4 R_4 + 2C_5 L_4 R_3 R_5 g_m + C_5 L_4 R_5 \right) + s \left(2C_5 R_3 R_4 R_5 g_m + 2C_5 R_3 R_5 + C_5 R_4 R_5 \right.}$$

10.64 **INVALID-ORDER-64** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{R_3 R_4 g_m + s^3 \left(C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_4 C_5 L_4 R_3 R_4 \right) + s^2 \left(C_4 L_4 R_3 R_4 g_m + C_5 L_4 R_3 R_5 g_m - C_5 L_4 R_3 \right) + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4 + L_4 R_3 g_m \right)}{2R_3 g_m + R_4 g_m + s^3 \left(2C_4 C_5 L_4 R_3 R_4 g_m + 2C_4 C_5 L_4 R_3 R_5 g_m + 2C_4 C_5 L_4 R_3 + C_4 C_5 L_4 R_4 R_5 g_m + C_4 C_5 L_4 R_4 \right) + s^2 \left(2C_4 L_4 R_3 g_m + C_4 L_4 R_4 g_m + 2C_5 L_4 R_3 g_m + C_5 L_4 R_5 g_m + C_5 L_4 \right) + s \left(2C_5 R_3 R_4 g_m + 2C_5 R_3 R_5 g_m + 2C_5 R_3 + C_5 R_4 R_5 g_m + C_5 R_4 + L_4 g_m \right)}$$

10.65 INVALID-ORDER-65 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_4C_5L_4L_5R_3R_4g_m s^4 + R_3R_4g_m + s^3\left(-C_4C_5L_4R_3R_4 + C_5L_4L_5R_3g_m\right) + s^2\left(C_4L_4R_3R_4g_m - C_5L_4R_3 + C_5L_5R_3R_4g_m\right) + s\left(-C_5R_3R_4 + L_4R_3g_m\right)}{2R_3g_m + R_4g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4 + C_5L_4L_5g_m\right) + s^2\left(2C_4L_4R_3g_m + C_4L_4R_4g_m + 2C_5L_4R_3g_m + C_5L_4 + 2C_5L_5R_3g_m + C_5L_5R_4g_m\right) + s\left(2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4 + L_4g_m\right)}$$

10.66 INVALID-ORDER-66 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4L_5R_3R_4s^4 - R_3R_4 + s^3\left(C_4L_4L_5R_3R_4g_m - C_5L_4L_5R_3\right) + s^2\left(-C_4L_4R_3R_4 - C_5L_5R_3R_4 + L_4L_5R_3g_m\right) + s\left(-L_4R_3 + L_5R_3R_4g_m\right)}{2R_3R_4g_m + 2R_3 + R_4 + s^4\left(2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4\right) + s^3\left(2C_4L_4L_5R_3g_m + C_4L_4L_5R_4g_m + 2C_5L_4L_5R_3g_m + C_5L_4L_5\right) + s^2\left(2C_4L_4R_3R_4g_m + 2C_4L_4R_3 + C_4L_4R_4 + 2C_5L_5R_3R_4g_m + 2C_5L_5R_3 + C_5L_5R_4 + L_4L_5g_m\right) + s\left(2L_4R_3g_m + \cdots\right)}$$

10.67 INVALID-ORDER-67 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_4C_5L_4L_5R_3R_4g_m s^4 + R_3R_4g_m + s^3\left(C_4C_5L_4R_3R_4R_5g_m - C_4C_5L_4R_3R_4 + C_5L_4L_5R_3g_m\right) + s^2\left(C_4L_4R_3R_4g_m + C_5L_4R_3R_5g_m - C_5L_4R_3 + C_5L_5R_3R_4g_m\right) + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4 + \cdots\right)}{2R_3g_m + R_4g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4R_5g_m + C_4C_5L_4R_4 + C_5L_4L_5g_m\right) + s^2\left(2C_4L_4R_3g_m + C_4L_4R_4g_m + 2C_5L_4R_3g_m + C_5L_4R_5g_m + C_5L_4 + 2C_5L_5R_3g_m + C_5L_5R_4\cdots\right)}$$

10.68 INVALID-ORDER-68 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4L_5R_3R_4R_5s^4 - R_3R_4R_5 + s^3\left(C_4L_4L_5R_3R_4R_5g_m - C_4L_4L_5R_3R_4 - C_5L_4L_5R_3R_5\right) + s^2\left(-C_4L_4R_3R_4R_5 - C_5L_5R_3R_4R_5 + \cdots\right)}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^4\left(2C_4C_5L_4L_5R_3R_4R_5g_m + 2C_4C_5L_4L_5R_3R_5 + C_4C_5L_4L_5R_4R_5\right) + s^3\left(2C_4L_4L_5R_3R_4g_m + 2C_4L_4L_5R_3R_5g_m + 2C_4L_4L_5R_3 + C_4L_4L_5R_4R_5g_m + C_4L_4L_5R_4 + 2C_5L_4L_5R_3R_5g_m + C_5L_4L_5R_5\right) + s^2\left(2C_4L_4R_3R_4R_5g_m + 2C_4L_4\cdots\right)}$$

10.69 INVALID-ORDER-69 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_4C_5L_4L_5R_3R_4R_5g_m - C_4C_5L_4L_5R_3R_4\right) + s^3\left(C_4L_4L_5R_3R_4g_m + C_5L_4L_5R_3R_5g_m - C_5L_4L_5R_3\right) + s^2\left(C_4L_4R_3R_4R_5g_m - C_4L_4\cdots\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4R_5g_m + C_4C_5L_4L_5R_4\right) + s^3\left(2C_4L_4L_5R_3g_m + C_4L_4L_5R_4g_m + 2C_5L_4L_5R_3g_m + C_5L_4L_5R_5g_m + C_5L_4L_5\right) + s^2\left(2C_4L_4R_3R_4g_m + 2\cdots\right)}$$

10.70 INVALID-ORDER-70 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_4C_5L_4L_5R_3R_4R_5g_m - C_4C_5L_4L_5R_3R_4\right) + s^3\left(-C_4C_5L_4R_3R_4R_5 + C_5L_4L_5R_3R_5g_m - C_5L_4L_5R_3\right) + \cdots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4R_5g_m + C_4C_5L_4L_5R_4\right) + s^3\left(2C_4C_5L_4R_3R_4R_5g_m + 2C_4C_5L_4R_3R_5 + C_4C_5L_4R_4R_5 + 2C_5L_4L_5R_3g_m + C_5L_4L_5R_5g_m + C_5L_4L_5\right) + \cdots}$$

10.71 INVALID-ORDER-71 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3R_4s^3 + C_4L_4R_3R_4g_m s^2 - C_5R_3R_4s + R_3R_4g_m}{2R_3g_m + R_4g_m + s^3\left(2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4\right) + s^2\left(2C_4C_5R_3R_4 + 2C_4L_4R_3g_m + C_4L_4R_4g_m\right) + s\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$$

10.72 INVALID-ORDER-72 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3R_4R_5s^3 - C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_4L_4R_3R_4R_5g_m - C_4L_4R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(2C_4C_5L_4R_3R_4R_5g_m + 2C_4C_5L_4R_3R_5 + C_4C_5L_4R_4R_5\right) + s^2\left(2C_4C_5R_3R_4R_5 + 2C_4L_4R_3R_4g_m + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + C_4L_4R_4R_5g_m + C_4L_4R_4\right) + s\left(2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2C_5R_3R_4R_5g_m + 2\cdots\right)}$$

10.73 INVALID-ORDER-73 $Z(s) = \left(\infty,\ \infty,\ R_3,\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_4L_4R_3R_4g_m s^2 + R_3R_4g_m + s^3\left(C_4C_5L_4R_3R_4R_5g_m - C_4C_5L_4R_3R_4\right) + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^3\left(2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4R_5g_m + C_4C_5L_4R_4\right) + s^2\left(2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4 + 2C_4L_4R_3g_m + C_4L_4R_4g_m\right) + s\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}$$

10.74 **INVALID-ORDER-74** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_4C_5L_4L_5R_3R_4g_ms^4 - C_4C_5L_4R_3R_4s^3 - C_5R_3R_4s + R_3R_4g_m + s^2\left(C_4L_4R_3R_4g_m + C_5L_5R_3R_4g_m\right)}{2R_3g_m + R_4g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4 + 2C_4C_5L_5R_3R_4g_m\right) + s^2\left(2C_4C_5R_3R_4 + 2C_4L_4R_3g_m + C_4L_4R_4g_m + 2C_5L_5R_3g_m + C_5L_5R_4g_m\right) + s\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$

10.75 **INVALID-ORDER-75** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{-C_4C_5L_4L_5R_3R_4s^4 + C_4L_4L_5R_3R_4g_ms^3 + L_5R_3R_4g_ms - R_3R_4 + s^2\left(-C_4L_4R_3R_4 - C_5L_5R_3R_4\right)}{2R_3R_4g_m + 2R_3 + R_4 + s^4\left(2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4\right) + s^3\left(2C_4C_5L_5R_3R_4 + 2C_4L_4L_5R_3g_m + C_4L_4L_5R_4g_m\right) + s^2\left(2C_4L_4R_3R_4g_m + 2C_4L_4R_3 + C_4L_4R_4 + 2C_4L_5R_3R_4g_m + 2C_5L_5R_3R_4g_m + 2C_5L_5R_3 + C_5L_5R_4\right) + s\left(2C_4R_3R_4 + \dots\right)}$

10.76 **INVALID-ORDER-76** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_4C_5L_4L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(C_4C_5L_4R_3R_4R_5g_m - C_4C_5L_4R_3R_4\right) + s^2\left(C_4L_4R_3R_4g_m + C_5L_5R_3R_4g_m\right) + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^4\left(2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4R_5g_m + C_4C_5L_4R_4 + 2C_4C_5L_5R_3R_4g_m\right) + s^2\left(2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4 + 2C_4L_4R_3g_m + C_4L_4R_4g_m + 2C_5L_5R_3g_m + C_5\dots\right)}$

10.77 **INVALID-ORDER-77** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \frac{-C_4C_5L_4L_5R_3R_4R_5s^4 - R_3R_4R_5 + s^3\left(C_4L_4L_5R_3R_4R_5g_m - C_4L_4L_5R_3R_4\right) + s^2\left(-C_4L_4R_3R_4R_5 - C_5L_5R_3R_4R_5\right) + \dots}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^4\left(2C_4C_5L_4L_5R_3R_4R_5g_m + 2C_4C_5L_4L_5R_3R_5 + C_4C_5L_4L_5R_4R_5\right) + s^3\left(2C_4C_5L_5R_3R_4R_5 + 2C_4L_4L_5R_3R_4g_m + 2C_4L_4L_5R_3R_5g_m + 2C_4L_4L_5R_3 + C_4L_4L_5R_4R_5g_m + C_4L_4L_5R_4\right) + s^2\left(2C_4L_4R_3R_4R_5g_m + 2C_4L_4R_3R_5 + C_4L_4\dots\right)}$

10.78 **INVALID-ORDER-78** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{C_4L_4L_5R_3R_4g_ms^3 + L_5R_3R_4g_ms + R_3R_4R_5g_m - R_3R_4 + s^4\left(C_4C_5L_4L_5R_3R_4R_5g_m - C_4C_5L_4L_5R_3R_4\right) + s^2\left(C_4L_4R_3\dots\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4R_5g_m + C_4C_5L_4L_5R_4\right) + s^3\left(2C_4C_5L_5R_3R_4R_5g_m + 2C_4C_5L_5R_3R_4 + 2C_4L_4L_5R_3g_m + C_4L_4L_5R_4g_m\right) + s^2\left(2C_4L_4R_3R_4g_m + 2C_4L_4\dots\right)}$

10.79 **INVALID-ORDER-79** $Z(s) = \left(\infty, \ \infty, \ R_3, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{-C_4C_5L_4R_3R_4R_5s^3 - C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4 + s^4\left(C_4C_5L_4L_5R_3R_4R_5g_m - C_4C_5L_4\dots\right) + \dots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4R_5g_m + C_4C_5L_4L_5R_4\right) + s^3\left(2C_4C_5L_4R_3R_4R_5g_m + 2C_4C_5L_4R_3R_5 + C_4C_5L_4R_4R_5 + 2C_4C_5L_5R_3R_4R_5g_m + 2C_4C_5L_5R_3R_4\right) + s^2\left(\dots\right)}$

10.80 **INVALID-ORDER-80** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3s}, \ R_4, \ R_5, \ \infty \right)$

$$H(s) = \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + s\left(C_3R_4R_5g_m + C_3R_4\right) + 2}$$

10.81 **INVALID-ORDER-81** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3s}, \ R_4, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$$H(s) = \frac{C_5L_5R_4g_ms^2 - C_5R_4s + R_4g_m}{C_3C_5L_5R_4g_ms^3 + 2g_m + s^2\left(C_3C_5R_4 + 2C_5L_5g_m\right) + s\left(C_3R_4g_m + 2C_5R_4g_m + 2C_5\right)}$$

10.82 **INVALID-ORDER-82** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3s}, \ R_4, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$$H(s) = \frac{-C_5L_5R_4s^2 + L_5R_4g_ms - R_4}{C_3C_5L_5R_4s^3 + 2R_4g_m + s^2\left(C_3L_5R_4g_m + 2C_5L_5R_4g_m + 2C_5L_5\right) + s\left(C_3R_4 + 2L_5g_m\right) + 2}$$

10.83 INVALID-ORDER-83 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_4 g_m s^2 + R_4 g_m + s\left(C_5 R_4 R_5 g_m - C_5 R_4\right)}{C_3 C_5 L_5 R_4 g_m s^3 + 2 g_m + s^2\left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_5 L_5 g_m\right) + s\left(C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

10.84 INVALID-ORDER-84 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_4 R_5 s^2 - R_4 R_5 + s\left(L_5 R_4 R_5 g_m - L_5 R_4\right)}{C_3 C_5 L_5 R_4 R_5 s^3 + 2 R_4 R_5 g_m + 2 R_5 + s^2\left(C_3 L_5 R_4 R_5 g_m + C_3 L_5 R_4 + 2 C_5 L_5 R_4 R_5 g_m + 2 C_5 L_5 R_5\right) + s\left(C_3 R_4 R_5 + 2 L_5 R_4 g_m + 2 L_5 R_5 g_m + 2 L_5\right)}$$

10.85 INVALID-ORDER-85 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_5 R_4 g_m s + R_4 R_5 g_m - R_4 + s^2\left(C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^3\left(C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4\right) + s^2\left(C_3 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 L_5 g_m\right) + 2}$$

10.86 INVALID-ORDER-86 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ R_4, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^2\left(C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^3\left(C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4\right) + s^2\left(C_3 C_5 R_4 R_5 + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5\right) + 2}$$

10.87 INVALID-ORDER-87 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_5 g_m - 1}{2 g_m + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

10.88 INVALID-ORDER-88 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 s + g_m}{s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.89 INVALID-ORDER-89 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{g_m + s\left(C_5 R_5 g_m - C_5\right)}{s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.90 INVALID-ORDER-90 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 g_m s^2 - C_5 s + g_m}{s^3\left(C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.91 INVALID-ORDER-91 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_5 s^2 + L_5 g_m s - 1}{2 g_m + s^3\left(C_3 C_5 L_5 + 2 C_4 C_5 L_5\right) + s^2\left(C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 + 2 C_4\right)}$$

10.92 INVALID-ORDER-92 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 g_m s^2 + g_m + s\left(C_5 R_5 g_m - C_5\right)}{s^3\left(C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.93 INVALID-ORDER-93 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_5 s^2 - R_5 + s\left(L_5 R_5 g_m - L_5\right)}{2 R_5 g_m + s^3\left(C_3 C_5 L_5 R_5 + 2 C_4 C_5 L_5 R_5\right) + s^2\left(C_3 L_5 R_5 g_m + C_3 L_5 + 2 C_4 L_5 R_5 g_m + 2 C_4 L_5 + 2 C_5 L_5 R_5 g_m\right) + s\left(C_3 R_5 + 2 C_4 R_5 + 2 L_5 g_m\right)}$$

10.94 INVALID-ORDER-94 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L_5 g_m s + R_5 g_m + s^2\left(C_5 L_5 R_5 g_m - C_5 L_5\right) - 1}{2 g_m + s^3\left(C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

10.95 INVALID-ORDER-95 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 R_5 s + R_5 g_m + s^2\left(C_5 L_5 R_5 g_m - C_5 L_5\right) - 1}{2 g_m + s^3\left(C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 C_5 R_5 + 2 C_4 C_5 R_5 + 2 C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4 + 2 C_5 R_5 g_m\right)}$$

10.96 INVALID-ORDER-96 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4}{2 R_4 g_m + 2 R_5 g_m + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4\right) + 2}$$

10.97 INVALID-ORDER-97 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_4 g_m s^2 - C_5 R_4 s + R_4 g_m}{2 g_m + s^3\left(C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m\right) + s^2\left(C_3 C_5 R_4 + 2 C_4 C_5 R_4 + 2 C_5 L_5 g_m\right) + s\left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.98 INVALID-ORDER-98 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_4 s^2 + L_5 R_4 g_m s - R_4}{2 R_4 g_m + s^3\left(C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4\right) + s^2\left(C_3 L_5 R_4 g_m + 2 C_4 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 + 2 C_4 R_4 + 2 L_5 g_m\right) + 2}$$

10.99 INVALID-ORDER-99 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_4 g_m s^2 + R_4 g_m + s\left(C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^3\left(C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m\right) + s^2\left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_4 + 2 C_5 L_5 g_m\right) + s\left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

10.100 INVALID-ORDER-100 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_4 R_5 s^2 - R_4 R_5 + s\left(L_5 R_4 R_5 g_m - L_5 R_4\right)}{2 R_4 R_5 g_m + 2 R_5 + s^3\left(C_3 C_5 L_5 R_4 R_5 + 2 C_4 C_5 L_5 R_4 R_5\right) + s^2\left(C_3 L_5 R_4 R_5 g_m + C_3 L_5 R_4 + 2 C_4 L_5 R_4 R_5 g_m + 2 C_4 L_5 R_4 + 2 C_5 L_5 R_4 R_5 g_m + 2 C_5 L_5 R_5\right) + s\left(C_3 R_4 R_5 + 2 C_4 R_4 R_5 + 2 L_5 R_4 g_m + 2 L_5 R_5 g_m + 2 L_5\right)}$$

10.101 INVALID-ORDER-101 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L_5 R_4 g_m s + R_4 R_5 g_m - R_4 + s^2\left(C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^3\left(C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_4\right) + s^2\left(C_3 L_5 R_4 g_m + 2 C_4 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 + 2 L_5 g_m\right) + 2}$$

10.102 INVALID-ORDER-102 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^2\left(C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^3\left(C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_4\right) + s^2\left(C_3 C_5 R_4 R_5 + 2 C_4 C_5 R_4 R_5 + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5\right) + 2}$$

10.103 INVALID-ORDER-103 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 R_4 s^2 + g_m + s\left(C_4 R_4 g_m - C_5\right)}{C_3 C_4 C_5 R_4 s^3 + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.104 INVALID-ORDER-104 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 R_4 R_5 s^2 + R_5 g_m + s\left(C_4 R_4 R_5 g_m - C_4 R_4 - C_5 R_5\right) - 1}{C_3 C_4 C_5 R_4 R_5 s^3 + 2 g_m + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + C_3 C_5 R_5 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_5\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4 + 2 C_5 R_5 g_m\right)}$$

10.105 INVALID-ORDER-105 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{g_m + s^2\left(C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4\right) + s\left(C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{s^3\left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.106 INVALID-ORDER-106 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_5 R_4 g_m s^3 + g_m + s^2\left(-C_4 C_5 R_4 + C_5 L_5 g_m\right) + s\left(C_4 R_4 g_m - C_5\right)}{C_3 C_4 C_5 L_5 R_4 g_m s^4 + s^3\left(C_3 C_4 C_5 R_4 + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.107 INVALID-ORDER-107 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_5 R_4 s^3 + s^2\left(C_4 L_5 R_4 g_m - C_5 L_5\right) + s\left(-C_4 R_4 + L_5 g_m\right) - 1}{C_3 C_4 C_5 L_5 R_4 s^4 + 2 g_m + s^3\left(C_3 C_4 L_5 R_4 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 C_4 R_4 + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 + 2 C_4 R_4 g_m + 2 C_4\right)}$$

10.108 INVALID-ORDER-108 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_5 R_4 g_m s^3 + g_m + s^2\left(C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_5 L_5 g_m\right) + s\left(C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{C_3 C_4 C_5 L_5 R_4 g_m s^4 + s^3\left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.109 INVALID-ORDER-109 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_5 R_4 R_5 s^3 - R_5 + s^2\left(C_4 L_5 R_4 R_5 g_m - C_4 L_5 R_4 - C_5 L_5 R_5\right) + s\left(-C_4 R_4 R_5 + L_5 R_5 g_m - L_5\right)}{C_3 C_4 C_5 L_5 R_4 R_5 s^4 + 2 R_5 g_m + s^3\left(C_3 C_4 L_5 R_4 R_5 g_m + C_3 C_4 L_5 R_4 + C_3 C_5 L_5 R_5 + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_5\right) + s^2\left(C_3 C_4 R_4 R_5 + C_3 L_5 R_5 g_m + C_3 L_5 + 2 C_4 L_5 R_4 g_m + 2 C_4 L_5 R_5 g_m + 2 C_4 L_5 + 2 C_5 L_5 R_5 g_m\right) + s\left(C_3 R_5 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_5 + 2 L_5 g_m\right)}$$

10.110 INVALID-ORDER-110 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^3\left(C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4\right) + s^2\left(C_4 L_5 R_4 g_m + C_5 L_5 R_5 g_m - C_5 L_5\right) + s\left(C_4 R_4 R_5 g_m - C_4 R_4 + L_5 g_m\right) - 1}{2 g_m + s^4\left(C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4\right) + s^3\left(C_3 C_4 L_5 R_4 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4\right.}$$

10.111 INVALID-ORDER-111 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^3\left(C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4\right) + s^2\left(-C_4 C_5 R_4 R_5 + C_5 L_5 R_5 g_m - C_5 L_5\right) + s\left(C_4 R_4 R_5 g_m - C_4 R_4 - C_5 R_5\right) - 1}{2 g_m + s^4\left(C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + C_3 C_5 R_5 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_5 + 2 C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m - \right.}$$

10.112 INVALID-ORDER-112 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^2\left(C_4 L_4 R_5 g_m - C_4 L_4\right) - 1}{2 C_4 L_4 g_m s^2 + 2 g_m + s^3\left(C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

10.113 INVALID-ORDER-113 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 s^3 + C_4 L_4 g_m s^2 - C_5 s + g_m}{C_3 C_4 C_5 L_4 s^4 + s^3\left(C_3 C_4 L_4 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.114 INVALID-ORDER-114 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_5 s^3 - C_5 R_5 s + R_5 g_m + s^2\left(C_4 L_4 R_5 g_m - C_4 L_4\right) - 1}{C_3 C_4 C_5 L_4 R_5 s^4 + 2 g_m + s^3\left(C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2 C_4 C_5 L_4 R_5 g_m\right) + s^2\left(C_3 C_5 R_5 + 2 C_4 C_5 R_5 + 2 C_4 L_4 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4 + 2 C_5 R_5 g_m\right)}$$

10.115 INVALID-ORDER-115 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 L_4 g_m s^2 + g_m + s^3\left(C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s\left(C_5 R_5 g_m - C_5\right)}{s^4\left(C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(C_3 C_4 L_4 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.116 INVALID-ORDER-116 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 g_m s^4 - C_4 C_5 L_4 s^3 - C_5 s + g_m + s^2\left(C_4 L_4 g_m + C_5 L_5 g_m\right)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + C_3 C_4 C_5 L_4 s^4 + s^3\left(C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.117 INVALID-ORDER-117 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 s^4 + C_4 L_4 L_5 g_m s^3 + L_5 g_m s + s^2\left(-C_4 L_4 - C_5 L_5\right) - 1}{C_3 C_4 C_5 L_4 L_5 s^5 + 2 g_m + s^4\left(C_3 C_4 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 + C_3 C_5 L_5 + 2 C_4 C_5 L_5\right) + s^2\left(C_3 L_5 g_m + 2 C_4 L_4 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 + 2 C_4\right)}$$

10.118 INVALID-ORDER-118 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 g_m s^4 + g_m + s^3\left(C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2\left(C_4 L_4 g_m + C_5 L_5 g_m\right) + s\left(C_5 R_5 g_m - C_5\right)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4\left(C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.119 INVALID-ORDER-119 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_5 s^4 - R_5 + s^3\left(C_4 L_4 L_5 R_5 g_m - C_4 L_4 L_5\right) + s^2\left(-C_4 L_4 R_5 - C_5 L_5 R_5\right) + s\left(L_5 R_5 g_m - L_5\right)}{C_3 C_4 C_5 L_4 L_5 R_5 s^5 + 2 R_5 g_m + s^4\left(C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_5 + C_3 C_5 L_5 R_5 + 2 C_4 C_5 L_5 R_5 + 2 C_4 L_4 L_5 g_m\right) + s^2\left(C_3 L_5 R_5 g_m + C_3 L_5 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_5 R_5 g_m + 2 C_4 L_5 + 2 C_5 L_5 R_5 g_m\right) + s\left(C_3 R_5 + 2 C_4 R_5 + 2 L_5 g_m\right)}$$

10.120 INVALID-ORDER-120 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{C_4 L_4 L_5 g_m s^3 + L_5 g_m s + R_5 g_m + s^4\left(C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5\right) + s^2\left(C_4 L_4 R_5 g_m - C_4 L_4 + C_5 L_5 R_5 g_m - C_5 L_5\right) - 1}{2 g_m + s^5\left(C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(C_3 C_4 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 L_5 g_m + 2 C_4 L_4 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2\right.}$$

10.121 INVALID-ORDER-121 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_5 s^3 - C_5 R_5 s + R_5 g_m + s^4\left(C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5\right) + s^2\left(C_4 L_4 R_5 g_m - C_4 L_4 + C_5 L_5 R_5 g_m - C_5 L_5\right) - 1}{2g_m + s^5\left(C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(C_3 C_4 C_5 L_4 R_5 + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_5 R_5 g_m + 2C_4 C_5 L_5\right) + s^2\left(C_3 C_5 R_5 + 2C_4 C_5 R_5 + 2C_4 L_4 g_m + 2C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C\right.}$$

10.122 INVALID-ORDER-122 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 s^2 + L_4 g_m s}{2C_5 s + 2g_m + s^3\left(C_3 C_5 L_4 + 2C_4 C_5 L_4\right) + s^2\left(C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m\right)}$$

10.123 INVALID-ORDER-123 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_5 s^2 + s\left(L_4 R_5 g_m - L_4\right)}{2R_5 g_m + s^3\left(C_3 C_5 L_4 R_5 + 2C_4 C_5 L_4 R_5\right) + s^2\left(C_3 L_4 R_5 g_m + C_3 L_4 + 2C_4 L_4 R_5 g_m + 2C_4 L_4 + 2C_5 L_4 R_5 g_m\right) + s\left(2C_5 R_5 + 2L_4 g_m\right) + 2}$$

10.124 INVALID-ORDER-124 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{L_4 g_m s + s^2\left(C_5 L_4 R_5 g_m - C_5 L_4\right)}{2g_m + s^3\left(C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_4\right) + s^2\left(C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m\right) + s\left(2C_5 R_5 g_m + 2C_5\right)}$$

10.125 INVALID-ORDER-125 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 g_m s^3 - C_5 L_4 s^2 + L_4 g_m s}{2C_5 s + 2g_m + s^4\left(C_3 C_5 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_5 L_4 + 2C_4 C_5 L_4\right) + s^2\left(C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m + 2C_5 L_5 g_m\right)}$$

10.126 INVALID-ORDER-126 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 L_5 s^3 + L_4 L_5 g_m s^2 - L_4 s}{s^4\left(C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5\right) + s^3\left(C_3 L_4 L_5 g_m + 2C_4 L_4 L_5 g_m + 2C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 + 2C_4 L_4 + 2C_5 L_5\right) + s\left(2L_4 g_m + 2L_5 g_m\right) + 2}$$

10.127 INVALID-ORDER-127 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 g_m s^3 + L_4 g_m s + s^2\left(C_5 L_4 R_5 g_m - C_5 L_4\right)}{2g_m + s^4\left(C_3 C_5 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_4\right) + s^2\left(C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m + 2C_5 L_5 g_m\right) + s\left(2C_5 R_5 g_m + 2C_5\right)}$$

10.128 INVALID-ORDER-128 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_5 s^3 - L_4 R_5 s + s^2\left(L_4 L_5 R_5 g_m - L_4 L_5\right)}{2R_5 + s^4\left(C_3 C_5 L_4 L_5 R_5 + 2C_4 C_5 L_4 L_5 R_5\right) + s^3\left(C_3 L_4 L_5 R_5 g_m + C_3 L_4 L_5 + 2C_4 L_4 L_5 R_5 g_m + 2C_4 L_4 L_5 + 2C_5 L_4 L_5 R_5 g_m\right) + s^2\left(C_3 L_4 R_5 + 2C_4 L_4 R_5 + 2C_5 L_5 R_5 + 2L_4 L_5 g_m\right) + s\left(2L_4 R_5 g_m + 2L_5 R_5 g_m + 2L_5\right)}$$

10.129 INVALID-ORDER-129 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_4 L_5 g_m s^2 + s^3\left(C_5 L_4 L_5 R_5 g_m - C_5 L_4 L_5\right) + s\left(L_4 R_5 g_m - L_4\right)}{2R_5 g_m + s^4\left(C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5 R_5 g_m + 2C_4 C_5 L_4 L_5\right) + s^3\left(C_3 L_4 L_5 g_m + 2C_4 L_4 L_5 g_m + 2C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 R_5 g_m + C_3 L_4 + 2C_4 L_4 R_5 g_m + 2C_4 L_4 + 2C_5 L_5 R_5 g_m + 2C_5 L_5\right) + s\left(2L_4 g_m + 2L_5 g_m\right) + 2}$$

10.130 INVALID-ORDER-130 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_5 s^2 + s^3\left(C_5 L_4 L_5 R_5 g_m - C_5 L_4 L_5\right) + s\left(L_4 R_5 g_m - L_4\right)}{2R_5 g_m + s^4\left(C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5 R_5 g_m + 2C_4 C_5 L_4 L_5\right) + s^3\left(C_3 C_5 L_4 R_5 + 2C_4 C_5 L_4 R_5 + 2C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 R_5 g_m + C_3 L_4 + 2C_4 L_4 R_5 g_m + 2C_4 L_4 + 2C_5 L_4 R_5 g_m + 2C_5 L_5 R_5 g_m + 2C_5 L_5\right) + s\left(2C_5 R_5 + 2L_4 g_m\right) + 2}$$

10.131 INVALID-ORDER-131 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^2\left(C_4 L_4 R_5 g_m - C_4 L_4\right) + s\left(C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2g_m + s^3\left(C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2C_4 L_4 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4\right)}$$

10.132 INVALID-ORDER-132 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 s^3 + g_m + s^2\left(-C_4 C_5 R_4 + C_4 L_4 g_m\right) + s\left(C_4 R_4 g_m - C_5\right)}{C_3 C_4 C_5 L_4 s^4 + s^3\left(C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + 2C_4 C_5 L_4 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 + 2C_4 C_5 R_4 g_m + 2C_4 C_5\right) + s\left(C_3 g_m + 2C_4 g_m + 2C_5 g_m\right)}$$

10.133 INVALID-ORDER-133 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_5 s^3 + R_5 g_m + s^2\left(-C_4 C_5 R_4 R_5 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s\left(C_4 R_4 R_5 g_m - C_4 R_4 - C_5 R_5\right) - 1}{C_3 C_4 C_5 L_4 R_5 s^4 + 2g_m + s^3\left(C_3 C_4 C_5 R_4 R_5 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2C_4 C_5 L_4 R_5 g_m\right) + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + C_3 C_5 R_5 + 2C_4 C_5 R_4 R_5 g_m + 2C_4 C_5 R_5 + 2C_4 L_4 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4 + 2C_5 R_5 g_m\right)}$$

10.134 INVALID-ORDER-134 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{g_m + s^3\left(C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2\left(C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_4 L_4 g_m\right) + s\left(C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{s^4\left(C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + 2C_4 C_5 L_4 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2C_4 C_5 R_4 g_m + 2C_4 C_5 R_5 g_m + 2C_4 C_5\right) + s\left(C_3 g_m + 2C_4 g_m + 2C_5 g_m\right)}$$

10.135 INVALID-ORDER-135 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 g_m s^4 + g_m + s^3\left(-C_4 C_5 L_4 + C_4 C_5 L_5 R_4 g_m\right) + s^2\left(-C_4 C_5 R_4 + C_4 L_4 g_m + C_5 L_5 g_m\right) + s\left(C_4 R_4 g_m - C_5\right)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4\left(C_3 C_4 C_5 L_4 + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3\left(C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2C_4 C_5 L_4 g_m + 2C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 + 2C_4 C_5 R_4 g_m + 2C_4 C_5\right) + s\left(C_3 g_m + 2C_4 g_m + 2C_5 g_m\right)}$$

10.136 INVALID-ORDER-136 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 s^4 + s^3\left(-C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right) + s^2\left(-C_4 L_4 + C_4 L_5 R_4 g_m - C_5 L_5\right) + s\left(-C_4 R_4 + L_5 g_m\right) - 1}{C_3 C_4 C_5 L_4 L_5 s^5 + 2g_m + s^4\left(C_3 C_4 C_5 L_5 R_4 + C_3 C_4 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 + C_3 C_4 L_5 R_4 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_5 R_4 g_m + 2C_4 C_5 L_5\right) + s^2\left(C_3 C_4 R_4 + C_3 L_5 g_m + 2C_4 L_4 g_m + 2C_4 L_5 g_m + 2C_5 L_5 g_m\right) + s\left(C_3 + 2C_4 R_4 g_m + 2C_4\right)}$$

10.137 INVALID-ORDER-137 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 g_m s^4 + g_m + s^3\left(C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4 + C_4 C_5 L_5 R_4 g_m\right) + s^2\left(C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_4 L_4 g_m + C_5 L_5 g_m\right) + s\left(C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4\left(C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4 + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2C_4 C_5 L_4 g_m + 2C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2C_4 C_5 R_4 g_m + 2C_4 C_5 R_5 g_m + 2C_4 C_5\right) + s\left(C_3 g_m \right)}$$

10.138 INVALID-ORDER-138 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_5 s^4 - R_5 + s^3\left(-C_4 C_5 L_5 R_4 R_5 + C_4 L_4 L_5 R_5 g_m - C_4 L_4 L_5\right) + s^2\left(-C_4 L_4 R_5 + C_4 L_5 R_4 R_5 g_m - C_4 L_5 R_4 - C_5 L_5 R_5\right) + s\left(-C_4 R_4 R_5 + L_5 R_5 g_m\right)}{C_3 C_4 C_5 L_4 L_5 R_5 s^5 + 2R_5 g_m + s^4\left(C_3 C_4 C_5 L_5 R_4 R_5 + C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2C_4 C_5 L_4 L_5 R_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_5 + C_3 C_4 L_5 R_4 R_5 g_m + C_3 C_4 L_5 R_4 + C_3 C_5 L_5 R_5 + 2C_4 C_5 L_5 R_4 R_5 g_m + 2C_4 C_5 L_5 R_5 + 2C_4 L_4 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 R_5 + C_3 L_5 R_5 g_m + C_3 L_5 + \right)}$$

10.139 INVALID-ORDER-139 $Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3 s},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^4\left(C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5\right) + s^3\left(C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right) + s^2\left(C_4 L_4 R_5 g_m - C_4 L_4 + C_4 L_5 R_4 g_m + C_5 L_5 R_5 g_m - C_5 L_5\right) + s\left(C_4 R_4 R_5 \right)}{2g_m + s^5\left(C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + C_3 C_4 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + C_3 C_4 L_5 R_4 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_5 R_4 g_m + 2C_4 C_5 L_5 R_5 g_m + 2C_4 C_5 L_5\right) + s^2\left(C_3 C_4 R_4 \right)}$$

10.140 **INVALID-ORDER-140** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^4 \left(C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5\right) + s^3 \left(-C_4 C_5 L_4 R_5 + C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4\right) + s^2 \left(-C_4 C_5 R_4 R_5 + C_4 L_4 R_5 g_m - C_4 L_4 + C_5 L_5 R\right)}{2 g_m + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(C_3 C_4 C_5 L_4 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(C_3 C_4 C_5 R_4 R_5 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5}$$

10.141 **INVALID-ORDER-141** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 R_4 s^2 + L_4 R_4 g_m s}{2 R_4 g_m + s^3 \left(C_3 C_5 L_4 R_4 + 2 C_4 C_5 L_4 R_4\right) + s^2 \left(C_3 L_4 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_5 L_4 R_4 g_m + 2 C_5 L_4\right) + s \left(2 C_5 R_4 + 2 L_4 g_m\right)}$$

10.142 **INVALID-ORDER-142** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 R_4 R_5 s^2 + s \left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2 R_4 R_5 g_m + 2 R_4 + s^3 \left(C_3 C_5 L_4 R_4 R_5 + 2 C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 + 2 C_4 L_4 R_4 R_5 g_m + 2 C_4 L_4 R_4 + 2 C_5 L_4 R_4 R_5 g_m + 2 C_5 L_4 R_5\right) + s \left(2 C_5 R_4 R_5 + 2 L_4 R_4 g_m + 2 L_4 R_5 g_m + 2 L_4\right)}$$

10.143 **INVALID-ORDER-143** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{L_4 R_4 g_m s + s^2 \left(C_5 L_4 R_4 R_5 g_m - C_5 L_4 R_4\right)}{2 R_4 g_m + s^3 \left(C_3 C_5 L_4 R_4 R_5 g_m + C_3 C_5 L_4 R_4 + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_4\right) + s^2 \left(C_3 L_4 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_5 L_4 R_4 g_m + 2 C_5 L_4 R_5 g_m + 2 C_5 L_4\right) + s \left(2 C_5 R_4 R_5 g_m + 2 C_5 R_4 + 2 L_4 g_m\right)}$$

10.144 **INVALID-ORDER-144** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_4 L_5 R_4 g_m s^3 - C_5 L_4 R_4 s^2 + L_4 R_4 g_m s}{2 R_4 g_m + s^4 \left(C_3 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_5 L_4 R_4 + 2 C_4 C_5 L_4 R_4 + 2 C_5 L_4 L_5 g_m\right) + s^2 \left(C_3 L_4 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_5 L_4 R_4 g_m + 2 C_5 L_4 + 2 C_5 L_5 R_4 g_m\right) + s \left(2 C_5 R_4 + 2 L_4 g_m\right)}$$

10.145 **INVALID-ORDER-145** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_4 s^3 + L_4 L_5 R_4 g_m s^2 - L_4 R_4 s}{2 R_4 + s^4 \left(C_3 C_5 L_4 L_5 R_4 + 2 C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(C_3 L_4 L_5 R_4 g_m + 2 C_4 L_4 L_5 R_4 g_m + 2 C_5 L_4 L_5 R_4 g_m + 2 C_5 L_4 L_5\right) + s^2 \left(C_3 L_4 R_4 + 2 C_4 L_4 R_4 + 2 C_5 L_5 R_4 + 2 L_4 L_5 g_m\right) + s \left(2 L_4 R_4 g_m + 2 L_4 + 2 L_5 R_4 g_m\right)}$$

10.146 **INVALID-ORDER-146** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_4 L_5 R_4 g_m s^3 + L_4 R_4 g_m s + s^2 \left(C_5 L_4 R_4 R_5 g_m - C_5 L_4 R_4\right)}{2 R_4 g_m + s^4 \left(C_3 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_5 L_4 R_4 R_5 g_m + C_3 C_5 L_4 R_4 + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_4 + 2 C_5 L_4 L_5 g_m\right) + s^2 \left(C_3 L_4 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_5 L_4 R_4 g_m + 2 C_5 L_4 R_5 g_m + 2 C_5 L_4 + 2 C_5 L_5 R_4 g_m\right) + s \left(2 C_5 R_4 R_5 g_m + 2 C_5 R_4 + 2 L_4 g_m\right)}$$

10.147 **INVALID-ORDER-147** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_4 R_5 s^3 - L_4 R_4 R_5 s + s^2 \left(L_4 L_5 R_4 R_5 g_m - L_4 L_5 R_4\right)}{2 R_4 R_5 + s^4 \left(C_3 C_5 L_4 L_5 R_4 R_5 + 2 C_4 C_5 L_4 L_5 R_4 R_5\right) + s^3 \left(C_3 L_4 L_5 R_4 R_5 g_m + C_3 L_4 L_5 R_4 + 2 C_4 L_4 L_5 R_4 R_5 g_m + 2 C_4 L_4 L_5 R_4 + 2 C_5 L_4 L_5 R_4 R_5 g_m + 2 C_5 L_4 L_5 R_5\right) + s^2 \left(C_3 L_4 R_4 R_5 + 2 C_4 L_4 R_4 R_5 + 2 C_5 L_5 R_4 R_5 + 2 L_4 L_5 R_4 g_m + 2 L_4 L_5 R_5 g_m + 2 L_4 L_5\right) + s \left(2 L_4 R_4 R_5 g_m\right)}$$

10.148 **INVALID-ORDER-148** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{L_4 L_5 R_4 g_m s^2 + s^3 \left(C_5 L_4 L_5 R_4 R_5 g_m - C_5 L_4 L_5 R_4\right) + s \left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2 R_4 R_5 g_m + 2 R_4 + s^4 \left(C_3 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_5 L_4 L_5 R_4 + 2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(C_3 L_4 L_5 R_4 g_m + 2 C_4 L_4 L_5 R_4 g_m + 2 C_5 L_4 L_5 R_4 g_m + 2 C_5 L_4 L_5 R_5 g_m + 2 C_5 L_4 L_5\right) + s^2 \left(C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 + 2 C_4 L_4 R_4 R_5 g_m + 2 C_4 L_4 R_4 + 2 C_5 L_5 R_4 R_5\right)}$$

10.149 **INVALID-ORDER-149** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_4 R_5 s^2 + s^3\left(C_5 L_4 L_5 R_4 R_5 g_m - C_5 L_4 L_5 R_4\right) + s\left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2 R_4 R_5 g_m + 2 R_4 + s^4\left(C_3 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_5 L_4 L_5 R_4 + 2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_4\right) + s^3\left(C_3 C_5 L_4 R_4 R_5 + 2 C_4 C_5 L_4 R_4 R_5 + 2 C_5 L_4 L_5 R_4 g_m + 2 C_5 L_4 L_5 R_5 g_m + 2 C_5 L_4 L_5\right) + s^2\left(C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 + 2 C_4 L_4 R_4 R_5 g_m + 2 C_4 L_4 R_4 + 2 C_5 L_4 R_4 R_5\right)}$$

10.150 **INVALID-ORDER-150** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^2\left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4\right) + s\left(L_4 R_5 g_m - L_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^3\left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4\right) + s^2\left(C_3 L_4 R_5 g_m + C_3 L_4 + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 L_4 g_m\right) + 2}$$

10.151 **INVALID-ORDER-151** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_4 s^3 + R_4 g_m + s^2\left(C_4 L_4 R_4 g_m - C_5 L_4\right) + s\left(-C_5 R_4 + L_4 g_m\right)}{C_3 C_4 C_5 L_4 R_4 s^4 + 2 g_m + s^3\left(C_3 C_4 L_4 R_4 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4\right) + s^2\left(C_3 C_5 R_4 + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s\left(C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.152 **INVALID-ORDER-152** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_4 R_5 s^3 + R_4 R_5 g_m - R_4 + s^2\left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 - C_5 L_4 R_5\right) + s\left(-C_5 R_4 R_5 + L_4 R_5 g_m - L_4\right)}{C_3 C_4 C_5 L_4 R_4 R_5 s^4 + 2 R_4 g_m + 2 R_5 g_m + s^3\left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + C_3 C_5 L_4 R_5 + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_5\right) + s^2\left(C_3 C_5 R_4 R_5 + C_3 L_4 R_5 g_m + C_3 L_4 + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 + 2 C_5 L_4 R_5 g_m\right) + s\left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_5 R_4 R_5 g_m + \ldots\right)}$$

10.153 **INVALID-ORDER-153** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{R_4 g_m + s^3\left(C_4 C_5 L_4 R_4 R_5 g_m - C_4 C_5 L_4 R_4\right) + s^2\left(C_4 L_4 R_4 g_m + C_5 L_4 R_5 g_m - C_5 L_4\right) + s\left(C_5 R_4 R_5 g_m - C_5 R_4 + L_4 g_m\right)}{2 g_m + s^4\left(C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4\right) + s^3\left(C_3 C_4 L_4 R_4 g_m + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4\right) + s^2\left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s\left(C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

10.154 **INVALID-ORDER-154** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 R_4 g_m s^4 + R_4 g_m + s^3\left(-C_4 C_5 L_4 R_4 + C_5 L_4 L_5 g_m\right) + s^2\left(C_4 L_4 R_4 g_m - C_5 L_4 + C_5 L_5 R_4 g_m\right) + s\left(-C_5 R_4 + L_4 g_m\right)}{C_3 C_4 C_5 L_4 L_5 R_4 g_m s^5 + 2 g_m + s^4\left(C_3 C_4 C_5 L_4 R_4 + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_4 g_m + C_3 C_5 L_4 + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4\right) + s^2\left(C_3 C_5 R_4 + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.155 **INVALID-ORDER-155** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_4 s^4 - R_4 + s^3\left(C_4 L_4 L_5 R_4 g_m - C_5 L_4 L_5\right) + s^2\left(-C_4 L_4 R_4 - C_5 L_5 R_4 + L_4 L_5 g_m\right) + s\left(-L_4 + L_5 R_4 g_m\right)}{C_3 C_4 C_5 L_4 L_5 R_4 s^5 + 2 R_4 g_m + s^4\left(C_3 C_4 L_4 L_5 R_4 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5\right) + s^3\left(C_3 C_4 L_4 R_4 + C_3 C_5 L_5 R_4 + C_3 L_4 L_5 g_m + 2 C_4 L_4 L_5 g_m + 2 C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 + C_3 L_5 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 \ldots\right)}$$

10.156 **INVALID-ORDER-156** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 R_4 g_m s^4 + R_4 g_m + s^3\left(C_4 C_5 L_4 R_4 R_5 g_m - C_4 C_5 L_4 R_4 + C_5 L_4 L_5 g_m\right) + s^2\left(C_4 L_4 R_4 g_m + C_5 L_4 R_5 g_m - C_5 L_4 + C_5 L_5 R_4 g_m\right) + s\left(C_5 R_4 R_5 g_m - C_5 R_4 + L_4 g_m\right)}{C_3 C_4 C_5 L_4 L_5 R_4 g_m s^5 + 2 g_m + s^4\left(C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_4 g_m + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4\right) + s^2\left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + C_3 L_4 g_m + \ldots\right)}$$

10.157 **INVALID-ORDER-157** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_4 R_5 s^4 - R_4 R_5 + s^3\left(C_4 L_4 L_5 R_4 R_5 g_m - C_4 L_4 L_5 R_4 - C_5 L_4 L_5 R_5\right) + s^2\left(-C_4 L_4 R_4 R_5 - C_5 L_5 R_4 R_5 + L_4 L_5 R_5 g_m\right) + \ldots}{C_3 C_4 C_5 L_4 L_5 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_5 + s^4\left(C_3 C_4 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_4 L_5 R_4 + C_3 C_5 L_4 L_5 R_5 + 2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_5\right) + s^3\left(C_3 C_4 L_4 R_4 R_5 + C_3 C_5 L_5 R_4 R_5 + C_3 L_4 L_5 R_5 g_m + C_3 L_4 L_5 + 2 C_4 L_4 L_5 R_4 g_m + 2 C_4 L_4 L_5 R_5 g_m + 2 C_4 L_4 L_5 + 2 C_5 L_4 \ldots\right)}$$

10.158 **INVALID-ORDER-158** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4\left(C_4 C_5 L_4 L_5 R_4 R_5 g_m - C_4 C_5 L_4 L_5 R_4\right) + s^3\left(C_4 L_4 L_5 R_4 g_m + C_5 L_4 L_5 R_5 g_m - C_5 L_4 L_5\right) + s^2\left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 + \ldots\right)}{2 R_4 g_m + 2 R_5 g_m + s^5\left(C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4\left(C_3 C_4 L_4 L_5 R_4 g_m + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_4 L_5\right) + s^3\left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + C_3 L_4 L_5 g_m + \ldots\right)}$$

10.159 **INVALID-ORDER-159** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^4 \left(C_4 C_5 L_4 L_5 R_4 R_5 g_m - C_4 C_5 L_4 L_5 R_4 \right) + s^3 \left(-C_4 C_5 L_4 R_4 R_5 + C_5 L_4 L_5 R_5 g_m - C_5 L_4 L_5 \right) + s^2 \cdots}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4 \right) + s^4 \left(C_3 C_4 C_5 L_4 R_4 R_5 + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_4 L_5 \right) + s^3 \left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + C_3 C_5 L_4 R_5 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + \cdots \right)}$

10.160 **INVALID-ORDER-160** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^2 \left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 \right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 \right) + s^2 \left(2 C_4 L_4 R_4 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 \right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 \right) + 2}$$

10.161 **INVALID-ORDER-161** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_4 s^3 + C_4 L_4 R_4 g_m s^2 - C_5 R_4 s + R_4 g_m}{C_3 C_4 C_5 L_4 R_4 s^4 + 2 g_m + s^3 \left(C_3 C_4 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 \right) + s^2 \left(C_3 C_5 R_4 + 2 C_4 C_5 R_4 + 2 C_4 L_4 g_m \right) + s \left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 \right)}$$

10.162 **INVALID-ORDER-162** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_4 C_5 L_4 R_4 R_5 s^3 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^2 \left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 \right)}{C_3 C_4 C_5 L_4 R_4 R_5 s^4 + 2 R_4 g_m + 2 R_5 g_m + s^3 \left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_5 \right) + s^2 \left(C_3 C_5 R_4 R_5 + 2 C_4 C_5 R_4 R_5 + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 \right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5 \right) + \cdots}$

10.163 **INVALID-ORDER-163** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_4 L_4 R_4 g_m s^2 + R_4 g_m + s^3 \left(C_4 C_5 L_4 R_4 R_5 g_m - C_4 C_5 L_4 R_4 \right) + s \left(C_5 R_4 R_5 g_m - C_5 R_4 \right)}{2 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 \right) + s^3 \left(C_3 C_4 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4 \right) + s^2 \left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_4 + 2 C_4 L_4 g_m \right) + s \left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5 \right)}$

10.164 **INVALID-ORDER-164** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_4 C_5 L_4 L_5 R_4 g_m s^4 - C_4 C_5 L_4 R_4 s^3 - C_5 R_4 s + R_4 g_m + s^2 \left(C_4 L_4 R_4 g_m + C_5 L_5 R_4 g_m \right)}{C_3 C_4 C_5 L_4 L_5 R_4 g_m s^5 + 2 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_4 + 2 C_4 C_5 L_4 L_5 g_m \right) + s^3 \left(C_3 C_4 L_4 R_4 g_m + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 + 2 C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_5 R_4 + 2 C_4 C_5 R_4 + 2 C_4 L_4 g_m + 2 C_5 L_5 g_m \right) + s \left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 \right)}$

10.165 **INVALID-ORDER-165** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_4 C_5 L_4 L_5 R_4 s^4 + C_4 L_4 L_5 R_4 g_m s^3 + L_5 R_4 g_m s - R_4 + s^2 \left(-C_4 L_4 R_4 - C_5 L_5 R_4 \right)}{C_3 C_4 C_5 L_4 L_5 R_4 s^5 + 2 R_4 g_m + s^4 \left(C_3 C_4 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 \right) + s^3 \left(C_3 C_4 L_4 R_4 + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 + 2 C_4 L_4 L_5 g_m \right) + s^2 \left(C_3 L_5 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 + 2 C_4 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 \right) + s \left(C_3 R_4 + 2 C_4 R_4 + 2 L_5 g_m \right) + \cdots}$

10.166 **INVALID-ORDER-166** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_4 C_5 L_4 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(C_4 C_5 L_4 R_4 R_5 g_m - C_4 C_5 L_4 R_4 \right) + s^2 \left(C_4 L_4 R_4 g_m + C_5 L_5 R_4 g_m \right) + s \left(C_5 R_4 R_5 g_m - C_5 R_4 \right)}{C_3 C_4 C_5 L_4 L_5 R_4 g_m s^5 + 2 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2 C_4 C_5 L_4 L_5 g_m \right) + s^3 \left(C_3 C_4 L_4 R_4 g_m + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4 + 2 C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_4 + 2 C_4 L_4 \cdots \right)}$

10.167 **INVALID-ORDER-167** $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_4 C_5 L_4 L_5 R_4 R_5 s^4 - R_4 R_5 + s^3 \left(C_4 L_4 L_5 R_4 R_5 g_m - C_4 L_4 L_5 R_4 \right) + s^2 \left(-C_4 L_4 R_4 R_5 - C_5 L_5 R_4 R_5 \right) + s \left(L_5 R_4 R_5 g_m - L_5 \cdots \right)}{C_3 C_4 C_5 L_4 L_5 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_5 + s^4 \left(C_3 C_4 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_4 L_5 R_4 + 2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_5 \right) + s^3 \left(C_3 C_4 L_4 R_4 R_5 + C_3 C_5 L_5 R_4 R_5 + 2 C_4 C_5 L_5 R_4 R_5 + 2 C_4 L_4 L_5 R_4 g_m + 2 C_4 L_4 L_5 R_5 g_m + 2 C_4 L_4 L_5 \right) + s^2 \left(C_3 L_5 R_4 R_5 g_m + C_3 L_5 R_4 + 2 \cdots \right)}$

10.168 INVALID-ORDER-168 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{C_4 L_4 L_5 R_4 g_m s^3 + L_5 R_4 g_m s + R_4 R_5 g_m - R_4 + s^4 \left(C_4 C_5 L_4 L_5 R_4 R_5 g_m - C_4 C_5 L_4 L_5 R_4\right) + s^2 \left(C_4 L_4 R_4 R_5 g_m - C_4 L_{\cdots}\right)}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(C_3 C_4 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_4 L_5\right) + s^3 \left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_4 + 2 C_4 L_4 L_5 g_{\cdots}}$$

10.169 INVALID-ORDER-169 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_4 R_5 s^3 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^4 \left(C_4 C_5 L_4 L_5 R_4 R_5 g_m - C_4 C_5 L_4 L_5 R_4\right) + s^2 \left(C_{\cdots}\right)}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(C_3 C_4 C_5 L_4 R_4 R_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_4 L_5\right) + s^3 \left(C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_5 + 2 C_4 C_5 L_{\cdots}}$$

10.170 INVALID-ORDER-170 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3 R_4 R_5 g_m - R_3 R_4}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 + s \left(C_3 R_3 R_4 R_5 g_m + C_3 R_3 R_4\right)}$$

10.171 INVALID-ORDER-171 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_3 R_4 g_m s^2 - C_5 R_3 R_4 s + R_3 R_4 g_m}{C_3 C_5 L_5 R_3 R_4 g_m s^3 + 2 R_3 g_m + R_4 g_m + s^2 \left(C_3 C_5 R_3 R_4 + 2 C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m + 2 C_5 R_3 R_4 g_m + 2 C_5 R_3 + C_5 R_4\right)}$$

10.172 INVALID-ORDER-172 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_3 R_4 s^2 + L_5 R_3 R_4 g_m s - R_3 R_4}{C_3 C_5 L_5 R_3 R_4 s^3 + 2 R_3 R_4 g_m + 2 R_3 + R_4 + s^2 \left(C_3 L_5 R_3 R_4 g_m + 2 C_5 L_5 R_3 R_4 g_m + 2 C_5 L_5 R_3 + C_5 L_5 R_4\right) + s \left(C_3 R_3 R_4 + 2 L_5 R_3 g_m + L_5 R_4 g_m\right)}$$

10.173 INVALID-ORDER-173 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_3 R_4 g_m s^2 + R_3 R_4 g_m + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4\right)}{C_3 C_5 L_5 R_3 R_4 g_m s^3 + 2 R_3 g_m + R_4 g_m + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m + C_3 C_5 R_3 R_4 + 2 C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m + 2 C_5 R_3 R_4 g_m + 2 C_5 R_3 R_5 g_m + 2 C_5 R_3 + C_5 R_4 R_5 g_m + C_5 R_4\right)}$$

10.174 INVALID-ORDER-174 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_3 R_4 R_5 s^2 - R_3 R_4 R_5 + s \left(L_5 R_3 R_4 R_5 g_m - L_5 R_3 R_4\right)}{C_3 C_5 L_5 R_3 R_4 R_5 s^3 + 2 R_3 R_4 R_5 g_m + 2 R_3 R_5 + R_4 R_5 + s^2 \left(C_3 L_5 R_3 R_4 R_5 g_m + C_3 L_5 R_3 R_4 + 2 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_5 L_5 R_3 R_5 + C_5 L_5 R_4 R_5\right) + s \left(C_3 R_3 R_4 R_5 + 2 L_5 R_3 R_4 g_m + 2 L_5 R_3 R_5 g_m + 2 L_5 R_3 + L_5 R_4 R_5 g_m + L_5 R_4\right)}$$

10.175 INVALID-ORDER-175 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_5 R_3 R_4 g_m s + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_5 L_5 R_3 R_4 R_5 g_m - C_5 L_5 R_3 R_4\right)}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_5 R_3 R_4\right) + s^2 \left(C_3 L_5 R_3 R_4 g_m + 2 C_5 L_5 R_3 R_4 g_m + 2 C_5 L_5 R_3 R_5 g_m + 2 C_5 L_5 R_3 + C_5 L_5 R_4 R_5 g_m + C_5 L_5 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m + C_3 R_3 R_4 + 2 L_5 R_3 g_m + L_5 R_4 g_m\right)}$$

10.176 INVALID-ORDER-176 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ R_4, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 R_3 R_4 R_5 s + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_5 L_5 R_3 R_4 R_5 g_m - C_5 L_5 R_3 R_4\right)}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_5 R_3 R_4\right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 + 2 C_5 L_5 R_3 R_4 g_m + 2 C_5 L_5 R_3 R_5 g_m + 2 C_5 L_5 R_3 + C_5 L_5 R_4 R_5 g_m + C_5 L_5 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m + C_3 R_3 R_4 + 2 C_5 R_3 R_4 R_5 g_m + 2 C_5 R_3 R_5 + C_5 R_4 R_5\right)}$$

10.177 INVALID-ORDER-177 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3}{2R_3g_m + R_5g_m + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3\right) + 1}$$

10.178 INVALID-ORDER-178 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_5L_5R_3g_ms^2 - C_5R_3s + R_3g_m}{g_m + s^3\left(C_3C_5L_5R_3g_m + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3 + 2C_4C_5R_3 + C_5L_5g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$$

10.179 INVALID-ORDER-179 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{-C_5L_5R_3s^2 + L_5R_3g_ms - R_3}{2R_3g_m + s^3\left(C_3C_5L_5R_3 + 2C_4C_5L_5R_3\right) + s^2\left(C_3L_5R_3g_m + 2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5\right) + s\left(C_3R_3 + 2C_4R_3 + L_5g_m\right) + 1}$$

10.180 INVALID-ORDER-180 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_5L_5R_3g_ms^2 + R_3g_m + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^3\left(C_3C_5L_5R_3g_m + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + C_5L_5g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$$

10.181 INVALID-ORDER-181 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5L_5R_3R_5s^2 - R_3R_5 + s\left(L_5R_3R_5g_m - L_5R_3\right)}{2R_3R_5g_m + R_5 + s^3\left(C_3C_5L_5R_3R_5 + 2C_4C_5L_5R_3R_5\right) + s^2\left(C_3L_5R_3R_5g_m + C_3L_5R_3 + 2C_4L_5R_3R_5g_m + 2C_4L_5R_3 + 2C_5L_5R_3R_5g_m + C_5L_5R_5\right) + s\left(C_3R_3R_5 + 2C_4R_3R_5 + 2L_5R_3g_m + L_5R_5g_m + L_5\right)}$$

10.182 INVALID-ORDER-182 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{L_5R_3g_ms + R_3R_5g_m - R_3 + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + 2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5R_3\right) + s^2\left(C_3L_5R_3g_m + 2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + L_5g_m\right) + 1}$$

10.183 INVALID-ORDER-183 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_5L_5R_3R_5g_m - C_5L_5R_3\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + 2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5R_3\right) + s^2\left(C_3C_5R_3R_5 + 2C_4C_5R_3R_5 + 2C_5L_5R_3g_m + C_5L_5R_5g_m + C_5L_5\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5g_m + C_5R_5\right) + 1}$$

10.184 INVALID-ORDER-184 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3R_4R_5g_m - R_3R_4}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s\left(C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_4R_3R_4R_5g_m + 2C_4R_3R_4\right)}$$

10.185 INVALID-ORDER-185 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_5L_5R_3R_4g_ms^2 - C_5R_3R_4s + R_3R_4g_m}{2R_3g_m + R_4g_m + s^3\left(C_3C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3R_4g_m\right) + s^2\left(C_3C_5R_3R_4 + 2C_4C_5R_3R_4 + 2C_5L_5R_3g_m + C_5L_5R_4g_m\right) + s\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$$

10.186 INVALID-ORDER-186 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{-C_5L_5R_3R_4s^2 + L_5R_3R_4g_ms - R_3R_4}{2R_3R_4g_m + 2R_3 + R_4 + s^3\left(C_3C_5L_5R_3R_4 + 2C_4C_5L_5R_3R_4\right) + s^2\left(C_3L_5R_3R_4g_m + 2C_4L_5R_3R_4g_m + 2C_5L_5R_3R_4g_m + 2C_5L_5R_3 + C_5L_5R_4\right) + s\left(C_3R_3R_4 + 2C_4R_3R_4 + 2L_5R_3g_m + L_5R_4g_m\right)}$$

10.187 INVALID-ORDER-187 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$$H(s) = \frac{C_5L_5R_3R_4g_ms^2 + R_3R_4g_m + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^3\left(C_3C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3R_4g_m\right) + s^2\left(C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4 + 2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_4 + 2C_5L_5R_3g_m + C_5L_5R_4g_m\right) + s\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4\right)}$$

10.188 INVALID-ORDER-188 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5L_5R_3R_4R_5s^2 - R_3R_4R_5 + s\left(L_5R_3R_4R_5g_m - L_5R_3R_4\right)}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^3\left(C_3C_5L_5R_3R_4R_5 + 2C_4C_5L_5R_3R_4R_5\right) + s^2\left(C_3L_5R_3R_4R_5g_m + C_3L_5R_3R_4 + 2C_4L_5R_3R_4R_5g_m + 2C_4L_5R_3R_4 + 2C_5L_5R_3R_4R_5g_m + 2C_5L_5R_3R_5 + C_5L_5R_4R_5\right) + s\left(C_3R_3R_4R_5 + 2C_4R_3R_4R_5 + 2L_5R_3R_4g_m + 2L_5R_3R_5g_m + \ldots\right)}$$

10.189 INVALID-ORDER-189 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$$H(s) = \frac{L_5R_3R_4g_ms + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_5L_5R_3R_4R_5g_m - C_5L_5R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(C_3C_5L_5R_3R_4R_5g_m + C_3C_5L_5R_3R_4 + 2C_4C_5L_5R_3R_4R_5g_m + 2C_4C_5L_5R_3R_4\right) + s^2\left(C_3L_5R_3R_4g_m + 2C_4L_5R_3R_4g_m + 2C_5L_5R_3R_4g_m + 2C_5L_5R_3R_5g_m + 2C_5L_5R_3 + C_5L_5R_4R_5g_m + C_5L_5R_4\right) + s\left(C_3R_3R_4R_5 \ldots\right)}$$

10.190 INVALID-ORDER-190 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$$H(s) = \frac{-C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_5L_5R_3R_4R_5g_m - C_5L_5R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(C_3C_5L_5R_3R_4R_5g_m + C_3C_5L_5R_3R_4 + 2C_4C_5L_5R_3R_4R_5g_m + 2C_4C_5L_5R_3R_4\right) + s^2\left(C_3C_5R_3R_4R_5 + 2C_4C_5R_3R_4R_5 + 2C_5L_5R_3R_4g_m + 2C_5L_5R_3R_5g_m + 2C_5L_5R_3 + C_5L_5R_4R_5g_m + C_5L_5R_4\right) + s\left(C_3R_3R_4R_5 \ldots\right)}$$

10.191 INVALID-ORDER-191 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty \right)$

$$H(s) = \frac{-C_4C_5R_3R_4s^2 + R_3g_m + s\left(C_4R_3R_4g_m - C_5R_3\right)}{C_3C_4C_5R_3R_4s^3 + g_m + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3 + C_4C_5R_4\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + C_4R_4g_m + 2C_5R_3g_m + C_5\right)}$$

10.192 INVALID-ORDER-192 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$$H(s) = \frac{-C_4C_5R_3R_4R_5s^2 + R_3R_5g_m - R_3 + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4 - C_5R_3R_5\right)}{C_3C_4C_5R_3R_4R_5s^3 + 2R_3g_m + R_5g_m + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + C_3C_5R_3R_5 + 2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_5 + C_4C_5R_4R_5\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_4g_m + 2C_4R_3R_5g_m + 2C_4R_3 + C_4R_4R_5g_m + C_4R_4 + 2C_5R_3R_5g_m + C_5R_5\right) + 1}$$

10.193 INVALID-ORDER-193 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$$H(s) = \frac{R_3g_m + s^2\left(C_4C_5R_3R_4R_5g_m - C_4C_5R_3R_4\right) + s\left(C_4R_3R_4g_m + C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3C_4C_5R_3R_4\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + C_4C_5R_4R_5g_m + C_4C_5R_4\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + C_4R_4g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$$

10.194 INVALID-ORDER-194 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$$H(s) = \frac{C_4C_5L_5R_3R_4g_ms^3 + R_3g_m + s^2\left(-C_4C_5R_3R_4 + C_5L_5R_3g_m\right) + s\left(C_4R_3R_4g_m - C_5R_3\right)}{C_3C_4C_5L_5R_3R_4g_ms^4 + g_m + s^3\left(C_3C_4C_5R_3R_4 + C_3C_5L_5R_3g_m + 2C_4C_5L_5R_3g_m + C_4C_5L_5R_4g_m\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3 + C_4C_5R_4 + C_5L_5g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + C_4R_4g_m + 2C_5R_3g_m + C_5\right)}$$

10.195 INVALID-ORDER-195 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$$H(s) = \frac{-C_4C_5L_5R_3R_4s^3 - R_3 + s^2\left(C_4L_5R_3R_4g_m - C_5L_5R_3\right) + s\left(-C_4R_3R_4 + L_5R_3g_m\right)}{C_3C_4C_5L_5R_3R_4s^4 + 2R_3g_m + s^3\left(C_3C_4L_5R_3R_4g_m + C_3C_5L_5R_3 + 2C_4C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3 + C_4C_5L_5R_4\right) + s^2\left(C_3C_4R_3R_4 + C_3L_5R_3g_m + 2C_4L_5R_3g_m + C_4L_5R_4g_m + 2C_5L_5R_3g_m + C_5L_5\right) + s\left(C_3R_3 + 2C_4R_3R_4g_m + 2C_4R_3 + C_4R_4 + L_5g_m\right) + 1}$$

10.196 **INVALID-ORDER-196** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_4C_5L_5R_3R_4g_ms^3 + R_3g_m + s^2\left(C_4C_5R_3R_4R_5g_m - C_4C_5R_3R_4 + C_5L_5R_3g_m\right) + s\left(C_4R_3R_4g_m + C_5R_3R_5g_m - C_5R_3\right)}{C_3C_4C_5L_5R_3R_4g_ms^4 + g_m + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3C_4C_5R_3R_4 + C_3C_5L_5R_3g_m + 2C_4C_5L_5R_3g_m + C_4C_5L_5R_4g_m\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + C_4C_5R_4R_5g_m + C_4C_5R_4 + C_5L_5g_m\right) + s}$$

10.197 **INVALID-ORDER-197** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_5R_3R_4R_5s^3 - R_3R_5 + s^2\left(C_4L_5R_3R_4R_5g_m - C_4L_5R_3R_4 - C_5L_5R_3R_5\right) + s\left(-C_4R_3R_4R_5 + L_5R_3R_5g_m - L_5R_3\right)}{C_3C_4C_5L_5R_3R_4R_5s^4 + 2R_3R_5g_m + R_5 + s^3\left(C_3C_4L_5R_3R_4R_5g_m + C_3C_4L_5R_3R_4 + C_3C_5L_5R_3R_5 + 2C_4C_5L_5R_3R_4R_5g_m + 2C_4C_5L_5R_3R_5 + C_4C_5L_5R_4R_5\right) + s^2\left(C_3C_4R_3R_4R_5 + C_3L_5R_3R_5g_m + C_3L_5R_3 + 2C_4L_5R_3R_4g_m + 2C_4C_5L_5R_3R_5g_m + 2C_4L_5R_3 + C_4L_5}\right)}$$

10.198 **INVALID-ORDER-198** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3 + s^3\left(C_4C_5L_5R_3R_4R_5g_m - C_4C_5L_5R_3R_4\right) + s^2\left(C_4L_5R_3R_4g_m + C_5L_5R_3R_5g_m - C_5L_5R_3\right) + s\left(C_4R_3R_4R_5\right)}{2R_3g_m + R_5g_m + s^4\left(C_3C_4C_5L_5R_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4\right) + s^3\left(C_3C_4L_5R_3R_4g_m + C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + 2C_4C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5R_3 + C_4C_5L_5R_4R_5g_m + C_4C_5L_5R_4\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + C_3L_5R_3g_m\right)}$$

10.199 **INVALID-ORDER-199** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3 + s^3\left(C_4C_5L_5R_3R_4R_5g_m - C_4C_5L_5R_3R_4\right) + s^2\left(-C_4C_5R_3R_4R_5 + C_5L_5R_3R_5g_m - C_5L_5\right)}{2R_3g_m + R_5g_m + s^4\left(C_3C_4C_5L_5R_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4\right) + s^3\left(C_3C_4C_5R_3R_4R_5 + C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + 2C_4C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5R_3 + C_4C_5L_5R_4R_5g_m + C_4C_5L_5R_4\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + C_3C_5R_3R_5}\right)}$$

10.200 **INVALID-ORDER-200** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3 + s^2\left(C_4L_4R_3R_5g_m - C_4L_4R_3\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3\right) + s^2\left(2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3\right) + 1}$$

10.201 **INVALID-ORDER-201** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3s^3 + C_4L_4R_3g_ms^2 - C_5R_3s + R_3g_m}{C_3C_4C_5L_4R_3s^4 + g_m + s^3\left(C_3C_4L_4R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4\right) + s^2\left(C_3C_5R_3 + 2C_4C_5R_3 + C_4L_4g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$$

10.202 **INVALID-ORDER-202** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_4L_4R_3R_5g_m - C_4L_4R_3\right)}{C_3C_4C_5L_4R_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3 + 2C_4C_5L_4R_3R_5g_m + C_4C_5L_4R_5\right) + s^2\left(C_3C_5R_3R_5 + 2C_4C_5R_3R_5 + 2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5g_m + C_5R_5\right) + 1}$$

10.203 **INVALID-ORDER-203** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_4L_4R_3g_ms^2 + R_3g_m + s^3\left(C_4C_5L_4R_3R_5g_m - C_4C_5L_4R_3\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^4\left(C_3C_4C_5L_4R_3R_5g_m + C_3C_4C_5L_4R_3\right) + s^3\left(C_3C_4L_4R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4R_5g_m + C_4C_5L_4\right) + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + C_4L_4g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$$

10.204 **INVALID-ORDER-204** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_4C_5L_4L_5R_3g_ms^4 - C_4C_5L_4R_3s^3 - C_5R_3s + R_3g_m + s^2\left(C_4L_4R_3g_m + C_5L_5R_3g_m\right)}{C_3C_4C_5L_4L_5R_3g_ms^5 + g_m + s^4\left(C_3C_4C_5L_4R_3 + C_4C_5L_4L_5g_m\right) + s^3\left(C_3C_4L_4R_3g_m + C_3C_5L_5R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4 + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3 + 2C_4C_5R_3 + C_4L_4g_m + C_5L_5g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$$

10.205 INVALID-ORDER-205 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_3 s^4 + C_4 L_4 L_5 R_3 g_m s^3 + L_5 R_3 g_m s - R_3 + s^2 (-C_4 L_4 R_3 - C_5 L_5 R_3)}{C_3 C_4 C_5 L_4 L_5 R_3 s^5 + 2R_3 g_m + s^4 (C_3 C_4 L_4 L_5 R_3 g_m + 2C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5) + s^3 (C_3 C_4 L_4 R_3 + C_3 C_5 L_5 R_3 + 2C_4 C_5 L_5 R_3 + C_4 L_4 L_5 g_m) + s^2 (C_3 L_5 R_3 g_m + 2C_4 L_4 R_3 g_m + C_4 L_4 + 2C_4 L_5 R_3 g_m + 2C_5 L_5 R_3 g_m + C_5 L_5) + s (C_3 R_3 + 2C_4 R_3 + L_5 g_m) + 1}$$

10.206 INVALID-ORDER-206 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_4 L_5 R_3 g_m s^4 + R_3 g_m + s^3 (C_4 C_5 L_4 R_3 R_5 g_m - C_4 C_5 L_4 R_3) + s^2 (C_4 L_4 R_3 g_m + C_5 L_5 R_3 g_m) + s (C_5 R_3 R_5 g_m - C_5 R_3)}{C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + g_m + s^4 (C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_3 + C_4 C_5 L_4 L_5 g_m) + s^3 (C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_5 R_3 g_m + 2C_4 C_5 L_4 R_3 g_m + C_4 C_5 L_4 R_5 g_m + C_4 C_5 L_4 + 2C_4 C_5 L_5 R_3 g_m) + s^2 (C_3 C_5 R_3 R_5 g_m + C_3 C_5 R_3 + 2C_4 C_5 R_3 R_5 g_m + 2C_4 C_5 R_3 + C_4 L_4 g_m +}$$

10.207 INVALID-ORDER-207 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 L_5 R_3 R_5 s^4 - R_3 R_5 + s^3 (C_4 L_4 L_5 R_3 R_5 g_m - C_4 L_4 L_5 R_3) + s^2 (-C_4 L_4 R_3 R_5 - C_5 L_5 R_3 R_5) + s (L_5 R_3 R_5 g_m - L_5 R_3)}{C_3 C_4 C_5 L_4 L_5 R_3 R_5 s^5 + 2R_3 R_5 g_m + R_5 + s^4 (C_3 C_4 L_4 L_5 R_3 R_5 g_m + C_3 C_4 L_4 L_5 R_3 + 2C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_4 C_5 L_4 L_5 R_5) + s^3 (C_3 C_4 L_4 R_3 R_5 + C_3 C_5 L_5 R_3 R_5 + 2C_4 C_5 L_5 R_3 R_5 + 2C_4 L_4 L_5 R_3 g_m + C_4 L_4 L_5 R_5 g_m + C_4 L_4 L_5) + s^2 (C_3 L_5 R_3 R_5 g_m + C_3 L_5 R_3 + 2C_4 L_4 }$$

10.208 INVALID-ORDER-208 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{C_4 L_4 L_5 R_3 g_m s^3 + L_5 R_3 g_m s + R_3 R_5 g_m - R_3 + s^4 (C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_4 C_5 L_4 L_5 R_3) + s^2 (C_4 L_4 R_3 R_5 g_m - C_4 L_4 R_3 -}{2R_3 g_m + R_5 g_m + s^5 (C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_3) + s^4 (C_3 C_4 L_4 L_5 R_3 g_m + 2C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_5 g_m + C_4 C_5 L_4 L_5) + s^3 (C_3 C_4 L_4 R_3 R_5 g_m + C_3 C_4 L_4 R_3 + C_3 C_5 L_5 R_3 R_5 g_m + C_3 C_5 L_5 R_3 + 2C_4 C_5 L_5 R_3 R_5 g_m + 2C_4 C_5 L_5 R_3 + C_4 L_4 L_5 g_m) +}$$

10.209 INVALID-ORDER-209 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_5 s^3 - C_5 R_3 R_5 s + R_3 R_5 g_m - R_3 + s^4 (C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_4 C_5 L_4 L_5 R_3) + s^2 (C_4 L_4 R}{2R_3 g_m + R_5 g_m + s^5 (C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_3) + s^4 (C_3 C_4 C_5 L_4 R_3 R_5 + 2C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_5 g_m + C_4 C_5 L_4 L_5) + s^3 (C_3 C_4 L_4 R_3 R_5 g_m + C_3 C_4 L_4 R_3 + C_3 C_5 L_5 R_3 R_5 g_m + C_3 C_5 L_5 R_3 + 2C_4 C_5 L_4 R_3 R_5 g_m + C_4 C_5 L_4 R_5 + 2C_4 C_5 L_5 R_3 R_5}$$

10.210 INVALID-ORDER-210 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_3 s^2 + L_4 R_3 g_m s}{2R_3 g_m + s^3 (C_3 C_5 L_4 R_3 + 2C_4 C_5 L_4 R_3) + s^2 (C_3 L_4 R_3 g_m + 2C_4 L_4 R_3 g_m + 2C_5 L_4 R_3 g_m + C_5 L_4) + s (2C_5 R_3 + L_4 g_m)}$$

10.211 INVALID-ORDER-211 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_3 R_5 s^2 + s (L_4 R_3 R_5 g_m - L_4 R_3)}{2R_3 R_5 g_m + 2R_3 + s^3 (C_3 C_5 L_4 R_3 R_5 + 2C_4 C_5 L_4 R_3 R_5) + s^2 (C_3 L_4 R_3 R_5 g_m + C_3 L_4 R_3 + 2C_4 L_4 R_3 R_5 g_m + 2C_4 L_4 R_3 + 2C_5 L_4 R_3 R_5 g_m + C_5 L_4 R_5) + s (2C_5 R_3 R_5 + 2L_4 R_3 g_m + L_4 R_5 g_m + L_4)}$$

10.212 INVALID-ORDER-212 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{L_4 R_3 g_m s + s^2 (C_5 L_4 R_3 R_5 g_m - C_5 L_4 R_3)}{2R_3 g_m + s^3 (C_3 C_5 L_4 R_3 R_5 g_m + C_3 C_5 L_4 R_3 + 2C_4 C_5 L_4 R_3 R_5 g_m + 2C_4 C_5 L_4 R_3) + s^2 (C_3 L_4 R_3 g_m + 2C_4 L_4 R_3 g_m + 2C_5 L_4 R_3 g_m + C_5 L_4 R_5 g_m + C_5 L_4) + s (2C_5 R_3 R_5 g_m + 2C_5 R_3 + L_4 g_m)}$$

10.213 INVALID-ORDER-213 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 g_m s^3 - C_5 L_4 R_3 s^2 + L_4 R_3 g_m s}{2R_3 g_m + s^4 (C_3 C_5 L_4 L_5 R_3 g_m + 2C_4 C_5 L_4 L_5 R_3 g_m) + s^3 (C_3 C_5 L_4 R_3 + 2C_4 C_5 L_4 R_3 + C_5 L_4 L_5 g_m) + s^2 (C_3 L_4 R_3 g_m + 2C_4 L_4 R_3 g_m + 2C_5 L_4 R_3 g_m + C_5 L_4 + 2C_5 L_5 R_3 g_m) + s (2C_5 R_3 + L_4 g_m)}$$

10.214 INVALID-ORDER-214 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{-C_5L_4L_5R_3s^3 + L_4L_5R_3g_ms^2 - L_4R_3s}{2R_3 + s^4\left(C_3C_5L_4L_5R_3 + 2C_4C_5L_4L_5R_3\right) + s^3\left(C_3L_4L_5R_3g_m + 2C_4L_4L_5R_3g_m + 2C_5L_4L_5R_3g_m + C_5L_4L_5\right) + s^2\left(C_3L_4R_3 + 2C_4L_4R_3 + 2C_5L_5R_3 + L_4L_5g_m\right) + s\left(2L_4R_3g_m + L_4 + 2L_5R_3g_m\right)}$$

10.215 INVALID-ORDER-215 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{C_5L_4L_5R_3g_ms^3 + L_4R_3g_ms + s^2\left(C_5L_4R_3R_5g_m - C_5L_4R_3\right)}{2R_3g_m + s^4\left(C_3C_5L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m\right) + s^3\left(C_3C_5L_4R_3R_5g_m + C_3C_5L_4R_3 + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3 + C_5L_4L_5g_m\right) + s^2\left(C_3L_4R_3g_m + 2C_4L_4R_3g_m + 2C_5L_4R_3g_m + C_5L_4R_5g_m + C_5L_4 + 2C_5L_5R_3g_m\right) + s\left(2C_5R_3R_5g_m + 2C_5R_3 + L_4g_m\right)}$$

10.216 INVALID-ORDER-216 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5L_4L_5R_3R_5s^3 - L_4R_3R_5s + s^2\left(L_4L_5R_3R_5g_m - L_4L_5R_3\right)}{2R_3R_5 + s^4\left(C_3C_5L_4L_5R_3R_5 + 2C_4C_5L_4L_5R_3R_5\right) + s^3\left(C_3L_4L_5R_3R_5g_m + C_3L_4L_5R_3 + 2C_4L_4L_5R_3R_5g_m + 2C_4L_4L_5R_3 + 2C_5L_4L_5R_3R_5g_m + C_5L_4L_5R_5\right) + s^2\left(C_3L_4R_3R_5 + 2C_4L_4R_3R_5 + 2C_5L_5R_3R_5 + 2L_4L_5R_3g_m + L_4L_5R_5g_m + L_4L_5\right) + s\left(2L_4R_3R_5g_m + \cdots\right)}$$

10.217 INVALID-ORDER-217 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$$H(s) = \frac{L_4L_5R_3g_ms^2 + s^3\left(C_5L_4L_5R_3R_5g_m - C_5L_4L_5R_3\right) + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2R_3R_5g_m + 2R_3 + s^4\left(C_3C_5L_4L_5R_3R_5g_m + C_3C_5L_4L_5R_3 + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3\right) + s^3\left(C_3L_4L_5R_3g_m + 2C_4L_4L_5R_3g_m + 2C_5L_4L_5R_3g_m + C_5L_4L_5R_5g_m + C_5L_4L_5\right) + s^2\left(C_3L_4R_3R_5g_m + C_3L_4R_3 + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + 2C_5L_5R_3R_5g_m + \cdots\right)}$$

10.218 INVALID-ORDER-218 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_5L_4R_3R_5s^2 + s^3\left(C_5L_4L_5R_3R_5g_m - C_5L_4L_5R_3\right) + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2R_3R_5g_m + 2R_3 + s^4\left(C_3C_5L_4L_5R_3R_5g_m + C_3C_5L_4L_5R_3 + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3\right) + s^3\left(C_3C_5L_4R_3R_5 + 2C_4C_5L_4R_3R_5 + 2C_5L_4L_5R_3g_m + C_5L_4L_5R_5g_m + C_5L_4L_5\right) + s^2\left(C_3L_4R_3R_5g_m + C_3L_4R_3 + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + 2C_5L_4R_3R_5g_m + \cdots\right)}$$

10.219 INVALID-ORDER-219 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3R_5g_m - R_3 + s^2\left(C_4L_4R_3R_5g_m - C_4L_4R_3\right) + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4\right)}{2R_3g_m + R_5g_m + s^3\left(C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + 2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_4g_m + 2C_4R_3R_5g_m + 2C_4R_3 + C_4R_4R_5g_m + C_4R_4\right) + 1}$$

10.220 INVALID-ORDER-220 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3s^3 + R_3g_m + s^2\left(-C_4C_5R_3R_4 + C_4L_4R_3g_m\right) + s\left(C_4R_3R_4g_m - C_5R_3\right)}{C_3C_4C_5L_4R_3s^4 + g_m + s^3\left(C_3C_4C_5R_3R_4 + C_3C_4L_4R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3 + C_4C_5R_4 + C_4L_4g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + C_4R_4g_m + 2C_5R_3g_m + C_5\right)}$$

10.221 INVALID-ORDER-221 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$$H(s) = \frac{-C_4C_5L_4R_3R_5s^3 + R_3R_5g_m - R_3 + s^2\left(-C_4C_5R_3R_4R_5 + C_4L_4R_3R_5g_m - C_4L_4R_3\right) + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4 - C_5R_3R_5\right)}{C_3C_4C_5L_4R_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(C_3C_4C_5R_3R_4R_5 + C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3 + 2C_4C_5L_4R_3R_5g_m + C_4C_5L_4R_5\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + C_3C_5R_3R_5 + 2C_4C_5R_3R_4R_5g_m + 2C_4C_5R_3R_5 + C_4C_5R_4R_5 + 2C_4L_4R_3g_m + C_4L_4R_5g_m + \cdots\right)}$$

10.222 INVALID-ORDER-222 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$$H(s) = \frac{R_3g_m + s^3\left(C_4C_5L_4R_3R_5g_m - C_4C_5L_4R_3\right) + s^2\left(C_4C_5R_3R_4R_5g_m - C_4C_5R_3R_4 + C_4L_4R_3g_m\right) + s\left(C_4R_3R_4g_m + C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^4\left(C_3C_4C_5L_4R_3R_5g_m + C_3C_4C_5L_4R_3\right) + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3C_4C_5R_3R_4 + C_3C_4L_4R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4R_5g_m + C_4C_5L_4\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3R_5g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3R_5 + C_4C_5R_4 \cdots\right)}$$

10.223 INVALID-ORDER-223 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ L_4s+R_4+\frac{1}{C_4s},\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{C_4C_5L_4L_5R_3g_ms^4 + R_3g_m + s^3\left(-C_4C_5L_4R_3 + C_4C_5L_5R_3R_4g_m\right) + s^2\left(-C_4C_5R_3R_4 + C_4L_4R_3g_m + C_5L_5R_3g_m\right) + s\left(C_4R_3R_4g_m - C_5R_3\right)}{C_3C_4C_5L_4L_5R_3g_ms^5 + g_m + s^4\left(C_3C_4C_5L_4R_3 + C_3C_4C_5L_5R_3R_4g_m + C_4C_5L_4L_5g_m\right) + s^3\left(C_3C_4C_5R_3R_4 + C_3C_4L_4R_3g_m + C_3C_5L_5R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4 + 2C_4C_5L_5R_3g_m + C_4C_5L_5R_4g_m\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3 + 2C_4C_5R_3R_4g_m + 2C_4C_5\cdots\right)}$

10.224 INVALID-ORDER-224 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ L_4s+R_4+\frac{1}{C_4s},\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_4L_5R_3s^4 - R_3 + s^3\left(-C_4C_5L_5R_3R_4 + C_4L_4L_5R_3g_m\right) + s^2\left(-C_4L_4R_3 + C_4L_5R_3R_4g_m - C_5L_5R_3\right) + s\left(-C_4R_3R_4 + L_5R_3g_m\right)}{C_3C_4C_5L_4L_5R_3s^5 + 2R_3g_m + s^4\left(C_3C_4C_5L_5R_3R_4 + C_3C_4L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5\right) + s^3\left(C_3C_4L_4R_3 + C_3C_4L_5R_3R_4g_m + C_3C_5L_5R_3 + 2C_4C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3 + C_4C_5L_5R_4 + C_4L_4L_5g_m\right) + s^2\left(C_3C_4R_3R_4 + C_3L_5R_3g_m + 2C_4L_4R_3\cdots\right)}$

10.225 INVALID-ORDER-225 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ L_4s+R_4+\frac{1}{C_4s},\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{C_4C_5L_4L_5R_3g_ms^4 + R_3g_m + s^3\left(C_4C_5L_4R_3R_5g_m - C_4C_5L_4R_3 + C_4C_5L_5R_3R_4g_m\right) + s^2\left(C_4C_5R_3R_4R_5g_m - C_4C_5R\cdots\right)}{C_3C_4C_5L_4L_5R_3g_ms^5 + g_m + s^4\left(C_3C_4C_5L_4R_3R_5g_m + C_3C_4C_5L_4R_3 + C_3C_4C_5L_5R_3R_4g_m + C_4C_5L_4L_5g_m\right) + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3C_4C_5R_3R_4 + C_3C_4L_4R_3g_m + C_3C_5L_5R_3g_m + 2C_4C_5L_4R_3g_m + C_4C_5L_4R_5g_m + C_4C_5L_4 + 2C_4C_5L_5R_3g_m + C_4C_5L_5g\cdots\right)}$

10.226 INVALID-ORDER-226 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ L_4s+R_4+\frac{1}{C_4s},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_4L_5R_3R_5s^4 - R_3R_5 + s^3\left(-C_4C_5L_5R_3R_4R_5 + C_4L_4L_5\cdots\right)}{C_3C_4C_5L_4L_5R_3R_5s^5 + 2R_3R_5g_m + R_5 + s^4\left(C_3C_4C_5L_5R_3R_4R_5 + C_3C_4L_4L_5R_3R_5g_m + C_3C_4L_4L_5R_3 + 2C_4C_5L_4L_5R_3R_5g_m + C_4C_5L_4L_5R_5\right) + s^3\left(C_3C_4L_4R_3R_5 + C_3C_4L_5R_3R_4R_5g_m + C_3C_4L_5R_3R_4 + C_3C_5L_5R_3R_5 + 2C_4C_5L_5R_3R_4R_5g_m + 2C_4C_5L_5R_3R_5 + \cdots\right)}$

10.227 INVALID-ORDER-227 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ L_4s+R_4+\frac{1}{C_4s},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^4\left(C_4C_5L_4L_5R_3R_5g_m - C_4C_5L_4L_5R_3\right) + s^3\left(\cdots\right)}{2R_3g_m + R_5g_m + s^5\left(C_3C_4C_5L_4L_5R_3R_5g_m + C_3C_4C_5L_4L_5R_3\right) + s^4\left(C_3C_4C_5L_5R_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4 + C_3C_4L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_5g_m + C_4C_5L_4L_5\right) + s^3\left(C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3 + C_3C_4L_5R_3R_4g_m + C_3C_5L_5R_3R_5g_m + \cdots\right)}$

10.228 INVALID-ORDER-228 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ L_4s+R_4+\frac{1}{C_4s},\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^4\left(C_4C_5L_4L_5R_3R_5\cdots\right)}{2R_3g_m + R_5g_m + s^5\left(C_3C_4C_5L_4L_5R_3R_5g_m + C_3C_4C_5L_4L_5R_3\right) + s^4\left(C_3C_4C_5L_4R_3R_5 + C_3C_4C_5L_5R_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4 + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_5g_m + C_4C_5L_4L_5\right) + s^3\left(C_3C_4C_5R_3R_4R_5 + C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3 + C_3C_5L_5R_3R_5g_m + \cdots\right)}$

10.229 INVALID-ORDER-229 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4},\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \dfrac{-C_5L_4R_3R_4s^2 + L_4R_3R_4g_ms}{2R_3R_4g_m + s^3\left(C_3C_5L_4R_3R_4 + 2C_4C_5L_4R_3R_4\right) + s^2\left(C_3L_4R_3R_4g_m + 2C_4L_4R_3R_4g_m + 2C_5L_4R_3R_4g_m + 2C_5L_4R_3 + C_5L_4R_4\right) + s\left(2C_5R_3R_4 + 2L_4R_3g_m + L_4R_4g_m\right)}$$

10.230 INVALID-ORDER-230 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$H(s) = \dfrac{-C_5L_4R_3R_4R_5s^2 + s\left(L_4R_3R_4R_5g_m - L_4R_3R_4\right)}{2R_3R_4R_5g_m + 2R_3R_4 + s^3\left(C_3C_5L_4R_3R_4R_5 + 2C_4C_5L_4R_3R_4R_5\right) + s^2\left(C_3L_4R_3R_4R_5g_m + C_3L_4R_3R_4 + 2C_4L_4R_3R_4R_5g_m + 2C_4L_4R_3R_4 + 2C_5L_4R_3R_4R_5g_m + 2C_5L_4R_3R_5 + C_5L_4R_4R_5\right) + s\left(2C_5R_3R_4R_5 + 2L_4R_3R_4g_m + 2L_4R_3R_5g_m + 2L_4R_3 + L_4R_4R_5g_m + \cdots\right)}$

10.231 INVALID-ORDER-231 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4},\ R_5+\frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{L_4R_3R_4g_ms + s^2\left(C_5L_4R_3R_4R_5g_m - C_5L_4R_3R_4\right)}{2R_3R_4g_m + s^3\left(C_3C_5L_4R_3R_4R_5g_m + C_3C_5L_4R_3R_4 + 2C_4C_5L_4R_3R_4R_5g_m + 2C_4C_5L_4R_3R_4\right) + s^2\left(C_3L_4R_3R_4g_m + 2C_4L_4R_3R_4g_m + 2C_5L_4R_3R_4g_m + 2C_5L_4R_3R_5g_m + 2C_5L_4R_3 + C_5L_4R_4R_5g_m + C_5L_4R_4\right) + s\left(2C_5R_3R_4R_5g_m + 2C_5R_3R_4 + 2L_4R_3g_m + L_4R_4\cdots\right)}$

10.232   INVALID-ORDER-232 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 R_4 g_m s^3 - C_5 L_4 R_3 R_4 s^2 + L_4 R_3 R_4 g_m s}{2R_3 R_4 g_m + s^4 (C_3 C_5 L_4 L_5 R_3 R_4 g_m + 2C_4 C_5 L_4 L_5 R_3 R_4 g_m) + s^3 (C_3 C_5 L_4 R_3 R_4 + 2C_4 C_5 L_4 R_3 R_4 + 2C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_4 g_m) + s^2 (C_3 L_4 R_3 R_4 g_m + 2C_4 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 + C_5 L_4 R_4 + 2C_5 L_5 R_3 R_4 g_m) + s (2C_5 R_3 R_4 + 2L_4 R_3 g_m + L}$$

10.233   INVALID-ORDER-233 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_3 R_4 s^3 + L_4 L_5 R_3 R_4 g_m s^2 - L_4 R_3 R_4 s}{2R_3 R_4 + s^4 (C_3 C_5 L_4 L_5 R_3 R_4 + 2C_4 C_5 L_4 L_5 R_3 R_4) + s^3 (C_3 L_4 L_5 R_3 R_4 g_m + 2C_4 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 + C_5 L_4 L_5 R_4) + s^2 (C_3 L_4 R_3 R_4 + 2C_4 L_4 R_3 R_4 + 2C_5 L_5 R_3 R_4 + 2L_4 L_5 R_3 g_m + L_4 L_5 R_4 g_m) + s (2L_4 R_3 R_4 g_m + 2L_4 R_3 + L_4 R_4 + 2L}$$

10.234   INVALID-ORDER-234 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_4 L_5 R_3 R_4 g_m s^3 + L_4 R_3 R_4 g_m s + s^2 (C_5 L_4 R_3 R_4 R_5 g_m - C_5 L_4 R_3 R_4)}{2R_3 R_4 g_m + s^4 (C_3 C_5 L_4 L_5 R_3 R_4 g_m + 2C_4 C_5 L_4 L_5 R_3 R_4 g_m) + s^3 (C_3 C_5 L_4 R_3 R_4 R_5 g_m + C_3 C_5 L_4 R_3 R_4 + 2C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 R_3 R_4 + 2C_5 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_4 g_m) + s^2 (C_3 L_4 R_3 R_4 g_m + 2C_4 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 R_4 g_m + 2C_5 L_4 R_3 R_5 g_m + 2C_5 L}$$

10.235   INVALID-ORDER-235 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 L_5 R_3 R_4 R_5 s^3 - L_4 R_3 R_4 R_5 s + s^2 (L_4 L_5 R_3 R_4 R_5 g_m - L_4 L_5 R_3 R_4)}{2R_3 R_4 R_5 + s^4 (C_3 C_5 L_4 L_5 R_3 R_4 R_5 + 2C_4 C_5 L_4 L_5 R_3 R_4 R_5) + s^3 (C_3 L_4 L_5 R_3 R_4 R_5 g_m + C_3 L_4 L_5 R_3 R_4 + 2C_4 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 L_4 L_5 R_3 R_4 + 2C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_5 L_4 L_5 R_3 R_5 + C_5 L_4 L_5 R_4 R_5) + s^2 (C_3 L_4 R_3 R_4 R_5 + 2C_4 L_4 R_3 R_4 R_5 + 2C_5 L_5 R_3 R_4 R_5 + 2L}$$

10.236   INVALID-ORDER-236 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_4 L_5 R_3 R_4 g_m s^2 + s^3 (C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_5 L_4 L_5 R_3 R_4) + s (L_4 R_3 R_4 \ldots}{2R_3 R_4 R_5 g_m + 2R_3 R_4 + s^4 (C_3 C_5 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_4 L_5 R_3 R_4 + 2C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 R_3 R_4) + s^3 (C_3 L_4 L_5 R_3 R_4 g_m + 2C_4 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_5 g_m + 2C_5 L_4 L_5 R_3 + C_5 L_4 L_5 R_4 R_5 g_m + C_5 L_4 L_5 R_4) + s^2 (C_3 L_4 \ldots}$$

10.237   INVALID-ORDER-237 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_4 R_3 R_4 R_5 s^2 + s^3 (C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_5 L_4 L_5 R_3 R_4) + \ldots}{2R_3 R_4 R_5 g_m + 2R_3 R_4 + s^4 (C_3 C_5 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_4 L_5 R_3 R_4 + 2C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 R_3 R_4) + s^3 (C_3 C_5 L_4 R_3 R_4 R_5 + 2C_4 C_5 L_4 R_3 R_4 R_5 + 2C_5 L_4 L_5 R_3 R_4 g_m + 2C_5 L_4 L_5 R_3 R_5 g_m + 2C_5 L_4 L_5 R_3 + C_5 L_4 L_5 R_4 R_5 g_m + C_5 L_4 L_5 R_4) + s^2 (C_3 L_4 \ldots}$$

10.238   INVALID-ORDER-238 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_3 R_4 R_5 g_m - R_3 R_4 + s^2 (C_4 L_4 R_3 R_4 R_5 g_m - C_4 L_4 R_3 R_4) + s (L_4 R_3 R_5 g_m - L_4 R_3)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^3 (C_3 C_4 L_4 R_3 R_4 R_5 g_m + C_3 C_4 L_4 R_3 R_4) + s^2 (C_3 L_4 R_3 R_5 g_m + C_3 L_4 R_3 + 2C_4 L_4 R_3 R_4 g_m + 2C_4 L_4 R_3 R_5 g_m + 2C_4 L_4 R_3 + C_4 L_4 R_4 R_5 g_m + C_4 L_4 R_4) + s (C_3 R_3 R_4 R_5 g_m + C_3 R_3 R_4 + 2L_4 R_3 g_m + L_4 R_5 g_m + L_4)}$$

10.239   INVALID-ORDER-239 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_4 s^3 + R_3 R_4 g_m + s^2 (C_4 L_4 R_3 R_4 g_m - C_5 L_4 R_3) + s (-C_5 R_3 R_4 + L_4 R_3 g_m)}{C_3 C_4 C_5 L_4 R_3 R_4 s^4 + 2R_3 g_m + R_4 g_m + s^3 (C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_4 R_3 + 2C_4 C_5 L_4 R_3 R_4 g_m + 2C_4 C_5 L_4 R_3 + C_4 C_5 L_4 R_4) + s^2 (C_3 C_5 R_3 R_4 + C_3 L_4 R_3 g_m + 2C_4 L_4 R_3 g_m + C_4 L_4 R_4 g_m + 2C_5 L_4 R_3 g_m + C_5 L_4) + s (C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4 + L \ldots}$$

10.240   INVALID-ORDER-240 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_4 R_3 R_4 R_5 s^3 + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 (C_4 L_4 R_3 R_4 R_5 g_m - C_4 L_4 R_3 R_4 - C_5 L_4 R_3 R_5) + s (-C_5 R_3 R_4 \ldots)}{C_3 C_4 C_5 L_4 R_3 R_4 R_5 s^4 + 2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^3 (C_3 C_4 L_4 R_3 R_4 R_5 g_m + C_3 C_4 L_4 R_3 R_4 + C_3 C_5 L_4 R_3 R_5 + 2C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_4 C_5 L_4 R_3 R_5 + C_4 C_5 L_4 R_4 R_5) + s^2 (C_3 C_5 R_3 R_4 R_5 + C_3 L_4 R_3 R_5 g_m + C_3 L_4 R_3 + 2C_4 L_4 R_3 R_4 g_m + 2C_4 L \ldots}$$

10.241 INVALID-ORDER-241 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{R_3R_4g_m + s^3\left(C_4C_5L_4R_3R_4R_5g_m - C_4C_5L_4R_3R_4\right) + s^2\left(C_4L_4R_3R_4g_m + C_5L_4R_3R_5g_m - C_5L_4R_3\right) + s\left(C_5R_3R_4R_5g_m - C_5\cdots\right)}{2R_3g_m + R_4g_m + s^4\left(C_3C_4C_5L_4R_3R_4R_5g_m + C_3C_4C_5L_4R_3R_4\right) + s^3\left(C_3C_4L_4R_3R_4g_m + C_3C_5L_4R_3R_5g_m + C_3C_5L_4R_3 + 2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4R_5g_m + C_4C_5L_4R_4\right) + s^2\left(C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4 + C_3L_4R_3g_m + \cdots\right)}$

10.242 INVALID-ORDER-242 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_4C_5L_4L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(-C_4C_5L_4R_3R_4 + C_5L_4L_5R_3g_m\right) + s^2\left(C_4L_4R_3R_4g_m - C_5L_4R_3 + C_5L_5R_3R_4g_m\right) + s\left(-\cdots\right)}{C_3C_4C_5L_4L_5R_3R_4g_ms^5 + 2R_3g_m + R_4g_m + s^4\left(C_3C_4C_5L_4R_3R_4 + C_3C_5L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(C_3C_4L_4R_3R_4g_m + C_3C_5L_4R_3 + C_3C_5L_5R_3R_4g_m + 2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4 + C_5L_4L_5g_m\right) + s^2\left(C_3C_5R_3R_4\cdots\right)}$

10.243 INVALID-ORDER-243 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_4L_5R_3R_4s^4 - R_3R_4 + s^3\left(C_4L_4L_5R_3R_4g_m - C_5L_4L_5R_3\right) + s^2\left(-C_4L_4R_3R_4 - C_5L_5R_3R_4 + L_4L_5R_3\cdots\right)}{C_3C_4C_5L_4L_5R_3R_4s^5 + 2R_3R_4g_m + 2R_3 + R_4 + s^4\left(C_3C_4L_4L_5R_3R_4g_m + C_3C_5L_4L_5R_3 + 2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4\right) + s^3\left(C_3C_4L_4R_3R_4 + C_3C_5L_5R_3R_4 + C_3L_4L_5R_3g_m + 2C_4L_4L_5R_3g_m + C_4L_4L_5R_4g_m + 2C_5L_4L_5R_3g_m + C_5L_4L_5\cdots\right)}$

10.244 INVALID-ORDER-244 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_4C_5L_4L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(C_4C_5L_4R_3R_4R_5g_m - C_4C_5L_4R_3R_4 + C_5\cdots\right)}{C_3C_4C_5L_4L_5R_3R_4g_ms^5 + 2R_3g_m + R_4g_m + s^4\left(C_3C_4C_5L_4R_3R_4R_5g_m + C_3C_4C_5L_4R_3R_4 + C_3C_5L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(C_3C_4L_4R_3R_4g_m + C_3C_5L_4R_3R_5g_m + C_3C_5L_4R_3 + C_3C_5L_5R_3R_4g_m + 2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R\cdots\right)}$

10.245 INVALID-ORDER-245 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_4L_5R_3R_4R_5s^4 + \cdots}{C_3C_4C_5L_4L_5R_3R_4R_5s^5 + 2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^4\left(C_3C_4L_4L_5R_3R_4R_5g_m + C_3C_4L_4L_5R_3R_4 + C_3C_5L_4L_5R_3R_5 + 2C_4C_5L_4L_5R_3R_4R_5g_m + 2C_4C_5L_4L_5R_3R_5 + C_4C_5L_4L_5R_4R_5\right) + s^3\left(C_3C_4L_4R_3R_4R_5 + C_3C_5L_5R_3R_4R_5 + C_3L_4L_5R_3R_5g_m + C_3L_4L\cdots\right)}$

10.246 INVALID-ORDER-246 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3\cdots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(C_3C_4C_5L_4L_5R_3R_4R_5g_m + C_3C_4C_5L_4L_5R_3R_4\right) + s^4\left(C_3C_4L_4L_5R_3R_4g_m + C_3C_5L_4L_5R_3R_5g_m + C_3C_5L_4L_5R_3 + 2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4R_5g_m + C_4C_5L_4L\cdots\right)}$

10.247 INVALID-ORDER-247 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{\cdots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(C_3C_4C_5L_4L_5R_3R_4R_5g_m + C_3C_4C_5L_4L_5R_3R_4\right) + s^4\left(C_3C_4C_5L_4R_3R_4R_5 + C_3C_5L_4L_5R_3R_5g_m + C_3C_5L_4L_5R_3 + 2C_4C_5L_4L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_5g_m + 2C_4C_5L_4L_5R_3 + C_4C_5L_4L_5R_4R_5g_m + C_4C_5L_4L\cdots\right)}$

10.248 INVALID-ORDER-248 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3R_4 + s^2\left(C_4L_4R_3R_4R_5g_m - C_4L_4R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(C_3C_4L_4R_3R_4R_5g_m + C_3C_4L_4R_3R_4\right) + s^2\left(2C_4L_4R_3R_4g_m + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + C_4L_4R_4R_5g_m + C_4L_4R_4\right) + s\left(C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_4R_3R_4R_5g_m + 2C_4R_3R_4\right)}$

10.249 INVALID-ORDER-249 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_4R_3R_4s^3 + C_4L_4R_3R_4g_ms^2 - C_5R_3R_4s + R_3R_4g_m}{C_3C_4C_5L_4R_3R_4s^4 + 2R_3g_m + R_4g_m + s^3\left(C_3C_4L_4R_3R_4g_m + 2C_4C_5L_4R_3R_4g_m + 2C_4C_5L_4R_3 + C_4C_5L_4R_4\right) + s^2\left(C_3C_5R_3R_4 + 2C_4C_5R_3R_4 + 2C_4L_4R_3g_m + C_4L_4R_4g_m\right) + s\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$

10.250 INVALID-ORDER-250 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \frac{-C_4 C_5 L_4 R_3 R_4 R_5 s^3 - C_5 R_3 R_4 R_5 s + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_4 L_4 R_3 R_4 R_5 g_m - C_4 L_4 R_3 R_4 \right)}{C_3 C_4 C_5 L_4 R_3 R_4 R_5 s^4 + 2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m + C_3 C_4 L_4 R_3 R_4 + 2 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_3 R_5 + C_4 C_5 L_4 R_4 R_5 \right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 + 2 C_4 C_5 R_3 R_4 R_5 + 2 C_4 L_4 R_3 R_4 g_m + 2 C_4 L_4 R_3 R_5 g_m + 2 C_4 L_4 R_3 + C \cdots \right)}$

10.251 INVALID-ORDER-251 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \frac{C_4 L_4 R_3 R_4 g_m s^2 + R_3 R_4 g_m + s^3 \left(C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_4 C_5 L_4 R_3 R_4 \right) + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4 \right)}{2 R_3 g_m + R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_3 R_4 \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + 2 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_4 C_5 L_4 R_3 + C_4 C_5 L_4 R_4 R_5 g_m + C_4 C_5 L_4 R_4 \right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m + C_3 C_5 R_3 R_4 + 2 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 R_3 R_4 + 2 C_4 L_4 R_3 \cdots \right)}$

10.252 INVALID-ORDER-252 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \frac{C_4 C_5 L_4 L_5 R_3 R_4 g_m s^4 - C_4 C_5 L_4 R_3 R_4 s^3 - C_5 R_3 R_4 s + R_3 R_4 g_m + s^2 \left(C_4 L_4 R_3 R_4 g_m + C_5 L_5 R_3 R_4 g_m \right)}{C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + 2 R_3 g_m + R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_4 + 2 C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_4 g_m \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_4 C_5 L_4 R_3 + C_4 C_5 L_4 R_4 + 2 C_5 L_5 R_3 R_4 g_m \right) + s^2 \left(C_3 C_5 R_3 R_4 + 2 C_4 C_5 R_3 R_4 + 2 C_4 L \cdots \right)}$

10.253 INVALID-ORDER-253 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \frac{-C_4 C_5 L_4 L_5 R_3 R_4 s^4 + C_4 L_4 L_5 R_3 R_4 g_m s^3 + L_5 R_3 R_4 g_m s - R_3 R_4 + s^2 \left(-C_4 L_4 R_3 R_4 - C_5 L_5 R_3 R_4 \right)}{C_3 C_4 C_5 L_4 L_5 R_3 R_4 s^5 + 2 R_3 R_4 g_m + 2 R_3 + R_4 + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_3 + C_4 C_5 L_4 L_5 R_4 \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 + C_3 C_5 L_5 R_3 R_4 + 2 C_4 C_5 L_5 R_3 R_4 + 2 C_4 L_4 L_5 R_3 g_m + C_4 L_4 L_5 R_4 g_m \right) + s^2 \left(C_3 L_5 R_3 R_4 g_m + 2 C_4 L_4 R_3 R_4 g_m + 2 C \cdots \right)}$

10.254 INVALID-ORDER-254 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \frac{C_4 C_5 L_4 L_5 R_3 R_4 g_m s^4 + R_3 R_4 g_m + s^3 \left(C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_4 C_5 L_4 R_3 R_4 \right) + s \cdots}{C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + 2 R_3 g_m + R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_3 R_4 + 2 C_4 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_4 g_m \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_4 C_5 L_4 R_3 + C_4 C_5 L_4 R_4 R_5 g_m + C_4 C_5 L_4 R_4 \cdots \right)}$

10.255 INVALID-ORDER-255 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \frac{-C_4 C_5 L_4 L_5 R_3 R_4 R_5 s^4 - R_3 R_4 R_5 + s^3 \left(\cdots \right)}{C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 s^5 + 2 R_3 R_4 R_5 g_m + 2 R_3 R_5 + R_4 R_5 + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_4 L_4 L_5 R_3 R_4 + 2 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_3 R_5 + C_4 C_5 L_4 L_5 R_4 R_5 \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 + C_3 C_5 L_5 R_3 R_4 R_5 + 2 C_4 C_5 L_5 R_3 R_4 R_5 + 2 C_4 L_4 L_5 R_3 R_4 g_m + 2 C_4 \cdots \right)}$

10.256 INVALID-ORDER-256 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \frac{C_4 L_4 L_5 R_3 R_4 g_m s^3 \cdots}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_3 R_4 \right) + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_3 + C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_4 C_5 L_4 L_5 R_4 \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m + C_3 C \cdots \right)}$

10.257 INVALID-ORDER-257 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \frac{\cdots}{2 R_3 R_4 g_m + 2 R_3 R_5 g_m + 2 R_3 + R_4 R_5 g_m + R_4 + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_3 R_4 \right) + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 + 2 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_3 + C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_4 C_5 L_4 L_5 R_4 \right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m + C_3 C \cdots \right)}$

10.258 INVALID-ORDER-258 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ R_5, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 \right)}{2 R_4 g_m + 2 R_5 g_m + s \left(2 C_3 R_3 R_4 g_m + 2 C_3 R_3 R_5 g_m + 2 C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 \right) + 2}$$

10.259 **INVALID-ORDER-259** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_5 R_3 R_4 g_m s^3 + R_4 g_m + s^2 \left(-C_3 C_5 R_3 R_4 + C_5 L_5 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2g_m + s^3 \left(2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m\right) + s^2 \left(2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4 + 2C_5 L_5 g_m\right) + s \left(2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}$$

10.260 **INVALID-ORDER-260** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_5 R_3 R_4 s^3 - R_4 + s^2 \left(C_3 L_5 R_3 R_4 g_m - C_5 L_5 R_4\right) + s \left(-C_3 R_3 R_4 + L_5 R_4 g_m\right)}{2R_4 g_m + s^3 \left(2C_3 C_5 L_5 R_3 R_4 g_m + 2C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4\right) + s^2 \left(2C_3 L_5 R_3 g_m + C_3 L_5 R_4 g_m + 2C_5 L_5 R_4 g_m + 2C_5 L_5\right) + s \left(2C_3 R_3 R_4 g_m + 2C_3 R_3 + C_3 R_4 + 2L_5 g_m\right) + 2}$$

10.261 **INVALID-ORDER-261** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_5 R_3 R_4 g_m s^3 + R_4 g_m + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4 + C_5 L_5 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2g_m + s^3 \left(2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m\right) + s^2 \left(2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 R_5 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_5 L_5 g_m\right) + s \left(2C_3 R_3 g_m + C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

10.262 **INVALID-ORDER-262** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_5 R_3 R_4 R_5 s^3 - R_4 R_5 + s^2 \left(C_3 L_5 R_3 R_4 R_5 g_m - C_3 L_5 R_3 R_4 - C_5 L_5 R_4 R_5\right) + s \left(-C_3 R_3 R_4 R_5 + L_5 R_4 R_5 g_m - L_5 R_4\right)}{2R_4 R_5 g_m + 2R_5 + s^3 \left(2C_3 C_5 L_5 R_3 R_4 R_5 g_m + 2C_3 C_5 L_5 R_3 R_5 + C_3 C_5 L_5 R_4 R_5\right) + s^2 \left(2C_3 L_5 R_3 R_4 g_m + 2C_3 L_5 R_3 R_5 g_m + 2C_3 L_5 R_3 + C_3 L_5 R_4 R_5 g_m + C_3 L_5 R_4 + 2C_5 L_5 R_4 R_5 g_m + 2C_5 L_5 R_5\right) + s \left(2C_3 R_3 R_4 R_5 g_m + 2C_3 R_3 R_5 + C_3 R_4 R_5 + 2L_5 R_4 g_m + 2L_5 R_5 g_m + 2\right)}$$

10.263 **INVALID-ORDER-263** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_5 R_3 R_4\right) + s^2 \left(C_3 L_5 R_3 R_4 g_m + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 + L_5 R_4 g_m\right)}{2R_4 g_m + 2R_5 g_m + s^3 \left(2C_3 C_5 L_5 R_3 R_4 g_m + 2C_3 C_5 L_5 R_3 R_5 g_m + 2C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4\right) + s^2 \left(2C_3 L_5 R_3 g_m + C_3 L_5 R_4 g_m + 2C_5 L_5 R_4 g_m + 2C_5 L_5 R_5 g_m + 2C_5 L_5\right) + s \left(2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2L_5 g_m\right) + 2}$$

10.264 **INVALID-ORDER-264** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_5 R_3 R_4\right) + s^2 \left(-C_3 C_5 R_3 R_4 R_5 + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 - C_5 R_4 R_5\right)}{2R_4 g_m + 2R_5 g_m + s^3 \left(2C_3 C_5 L_5 R_3 R_4 g_m + 2C_3 C_5 L_5 R_3 R_5 g_m + 2C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4\right) + s^2 \left(2C_3 C_5 R_3 R_4 R_5 g_m + 2C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + 2C_5 L_5 R_4 g_m + 2C_5 L_5 R_5 g_m + 2C_5 L_5\right) + s \left(2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + \dots\right)}$$

10.265 **INVALID-ORDER-265** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 R_3 s^2 + g_m + s \left(C_3 R_3 g_m - C_5\right)}{2C_3 C_4 C_5 R_3 s^3 + s^2 \left(2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 + 2C_4 C_5\right) + s \left(C_3 g_m + 2C_4 g_m + 2C_5 g_m\right)}$$

10.266 **INVALID-ORDER-266** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 R_3 R_5 s^2 + R_5 g_m + s \left(C_3 R_3 R_5 g_m - C_3 R_3 - C_5 R_5\right) - 1}{2C_3 C_4 C_5 R_3 R_5 s^3 + 2g_m + s^2 \left(2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3 + 2C_3 C_5 R_3 R_5 g_m + C_3 C_5 R_5 + 2C_4 C_5 R_5\right) + s \left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4 + 2C_5 R_5 g_m\right)}$$

10.267 **INVALID-ORDER-267** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{g_m + s^2 \left(C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3\right) + s \left(C_3 R_3 g_m + C_5 R_5 g_m - C_5\right)}{s^3 \left(2C_3 C_4 C_5 R_3 R_5 g_m + 2C_3 C_4 C_5 R_3\right) + s^2 \left(2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2C_4 C_5 R_5 g_m + 2C_4 C_5\right) + s \left(C_3 g_m + 2C_4 g_m + 2C_5 g_m\right)}$$

10.268 INVALID-ORDER-268 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_5 R_3 g_m s^3 + g_m + s^2 \left(-C_3 C_5 R_3 + C_5 L_5 g_m\right) + s \left(C_3 R_3 g_m - C_5\right)}{2 C_3 C_4 C_5 L_5 R_3 g_m s^4 + s^3 \left(2 C_3 C_4 C_5 R_3 + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 + 2 C_4 C_5\right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.269 INVALID-ORDER-269 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_5 R_3 s^3 + s^2 \left(C_3 L_5 R_3 g_m - C_5 L_5\right) + s \left(-C_3 R_3 + L_5 g_m\right) - 1}{2 C_3 C_4 C_5 L_5 R_3 s^4 + 2 g_m + s^3 \left(2 C_3 C_4 L_5 R_3 g_m + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5\right) + s^2 \left(2 C_3 C_4 R_3 + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 + 2 C_4\right)}$$

10.270 INVALID-ORDER-270 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_5 R_3 g_m s^3 + g_m + s^2 \left(C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_5 L_5 g_m\right) + s \left(C_3 R_3 g_m + C_5 R_5 g_m - C_5\right)}{2 C_3 C_4 C_5 L_5 R_3 g_m s^4 + s^3 \left(2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.271 INVALID-ORDER-271 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_5 R_3 R_5 s^3 - R_5 + s^2 \left(C_3 L_5 R_3 R_5 g_m - C_3 L_5 R_3 - C_5 L_5 R_5\right) + s \left(-C_3 R_3 R_5 + L_5 R_5 g_m - L_5\right)}{2 C_3 C_4 C_5 L_5 R_3 R_5 s^4 + 2 R_5 g_m + s^3 \left(2 C_3 C_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 L_5 R_3 + 2 C_3 C_5 L_5 R_3 R_5 g_m + C_3 C_5 L_5 R_5 + 2 C_4 C_5 L_5 R_5\right) + s^2 \left(2 C_3 C_4 R_3 R_5 + 2 C_3 L_5 R_3 g_m + C_3 L_5 R_5 g_m + C_3 L_5 + 2 C_4 L_5 R_5 g_m + 2 C_4 L_5 + 2 C_5 L_5 R_5 g_m\right) + s \left(2 C_3 R_3 R_5 g_m + C_3 R_5 + 2 C_4 R_5 + 2 L_5 g_m\right)}$$

10.272 INVALID-ORDER-272 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_3 C_5 L_5 R_3 R_5 g_m - C_3 C_5 L_5 R_3\right) + s^2 \left(C_3 L_5 R_3 g_m + C_5 L_5 R_5 g_m - C_5 L_5\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 + L_5 g_m\right) - 1}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3\right) + s^3 \left(2 C_3 C_4 L_5 R_3 g_m + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2 \left(2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m \cdots\right)}$$

10.273 INVALID-ORDER-273 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_3 C_5 L_5 R_3 R_5 g_m - C_3 C_5 L_5 R_3\right) + s^2 \left(-C_3 C_5 R_3 R_5 + C_5 L_5 R_5 g_m - C_5 L_5\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 - C_5 R_5\right) - 1}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_5 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2 \left(2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + 2 C_3 C_5 R_3 R_5 g_m + C_3 C_5 R_5 + 2 C_4 C_5 R_5 + 2 C_5 L_5 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m \cdots\right)}$$

10.274 INVALID-ORDER-274 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 R_3 R_4 s^2 + R_4 g_m + s \left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2 C_3 C_4 C_5 R_3 R_4 s^3 + 2 g_m + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 + 2 C_4 C_5 R_4\right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.275 INVALID-ORDER-275 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 R_3 R_4 R_5 s^2 + R_4 R_5 g_m - R_4 + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 - C_5 R_4 R_5\right)}{2 C_3 C_4 C_5 R_3 R_4 R_5 s^3 + 2 R_4 g_m + 2 R_5 g_m + s^2 \left(2 C_3 C_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 R_3 R_4 + 2 C_3 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + 2 C_4 C_5 R_4 R_5\right) + s \left(2 C_3 R_3 R_4 g_m + 2 C_3 R_3 R_5 g_m + 2 C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5\right) + \cdots}$$

10.276 INVALID-ORDER-276 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{R_4 g_m + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4\right) + s \left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_4\right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_4\right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

10.277   INVALID-ORDER-277 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_5 R_3 R_4 g_m s^3 + R_4 g_m + s^2 \left(-C_3 C_5 R_3 R_4 + C_5 L_5 R_4 g_m \right) + s \left(C_3 R_3 R_4 g_m - C_5 R_4 \right)}{2 C_3 C_4 C_5 L_5 R_3 R_4 g_m s^4 + 2 g_m + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 + 2 C_4 C_5 R_4 + 2 C_5 L_5 g_m \right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 \right)}$$

10.278   INVALID-ORDER-278 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_5 R_3 R_4 s^3 - R_4 + s^2 \left(C_3 L_5 R_3 R_4 g_m - C_5 L_5 R_4 \right) + s \left(-C_3 R_3 R_4 + L_5 R_4 g_m \right)}{2 C_3 C_4 C_5 L_5 R_3 R_4 s^4 + 2 R_4 g_m + s^3 \left(2 C_3 C_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 \right) + s^2 \left(2 C_3 C_4 R_3 R_4 + 2 C_3 L_5 R_3 g_m + C_3 L_5 R_4 g_m + 2 C_4 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 \right) + s \left(2 C_3 R_3 R_4 g_m + 2 C_3 R_3 + C_3 R_4 + 2 C_4 R_4 + 2 L_5 g_m \right)}$$

10.279   INVALID-ORDER-279 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_5 R_3 R_4 g_m s^3 + R_4 g_m + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4 + C_5 L_5 R_4 g_m \right) + s \left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4 \right)}{2 C_3 C_4 C_5 L_5 R_3 R_4 g_m s^4 + 2 g_m + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_4 + 2 C_5}$$

10.280   INVALID-ORDER-280 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_5 R_3 R_4 R_5 s^3 - R_4 R_5 + s^2 \left(C_3 L_5 R_3 R_4 R_5 g_m - C_3 L_5 R_3 R_4 - C_5 L_5 R_4 R_5 \right) + s \left(-C_3 R_3 R_4 R_5 + L_5 R_4 R_5 g_m - L_5 \right)}{2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 s^4 + 2 R_4 R_5 g_m + 2 R_5 + s^3 \left(2 C_3 C_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 L_5 R_3 R_4 + 2 C_3 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 L_5 R_3 R_5 + C_3 C_5 L_5 R_4 R_5 + 2 C_4 C_5 L_5 R_4 R_5 \right) + s^2 \left(2 C_3 C_4 R_3 R_4 R_5 + 2 C_3 L_5 R_3 R_4 g_m + 2 C_3 L_5 R_3 R_5 g_m + 2 C_3 L_5 R_3 + C_3 L_5 R_4 + }$$

10.281   INVALID-ORDER-281 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_5 R_3 R_4 \right) + s^2 \left(C_3 L_5 R_3 R_4 g_m + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4 \right) + s \left(C_3 \dots}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_4 \right) + s^3 \left(2 C_3 C_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_4 \right) + s^2 \left(2 C_3 C_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 R_3 R_4 + 2 C}$$

10.282   INVALID-ORDER-282 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_5 R_3 R_4 \right) + s^2 \left(-C_3 C_5 R_3 R_4 R_5 + C_5 L_5 R_4 R_5 g_m \dots}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_4 \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 + 2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_4 \right) + s^2 \left(2 C_3 C_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 R_3 R_4 + 2 C}$$

10.283   INVALID-ORDER-283 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 R_3 R_4 s^3 + g_m + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 - C_4 C_5 R_4 \right) + s \left(C_3 R_3 g_m + C_4 R_4 g_m - C_5 \right)}{s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 \right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 \right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.284   INVALID-ORDER-284 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 R_3 R_4 R_5 s^3 + R_5 g_m + s^2 \left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_5 - C_4 C_5 R_4 R_5 \right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 + C_4 R_4 R_5 g_m - C_4 R_4 - C_5 R_5 \right) - 1}{2 g_m + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5 \right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 C_5 R_3 R_5 g_m + C_3 C_5 R_5 + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_5 \right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m}$$

10.285   INVALID-ORDER-285 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{g_m + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 \right) + s^2 \left(C_3 C_4 R_3 R_4 g_m + C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 \right) + s \left(C_3 R_3 g_m + C_4 R_4 g_m + C_5 R_5 g_m - C_5 \right)}{s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 \right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 \right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.286 INVALID-ORDER-286 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_4 C_5 L_5 R_3 R_4 g_m s^4 + g_m + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 - C_4 C_5 R_4 + C_5 L_5 g_m \right) + s \left(C_3 R_3 g_m + C_4 R_4 g_m - C_5 \right)}{s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_3 C_4 C_5 L_5 R_4 g_m \right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 g_m + 2C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + C_3 C_5 L_5 g_m + 2C_4 C_5 L_5 g_m \right) + s^2 \left(2C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 + 2C_4 C_5 R_4 g_m + 2C_4 C_5 \right) + s \left(C_3 g_m + 2C_4 g_m + 2C_5 g_m \right)}$$

10.287 INVALID-ORDER-287 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_5 R_3 R_4 s^4 + s^3 \left(C_3 C_4 L_5 R_3 R_4 g_m - C_3 C_5 L_5 R_3 - C_4 C_5 L_5 R_4 \right) + s^2 \left(-C_3 C_4 R_3 R_4 + C_3 L_5 R_3 g_m + C_4 L_5 R_4 g_m - C_5 L_5 \right) + s \left(-C_3 R_3 - C_4 R_4 + L_5 g_m \right) - 1}{2g_m + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 \right) + s^3 \left(2C_3 C_4 L_5 R_3 g_m + C_3 C_4 L_5 R_4 g_m + 2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_5 R_4 g_m + 2C_4 C_5 L_5 \right) + s^2 \left(2C_3 C_4 R_3 R_4 g_m + 2C_3 C_4 R_3 + C_3 C_4 R_4 + C_3 L_5 g_m + 2C_4 L_5 g_m + 2C_5 L_5 g_m \right) + s \left(2C_3 R_3 g_m + \right.}$$

10.288 INVALID-ORDER-288 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_4 C_5 L_5 R_3 R_4 g_m s^4 + g_m + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 + C_3 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_4 R_3 R_4 g_m + C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_5 L_5 g_m \right) + s \left(C_3 R_3 g_m + C_4 R_4 g_m + C_5 R_5 g_m \right.}{s^4 \left(2C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m \right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 g_m + 2C_3 C_4 C_5 R_3 R_5 g_m + 2C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + C_3 C_5 L_5 g_m + 2C_4 C_5 L_5 g_m \right) + s^2 \left(2C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2C_4 C_5 R_4 g_m + 2C_4 C_5 R_5 \right.}$$

10.289 INVALID-ORDER-289 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_5 R_3 R_4 R_5 s^4 - R_5 + s^3 \left(C_3 C_4 L_5 R_3 R_4 R_5 g_m - C_3 C_4 L_5 R_3 R_4 - C_3 C_5 L_5 R_3 R_5 - C_4 C_5 L_5 R_4 R_5 \right) + s^2 \left(-C_3 C_4 R_3 R_4 R_5 + C_3 L_5 R_3 R_5 g_m - C_3 L_5 R_3 + \right.}{2R_5 g_m + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 \right) + s^3 \left(2C_3 C_4 L_5 R_3 R_4 g_m + 2C_3 C_4 L_5 R_3 R_5 g_m + 2C_3 C_4 L_5 R_3 + C_3 C_4 L_5 R_4 R_5 g_m + C_3 C_4 L_5 R_4 + 2C_3 C_5 L_5 R_3 R_5 g_m + C_3 C_5 L_5 R_5 + 2C_4 C_5 L_5 R_4 R_5 g_m + 2C_4 C_5 L_5 R_5 \right) + s^2 \left(2C_3 C_4 R_3 R_4 R_5 \right.}$$

10.290 INVALID-ORDER-290 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^4 \left(C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 \right) + s^3 \left(C_3 C_4 L_5 R_3 R_4 g_m + C_3 C_5 L_5 R_3 R_5 g_m - C_3 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4 \right) + s^2 \left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 + C_3 L_5 R_3 g_m + \right.}{2g_m + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 \right) + s^3 \left(2C_3 C_4 L_5 R_3 g_m + C_3 C_4 L_5 R_4 g_m + 2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_5 R_4 g_m + 2C_4 C_5 L_5 R_5 g_m + 2C_4 C_5 L_5 \right) + s^2 \left(2C_3 C_4 R_3 R_4 g_m + \right.}$$

10.291 INVALID-ORDER-291 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^4 \left(C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 \right) + s^3 \left(-C_3 C_4 C_5 R_3 R_4 R_5 + C_3 C_5 L_5 R_3 R_5 g_m - C_3 C_5 L_5 R_3 + C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4 \right) + s^2 \left(C_3 C_4 R_3 \right.}{2g_m + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 \right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5 + 2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_5 R_4 g_m + 2C_4 C_5 L_5 R_5 g_m + 2C_4 C_5 \right.}$$

10.292 INVALID-ORDER-292 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3 \right) + s^2 \left(C_4 L_4 R_5 g_m - C_4 L_4 \right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 \right) - 1}{2g_m + s^3 \left(2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 \right) + s^2 \left(2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3 + 2C_4 L_4 g_m \right) + s \left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4 \right)}$$

10.293 INVALID-ORDER-293 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 R_3 s^4 + g_m + s^3 \left(C_3 C_4 L_4 R_3 g_m - C_4 C_5 L_4 \right) + s^2 \left(-C_3 C_5 R_3 + C_4 L_4 g_m \right) + s \left(C_3 R_3 g_m - C_5 \right)}{s^4 \left(2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 \right) + s^3 \left(2C_3 C_4 C_5 R_3 + C_3 C_4 L_4 g_m + 2C_4 C_5 L_4 g_m \right) + s^2 \left(2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 + 2C_4 C_5 \right) + s \left(C_3 g_m + 2C_4 g_m + 2C_5 g_m \right)}$$

10.294 INVALID-ORDER-294 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 R_3 R_5 s^4 + R_5 g_m + s^3 \left(C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3 - C_4 C_5 L_4 R_5 \right) + s^2 \left(-C_3 C_5 R_3 R_5 + C_4 L_4 R_5 g_m - C_4 L_4 \right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 - C_5 R_5 \right) - 1}{2g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5 \right) + s^3 \left(2C_3 C_4 C_5 R_3 R_5 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2C_4 C_5 L_4 R_5 g_m \right) + s^2 \left(2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3 + 2C_3 C_5 R_3 R_5 g_m + C_3 C_5 R_5 + 2C_4 C_5 R_5 + 2C_4 L_4 g_m \right) + s \left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_\right.}$$

10.295 **INVALID-ORDER-295** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{g_m + s^4 (C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3) + s^3 (C_3 C_4 L_4 R_3 g_m + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4) + s^2 (C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_4 L_4 g_m) + s (C_3 R_3 g_m + C_5 R_5 g_m - C_5)}{s^4 (2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4) + s^3 (2C_3 C_4 C_5 R_3 R_5 g_m + 2C_3 C_4 C_5 R_3 + C_3 C_4 L_4 g_m + 2C_4 C_5 L_4 g_m) + s^2 (2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2C_4 C_5 R_5 g_m + 2C_4 C_5) + s (C_3 g_m + 2C_4 g_m + 2C_5 g_m)}$$

10.296 **INVALID-ORDER-296** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + g_m + s^4 (-C_3 C_4 C_5 L_4 R_3 + C_4 C_5 L_4 L_5 g_m) + s^3 (C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_5 R_3 g_m - C_4 C_5 L_4) + s^2 (-C_3 C_5 R_3 + C_4 L_4 g_m + C_5 L_5 g_m) + s (C_3 R_3 g_m - C_5)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4 (2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 + 2C_3 C_4 C_5 L_5 R_3 g_m) + s^3 (2C_3 C_4 C_5 R_3 + C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2C_4 C_5 L_4 g_m + 2C_4 C_5 L_5 g_m) + s^2 (2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 + 2C_4 C_5) + s (C_3 g_m + 2C_4 g_m + 2C_5 g_m)}$$

10.297 **INVALID-ORDER-297** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 L_5 R_3 s^5 + s^4 (C_3 C_4 L_4 L_5 R_3 g_m - C_4 C_5 L_4 L_5) + s^3 (-C_3 C_4 L_4 R_3 - C_3 C_5 L_5 R_3 + C_4 L_4 L_5 g_m) + s^2 (C_3 L_5 R_3 g_m - C_4 L_4 - C_5 L_5) + s (-C_3 R_3 + L_5 g_m) - 1}{2g_m + s^5 (2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5) + s^4 (2C_3 C_4 C_5 L_5 R_3 + C_3 C_4 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m) + s^3 (2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 + 2C_3 C_4 L_5 R_3 g_m + 2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 + 2C_4 C_5 L_5) + s^2 (2C_3 C_4 R_3 + C_3 L_5 g_m + 2C_4 L_4 g_m + 2C_4 L_5 g_m + 2C_5 L_5 g_m) +}$$

10.298 **INVALID-ORDER-298** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + g_m + s^4 (C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3 + C_4 C_5 L_4 L_5 g_m) + s^3 (C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_5 R_3 g_m + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4) + s^2 (C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_4 L_4 g_m + C_5 L_5 g_m) + s (C_3 R_3 g_m + C_5 R}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4 (2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4 + 2C_3 C_4 C_5 L_5 R_3 g_m) + s^3 (2C_3 C_4 C_5 R_3 R_5 g_m + 2C_3 C_4 C_5 R_3 + C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2C_4 C_5 L_4 g_m + 2C_4 C_5 L_5 g_m) + s^2 (2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2C_4 C_5 R_}$$

10.299 **INVALID-ORDER-299** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 L_5 R_3 R_5 s^5 - R_5 + s^4 (C_3 C_4 L_4 L_5 R_3 R_5 g_m - C_3 C_4 L_4 L_5 R_3 - C_4 C_5 L_4 L_5 R_5) + s^3 (-C_3 C_4 L_4 R_3 R_5 - C_3 C_5 L_5 R_3 R_5 + C_4 L_4 L_5 R_5 g_m - C_4 L_4 L_5) +}{2R_5 g_m + s^5 (2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_5) + s^4 (2C_3 C_4 C_5 L_5 R_3 R_5 + 2C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2C_4 C_5 L_4 L_5 R_5 g_m) + s^3 (2C_3 C_4 L_4 R_3 R_5 g_m + C_3 C_4 L_4 R_5 + 2C_3 C_4 L_5 R_3 R_5 g_m + 2C_3 C_4 L_5 R_3 + 2C_3 C_5 L_5 R_3 R_5 g_m + C_3 C_5 L_5 R_5}$$

10.300 **INVALID-ORDER-300** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^5 (C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3) + s^4 (C_3 C_4 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5) + s^3 (C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3 + C_3 C_5 L_5 R_3 R_5 g_m - C_3 C_5 L_5 R_3 + C_4 L_4 L_5 g_m) +}{2g_m + s^5 (2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5) + s^4 (2C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 + C_3 C_4 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m) + s^3 (2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2C_3 C_4 L_5 R_3 g_m + 2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 -}$$

10.301 **INVALID-ORDER-301** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^5 (C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3) + s^4 (-C_3 C_4 C_5 L_4 R_3 R_5 + C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5) + s^3 (C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3 + C_3 C_5 L_5 R_3}{2g_m + s^5 (2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5) + s^4 (2C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5 + 2C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 + 2C_4 C_5 L_4 L_5 g_m) + s^3 (2C_3 C_4 C_5 R_3 R_5 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2C_3 C_5 L_5 R_3 g_m + C_3}$$

10.302 **INVALID-ORDER-302** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty\right)$

$$H(s) = \frac{s^2 (C_3 L_4 R_3 R_5 g_m - C_3 L_4 R_3) + s (L_4 R_5 g_m - L_4)}{2R_5 g_m + s^3 (2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3) + s^2 (2C_3 L_4 R_3 g_m + C_3 L_4 R_5 g_m + C_3 L_4 + 2C_4 L_4 R_5 g_m + 2C_4 L_4) + s (2C_3 R_3 R_5 g_m + 2C_3 R_3 + 2L_4 g_m) + 2}$$

10.303 **INVALID-ORDER-303** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_4 R_3 s^3 + L_4 g_m s + s^2 (C_3 L_4 R_3 g_m - C_5 L_4)}{2C_3 C_4 C_5 L_4 R_3 s^4 + 2g_m + s^3 (2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2C_4 C_5 L_4) + s^2 (2C_3 C_5 R_3 + C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m) + s (2C_3 R_3 g_m + 2C_5)}$$

10.304 **INVALID-ORDER-304** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_4 R_3 R_5 s^3 + s^2\left(C_3 L_4 R_3 R_5 g_m - C_3 L_4 R_3 - C_5 L_4 R_5\right) + s\left(L_4 R_5 g_m - L_4\right)}{2C_3 C_4 C_5 L_4 R_3 R_5 s^4 + 2R_5 g_m + s^3\left(2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + 2C_3 C_5 L_4 R_3 R_5 g_m + C_3 C_5 L_4 R_5 + 2C_4 C_5 L_4 R_5\right) + s^2\left(2C_3 C_5 R_3 R_5 + 2C_3 L_4 R_3 g_m + C_3 L_4 R_5 g_m + C_3 L_4 + 2C_4 L_4 R_5 g_m + 2C_4 L_4 + 2C_5 L_4 R_5 g_m\right) + s\left(2C_3 R_3 R_5 g_m + 2C_3 R_3 + 2C_5 R_5 + 2L_4 g_m\right)}$$

10.305 **INVALID-ORDER-305** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{L_4 g_m s + s^3\left(C_3 C_5 L_4 R_3 R_5 g_m - C_3 C_5 L_4 R_3\right) + s^2\left(C_3 L_4 R_3 g_m + C_5 L_4 R_5 g_m - C_5 L_4\right)}{2g_m + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_4\right) + s^2\left(2C_3 C_5 R_3 R_5 g_m + 2C_3 C_5 R_3 + C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m\right) + s\left(2C_3 R_3 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

10.306 **INVALID-ORDER-306** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_4 L_5 R_3 g_m s^4 + L_4 g_m s + s^3\left(-C_3 C_5 L_4 R_3 + C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 R_3 g_m - C_5 L_4\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + 2g_m + s^4\left(2C_3 C_4 C_5 L_4 R_3 + C_3 C_5 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2C_3 C_5 L_5 R_3 g_m + 2C_4 C_5 L_4\right) + s^2\left(2C_3 C_5 R_3 + C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m + 2C_5 L_5 g_m\right) + s\left(2C_3 R_3 g_m + 2C_5\right)}$$

10.307 **INVALID-ORDER-307** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_4 L_5 R_3 s^4 - L_4 s + s^3\left(C_3 L_4 L_5 R_3 g_m - C_5 L_4 L_5\right) + s^2\left(-C_3 L_4 R_3 + L_4 L_5 g_m\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 s^5 + s^4\left(2C_3 C_4 L_4 L_5 R_3 g_m + 2C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5\right) + s^3\left(2C_3 C_4 L_4 R_3 + 2C_3 C_5 L_5 R_3 + C_3 L_4 L_5 g_m + 2C_4 L_4 L_5 g_m + 2C_5 L_4 L_5 g_m\right) + s^2\left(2C_3 L_4 R_3 g_m + C_3 L_4 + 2C_3 L_5 R_3 g_m + 2C_4 L_4 + 2C_5 L_5\right) + s\left(2C_3 R_3 + 2L_4 g_m + 2L_5 g_m\right)}$$

10.308 **INVALID-ORDER-308** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_4 L_5 R_3 g_m s^4 + L_4 g_m s + s^3\left(C_3 C_5 L_4 R_3 R_5 g_m - C_3 C_5 L_4 R_3 + C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 R_3 g_m + C_5 L_4 R_5 g_m - C_5 L_4\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + 2g_m + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 + C_3 C_5 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2C_3 C_5 L_5 R_3 g_m + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_4\right) + s^2\left(2C_3 C_5 R_3 R_5 g_m + 2C_3 C_5 R_3 + C\ldots\right)}$$

10.309 **INVALID-ORDER-309** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_4 L_5 R_3 R_5 s^4 - L_4 R_5 s + s^3\left(C_3 L_4 L_5 R_3 R_5 g_m - C_3 L_4 L_5 R_3 - C_5 L_4 L_5 R_5\right) + s^2\left(-C_3 L_4 R_3 R_5 + L_4 L_5 R_5 g_m - L\ldots\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 R_5 s^5 + 2R_5 + s^4\left(2C_3 C_4 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 L_4 L_5 R_3 + 2C_3 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_4 L_5 R_5 + 2C_4 C_5 L_4 L_5 R_5\right) + s^3\left(2C_3 C_4 L_4 R_3 R_5 + 2C_3 C_5 L_5 R_3 R_5 + 2C_3 L_4 L_5 R_3 g_m + C_3 L_4 L_5 R_5 g_m + C_3 L_4 L_5 + 2C_4 L_4 L_5 R_5 g_m + 2C_4 L_4 L_5 + 2C_5 L_4 L_5 R_5 g_m + \ldots\right)}$$

10.310 **INVALID-ORDER-310** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{s^4\left(C_3 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_5 L_4 L_5 R_3\right) + s^3\left(C_3 L_4 L_5 R_3 g_m + C_5 L_4 L_5 R_5 g_m - C_5 L_4 L_5\right) + s^2\left(C_3 L_4 R_3 R_5 g_m - C_3\ldots\right)}{2R_5 g_m + s^5\left(2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3\right) + s^4\left(2C_3 C_4 L_4 L_5 R_3 g_m + 2C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5 R_5 g_m + 2C_4 C_5 L_4 L_5\right) + s^3\left(2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + 2C_3 C_5 L_5 R_3 R_5 g_m + 2C_3 C_5 L_5 R_3 + C_3 L_4 L_5 g_m + 2\ldots\right)}$$

10.311 **INVALID-ORDER-311** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{s^4\left(C_3 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_5 L_4 L_5 R_3\right) + s^3\left(-C_3 C_5 L_4 R_3 R_5 + C_5 L_4 L_5 R_5 g_m - C_5 L_4 L_5\right) + s^2\left(C\ldots\right)}{2R_5 g_m + s^5\left(2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3\right) + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 + 2C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5 R_5 g_m + 2C_4 C_5 L_4 L_5\right) + s^3\left(2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + 2C_3 C_5 L_4 R_3 R_5 g_m + C_3 C_5 L_4 R_5 + 2C_3 C_5 L_5 R_3 R_5 g_m + \ldots\right)}$$

10.312 **INVALID-ORDER-312** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^3\left(C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3\right) + s^2\left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s\left(C_3 R_3 R_5 g_m - C_3 R_3 + C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2g_m + s^3\left(2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s^2\left(2C_3 C_4 R_3 R_4 g_m + 2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2C_4 L_4 g_m\right) + s\left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_4 g_m + 2C_4 R_5 g_m + 2C_4\right)}$$

10.313 **INVALID-ORDER-313** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 R_3 s^4 + g_m + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_4 R_3 g_m - C_4 C_5 L_4\right) + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 - C_4 C_5 R_4 + C_4 L_4 g_m\right) + s \left(C_3 R_3 g_m + C_4 R_4 g_m - C_5\right)}{s^4 \left(2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5\right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.314 **INVALID-ORDER-314** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 R_3 R_5 s^4 + R_5 g_m + s^3 \left(-C_3 C_4 C_5 R_3 R_4 R_5 + C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3 - C_4 C_5 L_4 R_5\right) + s^2 \left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_5 - C_4 C_5 R_4 R_5 + C_4 L_4 R_5 g_m - C_4 \dots \right)}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5 + 2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2 C_4 C_5 L_4 R_5 g_m\right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 C_5 \dots\right)}$$

10.315 **INVALID-ORDER-315** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3\right) + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_4 R_3 g_m + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2 \left(C_3 C_4 R_3 R_4 g_m + C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_4 L_4 g_m\right) + s \left(C_3 R_3 g_m \dots\right)}{s^4 \left(2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m \dots\right)}$$

10.316 **INVALID-ORDER-316** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + g_m + s^4 \left(-C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_5 R_3 g_m - C_4 C_5 L_4 + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 - C_4 C_5 R_4 + C_4 L_4 g_m + C_5 L_5 g_m \dots\right)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 + 2 C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 \dots\right)}$$

10.317 **INVALID-ORDER-317** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 L_5 R_3 s^5 + s^4 \left(-C_3 C_4 C_5 L_5 R_3 R_4 + C_3 C_4 L_4 L_5 R_3 g_m - C_4 C_5 L_4 L_5\right) + s^3 \left(-C_3 C_4 L_4 R_3 + C_3 C_4 L_5 R_3 R_4 g_m - C_3 C_5 L_5 R_3 - C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right) + s^2 \left(-C_3 C_4 R_3 R_4 + C_3 L_5 R_3 \dots\right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 + C_3 C_4 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 + 2 C_3 C_4 L_5 R_3 g_m + C_3 C_4 L_5 R_4 g_m + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 \dots\right)}$$

10.318 **INVALID-ORDER-318** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_4 L_5 R_3 g_m s^5 + g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_5 R_3 g_m + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4 + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 C_4 R_3 \dots\right)}{C_3 C_4 C_5 L_4 L_5 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4 + 2 C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + C_3 C_4 L_4 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 \dots\right)}$$

10.319 **INVALID-ORDER-319** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 L_5 R_3 R_5 s^5 - R_5 + s^4 \left(-C_3 C_4 C_5 L_5 R_3 R_4 R_5 + C_3 C_4 L_4 L_5 R_3 R_5 g_m - C_3 C_4 L_4 L_5 R_3 - C_4 C_5 L_4 L_5 R_5\right) + s^3 \left(-C_3 C_4 L_4 R_3 R_5 \dots\right)}{2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_5\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 + 2 C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_5 g_m\right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_5 g_m + C_3 C_4 L_4 R_5 + 2 C_3 C_4 L_5 R_3 R_4 g_m + 2 \dots\right)}$$

10.320 **INVALID-ORDER-320** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3\right) + s^4 \left(C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 + C_3 C_4 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5\right) + s^3 \left(C_3 C_4 L_4 R_3 R_5 g_m + C_3 C_4 L_5 \dots\right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + C_3 C_4 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + \dots\right)}$$

10.321 **INVALID-ORDER-321** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3\right) + s^4 \left(-C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 + C_4 C_5 L_4 L_5 R_5 g_m - C_4 \dots\right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5 + 2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + \dots\right)}$$

10.322 INVALID-ORDER-322 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5, \ \infty \right)$

$$H(s) = \frac{s^2 \left(C_3 L_4 R_3 R_4 R_5 g_m - C_3 L_4 R_3 R_4\right) + s \left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2R_4 R_5 g_m + 2R_4 + s^3 \left(2C_3 C_4 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 L_4 R_3 R_4\right) + s^2 \left(2C_3 L_4 R_3 R_4 g_m + 2C_3 L_4 R_3 R_5 g_m + 2C_3 L_4 R_3 + C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 + 2C_4 L_4 R_4 R_5 g_m + 2C_4 L_4 R_4\right) + s \left(2C_3 R_3 R_4 R_5 g_m + 2C_3 R_3 R_4 + 2L_4 R_4 g_m + 2L_4 R_5 g_m + 2L_4\right)}$$

10.323 INVALID-ORDER-323 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_4 R_3 R_4 s^3 + L_4 R_4 g_m s + s^2 \left(C_3 L_4 R_3 R_4 g_m - C_5 L_4 R_4\right)}{2C_3 C_4 C_5 L_4 R_3 R_4 s^4 + 2R_4 g_m + s^3 \left(2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 + C_3 C_5 L_4 R_4 + 2C_4 C_5 L_4 R_4\right) + s^2 \left(2C_3 C_5 R_3 R_4 + 2C_3 L_4 R_3 g_m + C_3 L_4 R_4 g_m + 2C_4 L_4 R_4 g_m + 2C_5 L_4 R_4 g_m + 2C_5 L_4\right) + s \left(2C_3 R_3 R_4 g_m + 2C_5 R_4 + 2L_4 g_m\right)}$$

10.324 INVALID-ORDER-324 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_4 R_3 R_4 R_5 s^3 + s^2 \left(C_3 L_4 R_3 R_4 R_5 g_m - C_3 L_4 R_3 R_4 - C_5 L_4 R_4 R_5\right) + s \left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2C_3 C_4 C_5 L_4 R_3 R_4 R_5 s^4 + 2R_4 R_5 g_m + 2R_4 + s^3 \left(2C_3 C_4 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 L_4 R_3 R_4 + 2C_3 C_5 L_4 R_3 R_4 R_5 g_m + 2C_3 C_5 L_4 R_3 R_5 + C_3 C_5 L_4 R_4 R_5 + 2C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(2C_3 C_5 R_3 R_4 R_5 + 2C_3 L_4 R_3 R_4 g_m + 2C_3 L_4 R_3 R_5 g_m + 2C_3 L_4 R_3 + C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 +$$

10.325 INVALID-ORDER-325 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{L_4 R_4 g_m s + s^3 \left(C_3 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_5 L_4 R_3 R_4\right) + s^2 \left(C_3 L_4 R_3 R_4 g_m + C_5 L_4 R_4 R_5 g_m - C_5 L_4 R_4\right)}{2R_4 g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 R_4\right) + s^3 \left(2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 R_5 g_m + 2C_3 C_5 L_4 R_3 + C_3 C_5 L_4 R_4 R_5 g_m + C_3 C_5 L_4 R_4 + 2C_4 C_5 L_4 R_4 R_5 g_m + 2C_4 C_5 L_4 R_4\right) + s^2 \left(2C_3 C_5 R_3 R_4 R_5 g_m + 2C_3 C_5 R_3 R_4 + 2C_3 L_4 R_3 g_m$$

10.326 INVALID-ORDER-326 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_4 L_5 R_3 R_4 g_m s^4 + L_4 R_4 g_m s + s^3 \left(-C_3 C_5 L_4 R_3 R_4 + C_5 L_4 L_5 R_4 g_m\right) + s^2 \left(C_3 L_4 R_3 R_4 g_m - C_5 L_4 R_4\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + 2R_4 g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 + 2C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_4 g_m + 2C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 + C_3 C_5 L_4 R_4 + 2C_3 C_5 L_5 R_3 R_4 g_m + 2C_4 C_5 L_4 R_4 + 2C_5 L_4 L_5 g_m\right) + s^2 \left(2C_3 C_5 R_3 R$$

10.327 INVALID-ORDER-327 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_4 L_5 R_3 R_4 s^4 - L_4 R_4 s + s^3 \left(C_3 L_4 L_5 R_3 R_4 g_m - C_5 L_4 L_5 R_4\right) + s^2 \left(-C_3 L_4 R_3 R_4 + L_4 L_5 R_4 g_m\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 R_4 s^5 + 2R_4 + s^4 \left(2C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2C_3 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_5 L_4 L_5 R_3 + C_3 C_5 L_4 L_5 R_4 + 2C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(2C_3 C_4 L_4 R_3 R_4 + 2C_3 C_5 L_5 R_3 R_4 + 2C_3 L_4 L_5 R_3 g_m + C_3 L_4 L_5 R_4 g_m + 2C_4 L_4 L_5 R_4 g_m + 2C_5 L_4 L_5 R_4 g_m + 2C_5 L_4 L_5\right) + s^2 \left(2C$$

10.328 INVALID-ORDER-328 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_4 L_5 R_3 R_4 g_m s^4 + L_4 R_4 g_m s + s^3 \left(C_3 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_5 L_4 R\right)}{2C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + 2R_4 g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 R_4 + 2C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_4 g_m + 2C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 R_4 g_m + 2C_3 C_5 L_4 R_3 R_5 g_m + 2C_3 C_5 L_4 R_3 + C_3 C_5 L_4 R_4 R_5 g_m + C_3 C_5 L_4 R_4 +$$

10.329 INVALID-ORDER-329 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_4 L_5 R_3 R_4 R_5 s^4 - L_4 R_4 R}{2C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 s^5 + 2R_4 R_5 + 2C_3 C_4 L_4 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 L_4 L_5 R_3 R_4 + 2C_3 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_3 C_5 L_4 L_5 R_3 R_5 + C_3 C_5 L_4 L_5 R_4 R_5 + 2C_4 C_5 L_4 L_5 R_4 R_5\right) + s^3 \left(2C_3 C_4 L_4 R_3 R_4 R_5 + 2C_3 C_5 L_5 R_3 R_4 R_5 + 2C_3 L_4 L_5 R_3 R_4 g_m + 2C_3 L_4 L_5 R_3 R_5 g_m + 2C$$

10.330 INVALID-ORDER-330 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{s^4 \left(C_3 C_5 L_4 L\right)}{2R_4 R_5 g_m + 2R_4 + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 R_4\right) + s^4 \left(2C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2C_3 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_5 L_4 L_5 R_3 + C_3 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_5 L_4 L_5 R_4 + 2C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(2C_3 C_4 L_4 R_3$$

10.331 INVALID-ORDER-331 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{}{2R_4 R_5 g_m + 2R_4 + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 R_4\right) + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 R_5 + 2C_3 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_5 L_4 L_5 R_3 + C_3 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_5 L_4 L_5 R_4 + 2C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(2C_3 C_4 L_4 R_3\right)}$$

10.332 INVALID-ORDER-332 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ R_5,\ \infty\right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_4 R_3 R_4\right) + s^2 \left(C_3 L_4 R_3 R_5 g_m - C_3 L_4 R_3 + C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 + L_4 R_5 g_m - L_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 R_5 g_m + 2 C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4\right) + s^2 \left(2 C_3 L_4 R_3 g_m + C_3 L_4 R_5 g_m + C_3 L_4 + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4\right) + s \left(2 C_3 R_3 R_4 g_m + 2 C_3 R_3 R_5 g_m + 2 C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2 L_4}$

10.333 INVALID-ORDER-333 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_4 R_3 R_4 s^4 + R_4 g_m + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m - C_3 C_5 L_4 R_3 - C_4 C_5 L_4 R_4\right) + s^2 \left(-C_3 C_5 R_3 R_4 + C_3 L_4 R_3 g_m + C_4 L_4 R_4 g_m - C_5 L_4\right) + s \left(C_3 R_3 R_4 g_m - C_5 R_4 + L_4 g_m\right)}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4\right) + s^3 \left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s \left(2 C_3 R_3 g_m +}$

10.334 INVALID-ORDER-334 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_4 R_3 R_4 R_5 s^4 + R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_4 R_3 R_4 - C_3 C_5 L_4 R_3 R_5 - C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(-C_3 C_5 R_3 R_4 R_5 + C_3 \dots\right)}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_4 R_4 R_5\right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 R_5 g_m + 2 C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + 2 C_3 C_5 L_4 R_3 R_5 g_m + C_3 C_5 L_4 R_5 + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_5\right) + s^2 \left(2 C_3 C_5}$

10.335 INVALID-ORDER-335 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 R_3 R_4\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_4 R_3 R_5 g_m - C_3 C_5 L_4 R_3 + C_4 C_5 L_4 R_4 R_5 g_m - C_4 C_5 L_4 R_4\right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4 + C_3 L_4 R_3 g_m \dots\right)}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4\right) + s^3 \left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_3 C_5 R_3 g_m +}$

10.336 INVALID-ORDER-336 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + R_4 g_m + s^4 \left(-C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m - C_3 C_5 L_4 R_3 + C_3 C_5 L_5 R_3 R_4 g_m - C_4 C_5 L_4 R_4 + C_5 L_4 L_5 g_m\right) + s^2 \left(-C_3 C_5 \dots\right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_4 \dots\right)}$

10.337 INVALID-ORDER-337 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_4 L_5 R_3 R_4 s^5 - R_4 + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 g_m - C_3 C_5 L_4 L_5 R_3 - C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(-C_3 C_4 L_4 R_3 R_4 - C_3 C_5 L_5 R_3 R_4 + C_3 L_4 L_5 R_3 g_m + C_4 \dots\right)}{2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2 C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5\right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 + 2 C_3 C_5 L_5 R_3 R_4 g_m +}$

10.338 INVALID-ORDER-338 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_5 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_4 R_3 R_5 g_m - C_3 C_5 L_4 R_3 + C_3 C_5 \dots\right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 \dots\right)}$

10.339 INVALID-ORDER-339 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 s^5 - R_4 R_5 + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 R_5 g_m - C_3 C_5 \dots\right)}{2 R_4 R_5 g_m + 2 R_5 + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 + C_3 C_4 C_5 L_4 L_5 R_4 R_5\right) + s^4 \left(2 C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 L_4 L_5 R_3 + C_3 C_4 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_4 L_5 R_4 + 2 C_3 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_4 L_5 R_5 + 2 C_4 C_5 L_4 L_5 R_4 R_5 g_m +}$

10.340 INVALID-ORDER-340 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3 R_4\right) + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 g_m + C_3 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_5 L_4 L_5 \dots\right)}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2 C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_}$

10.341 INVALID-ORDER-341 $Z(s) = \left(\infty,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^5 \left(C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3 R_4\right) + s^4 \left(\dots\right)}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_4 R_4 R_5 + 2 C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 +}$

10.342 INVALID-ORDER-342 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_4 R_3 R_4\right) + s^2 \left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4\right)}{2R_4 g_m + 2R_5 g_m + s^3 \left(2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4\right) + s^2 \left(2C_3 C_4 R_3 R_4 R_5 g_m + 2C_3 C_4 R_3 R_4 + 2C_4 L_4 R_4 g_m + 2C_4 L_4 R_5 g_m + 2C_4 L_4\right) + s \left(2C_3 R_3 R_4 g_m + 2C_3 R_3 R_5 g_m + 2C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2C_4 \cdots}$$

10.343 INVALID-ORDER-343 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 R_3 R_4 s^4 + R_4 g_m + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m - C_4 C_5 L_4 R_4\right) + s^2 \left(-C_3 C_5 R_3 R_4 + C_4 L_4 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4\right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2C_4 C_5 L_4 R_4 g_m + 2C_4 C_5 L_4\right) + s^2 \left(2C_3 C_4 R_3 R_4 g_m + 2C_3 C_5 R_3 R_4 g_m + 2C_3 C_5 R_3 + C_3 C_5 R_4 + 2C_4 C_5 R_4 + 2C_4 L_4 g_m\right) + s \left(2C_3 R_3 g_m + C_3 \cdots}$$

10.344 INVALID-ORDER-344 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 R_3 R_4 R_5 s^4 + R_4 R_5 g_m - R_4 + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_4 R_3 R_4 - C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(-\cdots\right)}{2R_4 g_m + 2R_5 g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_4 R_4 R_5\right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 R_5 + 2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + 2C_4 C_5 L_4 R_4 R_5 g_m + 2C_4 C_5 L_4 R_5\right) + s^2 \left(2C_3 C_4 R_3 R_4 R_5 g_m - \cdots}$$

10.345 INVALID-ORDER-345 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 R_3 R_4\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + C_4 C_5 L_4 R_4 R_5 g_m - C_4 C_5 L_4 R_4\right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - \cdots}{2g_m + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4\right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 R_3 R_4 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2C_4 C_5 L_4 R_4 g_m + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_4\right) + s^2 \left(2C_3 C_4 R_3 R_4 g_m + \cdots}$$

10.346 INVALID-ORDER-346 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + R_4 g_m + s^4 \left(-C_3 C_4 C_5 L_4 R_3 R_4 + C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_5 R_3 R_4 g_m - C_4 C_5 L_4 R_4\right) + s^2 \cdots}{2g_m + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 + 2C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m + 2C_4 C_5 L_4 g_m \cdots}$$

10.347 INVALID-ORDER-347 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 L_5 R_3 R_4 s^5 - R_4 + s^4 \left(C_3 C_4 L_4 L_5 R_3 R_4 g_m - C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(-C_3 C_4 L_4 R_3 R_4 - C_3 C_5 L_5 R_3 R_4 \cdots\right)}{2R_4 g_m + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 + 2C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_4 g_m + 2C_4 C_5 L_4 L_5 R_4 g_m + 2C_4 C_5 L_4 L_5\right) + s^3 \left(2C_3 C_4 L_4 R_3 R_4 g_m + 2C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 + 2C_3 C_5 L_5 R_3 R_4 g_m + 2C_3 C_5 L_5 \cdots}$$

10.348 INVALID-ORDER-348 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m s^5 + R_4 g_m + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 R_3 R_4 + C_4 C_5 L_4 L_5 R_4 g_m\right) + \cdots}{2g_m + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 R_3 R_4 + 2C_3 C_4 L_4 R_3 g_m \cdots}$$

10.349 INVALID-ORDER-349 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_4 L_5 R_3 R_4 \cdots}{2R_4 R_5 g_m + 2R_5 + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 R_5 + C_3 C_4 C_5 L_4 L_5 R_4 R_5\right) + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 R_5 + 2C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 L_4 L_5 R_3 + C_3 C_4 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_4 L_5 R_4 + 2C_4 C_5 L_4 L_5 R_4 R_5 g_m + 2C_4 C_5 L_4 L_5 \cdots}$$

10.350 INVALID-ORDER-350 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^5 \left(C_3 C_4 C_5 L_4 L_5 \cdots\right)}{2R_4 g_m + 2R_5 g_m + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 R_4 + 2C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_4 g_m + 2C_4 C_5 L_4 L_5 R_4 g_m + 2C_4 C_5 L_4 L_5 \cdots}$$

10.351 **INVALID-ORDER-351** $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{}{2R_4 g_m + 2R_5 g_m + s^5 \left(2C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_4 R_4 R_5 + 2C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 R_4 + 2C_4 C_5}$$

10.352 **INVALID-ORDER-352** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 s^3 + C_3 L_3 R_4 g_m s^2 - C_5 R_4 s + R_4 g_m}{2g_m + s^3 \left(2C_3 C_5 L_3 R_4 g_m + 2C_3 C_5 L_3\right) + s^2 \left(C_3 C_5 R_4 + 2C_3 L_3 g_m\right) + s \left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}$$

10.353 **INVALID-ORDER-353** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 R_5 s^3 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4\right)}{2R_4 g_m + 2R_5 g_m + s^3 \left(2C_3 C_5 L_3 R_4 R_5 g_m + 2C_3 C_5 L_3 R_5\right) + s^2 \left(C_3 C_5 R_4 R_5 + 2C_3 L_3 R_4 g_m + 2C_3 L_3 R_5 g_m + 2C_3 L_3\right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2C_5 R_4 R_5 g_m + 2C_5 R_5\right) + 2}$$

10.354 **INVALID-ORDER-354** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 L_3 R_4 g_m s^2 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4\right) + s \left(C_5 R_4 R_5 g_m - C_5 R_4\right)}{2g_m + s^3 \left(2C_3 C_5 L_3 R_4 g_m + 2C_3 C_5 L_3 R_5 g_m + 2C_3 C_5 L_3\right) + s^2 \left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_3 L_3 g_m\right) + s \left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

10.355 **INVALID-ORDER-355** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 - C_3 C_5 L_3 R_4 s^3 - C_5 R_4 s + R_4 g_m + s^2 \left(C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m\right)}{2C_3 C_5 L_3 L_5 g_m s^4 + 2g_m + s^3 \left(2C_3 C_5 L_3 R_4 g_m + 2C_3 C_5 L_3 + C_3 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 C_5 R_4 + 2C_3 L_3 g_m + 2C_5 L_5 g_m\right) + s \left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5\right)}$$

10.356 **INVALID-ORDER-356** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 s^4 + C_3 L_3 L_5 R_4 g_m s^3 + L_5 R_4 g_m s - R_4 + s^2 \left(-C_3 L_3 R_4 - C_5 L_5 R_4\right)}{2R_4 g_m + s^4 \left(2C_3 C_5 L_3 L_5 R_4 g_m + 2C_3 C_5 L_3 L_5\right) + s^3 \left(C_3 C_5 L_5 R_4 + 2C_3 L_3 L_5 g_m\right) + s^2 \left(2C_3 L_3 R_4 g_m + 2C_3 L_3 + C_3 L_5 R_4 g_m + 2C_5 L_5 R_4 g_m + 2C_5 L_5\right) + s \left(C_3 R_4 + 2L_5 g_m\right) + 2}$$

10.357 **INVALID-ORDER-357** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4\right) + s^2 \left(C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m\right) + s \left(C_5 R_4 R_5 g_m - C_5 R_4\right)}{2C_3 C_5 L_3 L_5 g_m s^4 + 2g_m + s^3 \left(2C_3 C_5 L_3 R_4 g_m + 2C_3 C_5 L_3 R_5 g_m + 2C_3 C_5 L_3 + C_3 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2C_3 L_3 g_m + 2C_5 L_5 g_m\right) + s \left(C_3 R_4 g_m + 2C_5 R_4 g_m + 2C_5 R_5 g_m + 2C_5\right)}$$

10.358 **INVALID-ORDER-358** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 R_5 s^4 - R_4 R_5 + s^3 \left(C_3 L_3 L_5 R_4 R_5 g_m - C_3 L_3 L_5 R_4\right) + s^2 \left(-C_3 L_3 R_4 R_5 - C_5 L_5 R_4 R_5\right) + s \left(L_5 R_4 R_5 g_m - L_5 R_4\right)}{2R_4 R_5 g_m + 2R_5 + s^4 \left(2C_3 C_5 L_3 L_5 R_4 R_5 g_m + 2C_3 C_5 L_3 L_5 R_5\right) + s^3 \left(C_3 C_5 L_5 R_4 R_5 + 2C_3 L_3 L_5 R_4 g_m + 2C_3 L_3 L_5 R_5 g_m + 2C_3 L_3 L_5\right) + s^2 \left(2C_3 L_3 R_4 R_5 g_m + 2C_3 L_3 R_5 + C_3 L_5 R_4 R_5 g_m + C_3 L_5 R_4 + 2C_5 L_5 R_4 R_5 g_m + 2C_5 L_5 R_5\right) + s \left(C_3 R_4 R_5 + 2L_5 R_4 g_m + 2L_5 R_5 g_m +}$$

10.359 **INVALID-ORDER-359** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{C_3 L_3 L_5 R_4 g_m s^3 + L_5 R_4 g_m s + R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_4\right) + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right)}{2R_4 g_m + 2R_5 g_m + s^4 \left(2C_3 C_5 L_3 L_5 R_4 g_m + 2C_3 C_5 L_3 L_5 R_5 g_m + 2C_3 C_5 L_3 L_5\right) + s^3 \left(C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2C_3 L_3 L_5 g_m\right) + s^2 \left(2C_3 L_3 R_4 g_m + 2C_3 L_3 R_5 g_m + 2C_3 L_3 + C_3 L_5 R_4 g_m + 2C_5 L_5 R_4 g_m + 2C_5 L_5 R_5 g_m + 2C_5 L_5\right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2L_5 g_m\right)}$$

10.360 INVALID-ORDER-360 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; R_4, \; \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \; \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 R_5 s^3 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^4\left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_4\right) + s^2\left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right)}{2 R_4 g_m + 2 R_5 g_m + s^4\left(2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3\left(2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_5 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4\right) + s^2\left(C_3 C_5 R_4 R_5 + 2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3 + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5\right) + s\left(C_3 R_4 R_5 g_m \ldots\right)}$$

10.361 INVALID-ORDER-361 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; R_5, \; \infty \right)$

$$H(s) = \frac{R_5 g_m + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3\right) - 1}{2 C_3 L_3 g_m s^2 + 2 g_m + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

10.362 INVALID-ORDER-362 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; \frac{1}{C_5 s}, \; \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 - C_5 s + g_m}{2 C_3 C_4 C_5 L_3 s^4 + s^3\left(2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.363 INVALID-ORDER-363 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; \frac{R_5}{C_5 R_5 s + 1}, \; \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_5 s^3 - C_5 R_5 s + R_5 g_m + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3\right) - 1}{2 C_3 C_4 C_5 L_3 R_5 s^4 + 2 g_m + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_5 L_3 R_5 g_m\right) + s^2\left(C_3 C_5 R_5 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_5\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4 + 2 C_5 R_5 g_m\right)}$$

10.364 INVALID-ORDER-364 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; R_5 + \frac{1}{C_5 s}, \; \infty \right)$

$$H(s) = \frac{C_3 L_3 g_m s^2 + g_m + s^3\left(C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3\right) + s\left(C_5 R_5 g_m - C_5\right)}{s^4\left(2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3\right) + s^3\left(2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.365 INVALID-ORDER-365 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; L_5 s + \frac{1}{C_5 s}, \; \infty \right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 g_m s^4 - C_3 C_5 L_3 s^3 - C_5 s + g_m + s^2\left(C_3 L_3 g_m + C_5 L_5 g_m\right)}{2 C_3 C_4 C_5 L_3 L_5 g_m s^5 + 2 C_3 C_4 C_5 L_3 s^4 + s^3\left(2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.366 INVALID-ORDER-366 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; \frac{L_5 s}{C_5 L_5 s^2 + 1}, \; \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 s^4 + C_3 L_3 L_5 g_m s^3 + L_5 g_m s + s^2\left(-C_3 L_3 - C_5 L_5\right) - 1}{2 C_3 C_4 C_5 L_3 L_5 s^5 + 2 g_m + s^4\left(2 C_3 C_4 L_3 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 + C_3 C_5 L_5 + 2 C_4 C_5 L_5\right) + s^2\left(2 C_3 L_3 g_m + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 + 2 C_4\right)}$$

10.367 INVALID-ORDER-367 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; L_5 s + R_5 + \frac{1}{C_5 s}, \; \infty \right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 g_m s^4 + g_m + s^3\left(C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3\right) + s^2\left(C_3 L_3 g_m + C_5 L_5 g_m\right) + s\left(C_5 R_5 g_m - C_5\right)}{2 C_3 C_4 C_5 L_3 L_5 g_m s^5 + s^4\left(2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3\right) + s^3\left(2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.368 INVALID-ORDER-368 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \; \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_5 s^4 - R_5 + s^3\left(C_3 L_3 L_5 R_5 g_m - C_3 L_3 L_5\right) + s^2\left(-C_3 L_3 R_5 - C_5 L_5 R_5\right) + s\left(L_5 R_5 g_m - L_5\right)}{2 C_3 C_4 C_5 L_3 L_5 R_5 s^5 + 2 R_5 g_m + s^4\left(2 C_3 C_4 L_3 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_5 + 2 C_3 C_5 L_3 L_5 R_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_5 + C_3 C_5 L_5 R_5 + 2 C_3 L_3 L_5 g_m + 2 C_4 C_5 L_5 R_5\right) + s^2\left(2 C_3 L_3 R_5 g_m + C_3 L_5 R_5 g_m + C_3 L_5 + 2 C_4 L_5 R_5 g_m + 2 C_4 L_5 + 2 C_5 L_5 R_5 g_m\right) + s\left(C_3 R_5 + 2 C_4 R_5 + 2 L_5 g_m \ldots\right)}$$

10.369 INVALID-ORDER-369 $Z(s) = \left(\infty, \; \infty, \; L_3 s + \frac{1}{C_3 s}, \; \frac{1}{C_4 s}, \; \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \; \infty \right)$

$$H(s) = \frac{C_3 L_3 L_5 g_m s^3 + L_5 g_m s + R_5 g_m + s^4\left(C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5\right) + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3 + C_5 L_5 R_5 g_m - C_5 L_5\right) - 1}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5\right) + s^4\left(2 C_3 C_4 L_3 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5\right) + s^2\left(2 C_3 L_3 g_m + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m \ldots\right)}$$

10.370 INVALID-ORDER-370 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_5 s^3 - C_5 R_5 s + R_5 g_m + s^4 \left(C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5 \right) + s^2 \left(C_3 L_3 R_5 g_m - C_3 L_3 + C_5 L_5 R_5 g_m - C_5 L_5 \right) - 1}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_5 + 2 C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_5 L_3 R_5 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_5 g_m + 2 C_4 C_5 L_5 \right) + s^2 \left(C_3 C_5 R_5 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_5 + 2 C_5 L_5 g_m \right) + s \left(C_3 R_5 g_m \dots \right)}$$

10.371 INVALID-ORDER-371 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5, \ \infty \right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 \right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 \right) + s^2 \left(2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3 \right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 \right) + 2}$$

10.372 INVALID-ORDER-372 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 s^3 + C_3 L_3 R_4 g_m s^2 - C_5 R_4 s + R_4 g_m}{2 C_3 C_4 C_5 L_3 R_4 s^4 + 2 g_m + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 \right) + s^2 \left(C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4 \right) + s \left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 \right)}$$

10.373 INVALID-ORDER-373 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 R_5 s^3 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 \right)}{2 C_3 C_4 C_5 L_3 R_4 R_5 s^4 + 2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + 2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_5 \right) + s^2 \left(C_3 C_5 R_4 R_5 + 2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3 + 2 C_4 C_5 R_4 R_5 \right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5 \dots \right)}$$

10.374 INVALID-ORDER-374 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 L_3 R_4 g_m s^2 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4 \right) + s \left(C_5 R_4 R_5 g_m - C_5 R_4 \right)}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 \right) + s^2 \left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_4 \right) + s \left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5 \right)}$$

10.375 INVALID-ORDER-375 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 - C_3 C_5 L_3 R_4 s^3 - C_5 R_4 s + R_4 g_m + s^2 \left(C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m \right)}{2 C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + 2 g_m + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4 + 2 C_5 L_5 g_m \right) + s \left(C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 \right)}$$

10.376 INVALID-ORDER-376 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 s^4 + C_3 L_3 L_5 R_4 g_m s^3 + L_5 R_4 g_m s - R_4 + s^2 \left(-C_3 L_3 R_4 - C_5 L_5 R_4 \right)}{2 C_3 C_4 C_5 L_3 L_5 R_4 s^5 + 2 R_4 g_m + s^4 \left(2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 \right) + s^3 \left(2 C_3 C_4 L_3 R_4 + C_3 C_5 L_5 R_4 + 2 C_3 L_3 L_5 g_m + 2 C_4 C_5 L_5 R_4 \right) + s^2 \left(2 C_3 L_3 R_4 g_m + 2 C_3 L_3 + C_3 L_5 R_4 g_m + 2 C_4 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 \right) + s \left(C_3 R_4 + 2 C_4 R_4 + 2 L_5 g_m \dots \right)}$$

10.377 INVALID-ORDER-377 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4 \right) + s^2 \left(C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m \right) + s \left(C_5 R_4 R_5 g_m - C_5 R_4 \right)}{2 C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + 2 g_m + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4 R_5 g_m + 2 \dots \right)}$$

10.378 INVALID-ORDER-378 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 R_5 s^4 - R_4 R_5 + s^3 \left(C_3 L_3 L_5 R_4 R_5 g_m - C_3 L_3 L_5 R_4 \right) + s^2 \left(-C_3 L_3 R_4 R_5 - C_5 L_5 R_4 R_5 \right) + s \left(L_5 R_4 R_5 g_m - \dots \right)}{2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_5 + s^4 \left(2 C_3 C_4 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_5 R_4 + 2 C_3 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_5 R_5 \right) + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 + C_3 C_5 L_5 R_4 R_5 + 2 C_3 L_3 L_5 R_4 g_m + 2 C_3 L_3 L_5 R_5 g_m + 2 C_3 L_3 L_5 + 2 C_4 C_5 L_5 R_4 R_5 \right) + s^2 \left(2 C_3 L_3 R_4 R_5 g_m + 2 C_3 L_3 \dots \right)}$$

10.379 INVALID-ORDER-379 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{C_3 L_3 L_5 R_4 g_m s^3 + L_5 R_4 g_m s + R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_4 \right) + s^2 \left(C_3 L_3 R_4 R_5 g_m - C \dots \right)}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4 \right) + s^4 \left(2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5 \right) + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_3 L_3 L_5 g_m + 2 C_4 C_5 L_5 R_4 R_5 g_m + 2 C_4 \dots \right)}$$

10.380 INVALID-ORDER-380 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_5 L_3 R_4 R_5 s^3 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^4\left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_4\right) + s^2}{2 R_4 g_m + 2 R_5 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(2 C_3 C_4 C_5 L_3 R_4 R_5 + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3\left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + 2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_5 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_4}$

10.381 INVALID-ORDER-381 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$H(s) = \dfrac{R_5 g_m + s^3\left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4\right) + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3\right) + s\left(C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2 g_m + s^3\left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3\right) + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 L_3 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4\right)}$

10.382 INVALID-ORDER-382 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 R_4 s^4 + g_m + s^3\left(C_3 C_4 L_3 R_4 g_m - C_3 C_5 L_3\right) + s^2\left(C_3 L_3 g_m - C_4 C_5 R_4\right) + s\left(C_4 R_4 g_m - C_5\right)}{s^4\left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3\right) + s^3\left(C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$

10.383 INVALID-ORDER-383 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 R_4 R_5 s^4 + R_5 g_m + s^3\left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 - C_3 C_5 L_3 R_5\right) + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3 - C_4 C_5 R_4 R_5\right) + s\left(C_4 R_4 R_5 g_m - C_4 R_4 - C_5 R_5\right) - 1}{2 g_m + s^4\left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_5 L_3 R_5 g_m\right) + s^2\left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + C_3 C_5 R_5 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4 R_5 g_m + 2 C_4 C_5 R_5\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5\right)}$

10.384 INVALID-ORDER-384 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{g_m + s^4\left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4\right) + s^3\left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3\right) + s^2\left(C_3 L_3 g_m + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4\right) + s\left(C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{s^4\left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$

10.385 INVALID-ORDER-385 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + g_m + s^4\left(-C_3 C_4 C_5 L_3 R_4 + C_3 C_5 L_3 L_5 g_m\right) + s^3\left(C_3 C_4 L_3 R_4 g_m - C_3 C_5 L_3 + C_4 C_5 L_5 R_4 g_m\right) + s^2\left(C_3 L_3 g_m - C_4 C_5 R_4 + C_5 L_5 g_m\right) + s\left(C_4 R_4 g_m - C_5\right)}{2 C_3 C_4 C_5 L_3 L_5 g_m s^5 + s^4\left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3\left(C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$

10.386 INVALID-ORDER-386 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_5 R_4 s^5 + s^4\left(C_3 C_4 L_3 L_5 R_4 g_m - C_3 C_5 L_3 L_5\right) + s^3\left(-C_3 C_4 L_3 R_4 + C_3 L_3 L_5 g_m - C_4 C_5 L_5 R_4\right) + s^2\left(-C_3 L_3 + C_4 L_5 R_4 g_m - C_5 L_5\right) + s\left(-C_4 R_4 + L_5 g_m\right) - 1}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5\right) + s^4\left(C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_5 R_4 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5\right) + s^2\left(C_3 C_4 R_4 + 2 C_3 L_3 g_m + C_3 L_5 g_m + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) +}$

10.387 INVALID-ORDER-387 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + g_m + s^4\left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 + C_3 C_5 L_3 L_5 g_m\right) + s^3\left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_5 R_4 g_m\right) + s^2\left(C_3 L_3 g_m + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_5 L_5 g_m\right) + s\left(C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{2 C_3 C_4 C_5 L_3 L_5 g_m s^5 + s^4\left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5}$

10.388 INVALID-ORDER-388 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_5 R_4 R_5 s^5 - R_5 + s^4\left(C_3 C_4 L_3 L_5 R_4 R_5 g_m - C_3 C_4 L_3 L_5 R_4 - C_3 C_5 L_3 L_5 R_5\right) + s^3\left(-C_3 C_4 L_3 R_4 R_5 + C_3 L_3 L_5 R_5 g_m - C_3 L_3 L_5 - C_4 C_5 L_5 R_4 R_5\right) + s}{2 R_5 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5\right) + s^4\left(C_3 C_4 C_5 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_4 L_3 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_5 + 2 C_3 C_5 L_3 L_5 R_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_5 + C_3 C_4 L_5 R_4 R_5 g_m + C_3 C_4 L_5 R_4 + C_3 C_5 L_5 R_5 + 2 C_3 L_3 L_5 g_m + 2}$

10.389 INVALID-ORDER-389 $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$H(s) = \dfrac{R_5 g_m + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5\right) + s^3\left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 + C_3 L_3 L_5 g_m + C_4 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4\right) +}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5\right) + s^4\left(C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_5 R_4 g_m + C_3 C_5 L_5 R_5 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m +}$

10.390 INVALID-ORDER-390 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{R_5 g_m + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(-C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5\right) + s^3\left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 - C_3 C_5 L_3 R_5\right.}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5\right) + s^4\left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(C_3 C_4 C_5 R_4 R_5 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_5 L_3 R_5 g_m + \cdots\right.}$

10.391 INVALID-ORDER-391 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_5 g_m + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3 + C_4 L_4 R_5 g_m - C_4 L_4\right) - 1}{2 C_3 C_4 L_3 L_4 g_m s^4 + 2 g_m + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s^2\left(2 C_3 L_3 g_m + 2 C_4 L_4 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4\right)}$

10.392 INVALID-ORDER-392 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 s^5 + C_3 C_4 L_3 L_4 g_m s^4 - C_5 s + g_m + s^3\left(-C_3 C_5 L_3 - C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + C_4 L_4 g_m\right)}{2 C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4\left(2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4\right) + s^3\left(2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$

10.393 INVALID-ORDER-393 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_5 s^5 - C_5 R_5 s + R_5 g_m + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3\left(-C_3 C_5 L_3 R_5 - C_4 C_5 L_4 R_5\right) + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3 + C_4 L_4 R_5 g_m - C_4 L_4\right) - 1}{2 C_3 C_4 C_5 L_3 L_4 R_5 g_m s^5 + 2 g_m + s^4\left(2 C_3 C_4 C_5 L_3 R_5 + C_3 C_4 C_5 L_4 R_5 + 2 C_3 C_4 L_3 L_4 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2 C_3 C_5 L_3 R_5 g_m + 2 C_4 C_5 L_4 R_5 g_m\right) + s^2\left(C_3 C_5 R_5 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_5 + 2 C_4 L_4 g_m\right) + s\left(C_3 R_5 g_m + C_3 + 2 C_4 \cdots\right.}$

10.394 INVALID-ORDER-394 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_4 L_3 L_4 g_m s^4 + g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4\right) + s^3\left(C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + C_4 L_4 g_m\right) + s\left(C_5 R_5 g_m - C_5\right)}{2 C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4\left(2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$

10.395 INVALID-ORDER-395 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 - C_3 C_4 C_5 L_3 L_4 s^5 - C_5 s + g_m + s^4\left(C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3\left(-C_3 C_5 L_3 - C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + C_4 L_4 g_m + C_5 L_5 g_m\right)}{s^5\left(2 C_3 C_4 C_5 L_3 L_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4\left(2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4\right) + s^3\left(2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 + 2 C_4 C_5\right) + s\left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$

10.396 INVALID-ORDER-396 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 L_5 s^6 + C_3 C_4 L_3 L_4 L_5 g_m s^5 + L_5 g_m s + s^4\left(-C_3 C_4 L_3 L_4 - C_3 C_5 L_3 L_5 - C_4 C_5 L_4 L_5\right) + s^3\left(C_3 L_3 L_5 g_m + C_4 L_4 L_5 g_m\right) + s^2\left(-C_3 L_3 - C_4 L_4 - C_5 L_5\right) - 1}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 + C_3 C_4 L_4 + C_3 C_5 L_5 + 2 C_4 C_5 L_5\right) + s^2\left(2 C_3 L_3 g_m + C_3 L_5 g_m + 2 C_4 L_4 g_m + 2 C_4 L_5 g_m + \cdots\right.}$

10.397 INVALID-ORDER-397 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4\right) + s^4\left(C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + C_4 L_4 g_m + C_5 L_5 g_m\right) + s\left(C_5 \cdots\right.}{s^5\left(2 C_3 C_4 C_5 L_3 L_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4\left(2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2\left(C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 \cdots\right.}$

10.398 INVALID-ORDER-398 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 - R_5 + s^5\left(C_3 C_4 L_3 L_4 L_5 R_5 g_m - C_3 C_4 L_3 L_4 L_5\right) + s^4\left(-C_3 C_4 L_3 L_4 R_5 - C_3 C_5 L_3 L_5 R_5 - C_4 C_5 L_4 L_5 R_5\right) + s^3\left(C_3 L_3 L_5 R_5 g_m - C_3 L_3 L_5 + \cdots\right.}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m s^6 + 2 R_5 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_5 + C_3 C_4 C_5 L_4 L_5 R_5 + 2 C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4\left(2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_5 + C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_4 C_5 L_4 L_5 R_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_5 + C_3 C_4 L_4 \cdots\right.}$

10.399 INVALID-ORDER-399 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_4 L_3 L_4 L_5 g_m s^5 + L_5 g_m s + R_5 g_m + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4 + C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5 + C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5\right) + s^3\left(C_3 \cdots\right.}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 \cdots\right.}$

10.400 **INVALID-ORDER-400** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty \right)$

$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_5 s^5 - C_5 R_5 s + R_5 g_m + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4 + C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5 + C_4 C_6 \ldots}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(2 C_3 C_4 C_5 L_3 R_5 + C_3 C_4 C_5 L_4 R_5 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + \ldots}$

10.401 **INVALID-ORDER-401** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5,\ \infty \right)$

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

10.402 **INVALID-ORDER-402** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{1}{C_5 s},\ \infty \right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_4 s^4 + C_3 L_3 L_4 g_m s^3 - C_5 L_4 s^2 + L_4 g_m s}{2 C_3 C_4 C_5 L_3 L_4 s^5 + 2 C_5 s + 2 g_m + s^4\left(2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m\right) + s^3\left(2 C_3 C_5 L_3 + C_3 C_5 L_4 + 2 C_4 C_5 L_4\right) + s^2\left(2 C_3 L_3 g_m + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right)}$$

10.403 **INVALID-ORDER-403** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty \right)$

$H(s) = \frac{-C_3 C_5 L_3 L_4 R_5 s^4 - C_5 L_4 R_5 s^2 + s^3\left(C_3 L_3 L_4 R_5 g_m - C_3 L_3 L_4\right) + s\left(L_4 R_5 g_m - L_4\right)}{2 C_3 C_4 C_5 L_3 L_4 R_5 s^5 + 2 R_5 g_m + s^4\left(2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_5 L_3 L_4 R_5 g_m\right) + s^3\left(2 C_3 C_5 L_3 R_5 + C_3 C_5 L_4 R_5 + 2 C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_5\right) + s^2\left(2 C_3 L_3 R_5 g_m + 2 C_3 L_3 + C_3 L_4 R_5 g_m + C_3 L_4 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 + 2 C_5 L_4 R_5 g_m\right) + s\left(2 C_5 R_5 + 2 L_4 g_m + \ldots\right)}$

10.404 **INVALID-ORDER-404** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5 + \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \frac{C_3 L_3 L_4 g_m s^3 + L_4 g_m s + s^4\left(C_3 C_5 L_3 L_4 R_5 g_m - C_3 C_5 L_3 L_4\right) + s^2\left(C_5 L_4 R_5 g_m - C_5 L_4\right)}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4\right) + s^4\left(2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m\right) + s^3\left(2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4\right) + s^2\left(2 C_3 L_3 g_m + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s\left(2 C_5 R_5 g_m + 2 C_5\right)}$

10.405 **INVALID-ORDER-405** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \frac{C_3 C_5 L_3 L_4 L_5 g_m s^5 - C_3 C_5 L_3 L_4 s^4 - C_5 L_4 s^2 + L_4 g_m s + s^3\left(C_3 L_3 L_4 g_m + C_5 L_4 L_5 g_m\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 C_3 C_4 C_5 L_3 L_4 s^5 + 2 C_5 s + 2 g_m + s^4\left(2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_5 g_m + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2 C_3 C_5 L_3 + C_3 C_5 L_4 + 2 C_4 C_5 L_4\right) + s^2\left(2 C_3 L_3 g_m + C_3 L_4 g_m + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m + 2 C_5 L_5 g_m\right)}$

10.406 **INVALID-ORDER-406** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty \right)$

$H(s) = \frac{-C_3 C_5 L_3 L_4 L_5 s^5 + C_3 L_3 L_4 L_5 g_m s^4 + L_4 L_5 g_m s^2 - L_4 s + s^3\left(-C_3 L_3 L_4 - C_5 L_4 L_5\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5\left(2 C_3 C_4 L_3 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2 C_3 C_4 L_3 L_4 + 2 C_3 C_5 L_3 L_5 + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5\right) + s^3\left(2 C_3 L_3 L_4 g_m + 2 C_3 L_3 L_5 g_m + C_3 L_4 L_5 g_m + 2 C_4 L_4 L_5 g_m + 2 C_5 L_4 L_5 g_m\right) + s^2\left(2 C_3 L_3 + C_3 L_4 + 2 C_4 L_4 + 2 C_5 L_5\right) + s\left(2 L_4 g_m + 2 L_5 \ldots\right)}$

10.407 **INVALID-ORDER-407** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \frac{C_3 C_5 L_3 L_4 L_5 g_m s^5 + L_4 g_m s + s^4\left(C_3 C_5 L_3 L_4 R_5 g_m - C_3 C_5 L_3 L_4\right) + s^3\left(C_3 L_3 L_4 g_m + C_5 L_4 L_5 g_m\right) + s^2\left(C_5 L_4 R_5 g_m - C_5 L_4\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4\right) + s^4\left(2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_5 g_m + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4\right) + s^2 \ldots}$

10.408 **INVALID-ORDER-408** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty \right)$

$H(s) = \frac{-C_3 C_5 L_3 L_4 L_5 R_5 s^5 - L_4 R_5 s + s^4\left(C_3 L_3 L_4 L_5 R_5 g_m - C_3 L_3 L_4 L_5\right) + s^3\left(-C_3 L_3 L_4 R_5 - C_5 L_4 L_5 R_5\right) + s^2\left(L_4 L_5 R_5 g_m - \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 + 2 R_5 + s^5\left(2 C_3 C_4 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5 + 2 C_3 C_5 L_3 L_4 L_5 R_5 g_m\right) + s^4\left(2 C_3 C_4 L_3 L_4 R_5 + 2 C_3 C_5 L_3 L_5 R_5 + C_3 C_5 L_4 L_5 R_5 + 2 C_3 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 R_5\right) + s^3\left(2 C_3 L_3 L_4 R_5 g_m + 2 C_3 L_3 L_5 R_5 g_m + 2 C_3 L_3 L_5 + C_3 L_4 L_5 R_5 g_m + C_3 L_4 L_5 \ldots\right)}$

10.409 **INVALID-ORDER-409** $Z(s) = \left(\infty,\ \infty,\ L_3 s + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty \right)$

$H(s) = \frac{C_3 L_3 L_4 L_5 g_m s^4 + L_4 L_5 g_m s^2 + s^5\left(C_3 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_5 L_3 L_4 L_5\right) + s^3\left(C_3 L_3 L_4 R_5 g_m - C_3 L_3 L_4 + C_5 L_4 L_5 \ldots\right)}{2 R_5 g_m + s^6\left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(2 C_3 C_4 L_3 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5 + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_4 L_5\right) + s^3\left(2 C_3 L_3 L_4 g_m + \ldots\right)}$

10.410 **INVALID-ORDER-410** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_4 R_5 s^4 - C_5 L_4 R_5 s^2 + s^5 \left(C_3 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_5 L_3 L_4 L_5\right) + s^3 \left(C_3 L_3 L_4 R_5 g_m -}{2 R_5 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_5 + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5 + C_3 C_5 L_4 L_5 R_5 g_m + C_3 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_4}$$

10.411 **INVALID-ORDER-411** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^4 \left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4\right) + s^2 \left(C_3 L_3 R_5 g_m - C_3 L_3 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2 C_3 C_4 L_3 L_4 g_m s^4 + 2 g_m + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s^2 \left(C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 L_3 g_m + 2 C_4 L_4 g_m\right) + s \left(C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4\right)}$$

10.412 **INVALID-ORDER-412** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 s^5 + g_m + s^4 \left(-C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m - C_3 C_5 L_3 - C_4 C_5 L_4\right) + s^2 \left(C_3 L_3 g_m - C_4 C_5 R_4 + C_4 L_4 g_m\right) + s \left(C_4 R_4 g_m - C_5\right)}{2 C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4\right) + s^3 \left(C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2 \left(C_3 C_4 R_4 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5\right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.413 **INVALID-ORDER-413** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_5 s^5 + R_5 g_m + s^4 \left(-C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 - C_3 C_5 L_3 R_5 - C_4 C_5 L_4 R_5\right) + s^2 \left(C_3 L_3 R_5 g_m - C_3 L_3 - C_4 C_5 R_5}{2 C_3 C_4 C_5 L_3 L_4 R_5 g_m s^5 + 2 g_m + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 + C_3 C_4 C_5 L_4 R_5 + 2 C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(C_3 C_4 C_5 R_4 R_5 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2 C_3 C_5 L_3 R_5 g_m + 2 C_4 C_5 L_4 R_5 g_m\right) + s^2 \left(C_3 C_4 R_4 R_5 g_m +}$$

10.414 **INVALID-ORDER-414** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4\right) + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2 \left(C_3 L_3 g_m + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 + C_4 L_4 g_m\right)}{2 C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3 \left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2 \left(C_3 C_4 R_4 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m +}$$

10.415 **INVALID-ORDER-415** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5 \left(-C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_3 L_5 R_4 g_m\right) + s^4 \left(-C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m - C_3 C_5 L_3 - C_4 C_5 L_4 + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 g_m - C_4 C_5 R_4 + C_4 L_4}{s^5 \left(2 C_3 C_4 C_5 L_3 L_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4 + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3 \left(C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_4 g_m + 2 C_4 C_5 L_5 g_m\right) + s^2 \left(C_3 C_4 R_4 g_m + C_3}$$

10.416 **INVALID-ORDER-416** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5 \left(-C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(-C_3 C_4 L_3 L_4 + C_3 C_4 L_3 L_5 R_4 g_m - C_3 C_5 L_3 L_5 - C_4 C_5 L_4 L_5\right) + s^3 \left(-C_3 C_4 L_3 R_4 + C_3 L_3 L_5 g_m - C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 + C_3 C_4 L_4 + C_3 C_4 L_5 R_4 g_m + C_4}$$

10.417 **INVALID-ORDER-417** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_3 L_5 R_4 g_m\right) + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_4 R_5}{s^5 \left(2 C_3 C_4 C_5 L_3 L_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4 + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3 \left(C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5}$$

10.418 **INVALID-ORDER-418** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 - R_5 + s^5 \left(-C_3 C_4 C_5 L_3 L_5 R_4 R_5 + C_3 C_4 L_3 L_4 L_5 R_5 g_m - C_3 C_4 L_3 L_4 L_5\right) + s^4 \left(-C_3 C_4 L_3 L_4 R_5 + C_3 C_4 L_3 L_5 R_4 R_5 g_m -}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m s^6 + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 + C_3 C_4 C_5 L_4 L_5 R_5 + 2 C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 C_5 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_4 L_3 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_5 + C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2 C_3}$$

10.419 **INVALID-ORDER-419** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4 + C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5}$$

10.420   INVALID-ORDER-420 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{R_5 g_m + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(-C_3 C_4 C_5 L_3 L_4 R_5 + C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4 \left(-C_3 C_4 C_5 L_3 R_4 R_5 + \cdots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 + C_3 C_4 C_5 L_4 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 \cdots\right)}$

10.421   INVALID-ORDER-421 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{s^3 \left(C_3 L_3 L_4 R_4 R_5 g_m - C_3 L_3 L_4 R_4\right) + s \left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2 R_4 R_5 g_m + 2 R_4 + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_4\right) + s^3 \left(2 C_3 L_3 L_4 R_4 g_m + 2 C_3 L_3 L_4 R_5 g_m + 2 C_3 L_3 L_4\right) + s^2 \left(2 C_3 L_3 R_4 R_5 g_m + 2 C_3 L_3 R_4 + C_3 L_4 R_4 R_5 g_m + C_3 L_4 R_4 + 2 C_4 L_4 R_4 R_5 g_m + 2 C_4 L_4 R_4\right) + s \left(2 L_4 R_4 g_m + 2 L_4 R_4 R_5 g_m + 2 L_4\right)}$

10.422   INVALID-ORDER-422 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 R_4 s^4 + C_3 L_3 L_4 R_4 g_m s^3 - C_5 L_4 R_4 s^2 + L_4 R_4 g_m s}{2 C_3 C_4 C_5 L_3 L_4 R_4 s^5 + 2 R_4 g_m + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4\right) + s^3 \left(2 C_3 C_5 L_3 R_4 + C_3 C_5 L_4 R_4 + 2 C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_4\right) + s^2 \left(2 C_3 L_3 R_4 g_m + C_3 L_4 R_4 g_m + 2 C_4 L_4 R_4 g_m + 2 C_5 L_4 R_4 g_m + 2 C_5 L_4\right) + s \left(2 C_5 R_4 + 2 L_4 g_m\right)}$

10.423   INVALID-ORDER-423 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 R_4 R_5 s^4 - C_5 L_4 R_4 R_5 s^2 + s^3 \left(C_3 L_3 L_4 R_4 R_5 g_m - C_3 L_3 L_4 R_4\right) + s \left(L_4 R_4 R_5 g_m - L_4 R_4\right)}{2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_4 + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_4 + 2 C_3 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 R_5\right) + s^3 \left(2 C_3 C_5 L_3 R_4 R_5 + C_3 C_5 L_4 R_4 R_5 + 2 C_3 L_3 L_4 R_4 g_m + 2 C_3 L_3 L_4 R_5 g_m + 2 C_3 L_3 L_4 + 2 C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(2 C_3 L_3 R_4 R_5 g_m + 2 C_3 L_3 \cdots\right)}$

10.424   INVALID-ORDER-424 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 L_3 L_4 R_4 g_m s^3 + L_4 R_4 g_m s + s^4 \left(C_3 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_5 L_3 L_4 R_4\right) + s^2 \left(C_5 L_4 R_4 R_5 g_m - C_5 L_4 R_4\right)}{2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_5 L_3 L_4\right) + s^3 \left(2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_4 + C_3 C_5 L_4 R_4 R_5 g_m + C_3 C_5 L_4 R_4 + 2 C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_4\right) + \cdots}$

10.425   INVALID-ORDER-425 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_5 L_3 L_4 L_5 R_4 g_m s^5 - C_3 C_5 L_3 L_4 R_4 s^4 - C_5 L_4 R_4 s^2 + L_4 R_4 g_m s + s^3 \left(C_3 L_3 L_4 R_4 g_m + C_5 L_4 L_5 R_4 g_m\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + 2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 + 2 C_3 C_5 L_3 L_5 R_4 g_m + C_3 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(2 C_3 C_5 L_3 R_4 + C_3 C_5 L_4 R_4 + 2 C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_4 \cdots\right)}$

10.426   INVALID-ORDER-426 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 L_5 R_4 s^5 + C_3 L_3 L_4 L_5 R_4 g_m s^4 + L_4 L_5 R_4 g_m s^2 - L_4 R_4 s + s^3 \left(-C_3 L_3 L_4 R_4 - C_5 L_4 L_5 R_4\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 + 2 R_4 + s^5 \left(2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 + 2 C_3 C_5 L_3 L_5 R_4 + C_3 C_5 L_4 L_5 R_4 + 2 C_3 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 R_4\right) + s^3 \left(2 C_3 L_3 L_4 R_4 g_m + 2 C_3 L_3 L_4 + 2 C_3 L_3 L_5 R_4 g_m + C_3 L_4 L_5 R_4 g_m + 2 C_4 \cdots\right)}$

10.427   INVALID-ORDER-427 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_5 L_3 L_4 L_5 R_4 g_m s^5 + L_4 R_4 g_m s + s^4 \left(C_3 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_5 L_3 L_4 \cdots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + 2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_4 + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 + 2 C_3 C_5 L_3 L_5 R_4 g_m + C_3 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(2 C_3 C_5 \cdots\right)}$

10.428   INVALID-ORDER-428 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 L_5 R_4 R_5 s^5 - L_4 R_4 R_5 \cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 s^6 + 2 R_4 R_5 + s^5 \left(2 C_3 C_4 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5 R_4 + 2 C_3 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_5\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 + 2 C_3 C_5 L_3 L_5 R_4 R_5 + C_3 C_5 L_4 L_5 R_4 R_5 + 2 C_3 L_3 L_4 L_5 R_4 g_m + 2 C_3 L_3 L_4 L_5 R_5 g_m + 2 C_3 L_3 L_4 L_5 + 2 C_4 C_5 \cdots\right)}$

10.429   INVALID-ORDER-429 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{C_3 L_3 L_4 L_5 R_4 \cdots}{2 R_4 R_5 g_m + 2 R_4 + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5 \left(2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_4 L_5\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_4 + 2 C_3 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_5 R_4 + C_3 C_5 L_4 \cdots\right)}$

10.430 **INVALID-ORDER-430** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{}{2R_4R_5g_m + 2R_4 + s^6 \left(2C_3C_4C_5L_3L_4L_5R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_4 \right) + s^5 \left(2C_3C_4C_5L_3L_4R_4R_5 + 2C_3C_5L_3L_4L_5R_4g_m + 2C_3C_5L_3L_4L_5R_5g_m + 2C_3C_5L_3L_4L_5 \right) + s^4 \left(2C_3C_4L_3L_4R_4R_5g_m + 2C_3C_4L_3L_4R_4 + 2C_3C_5L_3L_4R_4R_5g_m + 2C_3C_5L_3L_4R_5 + 2C_3C_5L_3L_4 \right)}$

10.431 **INVALID-ORDER-431** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{R_4R_5g_m - R_4 + s^4 \left(C_3C_4L_3L_4R_4R_5g_m - C_3C_4L_3L_4R_4 \right) + s^3 \left(C_3L_3L_4R_5g_m - C_3L_3L_4 \right) + s^2 \left(C_3L_3R_4R_5g_m - C_3L_3R_4 + C_4L_4R_4R_5g_m - C_4L_4R_4 \right) + s \left(L_4R_5g_m - L_4 \right)}{2R_4g_m + 2R_5g_m + s^4 \left(2C_3C_4L_3L_4R_4g_m + 2C_3C_4L_3L_4R_5g_m + 2C_3C_4L_3L_4 \right) + s^3 \left(C_3C_4L_4R_4R_5g_m + C_3C_4L_4R_4 + 2C_3L_3L_4g_m \right) + s^2 \left(2C_3L_3R_4g_m + 2C_3L_3R_5g_m + 2C_3L_3 + C_3L_4R_5g_m + C_3L_4 + 2C_4L_4R_4g_m + 2C_4L_4R_5g_m + 2C_4L_4 \right) + s \left(C_3R_4R_5g_m + C_3R_4 + \cdots \right)}$

10.432 **INVALID-ORDER-432** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_4s^5 + R_4g_m + s^4 \left(C_3C_4L_3L_4R_4g_m - C_3C_5L_3L_4 \right) + s^3 \left(-C_3C_5L_3R_4 + C_3L_3L_4g_m - C_4C_5L_4R_4 \right) + s^2 \left(C_3L_3R_4g_m + C_4L_4R_4g_m - C_5L_4 \right) + s \left(-C_5R_4 + L_4g_m \right)}{2g_m + s^5 \left(2C_3C_4C_5L_3L_4R_4g_m + 2C_3C_4C_5L_3L_4 \right) + s^4 \left(C_3C_4C_5L_4R_4 + 2C_3C_4L_3L_4g_m + 2C_3C_5L_3L_4g_m \right) + s^3 \left(C_3C_4L_4R_4g_m + 2C_3C_5L_3R_4g_m + 2C_3C_5L_3 + C_3C_5L_4 + 2C_4C_5L_4R_4g_m + 2C_4C_5L_4 \right) + s^2 \left(C_3C_5R_4 + 2C_3L_3g_m + C_3L_4g_m + 2C_4L_4g_m + 2C_5L_4g_m \right) + \cdots}$

10.433 **INVALID-ORDER-433** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_4R_5s^5 + R_4R_5g_m - R_4 + s^4 \left(C_3C_4L_3L_4R_4R_5g_m - C_3C_4L_3L_4R_4 - C_3C_5L_3L_4R_5 \right) + s^3 \left(-C_3C_5L_3R_4R_5 + C_3L_3L_4R_5g_m - C_3L_3 \cdots \right)}{2R_4g_m + 2R_5g_m + s^5 \left(2C_3C_4C_5L_3L_4R_4R_5g_m + 2C_3C_4C_5L_3L_4R_5 \right) + s^4 \left(C_3C_4C_5L_4R_4R_5 + 2C_3C_4L_3L_4R_4g_m + 2C_3C_4L_3L_4R_5g_m + 2C_3C_4L_3L_4 + 2C_3C_5L_3L_4R_5g_m \right) + s^3 \left(C_3C_4L_4R_4R_5g_m + C_3C_4L_4R_4 + 2C_3C_5L_3R_4R_5g_m + 2C_3C_5L_3R_5 + C_3C_5L_4R_5 + 2C_3L_3 \cdots \right)}$

10.434 **INVALID-ORDER-434** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{R_4g_m + s^5 \left(C_3C_4C_5L_3L_4R_4R_5g_m - C_3C_4C_5L_3L_4R_4 \right) + s^4 \left(C_3C_4L_3L_4R_4g_m + C_3C_5L_3L_4R_5g_m - C_3C_5L_3L_4 \right) + s^3 \left(C_3C_5L_3R_4R_5g_m - C_3C_5L_3R_4 + C_3L_3L_4g_m + C_4C_5L_4R_4R_5g_m - C_4C_5L_4R_4 \cdots \right)}{2g_m + s^5 \left(2C_3C_4C_5L_3L_4R_4g_m + 2C_3C_4C_5L_3L_4R_5g_m + 2C_3C_4C_5L_3L_4 \right) + s^4 \left(C_3C_4C_5L_4R_4R_5g_m + C_3C_4C_5L_4R_4 + 2C_3C_4L_3L_4g_m + 2C_3C_5L_3L_4g_m \right) + s^3 \left(C_3C_4L_4R_4g_m + 2C_3C_5L_3R_4g_m + 2C_3C_5L_3R_5g_m + 2C_3C_5L_3 + C_3C_5L_4R_5g_m + C_3C_5L_4 + 2C_4C_5L_4R_4g_m \cdots \right)}$

10.435 **INVALID-ORDER-435** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_4g_ms^6 + R_4g_m + s^5 \left(-C_3C_4C_5L_3L_4R_4 + C_3C_5L_3L_4L_5g_m \right) + s^4 \left(C_3C_4L_3L_4R_4g_m - C_3C_5L_3L_4 + C_3C_5L_3L_5R_4g_m + C_4C_5L_4L_5R_4g_m \right) + s^3 \left(-C_3C_5L_3R_4 + C_3L_3L_4g_m - C_4C_5L_4 \cdots \right)}{2C_3C_4C_5L_3L_4L_5g_ms^6 + 2g_m + s^5 \left(2C_3C_4C_5L_3L_4R_4g_m + 2C_3C_4C_5L_3L_4 + C_3C_4C_5L_4L_5R_4g_m \right) + s^4 \left(C_3C_4C_5L_4R_4 + 2C_3C_4L_3L_4g_m + 2C_3C_5L_3L_4g_m + 2C_3C_5L_3L_5g_m + C_3C_5L_4L_5g_m + 2C_4C_5L_4L_5g_m \right) + s^3 \left(C_3C_4L_4R_4g_m + 2C_3C_5L_3R_4g_m + 2C_3C_5L_3 + C_3C_5 \cdots \right)}$

10.436 **INVALID-ORDER-436** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_4s^6 - R_4 + s^5 \left(C_3C_4L_3L_4L_5R_4g_m - C_3C_5L_3L_4L_5 \right) + s^4 \left(-C_3C_4L_3L_4R_4 - C_3C_5L_3L_5R_4 + C_3L_3L_4L_5g_m - C_4C_5L_4L_5R_4 \right) + s^3 \cdots}{2R_4g_m + s^6 \left(2C_3C_4C_5L_3L_4L_5R_4g_m + 2C_3C_4C_5L_3L_4L_5 \right) + s^5 \left(C_3C_4C_5L_4L_5R_4 + 2C_3C_4L_3L_4L_5g_m + 2C_3C_5L_3L_4L_5g_m \right) + s^4 \left(2C_3C_4L_3L_4R_4g_m + 2C_3C_4L_3L_4 + C_3C_4L_4L_5R_4g_m + 2C_3C_5L_3L_5R_4g_m + 2C_3C_5L_3L_5 + C_3C_5L_4L_5 + 2C_4C_5L_4L_5R_4g_m + 2C_4C_5L_4L_5 \cdots \right)}$

10.437 **INVALID-ORDER-437** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_4g_ms^6 + R_4g_m + s^5 \left(C_3C_4C_5L_3L_4R_4R_5g_m - C_3C_4C_5L_3L_4R_4 + C_3C_5L_3L_4L_5g_m \right) + s^4 \left(C_3C_4L_3L_4R_4g_m + C_3C_5L_3L_4R_5g_m - C_3C_5L_3L_4 + C_3C_5L_3L_5R_4g_m + C_4C_5L_4 \cdots \right)}{2C_3C_4C_5L_3L_4L_5g_ms^6 + 2g_m + s^5 \left(2C_3C_4C_5L_3L_4R_4g_m + 2C_3C_4C_5L_3L_4R_5g_m + 2C_3C_4C_5L_3L_4 + C_3C_4C_5L_4L_5R_4g_m \right) + s^4 \left(C_3C_4C_5L_4R_4R_5g_m + C_3C_4C_5L_4R_4 + 2C_3C_4L_3L_4g_m + 2C_3C_5L_3L_4g_m + 2C_3C_5L_3L_5g_m + C_3C_5L_4L_5g_m + 2C_4C_5L_4L_5g_m \right) + s^3 \left(C_3C_4 \cdots \right)}$

10.438 **INVALID-ORDER-438** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_4R_5s^6 - R_4R_5 + s^5 \left(C_3C_4L_3L_4L_5R_4R_5g_m - C_3C_4 \cdots \right)}{2R_4R_5g_m + 2R_5 + s^6 \left(2C_3C_4C_5L_3L_4L_5R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_5 \right) + s^5 \left(C_3C_4C_5L_4L_5R_4R_5 + 2C_3C_4L_3L_4L_5R_4g_m + 2C_3C_4L_3L_4L_5R_5g_m + 2C_3C_4L_3L_4L_5 + 2C_3C_5L_3L_4L_5R_5g_m \right) + s^4 \left(2C_3C_4L_3L_4R_4R_5g_m + 2C_3C_4L_3L_4R_5 + C_3C_4L_4L_5R_4R_5g_m + C_3C_4 \cdots \right)}$

10.439 **INVALID-ORDER-439** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{R_4R_5g_m - R_4 + s^6 \left(C_3C_4C_5L_3L_4L_5R_4R_5g_m - C_3C_4C_5L_3L_4L_5R_4 \right) + s^5 \left(C_3C_4L_3L_4L_5R_4g_m + C_3C_5L_3L_4L_5R_5g_m - C_3C_5L_3L_4 \cdots \right)}{2R_4g_m + 2R_5g_m + s^6 \left(2C_3C_4C_5L_3L_4L_5R_4g_m + 2C_3C_4C_5L_3L_4L_5R_5g_m + 2C_3C_4C_5L_3L_4L_5 \right) + s^5 \left(C_3C_4C_5L_4L_5R_4R_5g_m + C_3C_4C_5L_4L_5R_4 + 2C_3C_4L_3L_4L_5g_m + 2C_3C_5L_3L_4L_5g_m \right) + s^4 \left(2C_3C_4L_3L_4R_4g_m + 2C_3C_4L_3L_4R_5g_m + 2C_3C_4L_3L_4 + C_3C_4L_4L_5R_4g_m + \cdots \right)}$

10.440 INVALID-ORDER-440 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5 R_4 \right) + s^5}{2 R_4 g_m + 2 R_5 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 \right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4 + 2 C_3 C_5 L_3 L_4 L_5 g_m \right) + s^4 \left(C_3 C_4 C_5 L_4 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3}$

10.441 INVALID-ORDER-441 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m - C_3 C_4 L_3 L_4 R_4 \right) + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 + C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 \right)}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 \right) + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 \right) + s^2 \left(2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3 + 2 C_4 L_4 R_4 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 \right) + s \left(C_3 R_4 R_5 g_m + C_3 R_4 + 2 \right)}$

10.442 INVALID-ORDER-442 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_4 s^5 + C_3 C_4 L_3 L_4 R_4 g_m s^4 - C_5 R_4 s + R_4 g_m + s^3 \left(-C_3 C_5 L_3 R_4 - C_4 C_5 L_4 R_4 \right) + s^2 \left(C_3 L_3 R_4 g_m + C_4 L_4 R_4 g_m \right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4 \right) + s^2 \left(C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4 + 2 C_4 L_4 g_m \right) + s \left(C \right)}$

10.443 INVALID-ORDER-443 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 - C_5 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m - C_3 C_4 L_3 L_4 R_4 \right) + s^3 \left(-C_3 C_4 \right.}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_4 C_5 L_4 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 \right) + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + 2 C_3 C_5 L_3 R_4 R_5 g_m + \right.}$

10.444 INVALID-ORDER-444 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_4 L_3 L_4 R_4 g_m s^4 + R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_4 \right) + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4 + C_4 C_5 L_4 R_4 R_5 g_m - C_4}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 + \right.}$

10.445 INVALID-ORDER-445 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 - C_3 C_4 C_5 L_3 L_4 R_4 s^5 - C_5 R_4 s + R_4 g_m + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_5 R_4 g_m + C_4 C_5 L_4 L_5 R_4 g_m \right) + s^3 \left(-C_3}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 + 2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_3 R \right.}$

10.446 INVALID-ORDER-446 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 + C_3 C_4 L_3 L_4 L_5 R_4 g_m s^5 + L_5 R_4 g_m s - R_4 + s^4 \left(-C_3 C_4 L_3 L_4 R_4 - C_3 C_5 L_3 L_5 R_4 - C_4}{2 R_4 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 \right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 C_5 L_4 L_5 R_4 + 2 C_3 C_4 L_3 L_4 L_5 g_m \right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_4 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 + 2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_4 C}$

10.447 INVALID-ORDER-447 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_4 \right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 + 2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_5 g_m +}$

10.448 INVALID-ORDER-448 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 L_5 R_4 R}{2 R_4 R_5 g_m + 2 R_5 + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 \right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5 \right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_5 + 2 C_3 C_4 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4}$

10.449 **INVALID-ORDER-449** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_4 L_3 L_4 L_5 R_4 g_m s^5 + L_5 R_4 g_m s}{2 R_4 g_m + 2 R_5 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4 + 2 C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3}$

10.450 **INVALID-ORDER-450** $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{}{2 R_4 g_m + 2 R_5 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 + 2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 + C_3}$

10.451 **INVALID-ORDER-451** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_4 s^2 + L_3 R_4 g_m s}{C_3 C_5 L_3 R_4 s^3 + R_4 g_m + s^2 \left(C_3 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3\right) + s \left(C_5 R_4 + 2 L_3 g_m\right)}$$

10.452 **INVALID-ORDER-452** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_4 R_5 s^2 + s \left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{C_3 C_5 L_3 R_4 R_5 s^3 + R_4 R_5 g_m + R_4 + s^2 \left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_5 L_3 R_4 R_5 g_m + 2 C_5 L_3 R_5\right) + s \left(C_5 R_4 R_5 + 2 L_3 R_4 g_m + 2 L_3 R_5 g_m + 2 L_3\right)}$$

10.453 **INVALID-ORDER-453** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{L_3 R_4 g_m s + s^2 \left(C_5 L_3 R_4 R_5 g_m - C_5 L_3 R_4\right)}{R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4\right) + s^2 \left(C_3 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3 R_5 g_m + 2 C_5 L_3\right) + s \left(C_5 R_4 R_5 g_m + C_5 R_4 + 2 L_3 g_m\right)}$$

10.454 **INVALID-ORDER-454** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_3 L_5 R_4 g_m s^3 - C_5 L_3 R_4 s^2 + L_3 R_4 g_m s}{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 + 2 C_5 L_3 L_5 g_m\right) + s^2 \left(C_3 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3 + C_5 L_5 R_4 g_m\right) + s \left(C_5 R_4 + 2 L_3 g_m\right)}$$

10.455 **INVALID-ORDER-455** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_4 s^3 + L_3 L_5 R_4 g_m s^2 - L_3 R_4 s}{C_3 C_5 L_3 L_5 R_4 s^4 + R_4 + s^3 \left(C_3 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5\right) + s^2 \left(C_3 L_3 R_4 + C_5 L_5 R_4 + 2 L_3 L_5 g_m\right) + s \left(2 L_3 R_4 g_m + 2 L_3 + L_5 R_4 g_m\right)}$$

10.456 **INVALID-ORDER-456** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_3 L_5 R_4 g_m s^3 + L_3 R_4 g_m s + s^2 \left(C_5 L_3 R_4 R_5 g_m - C_5 L_3 R_4\right)}{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 + 2 C_5 L_3 L_5 g_m\right) + s^2 \left(C_3 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3 R_5 g_m + 2 C_5 L_3 + C_5 L_5 R_4 g_m\right) + s \left(C_5 R_4 R_5 g_m + C_5 R_4 + 2 L_3 g_m\right)}$$

10.457 **INVALID-ORDER-457** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_4 R_5 s^3 - L_3 R_4 R_5 s + s^2 \left(L_3 L_5 R_4 R_5 g_m - L_3 L_5 R_4\right)}{C_3 C_5 L_3 L_5 R_4 R_5 s^4 + R_4 R_5 + s^3 \left(C_3 L_3 L_5 R_4 R_5 g_m + C_3 L_3 L_5 R_4 + 2 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_5 L_3 L_5 R_5\right) + s^2 \left(C_3 L_3 R_4 R_5 + C_5 L_5 R_4 R_5 + 2 L_3 L_5 R_4 g_m + 2 L_3 L_5 R_5 g_m + 2 L_3 L_5\right) + s \left(2 L_3 R_4 R_5 g_m + 2 L_3 R_5 + L_5 R_4 R_5 g_m + L_5 R_4\right)}$$

10.458 **INVALID-ORDER-458** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ R_4,\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3L_5R_4g_ms^2 + s^3\left(C_5L_3L_5R_4R_5g_m - C_5L_3L_5R_4\right) + s\left(L_3R_4R_5g_m - L_3R_4\right)}{R_4R_5g_m + R_4 + s^4\left(C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(C_3L_3L_5R_4g_m + 2C_5L_3L_5R_4g_m + 2C_5L_3L_5R_5g_m + 2C_5L_3L_5\right) + s^2\left(C_3L_3R_4R_5g_m + C_3L_3R_4 + C_5L_5R_4R_5g_m + C_5L_5R_4 + 2L_3L_5g_m\right) + s\left(2L_3R_4g_m + 2L_3R_5g_m + 2L_3 + L_5R_4g_m\right)}$$

10.459 **INVALID-ORDER-459** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ R_4,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5L_3R_4R_5s^2 + s^3\left(C_5L_3L_5R_4R_5g_m - C_5L_3L_5R_4\right) + s\left(L_3R_4R_5g_m - L_3R_4\right)}{R_4R_5g_m + R_4 + s^4\left(C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(C_3C_5L_3R_4R_5 + 2C_5L_3L_5R_4g_m + 2C_5L_3L_5R_5g_m + 2C_5L_3L_5\right) + s^2\left(C_3L_3R_4R_5g_m + C_3L_3R_4 + 2C_5L_3R_4R_5g_m + 2C_5L_3R_5 + C_5L_5R_4R_5g_m + C_5L_5R_4\right) + s\left(C_5R_4R_5 + 2L_3R_4g_m + 2L_3R_5g_m + 2L_3\right)}$$

10.460 **INVALID-ORDER-460** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{-C_5L_3s^2 + L_3g_ms}{C_5s + g_m + s^3\left(C_3C_5L_3 + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4L_3g_m + 2C_5L_3g_m\right)}$$

10.461 **INVALID-ORDER-461** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5L_3R_5s^2 + s\left(L_3R_5g_m - L_3\right)}{R_5g_m + s^3\left(C_3C_5L_3R_5 + 2C_4C_5L_3R_5\right) + s^2\left(C_3L_3R_5g_m + C_3L_3 + 2C_4L_3R_5g_m + 2C_4L_3 + 2C_5L_3R_5g_m\right) + s\left(C_5R_5 + 2L_3g_m\right) + 1}$$

10.462 **INVALID-ORDER-462** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3g_ms + s^2\left(C_5L_3R_5g_m - C_5L_3\right)}{g_m + s^3\left(C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4L_3g_m + 2C_5L_3g_m\right) + s\left(C_5R_5g_m + C_5\right)}$$

10.463 **INVALID-ORDER-463** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_5L_3L_5g_ms^3 - C_5L_3s^2 + L_3g_ms}{C_5s + g_m + s^4\left(C_3C_5L_3L_5g_m + 2C_4C_5L_3L_5g_m\right) + s^3\left(C_3C_5L_3 + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4L_3g_m + 2C_5L_3g_m + C_5L_5g_m\right)}$$

10.464 **INVALID-ORDER-464** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_5L_3L_5s^3 + L_3L_5g_ms^2 - L_3s}{s^4\left(C_3C_5L_3L_5 + 2C_4C_5L_3L_5\right) + s^3\left(C_3L_3L_5g_m + 2C_4L_3L_5g_m + 2C_5L_3L_5g_m\right) + s^2\left(C_3L_3 + 2C_4L_3 + C_5L_5\right) + s\left(2L_3g_m + L_5g_m\right) + 1}$$

10.465 **INVALID-ORDER-465** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_5L_3L_5g_ms^3 + L_3g_ms + s^2\left(C_5L_3R_5g_m - C_5L_3\right)}{g_m + s^4\left(C_3C_5L_3L_5g_m + 2C_4C_5L_3L_5g_m\right) + s^3\left(C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4L_3g_m + 2C_5L_3g_m + C_5L_5g_m\right) + s\left(C_5R_5g_m + C_5\right)}$$

10.466 **INVALID-ORDER-466** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{1}{C_4s},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_5L_3L_5R_5s^3 - L_3R_5s + s^2\left(L_3L_5R_5g_m - L_3L_5\right)}{R_5 + s^4\left(C_3C_5L_3L_5R_5 + 2C_4C_5L_3L_5R_5\right) + s^3\left(C_3L_3L_5R_5g_m + C_3L_3L_5 + 2C_4L_3L_5R_5g_m + 2C_4L_3L_5 + 2C_5L_3L_5R_5g_m\right) + s^2\left(C_3L_3R_5 + 2C_4L_3R_5 + C_5L_5R_5 + 2L_3L_5g_m\right) + s\left(2L_3R_5g_m + L_5R_5g_m + L_5\right)}$$

10.467 **INVALID-ORDER-467** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{L_3 L_5 g_m s^2 + s^3 (C_5 L_3 L_5 R_5 g_m - C_5 L_3 L_5) + s (L_3 R_5 g_m - L_3)}{R_5 g_m + s^4 (C_3 C_5 L_3 L_5 R_5 g_m + C_3 C_5 L_3 L_5 + 2 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_5) + s^3 (C_3 L_3 L_5 g_m + 2 C_4 L_3 L_5 g_m + 2 C_5 L_3 L_5 g_m) + s^2 (C_3 L_3 R_5 g_m + C_3 L_3 + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3 + C_5 L_5 R_5 g_m + C_5 L_5) + s (2 L_3 g_m + L_5 g_m) + 1}$$

10.468 **INVALID-ORDER-468** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_5 s^2 + s^3 (C_5 L_3 L_5 R_5 g_m - C_5 L_3 L_5) + s (L_3 R_5 g_m - L_3)}{R_5 g_m + s^4 (C_3 C_5 L_3 L_5 R_5 g_m + C_3 C_5 L_3 L_5 + 2 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_5) + s^3 (C_3 C_5 L_3 R_5 + 2 C_4 C_5 L_3 R_5 + 2 C_5 L_3 L_5 g_m) + s^2 (C_3 L_3 R_5 g_m + C_3 L_3 + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3 + 2 C_5 L_3 R_5 g_m + C_5 L_5 R_5 g_m + C_5 L_5) + s (C_5 R_5 + 2 L_3 g_m) + 1}$$

10.469 **INVALID-ORDER-469** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_4 s^2 + L_3 R_4 g_m s}{R_4 g_m + s^3 (C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4) + s^2 (C_3 L_3 R_4 g_m + 2 C_4 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3) + s (C_5 R_4 + 2 L_3 g_m)}$$

10.470 **INVALID-ORDER-470** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_4 R_5 s^2 + s (L_3 R_4 R_5 g_m - L_3 R_4)}{R_4 R_5 g_m + R_4 + s^3 (C_3 C_5 L_3 R_4 R_5 + 2 C_4 C_5 L_3 R_4 R_5) + s^2 (C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_4 L_3 R_4 R_5 g_m + 2 C_4 L_3 R_4 + 2 C_5 L_3 R_4 R_5 g_m + 2 C_5 L_3 R_5) + s (C_5 R_4 R_5 + 2 L_3 R_4 g_m + 2 L_3 R_5 g_m + 2 L_3)}$$

10.471 **INVALID-ORDER-471** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{L_3 R_4 g_m s + s^2 (C_5 L_3 R_4 R_5 g_m - C_5 L_3 R_4)}{R_4 g_m + s^3 (C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_4) + s^2 (C_3 L_3 R_4 g_m + 2 C_4 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3 R_5 g_m + 2 C_5 L_3) + s (C_5 R_4 R_5 g_m + C_5 R_4 + 2 L_3 g_m)}$$

10.472 **INVALID-ORDER-472** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_3 L_5 R_4 g_m s^3 - C_5 L_3 R_4 s^2 + L_3 R_4 g_m s}{R_4 g_m + s^4 (C_3 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_5 R_4 g_m) + s^3 (C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4 + 2 C_5 L_3 L_5 g_m) + s^2 (C_3 L_3 R_4 g_m + 2 C_4 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3 + C_5 L_5 R_4 g_m) + s (C_5 R_4 + 2 L_3 g_m)}$$

10.473 **INVALID-ORDER-473** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_4 s^3 + L_3 L_5 R_4 g_m s^2 - L_3 R_4 s}{R_4 + s^4 (C_3 C_5 L_3 L_5 R_4 + 2 C_4 C_5 L_3 L_5 R_4) + s^3 (C_3 L_3 L_5 R_4 g_m + 2 C_4 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5) + s^2 (C_3 L_3 R_4 + 2 C_4 L_3 R_4 + C_5 L_5 R_4 + 2 L_3 L_5 g_m) + s (2 L_3 R_4 g_m + 2 L_3 + L_5 R_4 g_m)}$$

10.474 **INVALID-ORDER-474** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_3 L_5 R_4 g_m s^3 + L_3 R_4 g_m s + s^2 (C_5 L_3 R_4 R_5 g_m - C_5 L_3 R_4)}{R_4 g_m + s^4 (C_3 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_5 R_4 g_m) + s^3 (C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_4 + 2 C_5 L_3 L_5 g_m) + s^2 (C_3 L_3 R_4 g_m + 2 C_4 L_3 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3 R_5 g_m + 2 C_5 L_3 + C_5 L_5 R_4 g_m) + s (C_5 R_4 R_5 g_m + C_5 R_4 + 2 L_3 g_m)}$$

10.475 **INVALID-ORDER-475** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_4 R_5 s^3 - L_3 R_4 R_5 s + s^2 (L_3 L_5 R_4 R_5 g_m - L_3 L_5 R_4)}{R_4 R_5 + s^4 (C_3 C_5 L_3 L_5 R_4 R_5 + 2 C_4 C_5 L_3 L_5 R_4 R_5) + s^3 (C_3 L_3 L_5 R_4 R_5 g_m + C_3 L_3 L_5 R_4 + 2 C_4 L_3 L_5 R_4 R_5 g_m + 2 C_4 L_3 L_5 R_4 + 2 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_5 L_3 L_5 R_5) + s^2 (C_3 L_3 R_4 R_5 + 2 C_4 L_3 R_4 R_5 + C_5 L_5 R_4 R_5 + 2 L_3 L_5 R_4 g_m + 2 L_3 L_5 R_5 g_m + 2 L_3 L_5) + s (2 L_3 R_4 R_5 g_m}$$

10.476 INVALID-ORDER-476 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{L_3 L_5 R_4 g_m s^2 + s^3 \left(C_5 L_3 L_5 R_4 R_5 g_m - C_5 L_3 L_5 R_4\right) + s \left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{R_4 R_5 g_m + R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_4 + 2 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_5 R_4\right) + s^3 \left(C_3 L_3 L_5 R_4 g_m + 2 C_4 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5 R_5 g_m + 2 C_5 L_3 L_5\right) + s^2 \left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_4 L_3 R_4 R_5 g_m + 2 C_4 L_3 R_4 + C_5 L_5 R_4 R_5 g_m\right)}$$

10.477 INVALID-ORDER-477 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_4 R_5 s^2 + s^3 \left(C_5 L_3 L_5 R_4 R_5 g_m - C_5 L_3 L_5 R_4\right) + s \left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{R_4 R_5 g_m + R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_4 + 2 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_5 R_4\right) + s^3 \left(C_3 C_5 L_3 R_4 R_5 + 2 C_4 C_5 L_3 R_4 R_5 + 2 C_5 L_3 L_5 R_4 g_m + 2 C_5 L_3 L_5 R_5 g_m + 2 C_5 L_3 L_5\right) + s^2 \left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_4 L_3 R_4 R_5 g_m + 2 C_4 L_3 R_4 + 2 C_5 L_3 R_4 R_5 g_m\right)}$$

10.478 INVALID-ORDER-478 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty \right)$

$$H(s) = \frac{s^2 \left(C_4 L_3 R_4 R_5 g_m - C_4 L_3 R_4\right) + s \left(L_3 R_5 g_m - L_3\right)}{R_5 g_m + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4\right) + s^2 \left(C_3 L_3 R_5 g_m + C_3 L_3 + 2 C_4 L_3 R_4 g_m + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3\right) + s \left(C_4 R_4 R_5 g_m + C_4 R_4 + 2 L_3 g_m\right) + 1}$$

10.479 INVALID-ORDER-479 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_4 C_5 L_3 R_4 s^3 + L_3 g_m s + s^2 \left(C_4 L_3 R_4 g_m - C_5 L_3\right)}{C_3 C_4 C_5 L_3 R_4 s^4 + g_m + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3\right) + s^2 \left(C_3 L_3 g_m + C_4 C_5 R_4 + 2 C_4 L_3 g_m + 2 C_5 L_3 g_m\right) + s \left(C_4 R_4 g_m + C_5\right)}$$

10.480 INVALID-ORDER-480 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_4 C_5 L_3 R_4 R_5 s^3 + s^2 \left(C_4 L_3 R_4 R_5 g_m - C_4 L_3 R_4 - C_5 L_3 R_5\right) + s \left(L_3 R_5 g_m - L_3\right)}{C_3 C_4 C_5 L_3 R_4 R_5 s^4 + R_5 g_m + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4 + C_3 C_5 L_3 R_5 + 2 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_4\right) + s^2 \left(C_3 L_3 R_5 g_m + C_3 L_3 + C_4 C_5 R_4 R_5 + 2 C_4 L_3 R_4 g_m + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3 + 2 C_5 L_3 R_5 g_m\right) + s \left(C_4 R_4 R_5 g_m + C_4 R_4 + C_5 R_5 + 2 L_3 g_m\right) + 1}$$

10.481 INVALID-ORDER-481 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{L_3 g_m s + s^3 \left(C_4 C_5 L_3 R_4 R_5 g_m - C_4 C_5 L_3 R_4\right) + s^2 \left(C_4 L_3 R_4 g_m + C_5 L_3 R_5 g_m - C_5 L_3\right)}{g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 R_4\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3 R_5 g_m + 2 C_4 C_5 L_3\right) + s^2 \left(C_3 L_3 g_m + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4 + 2 C_4 L_3 g_m + 2 C_5 L_3 g_m\right) + s \left(C_4 R_4 g_m + C_5 R_5 g_m + C_5\right)}$$

10.482 INVALID-ORDER-482 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_4 C_5 L_3 L_5 R_4 g_m s^4 + L_3 g_m s + s^3 \left(-C_4 C_5 L_3 R_4 + C_5 L_3 L_5 g_m\right) + s^2 \left(C_4 L_3 R_4 g_m - C_5 L_3\right)}{C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 + C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_3 L_5 g_m\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3 + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 g_m + C_4 C_5 R_4 + 2 C_4 L_3 g_m + 2 C_5 L_3 g_m + C_5 L_5 g_m\right) + s \left(C_4 R_4 g_m + C_5\right)}$$

10.483 INVALID-ORDER-483 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_4 C_5 L_3 L_5 R_4 s^4 - L_3 s + s^3 \left(C_4 L_3 L_5 R_4 g_m - C_5 L_3 L_5\right) + s^2 \left(-C_4 L_3 R_4 + L_3 L_5 g_m\right)}{C_3 C_4 C_5 L_3 L_5 R_4 s^5 + s^4 \left(C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 + 2 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_5\right) + s^3 \left(C_3 C_4 L_3 R_4 + C_3 L_3 L_5 g_m + C_4 C_5 L_5 R_4 + 2 C_4 L_3 L_5 g_m + 2 C_5 L_3 L_5 g_m\right) + s^2 \left(C_3 L_3 + 2 C_4 L_3 R_4 g_m + 2 C_4 L_3 + C_4 L_5 R_4 g_m + C_5 L_5\right) + s \left(C_4 R_4 + 2 L_3 g_m + L_5 g_m\right) + 1}$$

10.484 INVALID-ORDER-484 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_4 C_5 L_3 L_5 R_4 g_m s^4 + L_3 g_m s + s^3 \left(C_4 C_5 L_3 R_4 R_5 g_m - C_4 C_5 L_3 R_4 + C_5 L_3 L_5 g_m\right) + s^2 \left(C_4 L_3 R_4 g_m + C_5 L_3 R_5 g_m - C_5 L_3\right)}{C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 R_4 + C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_3 L_5 g_m\right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3 R_5 g_m + 2 C_4 C_5 L_3 + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 g_m + C_4 C_5 R_4 R_5 g_m + C_4 C_5 R_4 + \right.}$$

10.485 **INVALID-ORDER-485** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_5 R_4 R_5 s^4 - L_3 R_5 s + s^3\left(C_4 L_3 L_5 R_4 R_5 g_m - C_4 L_3 L_5 R_4 - C_5 L_3 L_5 R_5\right) + s^2\left(-C_4 L_3 R_4 R_5 + L_3 L_5 R_5 g_m - L_3 L_5\right)}{C_3 C_4 C_5 L_3 L_5 R_4 R_5 s^5 + R_5 + s^4\left(C_3 C_4 L_3 L_5 R_4 R_5 g_m + C_3 C_4 L_3 L_5 R_4 + C_3 C_5 L_3 L_5 R_5 + 2C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2C_4 C_5 L_3 L_5 R_5\right) + s^3\left(C_3 C_4 L_3 R_4 R_5 + C_3 L_3 L_5 R_5 g_m + C_3 L_3 L_5 + C_4 C_5 L_5 R_4 R_5 + 2C_4 L_3 L_5 R_4 g_m + 2C_4 L_3 L_5 R_5 g_m + 2C_4 L_3 L_5 + 2C_5 L_3 L_5 R_5 g_m\right) + s^2 \cdots}$

10.486 **INVALID-ORDER-486** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{s^4\left(C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_4 C_5 L_3 L_5 R_4\right) + s^3\left(C_4 L_3 L_5 R_4 g_m + C_5 L_3 L_5 R_5 g_m - C_5 L_3 L_5\right) + s^2\left(C_4 L_3 R_4 R_5 g_m - C_4 L_3 R_4 + \cdots\right)}{R_5 g_m + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 R_5 g_m + C_3 C_5 L_3 L_5 + 2C_4 C_5 L_3 L_5 R_4 g_m + 2C_4 C_5 L_3 L_5 R_5 g_m + 2C_4 C_5 L_3 L_5\right) + s^3\left(C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4 + C_3 L_3 L_5 g_m + C_4 C_5 L_5 R_4 R_5 g_m + C_4 C_5 L_5 R_4 + 2C_4 L_3 L_5 \cdots\right)}$

10.487 **INVALID-ORDER-487** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{s^4\left(C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_4 C_5 L_3 L_5 R_4\right) + s^3\left(-C_4 C_5 L_3 R_4 R_5 + C_5 L_3 L_5 R_5 g_m - C_5 L_3 L_5\right) + s^2\left(C_4 L_3 R_4 R_5 \cdots\right)}{R_5 g_m + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_5 L_3 L_5 R_5 g_m + C_3 C_5 L_3 L_5 + 2C_4 C_5 L_3 L_5 R_4 g_m + 2C_4 C_5 L_3 L_5 R_5 g_m + 2C_4 C_5 L_3 L_5\right) + s^3\left(C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4 + C_3 C_5 L_3 R_5 + 2C_4 C_5 L_3 R_4 R_5 g_m + 2C_4 C_5 L_3 R_5 + C_4 C_5 L_5 \cdots\right)}$

10.488 **INVALID-ORDER-488** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{s^3\left(C_4 L_3 L_4 R_5 g_m - C_4 L_3 L_4\right) + s\left(L_3 R_5 g_m - L_3\right)}{2C_4 L_3 L_4 g_m s^3 + 2L_3 g_m s + R_5 g_m + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4\right) + s^2\left(C_3 L_3 R_5 g_m + C_3 L_3 + 2C_4 L_3 R_5 g_m + 2C_4 L_3 + C_4 L_4 R_5 g_m + C_4 L_4\right) + 1}$$

10.489 **INVALID-ORDER-489** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_3 L_4 s^4 + C_4 L_3 L_4 g_m s^3 - C_5 L_3 s^2 + L_3 g_m s}{C_3 C_4 C_5 L_3 L_4 s^5 + C_5 s + g_m + s^4\left(C_3 C_4 L_3 L_4 g_m + 2C_4 C_5 L_3 L_4 g_m\right) + s^3\left(C_3 C_5 L_3 + 2C_4 C_5 L_3 + C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + 2C_4 L_3 g_m + C_4 L_4 g_m + 2C_5 L_3 g_m\right)}$$

10.490 **INVALID-ORDER-490** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 R_5 s^4 - C_5 L_3 R_5 s^2 + s^3\left(C_4 L_3 L_4 R_5 g_m - C_4 L_3 L_4\right) + s\left(L_3 R_5 g_m - L_3\right)}{C_3 C_4 C_5 L_3 L_4 R_5 s^5 + R_5 g_m + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4 + 2C_4 C_5 L_3 L_4 R_5 g_m\right) + s^3\left(C_3 C_5 L_3 R_5 + 2C_4 C_5 L_3 R_5 + C_4 C_5 L_4 R_5 + 2C_4 L_3 L_4 g_m\right) + s^2\left(C_3 L_3 R_5 g_m + C_3 L_3 + 2C_4 L_3 R_5 g_m + 2C_4 L_3 + C_4 L_4 R_5 g_m + C_4 L_4 + 2C_5 L_3 R_5 g_m\right) + s\left(C_5 R_5 + 2L_3 g_m\right) + 1}$

10.491 **INVALID-ORDER-491** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 L_3 L_4 g_m s^3 + L_3 g_m s + s^4\left(C_4 C_5 L_3 L_4 R_5 g_m - C_4 C_5 L_3 L_4\right) + s^2\left(C_5 L_3 R_5 g_m - C_5 L_3\right)}{g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4\right) + s^4\left(C_3 C_4 L_3 L_4 g_m + 2C_4 C_5 L_3 L_4 g_m\right) + s^3\left(C_3 C_5 L_3 R_5 g_m + C_3 C_5 L_3 + 2C_4 C_5 L_3 R_5 g_m + 2C_4 C_5 L_3 + C_4 C_5 L_4 R_5 g_m + C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + 2C_4 L_3 g_m + C_4 L_4 g_m + 2C_5 L_3 g_m\right) + s\left(C_5 R_5 g_m + C_5\right)}$

10.492 **INVALID-ORDER-492** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 g_m s^5 - C_4 C_5 L_3 L_4 s^4 - C_5 L_3 s^2 + L_3 g_m s + s^3\left(C_4 L_3 L_4 g_m + C_5 L_3 L_5 g_m\right)}{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + C_3 C_4 C_5 L_3 L_4 s^5 + C_5 s + g_m + s^4\left(C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + 2C_4 C_5 L_3 L_4 g_m + 2C_4 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_5 L_3 + 2C_4 C_5 L_3 + C_4 C_5 L_4\right) + s^2\left(C_3 L_3 g_m + 2C_4 L_3 g_m + C_4 L_4 g_m + 2C_5 L_3 g_m + C_5 L_5 g_m\right)}$

10.493 **INVALID-ORDER-493** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 s^5 + C_4 L_3 L_4 L_5 g_m s^4 + L_3 L_5 g_m s^2 - L_3 s + s^3\left(-C_4 L_3 L_4 - C_5 L_3 L_5\right)}{C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5\left(C_3 C_4 L_3 L_4 L_5 g_m + 2C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 + C_3 C_5 L_3 L_5 + 2C_4 C_5 L_3 L_5 + C_4 C_5 L_4 L_5\right) + s^3\left(C_3 L_3 L_5 g_m + 2C_4 L_3 L_4 g_m + 2C_4 L_3 L_5 g_m + C_4 L_4 L_5 g_m + 2C_5 L_3 L_5 g_m\right) + s^2\left(C_3 L_3 + 2C_4 L_3 + C_4 L_4 + C_5 L_5\right) + s\left(2L_3 g_m + L_5 g_m\right) + 1}$

10.494 **INVALID-ORDER-494** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ L_4s + \frac{1}{C_4s},\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \frac{C_4C_5L_3L_4L_5g_ms^5 + L_3g_ms + s^4\left(C_4C_5L_3L_4R_5g_m - C_4C_5L_3L_4\right) + s^3\left(C_4L_3L_4g_m + C_5L_3L_5g_m\right) + s^2\left(C_5L_3R_5g_m - C_5L_3\right)}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4\right) + s^4\left(C_3C_4L_3L_4g_m + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_4g_m + 2C_4C_5L_3L_5g_m + C_4C_5L_4L_5g_m\right) + s^3\left(C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3 + C_4C_5L_4R_5g_m + C_4C_5L_4\right) + s^2\left(C_3L_3g_m\ldots\right.}$

10.495 **INVALID-ORDER-495** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ L_4s + \frac{1}{C_4s},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$H(s) = \frac{-C_4C_5L_3L_4L_5R_5s^5 - L_3R_5s + s^4\left(C_4L_3L_4L_5R_5g_m - C_4L_3L_4L_5\right) + s^3\left(-C_4L_3L_4R_5 - C_5L_3L_5R_5\right) + s^2\left(L_3L_5R_5g_m - L_3L_5\ldots\right.}{C_3C_4C_5L_3L_4L_5R_5s^6 + R_5 + s^5\left(C_3C_4L_3L_4L_5R_5g_m + C_3C_4L_3L_4L_5 + 2C_4C_5L_3L_4L_5R_5g_m\right) + s^4\left(C_3C_4L_3L_4R_5 + C_3C_5L_3L_5R_5 + 2C_4C_5L_3L_5R_5 + C_4C_5L_4L_5R_5 + 2C_4L_3L_4L_5g_m\right) + s^3\left(C_3L_3L_5R_5g_m + C_3L_3L_5 + 2C_4L_3L_4R_5g_m + 2C_4L_3L_5R_5g_m + 2C_4L_3L_5 + \ldots\right.}$

10.496 **INVALID-ORDER-496** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ L_4s + \frac{1}{C_4s},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \frac{C_4L_3L_4L_5g_ms^4 + L_3L_5g_ms^2 + s^5\left(C_4C_5L_3L_4L_5R_5g_m - C_4C_5L_3L_4L_5\right) + s^3\left(C_4L_3L_4R_5g_m - C_4L_3L_4 + C_5L_3L_5R_5g_m - \ldots\right.}{R_5g_m + s^6\left(C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(C_3C_4L_3L_4L_5g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4 + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5R_5g_m + 2C_4C_5L_3L_5 + C_4C_5L_4L_5R_5g_m + C_4C_5L_4L_5\right) + s^3\left(C_3L_3L_5g_m + 2C_4L_3\ldots\right.}$

10.497 **INVALID-ORDER-497** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ L_4s + \frac{1}{C_4s},\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$H(s) = \frac{-C_4C_5L_3L_4R_5s^4 - C_5L_3R_5s^2 + s^5\left(C_4C_5L_3L_4L_5R_5g_m - C_4C_5L_3L_4L_5\right) + s^3\left(C_4L_3L_4R_5g_m - C_4L_3L_4\ldots\right.}{R_5g_m + s^6\left(C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(C_3C_4C_5L_3L_4R_5 + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4 + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_4R_5g_m + 2C_4C_5L_3L_5R_5g_m + 2C_4C_5L_3L_5 + C_4C_5L_4L_5R_5g_m + C_4C_5L_4L_5\right) + s^3\left(\ldots\right.}$

10.498 **INVALID-ORDER-498** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{L_4s}{C_4L_4s^2+1},\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{-C_5L_3L_4s^2 + L_3L_4g_ms}{2L_3g_m + L_4g_m + s^3\left(C_3C_5L_3L_4 + 2C_4C_5L_3L_4\right) + s^2\left(C_3L_3L_4g_m + 2C_4L_3L_4g_m + 2C_5L_3L_4g_m\right) + s\left(2C_5L_3 + C_5L_4\right)}$$

10.499 **INVALID-ORDER-499** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{L_4s}{C_4L_4s^2+1},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5L_3L_4R_5s^2 + s\left(L_3L_4R_5g_m - L_3L_4\right)}{2L_3R_5g_m + 2L_3 + L_4R_5g_m + L_4 + s^3\left(C_3C_5L_3L_4R_5 + 2C_4C_5L_3L_4R_5\right) + s^2\left(C_3L_3L_4R_5g_m + C_3L_3L_4 + 2C_4L_3L_4R_5g_m + 2C_4L_3L_4 + 2C_5L_3L_4R_5g_m\right) + s\left(2C_5L_3R_5 + C_5L_4R_5 + 2L_3L_4g_m\right)}$$

10.500 **INVALID-ORDER-500** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{L_4s}{C_4L_4s^2+1},\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3L_4g_ms + s^2\left(C_5L_3L_4R_5g_m - C_5L_3L_4\right)}{2L_3g_m + L_4g_m + s^3\left(C_3C_5L_3L_4R_5g_m + C_3C_5L_3L_4 + 2C_4C_5L_3L_4R_5g_m + 2C_4C_5L_3L_4\right) + s^2\left(C_3L_3L_4g_m + 2C_4L_3L_4g_m + 2C_5L_3L_4g_m\right) + s\left(2C_5L_3R_5g_m + 2C_5L_3 + C_5L_4R_5g_m + C_5L_4\right)}$$

10.501 **INVALID-ORDER-501** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{L_4s}{C_4L_4s^2+1},\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_5L_3L_4L_5g_ms^3 - C_5L_3L_4s^2 + L_3L_4g_ms}{2L_3g_m + L_4g_m + s^4\left(C_3C_5L_3L_4L_5g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^3\left(C_3C_5L_3L_4 + 2C_4C_5L_3L_4\right) + s^2\left(C_3L_3L_4g_m + 2C_4L_3L_4g_m + 2C_5L_3L_4g_m + 2C_5L_3L_5g_m + C_5L_4L_5g_m\right) + s\left(2C_5L_3 + C_5L_4\right)}$$

10.502 **INVALID-ORDER-502** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \frac{L_4s}{C_4L_4s^2+1},\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_5L_3L_4L_5s^3 + L_3L_4L_5g_ms^2 - L_3L_4s}{2L_3 + L_4 + s^4\left(C_3C_5L_3L_4L_5 + 2C_4C_5L_3L_4L_5\right) + s^3\left(C_3L_3L_4L_5g_m + 2C_4L_3L_4L_5g_m + 2C_5L_3L_4L_5g_m\right) + s^2\left(C_3L_3L_4 + 2C_4L_3L_4 + 2C_5L_3L_5 + C_5L_4L_5\right) + s\left(2L_3L_4g_m + 2L_3L_5g_m + L_4L_5g_m\right)}$$

10.503 **INVALID-ORDER-503** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_5 L_3 L_4 L_5 g_m s^3 + L_3 L_4 g_m s + s^2 \left(C_5 L_3 L_4 R_5 g_m - C_5 L_3 L_4 \right)}{2 L_3 g_m + L_4 g_m + s^4 \left(C_3 C_5 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 g_m \right) + s^3 \left(C_3 C_5 L_3 L_4 R_5 g_m + C_3 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 \right) + s^2 \left(C_3 L_3 L_4 g_m + 2 C_4 L_3 L_4 g_m + 2 C_5 L_3 L_4 g_m + 2 C_5 L_3 L_5 g_m + C_5 L_4 L_5 g_m \right) + s \left(2 C_5 L_3 R_5 g_m + 2 C_5 L_3 + C_5 L_4 R_5 g_m + C_5 L_4 \right)}$

10.504 **INVALID-ORDER-504** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_5 L_3 L_4 L_5 R_5 s^3 - L_3 L_4 R_5 s + s^2 \left(L_3 L_4 L_5 R_5 g_m - L_3 L_4 L_5 \right)}{2 L_3 R_5 + L_4 R_5 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_5 \right) + s^3 \left(C_3 L_3 L_4 L_5 R_5 g_m + C_3 L_3 L_4 L_5 + 2 C_4 L_3 L_4 L_5 R_5 g_m + 2 C_4 L_3 L_4 L_5 + 2 C_5 L_3 L_4 L_5 R_5 g_m \right) + s^2 \left(C_3 L_3 L_4 R_5 + 2 C_4 L_3 L_4 R_5 + 2 C_5 L_3 L_5 R_5 + C_5 L_4 L_5 R_5 + 2 L_3 L_4 L_5 g_m \right) + s \left(2 L_3 L_4 R_5 g_m + 2 L_3 L_5 R_5 g_m + \right.}$

10.505 **INVALID-ORDER-505** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{L_3 L_4 L_5 g_m s^2 + s^3 \left(C_5 L_3 L_4 L_5 R_5 g_m - C_5 L_3 L_4 L_5 \right) + s \left(L_3 L_4 R_5 g_m - L_3 L_4 \right)}{2 L_3 R_5 g_m + 2 L_3 + L_4 R_5 g_m + L_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 \right) + s^3 \left(C_3 L_3 L_4 L_5 g_m + 2 C_4 L_3 L_4 L_5 g_m + 2 C_5 L_3 L_4 L_5 g_m \right) + s^2 \left(C_3 L_3 L_4 R_5 g_m + C_3 L_3 L_4 + 2 C_4 L_3 L_4 R_5 g_m + 2 C_4 L_3 L_4 + 2 C_5 L_3 L_5 R_5 g_m + 2 C_5 L_3 L_5 \right.}$

10.506 **INVALID-ORDER-506** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_5 L_3 L_4 R_5 s^2 + s^3 \left(C_5 L_3 L_4 L_5 R_5 g_m - C_5 L_3 L_4 L_5 \right) + s \left(L_3 L_4 R_5 g_m - L_3 L_4 \right)}{2 L_3 R_5 g_m + 2 L_3 + L_4 R_5 g_m + L_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 \right) + s^3 \left(C_3 C_5 L_3 L_4 R_5 + 2 C_4 C_5 L_3 L_4 R_5 + 2 C_5 L_3 L_4 L_5 g_m \right) + s^2 \left(C_3 L_3 L_4 R_5 g_m + C_3 L_3 L_4 + 2 C_4 L_3 L_4 R_5 g_m + 2 C_4 L_3 L_4 + 2 C_5 L_3 L_5 \right.}$

10.507 **INVALID-ORDER-507** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{s^3 \left(C_4 L_3 L_4 R_5 g_m - C_4 L_3 L_4 \right) + s^2 \left(C_4 L_3 R_4 R_5 g_m - C_4 L_3 R_4 \right) + s \left(L_3 R_5 g_m - L_3 \right)}{R_5 g_m + s^4 \left(C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4 \right) + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4 + 2 C_4 L_3 L_4 g_m \right) + s^2 \left(C_3 L_3 R_5 g_m + C_3 L_3 + 2 C_4 L_3 R_4 g_m + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3 + C_4 L_4 R_5 g_m + C_4 L_4 \right) + s \left(C_4 R_4 R_5 g_m + C_4 R_4 + 2 L_3 g_m \right) + 1}$

10.508 **INVALID-ORDER-508** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 s^4 + L_3 g_m s + s^3 \left(-C_4 C_5 L_3 R_4 + C_4 L_3 L_4 g_m \right) + s^2 \left(C_4 L_3 R_4 g_m - C_5 L_3 \right)}{C_3 C_4 C_5 L_3 L_4 s^5 + g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + 2 C_4 C_5 L_3 L_4 g_m \right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3 + C_4 C_5 L_4 \right) + s^2 \left(C_3 L_3 g_m + C_4 C_5 R_4 + 2 C_4 L_3 g_m + C_4 L_4 g_m + 2 C_5 L_3 g_m \right) + s \left(C_4 R_4 g_m + C_5 \right)}$

10.509 **INVALID-ORDER-509** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 R_5 s^4 + s^3 \left(-C_4 C_5 L_3 R_4 R_5 + C_4 L_3 L_4 R_5 g_m - C_4 L_3 L_4 \right) + s^2 \left(C_4 L_3 R_4 R_5 g_m - C_4 L_3 R_4 - C_5 L_3 R_5 \right) + s \left(L_3 R_5 g_m - L_3 \right)}{C_3 C_4 C_5 L_3 L_4 R_5 s^5 + R_5 g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4 + 2 C_4 C_5 L_3 L_4 R_5 g_m \right) + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4 + C_3 C_5 L_3 R_5 + 2 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_5 + C_4 C_5 L_4 R_5 + 2 C_4 L_3 L_4 g_m \right) + s^2 \left(C_3 L_3 R_5 g_m + C_3 L_3 + C_4 C_5 R_4 R_5 + 2 \right.}$

10.510 **INVALID-ORDER-510** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{L_3 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_5 g_m - C_4 C_5 L_3 L_4 \right) + s^3 \left(C_4 C_5 L_3 R_4 R_5 g_m - C_4 C_5 L_3 R_4 + C_4 L_3 L_4 g_m \right) + s^2 \left(C_4 L_3 R_4 g_m + C_5 L_3 R_5 g_m - C_5 L_3 \right)}{g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 \right) + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + 2 C_4 C_5 L_3 L_4 g_m \right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3 R_5 g_m + 2 C_4 C_5 L_3 + C_4 C_5 L_4 R_5 g_m + C_4 C_5 L_4 \right) + s^2 \left(C_3 L_3 g_m - \right.}$

10.511 **INVALID-ORDER-511** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 g_m s^5 + L_3 g_m s + s^4 \left(-C_4 C_5 L_3 L_4 + C_4 C_5 L_3 L_5 R_4 g_m \right) + s^3 \left(-C_4 C_5 L_3 R_4 + C_4 L_3 L_4 g_m + C_5 L_3 L_5 g_m \right) + s^2 \left(C_4 L_3 R_4 g_m - C_5 L_3 \right)}{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_3 L_5 R_4 g_m \right) + s^4 \left(C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_3 L_4 g_m + 2 C_4 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m \right) + s^3 \left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 R_4 g_m + 2 C_4 C_5 L_3 + C_4 C_5 L_4 + C_4 C_5 L_5 R_4 g_m \right.}$

10.512 INVALID-ORDER-512 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 s^5 - L_3 s + s^4\left(-C_4 C_5 L_3 L_5 R_4 + C_4 L_3 L_4 L_5 g_m\right) + s^3\left(-C_4 L_3 L_4 + C_4 L_3 L_5 R_4 g_m - C_5 L_3 L_5\right) + s^2\left(-C_4 L_3 R_4 + L_3 L_5 g_m\right)}{C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 L_3 L_4 L_5 g_m + 2C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 + C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 + 2C_4 C_5 L_3 L_5 R_4 g_m + 2C_4 C_5 L_3 L_5 + C_4 C_5 L_4 L_5\right) + s^3\left(C_3 C_4 L_3 R_4 + C_3 L_3 L_5 g_m + C_4 C_5 L_5 R_4 + 2C_4 L_3 L_4 g_m + 2C_4 L_3 L_5 g_m + C_4 L \cdots\right)}$

10.513 INVALID-ORDER-513 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ L_4 s + R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 g_m s^5 + L_3 g_m s + s^4\left(C_4 C_5 L_3 L_4 R_5 g_m - C_4 C_5 L_3 L_4 + C_4 C_5 L_3 L_5 R_4 g_m\right) + s^3\left(C_4 C_5 L_3 R_4 R_5 g_m - C_4 C_5 L \cdots\right)}{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_3 L_5 R_4 g_m\right) + s^4\left(C_3 C_4 C_5 L_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + 2C_4 C_5 L_3 L_4 g_m + 2C_4 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m + C_3 C \cdots\right)}$

10.514 INVALID-ORDER-514 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 R_5 s^5 - L_3 R_5 s + s^4\left(-C_4 C_5 L_3 L_5 R_4 R_5 + C_4 L_3 L_4 \cdots\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 + R_5 + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 + C_3 C_4 L_3 L_4 L_5 R_5 g_m + C_3 C_4 L_3 L_4 L_5 + 2C_4 C_5 L_3 L_4 L_5 R_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_5 + C_3 C_4 L_3 L_5 R_4 R_5 g_m + C_3 C_4 L_3 L_5 R_4 + C_3 C_5 L_3 L_5 R_5 + 2C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2C_4 C_5 L_3 L_5 R_5 + C_4 C_5 L_4 L_5 R_5 + 2C_4 L_3 L_4 L_5 g_m \cdots\right)}$

10.515 INVALID-ORDER-515 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2+1},\ \infty\right)$

$H(s) = \dfrac{s^5\left(C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_4 C_5 L_3 L_4 L_5\right) + s^4\left(C_4 C_5 L_3 L_5 R_4 R_5 g_m \cdots\right)}{R_5 g_m + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 L_3 L_4 L_5 g_m + 2C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4 + C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 R_5 g_m + C_3 C_5 L_3 L_5 + 2C_4 C_5 L_3 L_5 R_4 g_m + 2C_4 C_5 L_3 \cdots\right)}$

10.516 INVALID-ORDER-516 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ L_4 s + R_4 + \frac{1}{C_4 s},\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{s^5\left(C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_4 C_5 L_3 L_4 L_5 \cdots\right)}{R_5 g_m + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 + C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_4 + 2C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4 + C_3 C_5 L_3 L_5 R_5 g_m + C_3 C_5 L_3 L_5 + 2C_4 C_5 L_3 \cdots\right)}$

10.517 INVALID-ORDER-517 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_4 R_4 s^2 + L_3 L_4 R_4 g_m s}{2L_3 R_4 g_m + L_4 R_4 g_m + s^3\left(C_3 C_5 L_3 L_4 R_4 + 2C_4 C_5 L_3 L_4 R_4\right) + s^2\left(C_3 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4\right) + s\left(2C_5 L_3 R_4 + C_5 L_4 R_4 + 2L_3 L_4 g_m\right)}$

10.518 INVALID-ORDER-518 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_4 R_4 R_5 s^2 + s\left(L_3 L_4 R_4 R_5 g_m - L_3 L_4 R_4\right)}{2L_3 R_4 R_5 g_m + 2L_3 R_4 + L_4 R_4 R_5 g_m + L_4 R_4 + s^3\left(C_3 C_5 L_3 L_4 R_4 R_5 + 2C_4 C_5 L_3 L_4 R_4 R_5\right) + s^2\left(C_3 L_3 L_4 R_4 R_5 g_m + C_3 L_3 L_4 R_4 + 2C_4 L_3 L_4 R_4 R_5 g_m + 2C_4 L_3 L_4 R_4 + 2C_5 L_3 L_4 R_4 R_5 g_m + 2C_5 L_3 L_4 R_4 R_5\right) + s\left(2C_5 L_3 R_4 R_5 + C_5 L_4 R_4 R_5 + 2L_3 L_4 R_4 g_m + 2L_3 L_4 R_5 g_m + 2L \cdots\right)}$

10.519 INVALID-ORDER-519 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{L_3 L_4 R_4 g_m s + s^2\left(C_5 L_3 L_4 R_4 R_5 g_m - C_5 L_3 L_4 R_4\right)}{2L_3 R_4 g_m + L_4 R_4 g_m + s^3\left(C_3 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_5 L_3 L_4 R_4 + 2C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 R_4\right) + s^2\left(C_3 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_5 g_m + 2C_5 L_3 L_4\right) + s\left(2C_5 L_3 R_4 R_5 g_m + 2C_5 L_3 R_4 + C_5 L_4 R_4 R_5 g_m + C_5 L_4 R_4 + 2L_3 L_4 g_m \cdots\right)}$

10.520 INVALID-ORDER-520 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_5 L_3 L_4 L_5 R_4 g_m s^3 - C_5 L_3 L_4 R_4 s^2 + L_3 L_4 R_4 g_m s}{2L_3 R_4 g_m + L_4 R_4 g_m + s^4\left(C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^3\left(C_3 C_5 L_3 L_4 R_4 + 2C_4 C_5 L_3 L_4 R_4 + 2C_5 L_3 L_4 L_5 g_m\right) + s^2\left(C_3 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 + 2C_5 L_3 L_5 R_4 g_m + C_5 L_4 L_5 R_4 g_m\right) + s\left(2C_5 L_3 R_4 + C_5 L_4 R_4 + 2L \cdots\right)}$

10.521 INVALID-ORDER-521 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \; \frac{L_5 s}{C_5 L_5 s^2 + 1}, \; \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_4 L_5 R_4 s^3 + L_3 L_4 L_5 R_4 g_m s^2 - L_3 L_4 R_4 s}{2L_3 R_4 + L_4 R_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_4 + 2C_4 C_5 L_3 L_4 L_5 R_4\right) + s^3 \left(C_3 L_3 L_4 L_5 R_4 g_m + 2C_4 L_3 L_4 L_5 R_4 g_m + 2C_5 L_3 L_4 L_5 R_4 g_m + 2C_5 L_3 L_4 L_5\right) + s^2 \left(C_3 L_3 L_4 R_4 + 2C_4 L_3 L_4 R_4 + 2C_5 L_3 L_5 R_4 + C_5 L_4 L_5 R_4 + 2L_3 L_4 L_5 g_m\right) + s\left(2L_3 L_4 R_4 g_m + 2L_3 L_4 + 2L_3 L_5 R_4 g_m + L_4 L_\ldots\right)}$

10.522 INVALID-ORDER-522 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \; L_5 s + R_5 + \frac{1}{C_5 s}, \; \infty\right)$

$H(s) = \dfrac{C_5 L_3 L_4 L_5 R_4 g_m s^3 + L_3 L_4 R_4 g_m s + s^2 \left(C_5 L_3 L_4 R_4 R_5 g_m - C_5 L_3 L_4 R_4\right)}{2L_3 R_4 g_m + L_4 R_4 g_m + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_5 L_3 L_4 R_4 + 2C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 R_4 + 2C_5 L_3 L_4 L_5 g_m\right) + s^2 \left(C_3 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_5 g_m + 2C_5 L_3 L_4 + 2C\ldots\right)}$

10.523 INVALID-ORDER-523 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \; \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \; \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_4 L_5 R_4 R_5 s^3 - L_3 L_4 R_4 R_5 s + s^2 \left(L_3 L_4 L_5 R_4 R_5 g_m - L_3 L_4 L_5 R_4\right)}{2L_3 R_4 R_5 + L_4 R_4 R_5 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_4 R_5 + 2C_4 C_5 L_3 L_4 L_5 R_4 R_5\right) + s^3 \left(C_3 L_3 L_4 L_5 R_4 R_5 g_m + C_3 L_3 L_4 L_5 R_4 + 2C_4 L_3 L_4 L_5 R_4 R_5 g_m + 2C_4 L_3 L_4 L_5 R_4 + 2C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2C_5 L_3 L_4 L_5 R_5\right) + s^2 \left(C_3 L_3 L_4 R_4 R_5 + 2C_4 L_3 L_4 R_4 R_5 + 2C_5 L_3 L_5 R_4 R_5 + C_5 L_4 L_5 R_4 \ldots\right)}$

10.524 INVALID-ORDER-524 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \; \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \; \infty\right)$

$H(s) = \dfrac{L_3 L_4 L_5 R_4 g_m s^2 + s^3 \left(C_5 L_3 L_4 L_5 R_4 R_5 g_m - C_5 L_3 L_4 L_5 R_4\right) + s\left(L_3 L_4 R_4 R_5 \ldots\right)}{2L_3 R_4 R_5 g_m + 2L_3 R_4 + L_4 R_4 R_5 g_m + L_4 R_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_4 + 2C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 L_5 R_4\right) + s^3 \left(C_3 L_3 L_4 L_5 R_4 g_m + 2C_4 L_3 L_4 L_5 R_4 g_m + 2C_5 L_3 L_4 L_5 R_4 g_m + 2C_5 L_3 L_4 L_5 R_5 g_m + 2C_5 L_3 L_4 L_5\right) + s^2 \left(C_3 L_3 L_4 R_4 R_5 g_m + \ldots\right)}$

10.525 INVALID-ORDER-525 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \; \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \; \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_4 R_4 R_5 s^2 + s^3 \left(C_5 L_3 L_4 L_5 R_4 R_5 g_m - C_5 L_3 L_4 L_5 R_4\right) + s\left(\ldots\right)}{2L_3 R_4 R_5 g_m + 2L_3 R_4 + L_4 R_4 R_5 g_m + L_4 R_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_4 + 2C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 L_5 R_4\right) + s^3 \left(C_3 C_5 L_3 L_4 R_4 R_5 + 2C_4 C_5 L_3 L_4 R_4 R_5 + 2C_5 L_3 L_4 L_5 R_4 g_m + 2C_5 L_3 L_4 L_5 R_5 g_m + 2C_5 L_3 L_4 L_5\right) + s^2 \left(C_3 L_3 L_4 R_4 R_5 g_m + \ldots\right)}$

10.526 INVALID-ORDER-526 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \; R_5, \; \infty\right)$

$H(s) = \dfrac{s^3 \left(C_4 L_3 L_4 R_4 R_5 g_m - C_4 L_3 L_4 R_4\right) + s^2 \left(L_3 L_4 R_5 g_m - L_3 L_4\right) + s\left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{R_4 R_5 g_m + R_4 + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4\right) + s^3 \left(C_3 L_3 L_4 R_5 g_m + C_3 L_3 L_4 + 2C_4 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_5 g_m + 2C_4 L_3 L_4\right) + s^2 \left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + C_4 L_4 R_4 R_5 g_m + C_4 L_4 R_4 + 2L_3 L_4 g_m\right) + s\left(2L_3 R_4 g_m + 2L_3 R_5 g_m + 2L_3 + L_4 R_5 g_m + L_4\right)}$

10.527 INVALID-ORDER-527 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \; \frac{1}{C_5 s}, \; \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 R_4 s^4 + L_3 R_4 g_m s + s^3 \left(C_4 L_3 L_4 R_4 g_m - C_5 L_3 L_4\right) + s^2 \left(-C_5 L_3 R_4 + L_3 L_4 g_m\right)}{C_3 C_4 C_5 L_3 L_4 R_4 s^5 + R_4 g_m + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_4 + 2C_4 C_5 L_3 L_4 R_4 g_m + 2C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_5 L_3 R_4 + C_3 L_3 L_4 g_m + C_4 C_5 L_4 R_4 + 2C_4 L_3 L_4 g_m + 2C_5 L_3 L_4 g_m\right) + s^2 \left(C_3 L_3 R_4 g_m + C_4 L_4 R_4 g_m + 2C_5 L_3 R_4 g_m + 2C_5 L_3 + C_5 L_4\right) + s\left(C_5 R_4 + 2L_3 g_m + \ldots\right)}$

10.528 INVALID-ORDER-528 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \; \frac{R_5}{C_5 R_5 s + 1}, \; \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 R_4 R_5 s^4 + s^3 \left(C_4 L_3 L_4 R_4 R_5 g_m - C_4 L_3 L_4 R_4 - C_5 L_3 L_4 R_5\right) + s^2 \left(-C_5 L_3 R_4 R_5 + L_3 L_4 R_5 g_m - L_3 \ldots\right)}{C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 + R_4 R_5 g_m + R_4 + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_4 R_5 + 2C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 R_5\right) + s^3 \left(C_3 C_5 L_3 R_4 R_5 + C_3 L_3 L_4 R_5 g_m + C_3 L_3 L_4 + C_4 C_5 L_4 R_4 R_5 + 2C_4 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_5 g_m + 2C_4 L_3 L_4 + 2C_5 L_3 L_4 \ldots\right)}$

10.529 INVALID-ORDER-529 $Z(s) = \left(\infty, \; \infty, \; \frac{L_3 s}{C_3 L_3 s^2 + 1}, \; \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \; R_5 + \frac{1}{C_5 s}, \; \infty\right)$

$H(s) = \dfrac{L_3 R_4 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_4 C_5 L_3 L_4 R_4\right) + s^3 \left(C_4 L_3 L_4 R_4 g_m + C_5 L_3 L_4 R_5 g_m - C_5 L_3 L_4\right) + s^2 \left(C_5 L_3 R_4 R_5 g_m - C\ldots\right)}{R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_4 R_5 g_m + C_3 C_5 L_3 L_4 + 2C_4 C_5 L_3 L_4 R_4 g_m + 2C_4 C_5 L_3 L_4 R_5 g_m + 2C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 + C_3 L_3 L_4 g_m + C_4 C_5 L_4 R_4 R_5 g_m + C_4 C_5 L_4 R_4 + 2C_4 L_3 L_4 g\ldots\right)}$

10.530 INVALID-ORDER-530 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 R_4 g_m s^5 + L_3 R_4 g_m s + s^4\left(-C_4 C_5 L_3 L_4 R_4 + C_5 L_3 L_4 L_5 g_m\right) + s^3\left(C_4 L_3 L_4 R_4 g_m - C_5 L_3 L_4 + C_5 L_3 L_5 R_4 g_m\right) + s^2\left(\cdots\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_5 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_4 + C_3 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 + C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3\left(C_3 C_5 L_3 R_4 + C_3 L_3 L_4 g_m + C_4 C_5 L_4 R_4 + 2 C_4 L_3 L_4 \cdots\right)}$

10.531 INVALID-ORDER-531 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 R_4 s^5 - L_3 R_4 s + s^4\left(C_4 L_3 L_4 L_5 R_4 g_m - C_5 L_3 L_4 L_5\right) + s^3\left(-C_4 L_3 L_4 R_4 - C_5 L_3 L_5 R_4 + L_3 L_4 L_5 \cdots\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 + R_4 + s^5\left(C_3 C_4 L_3 L_4 L_5 R_4 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_5 R_4 + C_3 L_3 L_4 L_5 g_m + C_4 C_5 L_4 L_5 R_4 + 2 C_4 L_3 L_4 L_5 g_m + 2 C_5 L_3 L_4 L_5 g_m\right) + s^3\left(C_3 L_3 L_4 + C_3 L_3 L_5 R_4 g_m + 2 C_4 L_3 L_4 R_4 g_m \cdots\right)}$

10.532 INVALID-ORDER-532 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 R_4 g_m s^5 + L_3 R_4 g_m s + s^4\left(C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_4 C_5 L_3 L_4 R_4 + C\cdots\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_5 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_4 R_5 g_m + C_3 C_5 L_3 L_4 + C_3 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 + C_4 C_5 L_4 \cdots\right)}$

10.533 INVALID-ORDER-533 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 R_4 R_5 s^5 - \cdots}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 s^6 + R_4 R_5 + s^5\left(C_3 C_4 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_3 L_4 L_5 R_4 + C_3 C_5 L_3 L_4 L_5 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_4 R_5 + C_3 C_5 L_3 L_5 R_4 R_5 + C_3 L_3 L_4 L_5 R_5 g_m + C_3 L_3 L_4 L_5 + C_4 C_5 L_4 L_5 R_4 R_5 + 2 C_4 L_3 L_4 L_5 R_4 g_m + \cdots\right)}$

10.534 INVALID-ORDER-534 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{s^5\left(C_4 C_5 L_3 L_4 L_5 R\cdots\right)}{R_4 R_5 g_m + R_4 + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5\left(C_3 C_4 L_3 L_4 L_5 R_4 g_m + C_3 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_5 R_4 R_5 g_m + \cdots\right)}$

10.535 INVALID-ORDER-535 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{}{R_4 R_5 g_m + R_4 + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5\left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 + C_3 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_4 R_5 + C_3 C_5 \cdots\right)}$

10.536 INVALID-ORDER-536 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{s^3\left(C_4 L_3 L_4 R_4 R_5 g_m - C_4 L_3 L_4 R_4\right) + s\left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{R_4 R_5 g_m + R_4 + s^4\left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4\right) + s^3\left(2 C_4 L_3 L_4 R_4 g_m + 2 C_4 L_3 L_4 R_5 g_m + 2 C_4 L_3 L_4\right) + s^2\left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_4 L_3 R_4 R_5 g_m + 2 C_4 L_3 R_4 + C_4 L_4 R_4 R_5 g_m + C_4 L_4 R_4\right) + s\left(2 L_3 R_4 g_m + 2 L_3 R_5 g_m + 2 L_3\right)}$

10.537 INVALID-ORDER-537 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 R_4 s^4 + C_4 L_3 L_4 R_4 g_m s^3 - C_5 L_3 R_4 s^2 + L_3 R_4 g_m s}{C_3 C_4 C_5 L_3 L_4 R_4 s^5 + R_4 g_m + s^4\left(C_3 C_4 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4\right) + s^3\left(C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4 + C_4 C_5 L_4 R_4 + 2 C_4 L_3 L_4 g_m\right) + s^2\left(C_3 L_3 R_4 g_m + 2 C_4 L_3 R_4 g_m + C_4 L_4 R_4 g_m + 2 C_5 L_3 R_4 g_m + 2 C_5 L_3\right) + s\left(C_5 R_4 + 2 L_3 g_m\right)}$

10.538 INVALID-ORDER-538 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 R_4 R_5 s^4 - C_5 L_3 R_4 R_5 s^2 + s^3\left(C_4 L_3 L_4 R_4 R_5 g_m - C_4 L_3 L_4 R_4\right) + s\left(L_3 R_4 R_5 g_m - L_3 R_4\right)}{C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 + R_4 R_5 g_m + R_4 + s^4\left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + 2 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 R_5\right) + s^3\left(C_3 C_5 L_3 R_4 R_5 + 2 C_4 C_5 L_3 R_4 R_5 + C_4 C_5 L_4 R_4 R_5 + 2 C_4 L_3 L_4 R_4 g_m + 2 C_4 L_3 L_4 R_5 g_m + 2 C_4 L_3 L_4\right) + s^2\left(C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 + 2 C_4 \cdots\right)}$

10.539 INVALID-ORDER-539 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 L_3 L_4 R_4 g_m s^3 + L_3 R_4 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_4 C_5 L_3 L_4 R_4\right) + s^2 \left(C_5 L_3 R_4 R_5 g_m - C_5 L_3 R_4\right)}{R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_4 + C_4 C_5 L_4 R_4 R_5 g_m + C_4 C_5 L_4 R_4 + 2 C_4 L_3 L_4 g_m\right) + s^2 \left(C\cdots\right)}$

10.540 INVALID-ORDER-540 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 R_4 g_m s^5 - C_4 C_5 L_3 L_4 R_4 s^4 - C_5 L_3 R_4 s^2 + L_3 R_4 g_m s + s^3 \left(C_4 L_3 L_4 R_4 g_m + C_5 L_3 L_5 R_4 g_m\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 + 2 C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_5 R_4 g_m + C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_5 L_3 R_4 + 2 C_4 C_5 L_3 R_4 + C_4 C_5 L_4 R_4 + 2 C_4 L_3 L_4 g_m + 2 C_5\cdots\right)}$

10.541 INVALID-ORDER-541 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 R_4 s^5 + C_4 L_3 L_4 L_5 R_4 g_m s^4 + L_3 L_5 R_4 g_m s^2 - L_3 R_4 s + s^3 \left(-C_4 L_3 L_4 R_4 - C_5 L_3 L_5 R_4\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 + R_4 + s^5 \left(C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_5 R_4 + 2 C_4 C_5 L_3 L_5 R_4 + C_4 C_5 L_4 L_5 R_4 + 2 C_4 L_3 L_4 L_5 g_m\right) + s^3 \left(C_3 L_3 L_5 R_4 g_m + 2 C_4 L_3 L_4 R_4 g_m + 2 C_4 L_3 L_4 + 2 C_4 L_3 L_5 R_4 g_m + C_4 L_4 L_5\cdots\right)}$

10.542 INVALID-ORDER-542 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_4 C_5 L_3 L_4 L_5 R_4 g_m s^5 + L_3 R_4 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_4 C_5 L_3 L_4 R_4\right) + \cdots}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_4 + 2 C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_5 R_4 g_m + C_4 C_5 L_4 L_5 R_4 g_m\right) + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m\cdots\right)}$

10.543 INVALID-ORDER-543 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_4 C_5 L_3 L_4 L_5 R_4 R_5 s^5 - L_3 R_4 R_5 s + s^4 \left(\cdots\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 s^6 + R_4 R_5 + s^5 \left(C_3 C_4 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_3 L_4 L_5 R_4 + 2 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 + C_3 C_5 L_3 L_5 R_4 R_5 + 2 C_4 C_5 L_3 L_5 R_4 R_5 + C_4 C_5 L_4 L_5 R_4 R_5 + 2 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_4 L_3 L_4 L_5 R_5 g_m + 2 C_4 L_3 L_4 L\cdots\right)}$

10.544 INVALID-ORDER-544 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{C_4 L_3 L_4 L_5 R_4 g_m s^4 + \cdots}{R_4 R_5 g_m + R_4 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5 \left(C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_4 + 2 C_4 C_5 L_3 L_5 R_4 R_5 g_m + \cdots\right)}$

10.545 INVALID-ORDER-545 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{\cdots}{R_4 R_5 g_m + R_4 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + C_3 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_4 + 2 C_4 C_5 L_3 L_4 R_4 R_5 g_m + \cdots\right)}$

10.546 INVALID-ORDER-546 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 s^3 + R_4 g_m + s^2 \left(-C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2 g_m + s^3 \left(2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3\right) + s^2 \left(2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 + 2 C_3 L_3 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.547 INVALID-ORDER-547 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 R_5 s^3 + R_4 R_5 g_m - R_4 + s^2 \left(-C_3 C_5 R_3 R_4 R_5 + C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4\right) + s \left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 - C_5 R_4 R_5\right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_5\right) + s^2 \left(2 C_3 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + 2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3\right) + s \left(2 C_3 R_3 R_4 g_m + 2 C_3 R_3 R_5 g_m + 2 C_3 R_3 + C_3 R_4 R_5 g_m + C_3 R_4 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5\right) + 2}$$

10.548 **INVALID-ORDER-548** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4\right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^3 \left(2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3\right) + s^2 \left(2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_3 L_3 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

10.549 **INVALID-ORDER-549** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(-C_3 C_5 L_3 R_4 + C_3 C_5 L_5 R_3 R_4 g_m\right) + s^2 \left(-C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2 C_3 C_5 L_3 L_5 g_m s^4 + 2 g_m + s^3 \left(2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m\right) + s^2 \left(2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_5 L_5 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.550 **INVALID-ORDER-550** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 s^4 - R_4 + s^3 \left(-C_3 C_5 L_5 R_3 R_4 + C_3 L_3 L_5 R_4 g_m\right) + s^2 \left(-C_3 L_3 R_4 + C_3 L_5 R_3 R_4 g_m - C_5 L_5 R_4\right) + s \left(-C_3 R_3 R_4 + L_5 R_4 g_m\right)}{2 R_4 g_m + s^4 \left(2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3 \left(2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 + 2 C_3 L_3 L_5 g_m\right) + s^2 \left(2 C_3 L_3 R_4 g_m + 2 C_3 L_3 + 2 C_3 L_5 R_3 g_m + C_3 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5\right) + s \left(2 C_3 R_3 R_4 g_m + 2 C_3 R_3 + C_3 R_4 + 2 L_5 g_m\right) + 2}$$

10.551 **INVALID-ORDER-551** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3 \left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4 + C_3 C_5 L_5 R_3 R_4 g_m\right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m\right) + s \left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 C_3 C_5 L_3 L_5 g_m s^4 + 2 g_m + s^3 \left(2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m\right) + s^2 \left(2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_5 L_5 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R}$$

10.552 **INVALID-ORDER-552** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 R_5 s^4 - R_4 R_5 + s^3 \left(-C_3 C_5 L_5 R_3 R_4 R_5 + C_3 L_3 L_5 R_4 R_5 g_m - C_3 L_3 L_5 R_4\right) + s^2 \left(-C_3 L_3 R_4 R_5 + C_3 L_5 R_3 R_4 R_5 g_m - C_3 L_5 R_3 R_4 - C_5 L_5 R_4 R_5\right) + s \left(-C_3 R}{2 R_4 R_5 g_m + 2 R_5 + s^4 \left(2 C_3 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_5 R_5\right) + s^3 \left(2 C_3 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 L_5 R_3 R_5 + C_3 C_5 L_5 R_4 R_5 + 2 C_3 L_3 L_5 R_4 g_m + 2 C_3 L_3 L_5 R_5 g_m + 2 C_3 L_3 L_5\right) + s^2 \left(2 C_3 L_3 R_4 R_5 g_m + 2 C_3 L_3 R_5 + 2 C_3 L_5 R_3 R_4 g_m + 2 C_3 L_5 R_3 R_5 g_m + 2 C_3 L_5 R_3 + C_3 L}$$

10.553 **INVALID-ORDER-553** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_4\right) + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_5 R_3 R_4 + C_3 L_3 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 + C_3 L_5 R_3 R_4 g_m + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3 \left(2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4 + 2 C_3 L_3 L_5 g_m\right) + s^2 \left(2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3 + 2 C_3 L_5 R_3 g_m + C_3 L_5 R_4 g_m + 2 C}$$

10.554 **INVALID-ORDER-554** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ R_4, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_4\right) + s^3 \left(-C_3 C_5 L_3 R_4 R_5 + C_3 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_5 R_3 R_4\right) + s^2 \left(-C_3 C_5 R_3 R_4 R_5 + C_3 L_3 R_4 R_5 g_m - C_3 L}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3 \left(2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_5 + 2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 R_5 g_m + C_3 C_5 L_5 R_4\right) + s^2 \left(2 C_3 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + 2}$$

10.555 **INVALID-ORDER-555** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^2 \left(C_3 L_3 R_5 g_m - C_3 L_3\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2 g_m + s^3 \left(2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3\right) + s^2 \left(2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + 2 C_3 L_3 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

10.556 **INVALID-ORDER-556** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 s^3 + g_m + s^2 \left(-C_3 C_5 R_3 + C_3 L_3 g_m\right) + s \left(C_3 R_3 g_m - C_5\right)}{2 C_3 C_4 C_5 L_3 s^4 + s^3 \left(2 C_3 C_4 C_5 R_3 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 + 2 C_4 C_5\right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m\right)}$$

10.557 INVALID-ORDER-557 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_3C_5L_3R_5s^3 + R_5g_m + s^2\left(-C_3C_5R_3R_5 + C_3L_3R_5g_m - C_3L_3\right) + s\left(C_3R_3R_5g_m - C_3R_3 - C_5R_5\right) - 1}{2C_3C_4C_5L_3R_5s^4 + 2g_m + s^3\left(2C_3C_4C_5R_3R_5 + 2C_3C_4L_3R_5g_m + 2C_3C_4L_3 + 2C_3C_5L_3R_5g_m\right) + s^2\left(2C_3C_4R_3R_5g_m + 2C_3C_4R_3 + 2C_3C_5R_3R_5g_m + C_3C_5R_5 + 2C_3L_3g_m + 2C_4C_5R_5\right) + s\left(2C_3R_3g_m + C_3R_5g_m + C_3 + 2C_4R_5g_m + 2C_4 + 2C_5R_5g_m\right)}$$

10.558 INVALID-ORDER-558 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{g_m + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_3\right) + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_3L_3g_m\right) + s\left(C_3R_3g_m + C_5R_5g_m - C_5\right)}{s^4\left(2C_3C_4C_5L_3R_5g_m + 2C_3C_4C_5L_3\right) + s^3\left(2C_3C_4C_5R_3R_5g_m + 2C_3C_4C_5R_3 + 2C_3C_4L_3g_m + 2C_3C_5L_3g_m\right) + s^2\left(2C_3C_4R_3g_m + 2C_3C_5R_3g_m + C_3C_5R_5g_m + C_3C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(C_3g_m + 2C_4g_m + 2C_5g_m\right)}$$

10.559 INVALID-ORDER-559 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(-C_3C_5L_3 + C_3C_5L_5R_3g_m\right) + s^2\left(-C_3C_5R_3 + C_3L_3g_m + C_5L_5g_m\right) + s\left(C_3R_3g_m - C_5\right)}{2C_3C_4C_5L_3L_5g_ms^5 + s^4\left(2C_3C_4C_5L_3 + 2C_3C_4C_5L_5R_3g_m\right) + s^3\left(2C_3C_4C_5R_3 + 2C_3C_4L_3g_m + 2C_3C_5L_3g_m + C_3C_5L_5g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_3C_4R_3g_m + 2C_3C_5R_3g_m + C_3C_5 + 2C_4C_5\right) + s\left(C_3g_m + 2C_4g_m + 2C_5g_m\right)}$$

10.560 INVALID-ORDER-560 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_3C_5L_3L_5s^4 + s^3\left(-C_3C_5L_5R_3 + C_3L_3L_5g_m\right) + s^2\left(-C_3L_3 + C_3L_5R_3g_m - C_5L_5\right) + s\left(-C_3R_3 + L_5g_m\right) - 1}{2C_3C_4C_5L_3L_5s^5 + 2g_m + s^4\left(2C_3C_4C_5L_5R_3 + 2C_3C_4L_3L_5g_m + 2C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3 + 2C_3C_4L_5R_3g_m + 2C_3C_5L_5R_3g_m + C_3C_5L_5 + 2C_4C_5L_5\right) + s^2\left(2C_3C_4R_3 + 2C_3L_3g_m + C_3L_5g_m + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(2C_3R_3g_m + C_3 + 2C_4\right)}$$

10.561 INVALID-ORDER-561 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_3C_5L_3L_5g_ms^4 + g_m + s^3\left(C_3C_5L_3R_5g_m - C_3C_5L_3 + C_3C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3R_5g_m - C_3C_5R_3 + C_3L_3g_m + C_5L_5g_m\right) + s\left(C_3R_3g_m + C_5R_5g_m - C_5\right)}{2C_3C_4C_5L_3L_5g_ms^5 + s^4\left(2C_3C_4C_5L_3R_5g_m + 2C_3C_4C_5L_3 + 2C_3C_4C_5L_5R_3g_m\right) + s^3\left(2C_3C_4C_5R_3R_5g_m + 2C_3C_4C_5R_3 + 2C_3C_4L_3g_m + 2C_3C_5L_3g_m + C_3C_5L_5g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_3C_4R_3g_m + 2C_3C_5R_3g_m + C_3C_5R_5g_m + C_3C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + \cdots}$$

10.562 INVALID-ORDER-562 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_3C_5L_3L_5R_5s^4 - R_5 + s^3\left(-C_3C_5L_5R_3R_5 + C_3L_3L_5R_5g_m - C_3L_3L_5\right) + s^2\left(-C_3L_3R_5 + C_3L_5R_3R_5g_m - C_3L_5R_3 - C_5L_5R_5\right) + s\left(-C_3R_3R_5 + L_5\cdots\right)}{2C_3C_4C_5L_3L_5R_5s^5 + 2R_5g_m + s^4\left(2C_3C_4C_5L_5R_3R_5 + 2C_3C_4L_3L_5R_5g_m + 2C_3C_4L_3L_5 + 2C_3C_5L_3L_5R_5g_m\right) + s^3\left(2C_3C_4L_3R_5 + 2C_3C_4L_5R_3R_5g_m + 2C_3C_4L_5R_3 + 2C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_5 + 2C_3L_3L_5g_m + 2C_4C_5L_5R_5\right) + s^2\left(2C_3C_4R_3R_5 + 2C_3L_3R_5g_m\cdots\right)}$$

10.563 INVALID-ORDER-563 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5\right) + s^3\left(C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_3 + C_3L_3L_5g_m\right) + s^2\left(C_3L_3R_5g_m - C_3L_3 + C_3L_5R_3g_m + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_3\cdots\right)}{2g_m + s^5\left(2C_3C_4C_5L_3L_5R_5g_m + 2C_3C_4C_5L_3L_5\right) + s^4\left(2C_3C_4C_5L_5R_3R_5g_m + 2C_3C_4C_5L_5R_3 + 2C_3C_4L_3L_5g_m + 2C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_5g_m + 2C_3C_4L_3 + 2C_3C_4L_5R_3g_m + 2C_3C_5L_5R_3g_m + C_3C_5L_5R_5g_m + C_3C_5L_5 + 2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\cdots}$$

10.564 INVALID-ORDER-564 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_5g_m + s^4\left(C_3C_5L_3L_5R_5g_m - C_3C_5L_3L_5\right) + s^3\left(-C_3C_5L_3R_5 + C_3C_5L_5R_3R_5g_m - C_3C_5L_5R_3\right) + s^2\left(-C_3C_5R_3R_5 + C_3L_3R_5g_m - C_3L_3 + C\cdots\right)}{2g_m + s^5\left(2C_3C_4C_5L_3L_5R_5g_m + 2C_3C_4C_5L_3L_5\right) + s^4\left(2C_3C_4C_5L_3R_5 + 2C_3C_4C_5L_5R_3R_5g_m + 2C_3C_4C_5L_5R_3 + 2C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_4C_5R_3R_5 + 2C_3C_4L_3R_5g_m + 2C_3C_4L_3 + 2C_3C_5L_3R_5g_m + 2C_3C_5L_5R_3g_m + C_3C_5L_5R_5g_m + C_3C_5L_5 + 2C_4C_5L_5R_5g_m\cdots\right)}$$

10.565 INVALID-ORDER-565 $Z(s) = \left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_4R_5g_m - R_4 + s^2\left(C_3L_3R_4R_5g_m - C_3L_3R_4\right) + s\left(C_3R_3R_4R_5g_m - C_3R_3R_4\right)}{2R_4g_m + 2R_5g_m + s^3\left(2C_3C_4L_3R_4R_5g_m + 2C_3C_4L_3R_4\right) + s^2\left(2C_3C_4R_3R_4R_5g_m + 2C_3C_4R_3R_4 + 2C_3L_3R_4g_m + 2C_3L_3R_5g_m + 2C_3L_3\right) + s\left(2C_3R_3R_4g_m + 2C_3R_3R_5g_m + 2C_3R_3 + C_3R_4R_5g_m + C_3R_4 + 2C_4R_4R_5g_m + 2C_4R_4\right) + 2}$$

10.566 INVALID-ORDER-566 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 s^3 + R_4 g_m + s^2\left(-C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m\right) + s\left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2 C_3 C_4 C_5 L_3 R_4 s^4 + 2 g_m + s^3\left(2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3\right) + s^2\left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 + 2 C_3 L_3 g_m + 2 C_4 C_5 R_4\right) + s\left(2 C_3 R_3 g_m + C_3 R_4 g_m + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

10.567 INVALID-ORDER-567 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 R_4 R_5 s^3 + R_4 R_5 g_m - R_4 + s^2\left(-C_3 C_5 R_3 R_4 R_5 + C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4\right) + s\left(C_3 R_3 R_4 R_5 g_m - C_3 R_3 R_4 - C_5 R_4 R_5\right.}{2 C_3 C_4 C_5 L_3 R_4 R_5 s^4 + 2 R_4 g_m + 2 R_5 g_m + s^3\left(2 C_3 C_4 C_5 R_3 R_4 R_5 + 2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + 2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_5\right) + s^2\left(2 C_3 C_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 R_3 R_4 + 2 C_3 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + 2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3}$$

10.568 INVALID-ORDER-568 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{R_4 g_m + s^3\left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4\right) + s^2\left(C_3 C_5 R_3 R_4 R_5 g_m - C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m\right) + s\left(C_3 R_3 R_4 g_m + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^4\left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4\right) + s^3\left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3\right) + s^2\left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_5 g_m + 2 C_3 C_5 R_3 + C_3 C_5 R_4 R_5 g_m + C_3 C_5 R_4 + 2}$$

10.569 INVALID-ORDER-569 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3\left(-C_3 C_5 L_3 R_4 + C_3 C_5 L_5 R_3 R_4 g_m\right) + s^2\left(-C_3 C_5 R_3 R_4 + C_3 L_3 R_4 g_m + C_5 L_5 R_4 g_m\right) + s\left(C_3 R_3 R_4 g_m - C_5 R_4\right)}{2 C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + 2 g_m + s^4\left(2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5 R_4 g_m\right) + s^2\left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_5 R_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m\right)}$$

10.570 INVALID-ORDER-570 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 s^4 - R_4 + s^3\left(-C_3 C_5 L_5 R_3 R_4 + C_3 L_3 L_5 R_4 g_m\right) + s^2\left(-C_3 L_3 R_4 + C_3 L_5 R_3 R_4 g_m - C_5 L_5 R_4\right) + s\left(-C_3 R_3 R_4 + L_5 R_4 g_m\right)}{2 C_3 C_4 C_5 L_3 L_5 R_4 s^5 + 2 R_4 g_m + s^4\left(2 C_3 C_4 C_5 L_5 R_3 R_4 + 2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3\left(2 C_3 C_4 L_3 R_4 + 2 C_3 C_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_5 R_3 + C_3 C_5 L_5 R_4 + 2 C_3 L_3 L_5 g_m + 2 C_4 C_5 L_5 R_4\right) + s^2\left(2 C_3 C_4 R_3 R_4 + 2 C_3 L_3 R_4 g_m}$$

10.571 INVALID-ORDER-571 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_3 L_5 R_4 g_m s^4 + R_4 g_m + s^3\left(C_3 C_5 L_3 R_4 R_5 g_m - C_3 C_5 L_3 R_4 + C_3 C_5 L_5 R_3 R_4 g_m\right) + s^2\left(C_3 C_5 R_3 R_4 R_5 g_m}{2 C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + 2 g_m + s^4\left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_3 L_5 g_m\right) + s^3\left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_5 g_m + 2 C_3 C_5 L_3 + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 R_4 g_m + }$$

10.572 INVALID-ORDER-572 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_5 R_4 R_5 s^4 - R_4 R_5 + s^3\left(-C_3 C_5 L_5 R_3 R_4 R_5\right.}{2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_5 + s^4\left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 + 2 C_3 C_4 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_5 R_4 + 2 C_3 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_5 R_5\right) + s^3\left(2 C_3 C_4 L_3 R_4 R_5 + 2 C_3 C_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 L_5 R_3 R_4 + 2 C_3 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_5 L_5 R_3 R_5 + C_3 C_5}$$

10.573 INVALID-ORDER-573 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4\left(C_3 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_5 L\right.}{2 R_4 g_m + 2 R_5 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_4 + 2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3\left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + 2 C_3 C_4 L_5 R_3 R_4 g_m + 2 C_3 C\right.}$$

10.574 INVALID-ORDER-574 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4\left(C_3\right.}{2 R_4 g_m + 2 R_5 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4\right) + s^4\left(2 C_3 C_4 C_5 L_3 R_4 R_5 + 2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_4 + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_5\right) + s^3\left(2 C_3 C_4 C_5 R_3 R_4 R_5 + 2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + 2 C_3 C\right.}$$

10.575 **INVALID-ORDER-575** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 \right) + s^2 \left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 + C_3 L_3 R_5 g_m - C_3 L_3 \right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 + C_4 R_4 R_5 g_m - C_4 R_4 \right) - 1}{2 g_m + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 \right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 L_3 g_m \right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4 \right)}$$

10.576 **INVALID-ORDER-576** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 R_4 s^4 + g_m + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m - C_3 C_5 L_3 \right) + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 + C_3 L_3 g_m - C_4 C_5 R_4 \right) + s \left(C_3 R_3 g_m + C_4 R_4 g_m - C_5 \right)}{s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m \right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 \right) + s \left(C_3 g_m + 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.577 **INVALID-ORDER-577** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 R_4 R_5 s^4 + R_5 g_m + s^3 \left(-C_3 C_4 C_5 R_3 R_4 R_5 + C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 - C_3 C_5 L_3 R_5 \right) + s^2 \left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_5 + C_3 L_3 R_5 g_m - C_3 L_3 - C_4 C_5 R_4 R_5 \right)}{2 g_m + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_5 L_3 R_5 g_m \right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 \ldots \right)}$$

10.578 **INVALID-ORDER-578** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty \right)$

$$H(s) = \frac{g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 \right) + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 \right) + s^2 \left(C_3 C_4 R_3 R_4 g_m + C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_3 L_3 g_m + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4 \right) + s \left(C_3 R_3 \ldots \right)}{s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m \right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + C_3 C_5 + 2 C_4 C_5 R \ldots \right)}$$

10.579 **INVALID-ORDER-579** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty \right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + g_m + s^4 \left(-C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m - C_3 C_5 L_3 + C_3 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 + C_3 L_3 g_m - C_4 C_5 R_4 + C_5 L_5 g_m \ldots \right)}{2 C_3 C_4 C_5 L_3 L_5 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 + 2 C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C_4 C_5 L_5 g_m \right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + \ldots \right)}$$

10.580 **INVALID-ORDER-580** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_5 R_4 s^5 + s^4 \left(-C_3 C_4 C_5 L_5 R_3 R_4 + C_3 C_4 L_3 L_5 R_4 g_m - C_3 C_5 L_3 L_5 \right) + s^3 \left(-C_3 C_4 L_3 R_4 + C_3 C_4 L_5 R_3 R_4 g_m - C_3 C_5 L_5 R_3 + C_3 L_3 L_5 g_m - C_4 C_5 L_5 R_4 \right) + s^2 \left(-C_3 C_4 R_3 R_4 - C_3 L_3 \ldots \right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_4 L_5 R_3 g_m + C_3 C_4 L_5 R_4 g_m + 2 C_3 C_5 L_5 R_3 g_m + C_3 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + \ldots \right)}$$

10.581 **INVALID-ORDER-581** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty \right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_5 R_4 g_m s^5 + g_m + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_3 C_5 L_5 R_3 g_m + C_4 C_5 L_5 R_4 g_m \right) + s^2 \left(C_3 C_4 \ldots \right)}{2 C_3 C_4 C_5 L_3 L_5 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + 2 C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + 2 C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2 C \ldots \right)}$$

10.582 **INVALID-ORDER-582** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty \right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_5 R_4 R_5 s^5 - R_5 + s^4 \left(-C_3 C_4 C_5 L_5 R_3 R_4 R_5 + C_3 C_4 L_3 L_5 R_4 R_5 g_m - C_3 C_4 L_3 L_5 R_4 - C_3 C_5 L_3 L_5 R_5 \right) + s^3 \left(-C_3 C_4 L_3 R_4 \ldots \right)}{2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_4 L_3 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_5 + 2 C_3 C_5 L_3 L_5 R_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_5 + 2 C_3 C_4 L_5 R_3 R_4 g_m + \ldots \right)}$$

10.583 **INVALID-ORDER-583** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4 \right) + s^4 \left(C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 + C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_5 L_3 L_5 R_5 g_m - C_3 C_5 L_3 L_5 \right) + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 + C_3 C_4 \ldots \right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C \ldots \right)}$$

10.584 **INVALID-ORDER-584** $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty \right)$

$$H(s) = \frac{R_5 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4 \right) + s^4 \left(-C_3 C_4 C_5 L_3 R_4 R_5 + C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 + C_3 C_5 L_3 L_5 R_5 g_m - C \ldots \right)}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 + 2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_5 L_3 L_5 g_m \right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 \ldots \right)}$$

10.585 INVALID-ORDER-585 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3\left(C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3\right) + s^2\left(C_3 L_3 R_5 g_m - C_3 L_3 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s\left(C_3 R_3 R_5 g_m - C_3 R_3\right) - 1}{2C_3 C_4 L_3 L_4 g_m s^4 + 2g_m + s^3\left(2C_3 C_4 L_3 R_5 g_m + 2C_3 C_4 L_3 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s^2\left(2C_3 C_4 R_3 R_5 g_m + 2C_3 C_4 R_3 + 2C_3 L_3 g_m + 2C_4 L_4 g_m\right) + s\left(2C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2C_4 R_5 g_m + 2C_4\right)}$$

10.586 INVALID-ORDER-586 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 s^5 + g_m + s^4\left(-C_3 C_4 C_5 L_4 R_3 + C_3 C_4 L_3 L_4 g_m\right) + s^3\left(C_3 C_4 L_4 R_3 g_m - C_3 C_5 L_3 - C_4 C_5 L_4\right) + s^2\left(-C_3 C_5 R_3 + C_3 L_3 g_m + C_4 L_4 g_m\right) + s\left(C_3 R_3 g_m - C_5\right)}{2C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4\left(2C_3 C_4 C_5 L_3 + 2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(2C_3 C_4 C_5 R_3 + 2C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2C_3 C_5 L_3 g_m + 2C_4 C_5 L_4 g_m\right) + s^2\left(2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 + 2C_4 C_5\right) + s\left(C_3 g_m + 2C_4 g_m + 2C_5 g_m\right)}$$

10.587 INVALID-ORDER-587 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_5 s^5 + R_5 g_m + s^4\left(-C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3\left(C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3 - C_3 C_5 L_3 R_5 - C_4 C_5 L_4 R_5\right) + s^2\left(-C_3 C_5 R_3 R_5 + C_3 L_3 R_5 g_m - \ldots\right)}{2C_3 C_4 C_5 L_3 L_4 R_5 g_m s^5 + 2g_m + s^4\left(2C_3 C_4 C_5 L_3 R_5 + 2C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5 + 2C_3 C_4 L_3 L_4 g_m\right) + s^3\left(2C_3 C_4 C_5 R_3 R_5 + 2C_3 C_4 L_3 R_5 g_m + 2C_3 C_4 L_3 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4 + 2C_3 C_5 L_3 R_5 g_m + 2C_4 C_5 L_4 R_5 g_m\right) + s^2\left(2C_3 C_4 R_3 R_5 g_m + \ldots\right)}$$

10.588 INVALID-ORDER-588 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4\right) + s^4\left(C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 L_3 L_4 g_m\right) + s^3\left(C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2\left(C_3 C_5 R_3 R_5 g_m - C_3 C_5 R_3 + C_3 L_3 g_m + C_4 L_4 g_m\right) + \ldots}{2C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4\left(2C_3 C_4 C_5 L_3 R_5 g_m + 2C_3 C_4 C_5 L_3 + 2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3\left(2C_3 C_4 C_5 R_3 R_5 g_m + 2C_3 C_4 C_5 R_3 + 2C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2C_3 C_5 L_3 g_m + 2C_4 C_5 L_4 g_m\right) + s^2\left(2C_3 C_4 R_3 g_m + 2C_3 C_5 R_3 g_m + C_3 C_5 R_5 g_m + \ldots\right)}$$

10.589 INVALID-ORDER-589 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5\left(-C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_4 L_5 R_3 g_m\right) + s^4\left(-C_3 C_4 C_5 L_4 R_3 + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_3 g_m - C_3 C_5 L_3 + C_3 C_5 L_5 R_3 g_m - C_4 C_5 L_4\right) + s^2\left(-C_3 C_5 R_3 + C_3 L_3 g_m + C_4 \ldots\right)}{s^5\left(2C_3 C_4 C_5 L_3 L_4 g_m + 2C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 C_5 L_3 + 2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 + 2C_3 C_4 C_5 L_5 R_3 g_m\right) + s^3\left(2C_3 C_4 C_5 R_3 + 2C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2C_3 C_5 L_3 g_m + C_3 C_5 L_5 g_m + 2C_4 C_5 L_4 g_m + 2C_4 C_5 L_5 g_m\right) + s^2\left(2C_3 C_4 R_3 g_m + \ldots\right)}$$

10.590 INVALID-ORDER-590 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5\left(-C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4\left(-C_3 C_4 L_3 L_4 + C_3 C_4 L_4 L_5 R_3 g_m - C_3 C_5 L_3 L_5 - C_4 C_5 L_4 L_5\right) + s^3\left(-C_3 C_4 L_4 R_3 - C_3 C_5 L_5 R_3 + C_3 L_3 L_5 g_m + C_4 L_4 L_5 g_m\right) + \ldots}{2C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2g_m + s^5\left(2C_3 C_4 C_5 L_3 L_5 + 2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(2C_3 C_4 C_5 L_5 R_3 + 2C_3 C_4 L_3 L_4 g_m + 2C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2C_3 C_5 L_3 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2C_3 C_4 L_3 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 + 2C_3 C_4 L_5 R_3 g_m + \ldots\right)}$$

10.591 INVALID-ORDER-591 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_4 L_5 R_3 g_m\right) + s^4\left(C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3\left(C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_3 C_5 L_5 \ldots\right)}{s^5\left(2C_3 C_4 C_5 L_3 L_4 g_m + 2C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 C_5 L_3 R_5 g_m + 2C_3 C_4 C_5 L_3 + 2C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4 + 2C_3 C_4 C_5 L_5 R_3 g_m\right) + s^3\left(2C_3 C_4 C_5 R_3 R_5 g_m + 2C_3 C_4 C_5 R_3 + 2C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2C_3 C_5 L_3 g_m + C_5 \ldots\right)}$$

10.592 INVALID-ORDER-592 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 - R_5 + s^5\left(-C_3 C_4 C_5 L_4 L_5 R_3 R_5 + C_3 C_4 L_3 L_4 L_5 R_5 g_m - C_3 C_4 L_3 L_4 L_5\right) + s^4\left(-C_3 C_4 L_3 L_4 R_5 + C_3 C_4 L_4 L_5 R_3 \ldots\right)}{2C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m s^6 + 2R_5 g_m + s^5\left(2C_3 C_4 C_5 L_3 L_5 R_5 + 2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_5 + 2C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 C_5 L_5 R_3 R_5 + 2C_3 C_4 L_3 L_4 R_5 g_m + 2C_3 C_4 L_3 L_5 R_5 g_m + 2C_3 C_4 L_3 L_5 + 2C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 L_5 R_5 g_m + C_3 C_4 L_4 L_5 + 2\ldots\right)}$$

10.593 INVALID-ORDER-593 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4 + C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_5 L_3 L_5 R_5 g_m - C_3 \ldots\right)}{2C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2g_m + s^5\left(2C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2C_3 C_4 C_5 L_3 L_5 + 2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(2C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 + 2C_3 C_4 L_3 L_4 g_m + 2C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2C_3 C_5 L_3 L_5 g_m + 2C_4 C_5 L_4 \ldots\right)}$$

10.594 INVALID-ORDER-594 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ L_4 s + \frac{1}{C_4 s},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(-C_3 C_4 C_5 L_3 L_4 R_5 + C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3\right) + s^4\left(-C_3 C_4 C_5 L_4 R_3 R_5 + \ldots\right)}{2C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2g_m + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2C_3 C_4 C_5 L_3 L_5 + 2C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4\left(2C_3 C_4 C_5 L_3 R_5 + 2C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5 + 2C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_5 R_3 + \ldots\right)}$$

10.595   INVALID-ORDER-595 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5,\ \infty\right)$

$$H(s) = \frac{s^3\left(C_3 L_3 L_4 R_5 g_m - C_3 L_3 L_4\right) + s^2\left(C_3 L_4 R_3 R_5 g_m - C_3 L_4 R_3\right) + s\left(L_4 R_5 g_m - L_4\right)}{2R_5 g_m + s^4\left(2C_3 C_4 L_3 L_4 R_5 g_m + 2C_3 C_4 L_3 L_4\right) + s^3\left(2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + 2C_3 L_3 L_4 g_m\right) + s^2\left(2C_3 L_3 R_5 g_m + 2C_3 L_3 + 2C_3 L_4 R_3 g_m + C_3 L_4 R_5 g_m + C_3 L_4 + 2C_4 L_4 R_5 g_m + 2C_4 L_4\right) + s\left(2C_3 R_3 R_5 g_m + 2C_3 R_3 + 2L_4 g_m\right) + 2}$$

10.596   INVALID-ORDER-596 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_4 s^4 + L_4 g_m s + s^3\left(-C_3 C_5 L_4 R_3 + C_3 L_3 L_4 g_m\right) + s^2\left(C_3 L_4 R_3 g_m - C_5 L_4\right)}{2C_3 C_4 C_5 L_3 L_4 s^5 + 2g_m + s^4\left(2C_3 C_4 C_5 L_4 R_3 + 2C_3 C_4 L_3 L_4 g_m + 2C_3 C_5 L_3 L_4 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_3 + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2C_4 C_5 L_4\right) + s^2\left(2C_3 C_5 R_3 + 2C_3 L_3 g_m + C_3 L_4 g_m + 2C_4 L_4 g_m + 2C_5 L_4 g_m\right) + s\left(2C_3 R_3 g_m + 2C_5\right)}$$

10.597   INVALID-ORDER-597 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_4 R_5 s^4 + s^3\left(-C_3 C_5 L_4 R_3 R_5 + C_3 L_3 L_4 R_5 g_m - C_3 L_3 L_4\right) + s^2\left(C_3 L_4 R_3 R_5 g_m - C_3 L_4 R_3 - C_5 L_4 R_5\right) + s\left(L_4 R_5 g_m - \cdots\right.}{2C_3 C_4 C_5 L_3 L_4 R_5 s^5 + 2R_5 g_m + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 + 2C_3 C_4 L_3 L_4 R_5 g_m + 2C_3 C_4 L_3 L_4 + 2C_3 C_5 L_3 L_4 R_5 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 R_5 g_m + 2C_3 C_4 L_4 R_3 + 2C_3 C_5 L_3 R_5 + 2C_3 C_5 L_4 R_3 R_5 g_m + C_3 C_5 L_4 R_5 + 2C_3 L_3 L_4 g_m + 2C_4 C_5 L_4 R_5\right) + s^2\left(2C_3 C_5 R_3 R_5 + 2C_3 L_3 R_5 g_m \cdots\right.}$$

10.598   INVALID-ORDER-598 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_4 g_m s + s^4\left(C_3 C_5 L_3 L_4 R_5 g_m - C_3 C_5 L_3 L_4\right) + s^3\left(C_3 C_5 L_4 R_3 R_5 g_m - C_3 C_5 L_4 R_3 + C_3 L_3 L_4 g_m\right) + s^2\left(C_3 L_4 R_3 g_m + C_5 L_4 R_5 g_m - C_5 L_4\right)}{2g_m + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4\right) + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 + 2C_3 C_4 L_3 L_4 g_m + 2C_3 C_5 L_3 L_4 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_3 R_5 g_m + 2C_3 C_5 L_3 + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 R_5 g_m + C_3 C_5 L_4 + 2C_4 C_5 L_4 R_5 g_m + 2C_4 C_5 L_4\right) + s^2\cdots}$$

10.599   INVALID-ORDER-599 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_3 L_4 L_5 g_m s^5 + L_4 g_m s + s^4\left(-C_3 C_5 L_3 L_4 + C_3 C_5 L_4 L_5 R_3 g_m\right) + s^3\left(-C_3 C_5 L_4 R_3 + C_3 L_3 L_4 g_m + C_5 L_4 L_5 g_m\right) + s^2\left(C_3 L_4 R_3 g_m - C_5 L_4\right)}{2C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2g_m + s^5\left(2C_3 C_4 C_5 L_3 L_4 + 2C_3 C_4 C_5 L_4 L_5 R_3 g_m\right) + s^4\left(2C_3 C_4 C_5 L_4 R_3 + 2C_3 C_4 L_3 L_4 g_m + 2C_3 C_5 L_3 L_4 g_m + 2C_3 C_5 L_3 L_5 g_m + C_3 C_5 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_3 + 2C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2C_3 C_5 L_5 R_3 g_m \cdots\right.}$$

10.600   INVALID-ORDER-600 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_4 L_5 s^5 - L_4 s + s^4\left(-C_3 C_5 L_4 L_5 R_3 + C_3 L_3 L_4 L_5 g_m\right) + s^3\left(-C_3 L_3 L_4 + C_3 L_4 L_5 R_3 g_m - C_5 L_4 L_5\right) + s^2\left(-C_3 L_4 R_3 + L_4\cdots\right.}{2C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5\left(2C_3 C_4 C_5 L_4 L_5 R_3 + 2C_3 C_4 L_3 L_4 L_5 g_m + 2C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 L_3 L_4 + 2C_3 C_4 L_4 L_5 R_3 g_m + 2C_3 C_5 L_3 L_5 + 2C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 + 2C_4 C_5 L_4 L_5\right) + s^3\left(2C_3 C_4 L_4 R_3 + 2C_3 C_5 L_5 R_3 + 2C_3 L_3 L_4 g_m + 2C_3 L_3 L_5 g_m + C_3 L_4 L_5 g_m\cdots\right.}$$

10.601   INVALID-ORDER-601 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_3 C_5 L_3 L_4 L_5 g_m s^5 + L_4 g_m s + s^4\left(C_3 C_5 L_3 L_4 R_5 g_m - C_3 C_5 L_3 L_4 + C_3 C_5 L_4 L_5 R_3 g_m\right) + s^3\left(C_3 C_5 L_4 R_3 R_5 g_m \cdots\right.}{2C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2g_m + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 + 2C_3 C_4 C_5 L_4 L_5 R_3 g_m\right) + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 R_3 + 2C_3 C_4 L_3 L_4 g_m + 2C_3 C_5 L_3 L_4 g_m + 2C_3 C_5 L_3 L_5 g_m + C_3 C_5 L_4 L_5 g_m + 2C_4 C_5 L_4 L_5 g_m\right) + s^3\left(2C_3 C_4 L_4 R_3 g_m + 2C_3 C_5 L_3 \cdots\right.}$$

10.602   INVALID-ORDER-602 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_3 C_5 L_3 L_4 L_5 R_5 s^5 - L_4 R_5 s + s^4\left(-C_3 C_5 L_4 L_5 R_3 R_5 \cdots\right.}{2C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 + 2R_5 + s^5\left(2C_3 C_4 C_5 L_4 L_5 R_3 R_5 + 2C_3 C_4 L_3 L_4 L_5 R_5 g_m + 2C_3 C_4 L_3 L_4 L_5 + 2C_3 C_5 L_3 L_4 L_5 R_5 g_m\right) + s^4\left(2C_3 C_4 L_3 L_4 R_5 + 2C_3 C_4 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 L_4 L_5 R_3 + 2C_3 C_5 L_3 L_5 R_5 + 2C_3 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_4 L_5 R_5 + 2C_3 L_3 L_4 L_5 g_m + 2C\cdots\right.}$$

10.603   INVALID-ORDER-603 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{s^5\left(C_3 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_5 L_3 L_4 L_5\right) + s^4\left(C_3 C\cdots\right.}{2R_5 g_m + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 + 2C_3 C_4 L_3 L_4 L_5 g_m + 2C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 L_3 L_4 L_5 R_5 g_m + 2C_3 C_4 L_3 L_4 + 2C_3 C_4 L_4 L_5 R_3 g_m + 2C_3 C_5 L_3 L_5 R_5 g_m + 2C_3 C_5 L_3 L_5 + 2C_3 C_5 L_4 L_5 R_3 g_m\cdots\right.}$$

10.604   INVALID-ORDER-604 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{s^5\left(C_3 C_5 L_3 L_4 L_5 R_5 g_m - \cdots\right.}{2R_5 g_m + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_5 + 2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 + 2C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 C_5 L_4 R_3 R_5 + 2C_3 C_4 L_3 L_4 R_5 g_m + 2C_3 C_4 L_3 L_4 + 2C_3 C_5 L_3 L_4 R_5 g_m + 2C_3 C_5 L_3 L_5 R_5 g_m + 2C_3 C_5 L_3 L_5\cdots\right.}$$

10.605 INVALID-ORDER-605 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^4 \left(C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3 \left(C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 + C_3 C_4 L_4 R_3 R_5 g_m - C_3 C_4 L_4 R_3\right) + s^2 \left(C_3 C_4 R_3 R_4 R_5 g_m - C_3 C_4 R_3 R_4 + C_3 L_3 R_5 g_m - C_3 L_3 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_3 R_3 R_5 g_m - C_3 R_3 + C_4 R_4 R_5 g_m - C_4 R_4\right)}{2 C_3 C_4 L_3 L_4 g_m s^4 + 2 g_m + s^3 \left(2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_5 g_m + C_3 C_4 L_4\right) + s^2 \left(2 C_3 C_4 R_3 R_4 g_m + 2 C_3 C_4 R_3 R_5 g_m + 2 C_3 C_4 R_3 + C_3 C_4 R_4 R_5 g_m + C_3 C_4 R_4 + 2 C_3 L_3 g_m + 2 C_4 L_4 g_m\right) + s \left(2 C_3 R_3 g_m + C_3 R_5 g_m + C_3 + 2 \ldots\right)}$$

10.606 INVALID-ORDER-606 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 s^5 + g_m + s^4 \left(-C_3 C_4 C_5 L_3 R_4 - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m + C_3 C_4 L_4 R_3 g_m - C_3 C_5 L_3 - C_4 C_5 L_4\right) + s^2 \left(C_3 C_4 R_3 R_4 g_m - C_3 C_5 R_3 + C_3 L_3 g_m - C_4 C_5 R_4 + C_4 L_4 g_m\right) + s \left(C_3 \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 + 2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 C_5 L_3 g_m + 2 C_4 C_5 L_4 g_m\right) + s^2 \left(2 C_3 C_4 R_3 g_m + C_3 C_4 R_4 g_m + 2 C_3 C_5 R_3 g_m + C_3 C_5 \ldots\right)}$$

10.607 INVALID-ORDER-607 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_5 s^5 + R_5 g_m + s^4 \left(-C_3 C_4 C_5 L_3 R_4 R_5 - C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 L_3 L_4 R_5 g_m - C_3 C_4 L_3 L_4\right) + s^3 \left(-C_3 C_4 C_5 R_3 R_4 R_5 + C_3 C_4 L_3 R_4 R_5 g_m - C_3 C_4 L_3 R_4 + C_3 C_4 L_4 R_3 \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 R_5 g_m s^5 + 2 g_m + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_4 R_5 + 2 C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_3 R_5 g_m + 2 C_3 C_4 L_3 + 2 C_3 C_4 L_4 R_3 g_m + \ldots\right)}$$

10.608 INVALID-ORDER-608 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4\right) + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m + C_3 C_4 L_4 R_3 g_m + C_3 C_5 L_3 R_5 g_m - C_3 C_5 L_3 + C_4 C_5 L_4 \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 g_m s^5 + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + 2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 R_5 g_m + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C_3 \ldots\right)}$$

10.609 INVALID-ORDER-609 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5 \left(-C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_3 L_5 R_4 g_m + C_3 C_4 C_5 L_4 L_5 R_3 g_m\right) + s^4 \left(-C_3 C_4 C_5 L_3 R_4 - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 L_3 R_4 g_m + C_3 C_4 L_4 R_3 g_m \ldots\right)}{s^5 \left(2 C_3 C_4 C_5 L_3 L_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 + 2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 + 2 C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 R_3 + C_3 C_4 C_5 R_4 + 2 C_3 C_4 L_3 g_m + C_3 C_4 L_4 g_m + 2 C \ldots\right)}$$

10.610 INVALID-ORDER-610 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 s^6 + s^5 \left(-C_3 C_4 C_5 L_3 L_5 R_4 - C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(-C_3 C_4 C_5 L_5 R_3 R_4 - C_3 C_4 L_3 L_4 + C_3 C_4 L_3 L_5 R_4 g_m + C_3 C_4 L_4 L_5 R_3 g_m - C_3 C_5 L_3 L_5 - C_4 C_5 \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_4 L_3 L_5 g_m + C_3 C_4 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_5 g_m + 2 C_4 C_5 L_4 L_5 g_m\right)}$$

10.611 INVALID-ORDER-611 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 + C_3 C_4 C_5 L_3 L_5 R_4 g_m + C_3 C_4 C_5 L_4 L_5 R_3 g_m\right) + s^4 \left(C_3 C_4 C_5 L_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 R_4 + C_3 C_4 C_5 L_4 R_3 R_5 g_m - C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_5 R_3 R_4 g_m + C_3 C_4 L_3 L_4 g_m + C_3 C_5 L_3 L_5 g_m + C_4 C_5 L_4 L_5 \ldots\right)}{s^5 \left(2 C_3 C_4 C_5 L_3 L_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 g_m + C_3 C_4 C_5 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 + 2 C_3 C_4 C_5 L_4 R_3 g_m + C_3 C_4 C_5 L_4 R_5 g_m + C_3 C_4 C_5 L_4 + 2 C_3 C_4 C_5 L_5 R_3 g_m + C_3 C_4 C_5 L_5 R_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 g_m + \ldots\right)}$$

10.612 INVALID-ORDER-612 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 R_5 s^6 - R_5 + s^5 \left(-C_3 C_4 C_5 L_3 L_5 R_4 R_5 - C_3 C_4 C_5 L_4 L_5 R_3 R_5 + C_3 C_4 L_3 L_4 L_5 R_5 g_m - C_3 C_4 L_3 L_4 L_5 \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m s^6 + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_5 + 2 C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 + C_3 C_4 C_5 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_5 R_4 g_m - \ldots\right)}$$

10.613 INVALID-ORDER-613 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 C_5 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_5 R_3 R_4 + C_3 C_4 L_3 L_4 R_5 g_m - \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_5 R_3 + C_3 C_4 C_5 L_5 R_4 R_5 g_m + C_3 C_4 C_5 \ldots\right)}$$

10.614 INVALID-ORDER-614 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{R_5 g_m + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(-C_3 C_4 C_5 L_3 L_4 R_5 + C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_5 R_4 + C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m - \ldots\right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_5 g_m + C_3 C_4 C_5 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_5 + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + C_3 C_4 C_5 \ldots\right)}$$

10.615 INVALID-ORDER-615 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{s^3 \left(C_3 L_3 L_4 R_4 R_5 g_m - C_3 L_3 L_4 R_4 \right) + s^2 \left(C_3 L_4 R_3 R_4 R_5 g_m - C_3 L_4 R_3 R_4 \right) + s \left(L_4 R_4 R_5 g_m - L_4 R_4 \right)}{2 R_4 R_5 g_m + 2 R_4 + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_4 \right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 L_4 R_3 R_4 + 2 C_3 L_3 L_4 R_4 g_m + 2 C_3 L_3 L_4 R_5 g_m + 2 C_3 L_3 L_4 \right) + s^2 \left(2 C_3 L_3 R_4 R_5 g_m + 2 C_3 L_3 R_4 + 2 C_3 L_4 R_3 R_4 g_m + 2 C_3 L_4 R_3 R_5 g_m + 2 C_3 L_4 R_3 + C_3 L_4 R_4 R_5 g_m + C_3 L_4 \cdots}$

10.616 INVALID-ORDER-616 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 R_4 s^4 + L_4 R_4 g_m s + s^3 \left(-C_3 C_5 L_4 R_3 R_4 + C_3 L_3 L_4 R_4 g_m \right) + s^2 \left(C_3 L_4 R_3 R_4 g_m - C_5 L_4 R_4 \right)}{2 C_3 C_4 C_5 L_3 L_4 R_4 s^5 + 2 R_4 g_m + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 \right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 + 2 C_3 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_5 L_4 R_3 + C_3 C_5 L_4 R_4 + 2 C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_4 \right) + s^2 \left(2 C_3 C_5 R_3 R_4 + 2 C_3 L_3 R_4 g_m + \cdots \right)}$

10.617 INVALID-ORDER-617 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 R_4 R_5 s^4 + s^3 \left(-C_3 C_5 L_4 R_3 \cdots \right) + \cdots}{2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_4 + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_4 + 2 C_3 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 R_5 \right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 L_4 R_3 R_4 + 2 C_3 C_5 L_3 R_4 R_5 + 2 C_3 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_5 L_4 R_3 R_5 + C_3 C_5 \cdots \right)}$

10.618 INVALID-ORDER-618 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{L_4 R_4 g_m s + s^4 \left(C_3 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_5 L_3 L_4 R_4 \right) + \cdots}{2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_4 \right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_4 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 \right) + s^3 \left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_5 L_3 R_4 + 2 C_3 C_5 L_4 R_3 R_4 g_m \cdots \right)}$

10.619 INVALID-ORDER-619 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_5 L_3 L_4 L_5 R_4 g_m s^5 + L_4 R_4 g_m s + s^4 \left(-C_3 C_5 L_3 L_4 R_4 + \cdots \right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + 2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 g_m \right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 + 2 C_3 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_5 L_4 L_5 R_3 g_m + C_3 C_5 L_4 L_5 R_4 g_m + 2 C_4 C_5 L_4 L_5 R_4 \cdots \right)}$

10.620 INVALID-ORDER-620 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_4 L_5 R_4 s^5 - L_4 R_4 s + s^4 \left(-C_3 \cdots \right)}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 + 2 R_4 + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 + 2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 \right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 + 2 C_3 C_4 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_3 L_5 R_4 + 2 C_3 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_4 L_5 R_3 + C_3 C_5 L_4 L_5 R_4 + 2 C_3 L_3 L_4 L_5 g_m + 2 C_4 \cdots \right)}$

10.621 INVALID-ORDER-621 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{\cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + 2 R_4 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_4 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 g_m \right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_4 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 + 2 \cdots \right)}$

10.622 INVALID-ORDER-622 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{\cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 s^6 + 2 R_4 R_5 + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 + 2 C_3 C_4 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5 R_4 + 2 C_3 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_5 \right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 + 2 C_3 C_4 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 L_4 L_5 R_3 R_4 + 2 C_3 C_5 L_3 L_5 R_4 R_5 + 2 C_3 C_5 L_4 L_5 \cdots \right)}$

10.623 INVALID-ORDER-623 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{\cdots}{2 R_4 R_5 g_m + 2 R_4 + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 \right) + s^5 \left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 + 2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 \right) + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_4 + \cdots \right)}$

10.624 INVALID-ORDER-624 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{\cdots}{2 R_4 R_5 g_m + 2 R_4 + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 \right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 + 2 C_3 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 \right) + s^4 \left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_4 R_5 \cdots \right)}$

10.625   INVALID-ORDER-625 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ R_5,\ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4\left(C_3 C_4 L_3 L_4 R_4 R_5 g_m - C_3 C_4 L_3 L_4 R_4\right) + s^3\left(C_3 C_4 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_4 R_3 R_4 + C_3 L_3 L_4 R_5 g_m - C_3 L_3 L_4\right) + s^2\left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 + C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_3 + C_4 L_4 R_4 R_5 g\right.}{2 R_4 g_m + 2 R_5 g_m + s^4\left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4\right) + s^3\left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 R_5 g_m + 2 C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4 + 2 C_3 L_3 L_4 g_m\right) + s^2\left(2 C_3 L_3 R_4 g_m + 2 C_3 L_3 R_5 g_m + 2 C_3 L_3 + 2 C_3 L_4 R_3 g_m + C_3 L_4 R_5 g_m + C_3\right.}$$

10.626   INVALID-ORDER-626 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_4 s^5 + R_4 g_m + s^4\left(-C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_4 L_3 L_4 R_4 g_m - C_3 C_5 L_3 L_4\right) + s^3\left(C_3 C_4 L_4 R_3 R_4 g_m - C_3 C_5 L_3 R_4 - C_3 C_5 L_4 R_3 + C_3 L_3 L_4 g_m - C_4 C_5 L_4 R_4\right) + s^2\left(-C_3 C_5 R_3 R_4 + C_3\right.}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4\right) + s^4\left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m\right) + s^3\left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 + 2 C_3 C_5 L_4 R_3 g_m + C_3 C_5 L_4 + 2 C_4 C_5 L_4 R_4 g_m +\right.}$$

10.627   INVALID-ORDER-627 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 + R_4 R_5 g_m - R_4 + s^4\left(-C_3 C_4 C_5 L_4 R_3 R_4 R_5 + C_3 C_4 L_3 L_4 R_4 R_5 g_m - C_3 C_4 L_3 L_4 R_4 - C_3 C_5\right.}{2 R_4 g_m + 2 R_5 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5\right) + s^4\left(2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_4 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_5 L_3 L_4 R_5 g_m\right) + s^3\left(2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 R_5 g_m + 2\right.}$$

10.628   INVALID-ORDER-628 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4\left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_4 L_3 L_4 R_4 g_m + C_3 C_5 L_3 L_4 R_5 g_m - C_3 C_5 L_3 L_4\right) + s^3\left(C_3 C_4 L_4 R_3 R_4 g_m + C_3 C_5 L_3 R_4 R\right.}{2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4\right) + s^4\left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m\right) + s^3\left(2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5\right.}$$

10.629   INVALID-ORDER-629 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5\left(-C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(-C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_4 L_3 L_4 R_4 g_m - C_3 C_5 L_3 L_4 + C_3 C_5 L_3 L_5 R_4 g_m + C_3 C_5 L_4 L_5 R_3 g\right.}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4\left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_4 g_m + 2 C_3 C_5 L_3 L_5 g_m + C_3 C_5 L_4 L_5 g_m + 2 C_4 C_5 L_4\right.}$$

10.630   INVALID-ORDER-630 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 - R_4 + s^5\left(-C_3 C_4 C_5 L_4 L_5 R_3 R_4 + C_3 C_4 L_3 L_4 L_5 R_4 g_m - C_3 C_5 L_3 L_4 L_5\right) + s^4\left(-C_3 C_4 L_3 L_4 R_4\right.}{2 R_4 g_m + s^6\left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 + 2 C_3 C_4 L_3 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_4 L_4 L_5 R_3 g_m + C_3 C_4 L_4 L_5 R_4 g_m + 2 C_3 C_5 L_3 L_5 R\right.}$$

10.631   INVALID-ORDER-631 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_4 L_3 L_4 R_4 g_m + C\right.}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4\left(2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L\right.}$$

10.632   INVALID-ORDER-632 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4}{2 R_4 R_5 g_m + 2 R_5 + s^6\left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5\right) + s^5\left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5 + 2 C_3 C_5 L_3 L_4 L_5 R_5 g_m\right) + s^4\left(2 C_3 C_4 L_3 L_4 R_4 R_5 g\right.}$$

10.633   INVALID-ORDER-633 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5\left(C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_4 L_5 R_3 R\right.}{2 R_4 g_m + 2 R_5 g_m + s^6\left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4 + 2 C_3 C_4 L_3 L_4 L_5 g_m + 2 C_3 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2 C_3\right.}$$

10.634   INVALID-ORDER-634 $Z(s) = \left(\infty,\ \infty,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^6\left(C_3 C_4 C_5 L\right.}{2 R_4 g_m + 2 R_5 g_m + s^6\left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5\left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4 + 2\right.}$$

10.635 **INVALID-ORDER-635** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{R_4 R_5 g_m - R_4 + s^4 \left(C_3 C_4 L_3 L_4 R_4 R_5 g_m - C_3 C_4 L_3 L_4 R_4\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_4 R_3 R_4\right) + s^2 \left(C_3 L_3 R_4 R_5 g_m - C_3 L_3 R_4 + C_4 L_4 R_4 R_5 g_m\right.}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4\right) + s^3 \left(2 C_3 C_4 L_3 R_4 R_5 g_m + 2 C_3 C_4 L_3 R_4 + 2 C_3 C_4 L_4 R_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 R_5 g_m + 2 C_3 C_4 L_4 R_3 + C_3 C_4 L_4 R_4 R_5 g_m + C_3 C_4 L_4 R_4\right) + s^2 \left(2 C_3 C_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 R_3 R_4 + 2 C_3 L_3 R_4 g_m + \right.}$

10.636 **INVALID-ORDER-636** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_4 s^5 + R_4 g_m + s^4 \left(-C_3 C_4 C_5 L_4 R_3 R_4 + C_3 C_4 L_3 L_4 R_4 g_m\right) + s^3 \left(C_3 C_4 L_4 R_3 R_4 g_m - C_3 C_5 L_3 R_4 - C_4 C_5 L_4 R_4\right) + s^2 \left(-C_3 C_5 R_3\right.}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 + 2 C_3 C_4 L_3 R_4 g_m + 2 C_3 C_4 L_4 R_3 g_m + C_3 C_4 L_4 R_4 g_m + 2 C_3 C_5 L_3 R_4 g_m + 2 C_3 C_5 L_3 + 2 C_4 C_5 L_4 R_4\right.}$

10.637 **INVALID-ORDER-637** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_4 R_5 s^5 + R_4 R_5 g_m - R_4 + s^4 \left(\right.}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 + 2 C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 + C_3 C_4 C_5 L_4 R_4 R_5 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 R_5 g_m + 2 C_3 C_4 L_3 L_4\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5 + 2 C_3 C_4 L_3 R_4 R_5 g_m + 2\right.}$

10.638 **INVALID-ORDER-638** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{R_4 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4 \left(C_3 C_4 C_5 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5\right.}{2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 L_3 L_4 g_m\right) + s^3 \left(2 C_3 C_4 C_5 R_3 R_4 R_5\right.}$

10.639 **INVALID-ORDER-639** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5 \left(-C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m\right) + s^4 \left(-C_3 C_4\right.}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 + 2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 + C_3 C_4 C_5 L_4 R_4 + 2 C_3 C_4 C_5 L_5 R_3 R_4 g_m + 2 C_3 C_4 L_3 L_4 g_m\right.}$

10.640 **INVALID-ORDER-640** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 L_5 R_4 s^6 - R_4 + s^5 \left(-C_3 C_4 C_5 L_4 L_5\right.}{2 R_4 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 + 2 C_3 C_4 L_3 L_4 L_5 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 + 2 C_3 C_4 L_3 L_4 R_4 g_m + 2 C_3 C_4 L_3 L_4 + 2 C_3 C_4 L_3 L_5 R_4 g_m + 2 C_3 C_4 L_4 L_5 R_3\right.}$

10.641 **INVALID-ORDER-641** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m s^6 + R_4 g_m + s^5 \left(C_3 C_4 C_5\right.}{2 C_3 C_4 C_5 L_3 L_4 L_5 g_m s^6 + 2 g_m + s^5 \left(2 C_3 C_4 C_5 L_3 L_4 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 + 2 C_3 C_4 C_5 L_3 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_4 L_5 R_4 g_m\right) + s^4 \left(2 C_3 C_4 C_5 L_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 R_4 + 2 C_3 C_4 C_5 L_4 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 R_3 R_5 g_m + 2 C\right.}$

10.642 **INVALID-ORDER-642** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{}{2 R_4 R_5 g_m + 2 R_5 + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5\right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 + 2 C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5\right) + s^4 \left(2 C_3 C_4 C_5 L_5 R_3 R_4 R_5 +\right.}$

10.643 **INVALID-ORDER-643** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{}{2 R_4 g_m + 2 R_5 g_m + s^6 \left(2 C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(2 C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_5 R_4 + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_4 L_5 R_3 + C_3 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_4 L_5 R_4 + 2\right.}$

10.644 **INVALID-ORDER-644** $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \frac{R_4\left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{}{2R_4 g_m + 2R_5 g_m + s^6 \left(2C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5\right) + s^5 \left(2C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 R_5 + 2C_3 C_4 C_5 L_3 L_5 R_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_5 R_4 + 2C_3 C_4 C_5 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_4 L_5 R_3 + \cdots}$$

10.645 **INVALID-ORDER-645** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_3 R_4 s^2 + L_3 R_3 R_4 g_m s}{C_3 C_5 L_3 R_3 R_4 s^3 + R_3 R_4 g_m + s^2 \left(C_3 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 + C_5 L_3 R_4\right) + s \left(C_5 R_3 R_4 + 2L_3 R_3 g_m + L_3 R_4 g_m\right)}$$

10.646 **INVALID-ORDER-646** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 R_3 R_4 R_5 s^2 + s \left(L_3 R_3 R_4 R_5 g_m - L_3 R_3 R_4\right)}{C_3 C_5 L_3 R_3 R_4 R_5 s^3 + R_3 R_4 R_5 g_m + R_3 R_4 + s^2 \left(C_3 L_3 R_3 R_4 R_5 g_m + C_3 L_3 R_3 R_4 + 2C_5 L_3 R_3 R_4 R_5 g_m + 2C_5 L_3 R_3 R_5 + C_5 L_3 R_4 R_5\right) + s \left(C_5 R_3 R_4 R_5 + 2L_3 R_3 R_4 g_m + 2L_3 R_3 R_5 g_m + 2L_3 R_3 + L_3 R_4 R_5 g_m + L_3 R_4\right)}$$

10.647 **INVALID-ORDER-647** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{L_3 R_3 R_4 g_m s + s^2 \left(C_5 L_3 R_3 R_4 R_5 g_m - C_5 L_3 R_3 R_4\right)}{R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C_5 L_3 R_3 R_4\right) + s^2 \left(C_3 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 R_5 g_m + 2C_5 L_3 R_3 + C_5 L_3 R_4 R_5 g_m + C_5 L_3 R_4\right) + s \left(C_5 R_3 R_4 R_5 g_m + C_5 R_3 R_4 + 2L_3 R_3 g_m + L_3 R_4 g_m\right)}$$

10.648 **INVALID-ORDER-648** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_3 L_5 R_3 R_4 g_m s^3 - C_5 L_3 R_3 R_4 s^2 + L_3 R_3 R_4 g_m s}{C_3 C_5 L_3 L_5 R_3 R_4 g_m s^4 + R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 R_3 R_4 + 2C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 + C_5 L_3 R_4 + C_5 L_5 R_3 R_4 g_m\right) + s \left(C_5 R_3 R_4 + 2L_3 R_3 g_m + L_3 R_4 g_m\right)}$$

10.649 **INVALID-ORDER-649** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_3 R_4 s^3 + L_3 L_5 R_3 R_4 g_m s^2 - L_3 R_3 R_4 s}{C_3 C_5 L_3 L_5 R_3 R_4 s^4 + R_3 R_4 + s^3 \left(C_3 L_3 L_5 R_3 R_4 g_m + 2C_5 L_3 L_5 R_3 R_4 g_m + 2C_5 L_3 L_5 R_3 + C_5 L_3 L_5 R_4\right) + s^2 \left(C_3 L_3 R_3 R_4 + C_5 L_5 R_3 R_4 + 2L_3 L_5 R_3 g_m + L_3 L_5 R_4 g_m\right) + s \left(2L_3 R_3 R_4 g_m + 2L_3 R_3 + L_3 R_4 + L_5 R_3 R_4 g_m\right)}$$

10.650 **INVALID-ORDER-650** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$$H(s) = \frac{C_5 L_3 L_5 R_3 R_4 g_m s^3 + L_3 R_3 R_4 g_m s + s^2 \left(C_5 L_3 R_3 R_4 R_5 g_m - C_5 L_3 R_3 R_4\right)}{C_3 C_5 L_3 L_5 R_3 R_4 g_m s^4 + R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C_5 L_3 R_3 R_4 + 2C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 R_4 g_m + 2C_5 L_3 R_3 R_5 g_m + 2C_5 L_3 R_3 + C_5 L_3 R_4 R_5 g_m + C_5 L_3 R_4 + C_5 L_5 R_3 R_4 g_m\right) + s \left(C_5 R_3 R_4 R_5 g_m + C_5 R_3 R_4 + 2L_3 \cdots\right)}$$

10.651 **INVALID-ORDER-651** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_3 R_4 R_5 s^3 - L_3 R_3 R_4 R_5 s + s^2 \left(L_3 L_5 R_3 R_4 R_5 g_m - L_3 L_5 R_3 R_4\right)}{C_3 C_5 L_3 L_5 R_3 R_4 R_5 s^4 + R_3 R_4 R_5 + s^3 \left(C_3 L_3 L_5 R_3 R_4 R_5 g_m + C_3 L_3 L_5 R_3 R_4 + 2C_5 L_3 L_5 R_3 R_4 R_5 g_m + 2C_5 L_3 L_5 R_3 R_5 + C_5 L_3 L_5 R_4 R_5\right) + s^2 \left(C_3 L_3 R_3 R_4 R_5 + C_5 L_5 R_3 R_4 R_5 + 2L_3 L_5 R_3 R_4 g_m + 2L_3 L_5 R_3 R_5 g_m + 2L_3 L_5 R_3 + L_3 L_5 R_4 R_5 g_m + L_3 L_5 R_4\right) + s \left(2L_3 R_3 R_4 \cdots\right)}$$

10.652 **INVALID-ORDER-652** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$$H(s) = \frac{L_3 L_5 R_3 R_4 g_m s^2 + s^3 \left(C_5 L_3 L_5 R_3 R_4 R_5 g_m - C_5 L_3 L_5 R_3 R_4\right) + s \left(L_3 R_3 R_4 R_5 g_m - L_3 R_3 R_4\right)}{R_3 R_4 R_5 g_m + R_3 R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_3 R_4\right) + s^3 \left(C_3 L_3 L_5 R_3 R_4 g_m + 2C_5 L_3 L_5 R_3 R_4 g_m + 2C_5 L_3 L_5 R_3 R_5 g_m + 2C_5 L_3 L_5 R_3 + C_5 L_3 L_5 R_4 R_5 g_m + C_5 L_3 L_5 R_4\right) + s^2 \left(C_3 L_3 R_3 R_4 R_5 g_m + C_3 L_3 R_3 R_4 + C_5 L_5 R_3 R_4 R_5 g_m + C_5 L_5 R_3 R_4 + 2L_3 L_5 \cdots\right)}$$

10.653 **INVALID-ORDER-653** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 R_3 R_4 R_5 s^2 + s^3\left(C_5 L_3 L_5 R_3 R_4 R_5 g_m - C_5 L_3 L_5 R_3 R_4\right) + s\left(L_3 R_3 R_4 R_5 g_m - L_3 R_3 R_4\right)}{R_3 R_4 R_5 g_m + R_3 R_4 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_3 R_4\right) + s^3\left(C_3 C_5 L_3 R_3 R_4 R_5 + 2C_5 L_3 L_5 R_3 R_4 g_m + 2C_5 L_3 L_5 R_3 R_5 g_m + 2C_5 L_3 L_5 R_3 + C_5 L_3 L_5 R_4 R_5 g_m + C_5 L_3 L_5 R_4\right) + s^2\left(C_3 L_3 R_3 R_4 R_5 g_m + C_3 L_3 R_3 R_4 + 2C_5 L_3 R_3 R_4 R_5 g_m + 2C_5 L_3 R_3 R_5 + C_5 L_3 \cdots\right)}$$

10.654 **INVALID-ORDER-654** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 R_3 s^2 + L_3 R_3 g_m s}{R_3 g_m + s^3\left(C_3 C_5 L_3 R_3 + 2C_4 C_5 L_3 R_3\right) + s^2\left(C_3 L_3 R_3 g_m + 2C_4 L_3 R_3 g_m + 2C_5 L_3 R_3 g_m + C_5 L_3\right) + s\left(C_5 R_3 + L_3 g_m\right)}$$

10.655 **INVALID-ORDER-655** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 R_3 R_5 s^2 + s\left(L_3 R_3 R_5 g_m - L_3 R_3\right)}{R_3 R_5 g_m + R_3 + s^3\left(C_3 C_5 L_3 R_3 R_5 + 2C_4 C_5 L_3 R_3 R_5\right) + s^2\left(C_3 L_3 R_3 R_5 g_m + C_3 L_3 R_3 + 2C_4 L_3 R_3 R_5 g_m + 2C_4 L_3 R_3 + 2C_5 L_3 R_3 R_5 g_m + C_5 L_3 R_5\right) + s\left(C_5 R_3 R_5 + 2L_3 R_3 g_m + L_3 R_5 g_m + L_3\right)}$$

10.656 **INVALID-ORDER-656** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{L_3 R_3 g_m s + s^2\left(C_5 L_3 R_3 R_5 g_m - C_5 L_3 R_3\right)}{R_3 g_m + s^3\left(C_3 C_5 L_3 R_3 R_5 g_m + C_3 C_5 L_3 R_3 + 2C_4 C_5 L_3 R_3 R_5 g_m + 2C_4 C_5 L_3 R_3\right) + s^2\left(C_3 L_3 R_3 g_m + 2C_4 L_3 R_3 g_m + 2C_5 L_3 R_3 g_m + C_5 L_3 R_5 g_m + C_5 L_3\right) + s\left(C_5 R_3 R_5 g_m + C_5 R_3 + L_3 g_m\right)}$$

10.657 **INVALID-ORDER-657** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_3 L_5 R_3 g_m s^3 - C_5 L_3 R_3 s^2 + L_3 R_3 g_m s}{R_3 g_m + s^4\left(C_3 C_5 L_3 L_5 R_3 g_m + 2C_4 C_5 L_3 L_5 R_3 g_m\right) + s^3\left(C_3 C_5 L_3 R_3 + 2C_4 C_5 L_3 R_3 + C_5 L_3 L_5 g_m\right) + s^2\left(C_3 L_3 R_3 g_m + 2C_4 L_3 R_3 g_m + 2C_5 L_3 R_3 g_m + C_5 L_3 + C_5 L_5 R_3 g_m\right) + s\left(C_5 R_3 + L_3 g_m\right)}$$

10.658 **INVALID-ORDER-658** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_3 s^3 + L_3 L_5 R_3 g_m s^2 - L_3 R_3 s}{R_3 + s^4\left(C_3 C_5 L_3 L_5 R_3 + 2C_4 C_5 L_3 L_5 R_3\right) + s^3\left(C_3 L_3 L_5 R_3 g_m + 2C_4 L_3 L_5 R_3 g_m + 2C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5\right) + s^2\left(C_3 L_3 R_3 + 2C_4 L_3 R_3 + C_5 L_5 R_3 + L_3 L_5 g_m\right) + s\left(2L_3 R_3 g_m + L_3 + L_5 R_3 g_m\right)}$$

10.659 **INVALID-ORDER-659** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_3 L_5 R_3 g_m s^3 + L_3 R_3 g_m s + s^2\left(C_5 L_3 R_3 R_5 g_m - C_5 L_3 R_3\right)}{R_3 g_m + s^4\left(C_3 C_5 L_3 L_5 R_3 g_m + 2C_4 C_5 L_3 L_5 R_3 g_m\right) + s^3\left(C_3 C_5 L_3 R_3 R_5 g_m + C_3 C_5 L_3 R_3 + 2C_4 C_5 L_3 R_3 R_5 g_m + 2C_4 C_5 L_3 R_3 + C_5 L_3 L_5 g_m\right) + s^2\left(C_3 L_3 R_3 g_m + 2C_4 L_3 R_3 g_m + 2C_5 L_3 R_3 g_m + C_5 L_3 R_5 g_m + C_5 L_3 + C_5 L_5 R_3 g_m\right) + s\left(C_5 R_3 R_5 g_m + C_5 R_3 + L_3 g_m\right)}$$

10.660 **INVALID-ORDER-660** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 L_5 R_3 R_5 s^3 - L_3 R_3 R_5 s + s^2\left(L_3 L_5 R_3 R_5 g_m - L_3 L_5 R_3\right)}{R_3 R_5 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_5 + 2C_4 C_5 L_3 L_5 R_3 R_5\right) + s^3\left(C_3 L_3 L_5 R_3 R_5 g_m + C_3 L_3 L_5 R_3 + 2C_4 L_3 L_5 R_3 R_5 g_m + 2C_4 L_3 L_5 R_3 + 2C_5 L_3 L_5 R_3 R_5 g_m + C_5 L_3 L_5 R_5\right) + s^2\left(C_3 L_3 R_3 R_5 + 2C_4 L_3 R_3 R_5 + C_5 L_5 R_3 R_5 + 2L_3 L_5 R_3 g_m + L_3 L_5 R_5 g_m + L_3 L_5\right) + s\left(2L_3 R_3 R_5 g_m + L \cdots\right)}$$

10.661 **INVALID-ORDER-661** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{1}{C_4 s}, \ \frac{C_5 L_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_3 L_5 R_3 g_m s^2 + s^3\left(C_5 L_3 L_5 R_3 R_5 g_m - C_5 L_3 L_5 R_3\right) + s\left(L_3 R_3 R_5 g_m - L_3 R_3\right)}{R_3 R_5 g_m + R_3 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_5 R_3 + 2C_4 C_5 L_3 L_5 R_3 R_5 g_m + 2C_4 C_5 L_3 L_5 R_3\right) + s^3\left(C_3 L_3 L_5 R_3 g_m + 2C_4 L_3 L_5 R_3 g_m + 2C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5 R_5 g_m + C_5 L_3 L_5\right) + s^2\left(C_3 L_3 R_3 R_5 g_m + C_3 L_3 R_3 + 2C_4 L_3 R_3 R_5 g_m + 2C_4 L_3 R_3 + C_5 L_5 R_3 R_5 g_m + \cdots\right)}$$

10.662 **INVALID-ORDER-662** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{1}{C_4 s},\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 R_3 R_5 s^2 + s^3\left(C_5 L_3 L_5 R_3 R_5 g_m - C_5 L_3 L_5 R_3\right) + s\left(L_3 R_3 R_5 g_m - L_3 R_3\right)}{R_3 R_5 g_m + R_3 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_5 R_3 + 2 C_4 C_5 L_3 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_3 L_5 R_3\right) + s^3\left(C_3 C_5 L_3 R_3 R_5 + 2 C_4 C_5 L_3 R_3 R_5 + 2 C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5 R_5 g_m + C_5 L_3 L_5\right) + s^2\left(C_3 L_3 R_3 R_5 g_m + C_3 L_3 R_3 + 2 C_4 L_3 R_3 R_5 g_m + 2 C_4 L_3 R_3 + 2 C_5 L_3 R_3 R_5 g_m + \cdots\right)}$

10.663 **INVALID-ORDER-663** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 R_3 R_4 s^2 + L_3 R_3 R_4 g_m s}{R_3 R_4 g_m + s^3\left(C_3 C_5 L_3 R_3 R_4 + 2 C_4 C_5 L_3 R_3 R_4\right) + s^2\left(C_3 L_3 R_3 R_4 g_m + 2 C_4 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 + C_5 L_3 R_4\right) + s\left(C_5 R_3 R_4 + 2 L_3 R_3 g_m + L_3 R_4 g_m\right)}$

10.664 **INVALID-ORDER-664** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 R_3 R_4 R_5 s^2 + s\left(L_3 R_3 R_4 R_5 g_m - L_3 R_3 R_4\right)}{R_3 R_4 R_5 g_m + R_3 R_4 + s^3\left(C_3 C_5 L_3 R_3 R_4 R_5 + 2 C_4 C_5 L_3 R_3 R_4 R_5\right) + s^2\left(C_3 L_3 R_3 R_4 R_5 g_m + C_3 L_3 R_3 R_4 + 2 C_4 L_3 R_3 R_4 R_5 g_m + 2 C_4 L_3 R_3 R_4 + 2 C_5 L_3 R_3 R_4 R_5 g_m + 2 C_5 L_3 R_3 R_5 + C_5 L_3 R_4 R_5\right) + s\left(C_5 R_3 R_4 R_5 + 2 L_3 R_3 R_4 g_m + 2 L_3 R_3 R_5 g_m + 2 L_3 R_3 + L_3 R_4 R_5 g_m + L_3 \cdots\right)}$

10.665 **INVALID-ORDER-665** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{L_3 R_3 R_4 g_m s + s^2\left(C_5 L_3 R_3 R_4 R_5 g_m - C_5 L_3 R_3 R_4\right)}{R_3 R_4 g_m + s^3\left(C_3 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C_5 L_3 R_3 R_4 + 2 C_4 C_5 L_3 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_3 R_4\right) + s^2\left(C_3 L_3 R_3 R_4 g_m + 2 C_4 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 R_5 g_m + 2 C_5 L_3 R_3 + C_5 L_3 R_4 R_5 g_m + C_5 L_3 R_4\right) + s\left(C_5 R_3 R_4 R_5 g_m + C_5 R_3 R_4 + 2 L_3 R_3 g_m + L_3 R_4 g_m\right)}$

10.666 **INVALID-ORDER-666** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_5 L_3 L_5 R_3 R_4 g_m s^3 - C_5 L_3 R_3 R_4 s^2 + L_3 R_3 R_4 g_m s}{R_3 R_4 g_m + s^4\left(C_3 C_5 L_3 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_3 L_5 R_3 R_4 g_m\right) + s^3\left(C_3 C_5 L_3 R_3 R_4 + 2 C_4 C_5 L_3 R_3 R_4 + 2 C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5 R_4 g_m\right) + s^2\left(C_3 L_3 R_3 R_4 g_m + 2 C_4 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 + C_5 L_3 R_4 + C_5 L_5 R_3 R_4 g_m\right) + s\left(C_5 R_3 R_4 + 2 L_3 R_3 g_m + L_3 R_4 \cdots\right)}$

10.667 **INVALID-ORDER-667** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_5 R_3 R_4 s^3 + L_3 L_5 R_3 R_4 g_m s^2 - L_3 R_3 R_4 s}{R_3 R_4 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_4 + 2 C_4 C_5 L_3 L_5 R_3 R_4\right) + s^3\left(C_3 L_3 L_5 R_3 R_4 g_m + 2 C_4 L_3 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_5 R_3 + C_5 L_3 L_5 R_4\right) + s^2\left(C_3 L_3 R_3 R_4 + 2 C_4 L_3 R_3 R_4 + C_5 L_5 R_3 R_4 + 2 L_3 L_5 R_3 g_m + L_3 L_5 R_4 g_m\right) + s\left(2 L_3 R_3 R_4 g_m + 2 L_3 R_3 + L_3 R_4 + L_5 R_3 \cdots\right)}$

10.668 **INVALID-ORDER-668** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$H(s) = \dfrac{C_5 L_3 L_5 R_3 R_4 g_m s^3 + L_3 R_3 R_4 g_m s + s^2\left(C_5 L_3 R_3 R_4 R_5 g_m - C_5 L_3 R_3 R_4\right)}{R_3 R_4 g_m + s^4\left(C_3 C_5 L_3 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_3 L_5 R_3 R_4 g_m\right) + s^3\left(C_3 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C_5 L_3 R_3 R_4 + 2 C_4 C_5 L_3 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_3 R_4 + 2 C_5 L_3 L_5 R_3 g_m + C_5 L_3 L_5 R_4 g_m\right) + s^2\left(C_3 L_3 R_3 R_4 g_m + 2 C_4 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 R_4 g_m + 2 C_5 L_3 R_3 R_5 g_m + 2 C_5 L_3 R_3 \cdots\right)}$

10.669 **INVALID-ORDER-669** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$H(s) = \dfrac{-C_5 L_3 L_5 R_3 R_4 R_5 s^3 - L_3 R_3 R_4 R_5 s + s^2\left(L_3 L_5 R_3 R_4 R_5 g_m - L_3 L_5 R_3 R_4\right)}{R_3 R_4 R_5 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_4 R_5 + 2 C_4 C_5 L_3 L_5 R_3 R_4 R_5\right) + s^3\left(C_3 L_3 L_5 R_3 R_4 R_5 g_m + C_3 L_3 L_5 R_3 R_4 + 2 C_4 L_3 L_5 R_3 R_4 R_5 g_m + 2 C_4 L_3 L_5 R_3 R_4 + 2 C_5 L_3 L_5 R_3 R_4 R_5 g_m + 2 C_5 L_3 L_5 R_3 R_5 + C_5 L_3 L_5 R_4 R_5\right) + s^2\left(C_3 L_3 R_3 R_4 R_5 + 2 C_4 L_3 R_3 R_4 R_5 + C_5 L_5 R_3 R_4 R_5 + 2 L_3 L_\cdots\right)}$

10.670 **INVALID-ORDER-670** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{R_4}{C_4 R_4 s + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty\right)$

$H(s) = \dfrac{L_3 L_5 R_3 R_4 g_m s^2 + s^3\left(C_5 L_3 L_5 R_3 R_4 R_5 g_m - C_5 L_3 L_5 R_3 R_4\right) + s\left(L_3 R_3 R_4 R_5 \cdots\right)}{R_3 R_4 R_5 g_m + R_3 R_4 + s^4\left(C_3 C_5 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_3 R_4 + 2 C_4 C_5 L_3 L_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_5 R_3 R_4\right) + s^3\left(C_3 L_3 L_5 R_3 R_4 g_m + 2 C_4 L_3 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_5 R_3 R_5 g_m + 2 C_5 L_3 L_5 R_3 + C_5 L_3 L_5 R_4 R_5 g_m + C_5 L_3 L_5 R_4\right) + s^2\left(C_3 L_3 R_3 \cdots\right)}$

10.671 **INVALID-ORDER-671** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_5L_3R_3R_4R_5s^2 + s^3\left(C_5L_3L_5R_3R_4R_5g_m - C_5L_3L_5R_3R_4\right) + s\left(\cdots\right.}{R_3R_4R_5g_m + R_3R_4 + s^4\left(C_3C_5L_3L_5R_3R_4R_5g_m + C_3C_5L_3L_5R_3R_4 + 2C_4C_5L_3L_5R_3R_4R_5g_m + 2C_4C_5L_3L_5R_3R_4\right) + s^3\left(C_3C_5L_3R_3R_4R_5 + 2C_4C_5L_3R_3R_4R_5 + 2C_5L_3L_5R_3R_4g_m + 2C_5L_3L_5R_3R_5g_m + 2C_5L_3L_5R_3 + C_5L_3L_5R_4R_5g_m + C_5L_3L_5R_4\right) + s^2\left(C_3L_3R_3\cdots\right.}$

10.672 **INVALID-ORDER-672** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{s^2\left(C_4L_3R_3R_4R_5g_m - C_4L_3R_3R_4\right) + s\left(L_3R_3R_5g_m - L_3R_3\right)}{R_3R_5g_m + R_3 + s^3\left(C_3C_4L_3R_3R_4R_5g_m + C_3C_4L_3R_3R_4\right) + s^2\left(C_3L_3R_3R_5g_m + C_3L_3R_3 + 2C_4L_3R_3R_4g_m + 2C_4L_3R_3R_5g_m + 2C_4L_3R_3 + C_4L_3R_4R_5g_m + C_4L_3R_4\right) + s\left(C_4R_3R_4R_5g_m + C_4R_3R_4 + 2L_3R_3g_m + L_3R_5g_m + L_3\right)}$

10.673 **INVALID-ORDER-673** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_3R_3R_4s^3 + L_3R_3g_ms + s^2\left(C_4L_3R_3R_4g_m - C_5L_3R_3\right)}{C_3C_4C_5L_3R_3R_4s^4 + R_3g_m + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3 + 2C_4C_5L_3R_3R_4g_m + 2C_4C_5L_3R_3 + C_4C_5L_3R_4\right) + s^2\left(C_3L_3R_3g_m + C_4C_5R_3R_4 + 2C_4L_3R_3g_m + C_4L_3R_4g_m + 2C_5L_3R_3g_m + C_5L_3\right) + s\left(C_4R_3R_4g_m + C_5R_3 + L_3g_m\right)}$

10.674 **INVALID-ORDER-674** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_3R_3R_4R_5s^3 + s^2\left(C_4L_3R_3R_4R_5g_m - C_4L_3R_3R_4 - C_5L_3R_3R_5\right) + s\left(L_3R_3R_5g_m - L_3R_3\right)}{C_3C_4C_5L_3R_3R_4R_5s^4 + R_3R_5g_m + R_3 + s^3\left(C_3C_4L_3R_3R_4R_5g_m + C_3C_4L_3R_3R_4 + C_3C_5L_3R_3R_5 + 2C_4C_5L_3R_3R_4R_5g_m + 2C_4C_5L_3R_3R_5 + C_4C_5L_3R_4R_5\right) + s^2\left(C_3L_3R_3R_5g_m + C_3L_3R_3 + C_4C_5R_3R_4R_5 + 2C_4L_3R_3R_4g_m + 2C_4L_3R_3R_5g_m + 2C_4L_3R_3 + C_4L_3R_4\cdots\right.}$

10.675 **INVALID-ORDER-675** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{L_3R_3g_ms + s^3\left(C_4C_5L_3R_3R_4R_5g_m - C_4C_5L_3R_3R_4\right) + s^2\left(C_4L_3R_3R_4g_m + C_5L_3R_3R_5g_m - C_5L_3R_3\right)}{R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m + C_3C_4C_5L_3R_3R_4\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_3 + 2C_4C_5L_3R_3R_4g_m + 2C_4C_5L_3R_3R_5g_m + 2C_4C_5L_3R_3 + C_4C_5L_3R_4R_5g_m + C_4C_5L_3R_4\right) + s^2\left(C_3L_3R_3g_m + C_4C_5R_3R_4R_5g_m + C_4C_5R_3R_4 + 2C_4L_3\cdots\right.}$

10.676 **INVALID-ORDER-676** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_4C_5L_3L_5R_3R_4g_ms^4 + L_3R_3g_ms + s^3\left(-C_4C_5L_3R_3R_4 + C_5L_3L_5R_3g_m\right) + s^2\left(C_4L_3R_3R_4g_m - C_5L_3R_3\right)}{C_3C_4C_5L_3L_5R_3R_4g_ms^5 + R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4 + C_3C_5L_3L_5R_3g_m + 2C_4C_5L_3L_5R_3g_m + C_4C_5L_3L_5R_4g_m\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3 + 2C_4C_5L_3R_3R_4g_m + 2C_4C_5L_3R_3 + C_4C_5L_3R_4 + C_4C_5L_5R_3R_4g_m + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_3g_m + C_4C_5\cdots\right.}$

10.677 **INVALID-ORDER-677** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_3L_5R_3R_4s^4 - L_3R_3s + s^3\left(C_4L_3L_5R_3R_4g_m - C_5L_3L_5R_3\right) + s^2\left(-C_4L_3R_3R_4 + L_3L_5R_3g_m\right)}{C_3C_4C_5L_3L_5R_3R_4s^5 + R_3 + s^4\left(C_3C_4L_3L_5R_3R_4g_m + C_3C_5L_3L_5R_3 + 2C_4C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_5R_3 + C_4C_5L_3L_5R_4\right) + s^3\left(C_3C_4L_3R_3R_4 + C_3L_3L_5R_3g_m + C_4C_5L_5R_3R_4 + 2C_4L_3L_5R_3g_m + C_4L_3L_5R_4g_m + 2C_5L_3L_5R_3g_m + C_5L_3L_5\right) + s^2\left(C_3L_3R_3 + 2\cdots\right.}$

10.678 **INVALID-ORDER-678** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_4C_5L_3L_5R_3R_4g_ms^4 + L_3R_3g_ms + s^3\left(C_4C_5L_3R_3R_4R_5g_m - C_4C_5L_3R_3R_4 + C_5L_3\cdots\right.}{C_3C_4C_5L_3L_5R_3R_4g_ms^5 + R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m + C_3C_4C_5L_3R_3R_4 + C_3C_5L_3L_5R_3g_m + 2C_4C_5L_3L_5R_3g_m + C_4C_5L_3L_5R_4g_m\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_3 + 2C_4C_5L_3R_3R_4g_m + 2C_4C_5L_3R_3R_5g_m + 2C_4C_5L_3R_3 + C_4C_5L\cdots\right.}$

10.679 **INVALID-ORDER-679** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_4C_5L_3L_5R_3R_4R_5s^4 - L_3R_3R_5s + s^3\left(C_4\cdots\right.}{C_3C_4C_5L_3L_5R_3R_4R_5s^5 + R_3R_5 + s^4\left(C_3C_4L_3L_5R_3R_4R_5g_m + C_3C_4L_3L_5R_3R_4 + C_3C_5L_3L_5R_3R_5 + 2C_4C_5L_3L_5R_3R_4R_5g_m + 2C_4C_5L_3L_5R_3R_5 + C_4C_5L_3L_5R_4R_5\right) + s^3\left(C_3C_4L_3R_3R_4R_5 + C_3L_3L_5R_3R_5g_m + C_3L_3L_5R_3 + C_4C_5L_3R_3R_4R_5 + 2C_4L_3L_5R_3R_4g_m\cdots\right.}$

10.680 **INVALID-ORDER-680** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{s^4\left(C_4C_5L_3L_5R_3R_4R_5g_m - \cdots\right.}{R_3R_5g_m + R_3 + s^5\left(C_3C_4C_5L_3L_5R_3R_4R_5g_m + C_3C_4C_5L_3L_5R_3R_4\right) + s^4\left(C_3C_4L_3L_5R_3R_4g_m + C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_3 + 2C_4C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_5R_3R_5g_m + 2C_4C_5L_3L_5R_3 + C_4C_5L_3L_5R_4R_5g_m + C_4C_5L_3L_5R_4\right) + s^3\left(C_3C_4L_3R_3R_4R_5g_m + \cdots\right.}$

10.681 INVALID-ORDER-681 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{s^4 \left(C_4 C \ldots\right.}{R_3 R_5 g_m + R_3 + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_3 R_4\right) + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 R_5 + C_3 C_5 L_3 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_5 R_3 + 2 C_4 C_5 L_3 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_3 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_3 L_5 R_3 + C_4 C_5 L_3 L_5 R_4 R_5 g_m + C_4 C_5 L_3 L_5 R_4\right) + s^3 \left(C_3 C_4 L_3 R_3 R_4 R_5 g_m + \ldots\right.}$$

10.682 INVALID-ORDER-682 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$$H(s) = \frac{s^3 \left(C_4 L_3 L_4 R_3 R_5 g_m - C_4 L_3 L_4 R_3\right) + s \left(L_3 R_3 R_5 g_m - L_3 R_3\right)}{R_3 R_5 g_m + R_3 + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3\right) + s^3 \left(2 C_4 L_3 L_4 R_3 g_m + C_4 L_3 L_4 R_5 g_m + C_4 L_3 L_4\right) + s^2 \left(C_3 L_3 R_3 R_5 g_m + C_3 L_3 R_3 + 2 C_4 L_3 R_3 R_5 g_m + 2 C_4 L_3 R_3 + C_4 L_4 R_3 R_5 g_m + C_4 L_4 R_3\right) + s \left(2 L_3 R_3 g_m + L_3 R_5 g_m + L_3\right)}$$

10.683 INVALID-ORDER-683 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_3 L_4 R_3 s^4 + C_4 L_3 L_4 R_3 g_m s^3 - C_5 L_3 R_3 s^2 + L_3 R_3 g_m s}{C_3 C_4 C_5 L_3 L_4 R_3 s^5 + R_3 g_m + s^4 \left(C_3 C_4 L_3 L_4 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_5 L_3 R_3 + 2 C_4 C_5 L_3 R_3 + C_4 C_5 L_4 R_3 + C_4 L_3 L_4 g_m\right) + s^2 \left(C_3 L_3 R_3 g_m + 2 C_4 L_3 R_3 g_m + C_4 L_4 R_3 g_m + 2 C_5 L_3 R_3 g_m + C_5 L_3\right) + s \left(C_5 R_3 + L_3 g_m\right)}$$

10.684 INVALID-ORDER-684 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_3 L_4 R_3 R_5 s^4 - C_5 L_3 R_3 R_5 s^2 + s^3 \left(C_4 L_3 L_4 R_3 R_5 g_m - C_4 L_3 L_4 R_3\right) + s \left(L_3 R_3 R_5 g_m - L_3 R_3\right)}{C_3 C_4 C_5 L_3 L_4 R_3 R_5 s^5 + R_3 R_5 g_m + R_3 + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3 + 2 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C_4 C_5 L_3 L_4 R_5\right) + s^3 \left(C_3 C_5 L_3 R_3 R_5 + 2 C_4 C_5 L_3 R_3 R_5 + C_4 C_5 L_4 R_3 R_5 + 2 C_4 L_3 L_4 R_3 g_m + C_4 L_3 L_4 R_5 g_m + C_4 L_3 L_4\right) + s^2 \left(C_3 L_3 R_3 R_5 g_m + C_3 L_3 R_3 + 2 C_4 L_3 \ldots\right.}$$

10.685 INVALID-ORDER-685 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_4 L_3 L_4 R_3 g_m s^3 + L_3 R_3 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_3 R_5 g_m - C_4 C_5 L_3 L_4 R_3\right) + s^2 \left(C_5 L_3 R_3 R_5 g_m - C_5 L_3 R_3\right)}{R_3 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_3\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4 R_5 g_m + C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_5 L_3 R_3 R_5 g_m + C_3 C_5 L_3 R_3 + 2 C_4 C_5 L_3 R_3 R_5 g_m + 2 C_4 C_5 L_3 R_3 + C_4 C_5 L_4 R_3 R_5 g_m + C_4 C_5 L_4 R_3 + C_4 L_3 L_4 g_m\right) + s^2 \left(C_3 L_3 \ldots\right.}$$

10.686 INVALID-ORDER-686 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_3 L_4 L_5 R_3 g_m s^5 - C_4 C_5 L_3 L_4 R_3 s^4 - C_5 L_3 R_3 s^2 + L_3 R_3 g_m s + s^3 \left(C_4 L_3 L_4 R_3 g_m + C_5 L_3 L_5 R_3 g_m\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m s^6 + R_3 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 + C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_3 g_m\right) + s^3 \left(C_3 C_5 L_3 R_3 + 2 C_4 C_5 L_3 R_3 + C_4 C_5 L_4 R_3 + C_4 L_3 L_4 g_m + C_5 L_3 L_5 \ldots\right.}$$

10.687 INVALID-ORDER-687 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_3 L_4 L_5 R_3 s^5 + C_4 L_3 L_4 L_5 R_3 g_m s^4 + L_3 L_5 R_3 g_m s^2 - L_3 R_3 s + s^3 \left(-C_4 L_3 L_4 R_3 - C_5 L_3 L_5 R_3\right)}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 s^6 + R_3 + s^5 \left(C_3 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 + C_3 C_5 L_3 L_5 R_3 + 2 C_4 C_5 L_3 L_5 R_3 + C_4 C_5 L_4 L_5 R_3 + C_4 L_3 L_4 L_5 g_m\right) + s^3 \left(C_3 L_3 L_5 R_3 g_m + 2 C_4 L_3 L_4 R_3 g_m + C_4 L_3 L_4 + 2 C_4 L_3 L_5 R_3 g_m + C_4 L_4 L_5 R_3 g_m + \ldots\right.}$$

10.688 INVALID-ORDER-688 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_4 C_5 L_3 L_4 L_5 R_3 g_m s^5 + L_3 R_3 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_3 R_5 g_m - C_4 C_5 L_3 L_4 R_3\right) + s^3 \left(C \ldots\right.}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m s^6 + R_3 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_3 + C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4 R_5 g_m + C_4 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_3 g_m\right) + s^3 \left(C_3 C_5 L_3 R_3 R_5 g_m + C \ldots\right.}$$

10.689 INVALID-ORDER-689 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_4 C_5 L_3 L_4 L_5 R_3 R_5 s^5 - L_3 R_3 R_5 s + s^4 \left(C_4 L \ldots\right.}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 s^6 + R_3 R_5 + s^5 \left(C_3 C_4 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_4 L_3 L_4 L_5 R_3 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_4 C_5 L_3 L_4 L_5 R_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 + C_3 C_5 L_3 L_5 R_3 R_5 + 2 C_4 C_5 L_3 L_5 R_3 R_5 + C_4 C_5 L_4 L_5 R_3 R_5 + 2 C_4 L_3 L_4 L_5 R_3 g_m + C_4 L_3 L_4 L_5 R_5 g_m + C_4 L_3 L_4 L_5\right) + \ldots}$$

10.690 INVALID-ORDER-690 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{C_4 L_3 L_4 L_5 R_3 g_m s^4 + L_3 L_5 \ldots}{R_3 R_5 g_m + R_3 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_3\right) + s^5 \left(C_3 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_5 g_m + C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3 + C_3 C_5 L_3 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_5 R_3 + 2 C_4 C_5 L_3 L_5 R_3 R_5 g_m + 2 \ldots\right.}$$

10.691 **INVALID-ORDER-691** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ L_4 s + \frac{1}{C_4 s},\ \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty \right)$

$H(s) = \dfrac{-C_4 C_5 \cdots}{R_3 R_5 g_m + R_3 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_3 \right) + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_5 g_m + C_4 C_5 L_3 L_4 L_5 \right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3 + C_3 C_5 L_3 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_5 R_3 + 2 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C}$

10.692 **INVALID-ORDER-692** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \dfrac{-C_5 L_3 L_4 R_3 s^2 + L_3 L_4 R_3 g_m s}{2 L_3 R_3 g_m + L_4 R_3 g_m + s^3 \left(C_3 C_5 L_3 L_4 R_3 + 2 C_4 C_5 L_3 L_4 R_3 \right) + s^2 \left(C_3 L_3 L_4 R_3 g_m + 2 C_4 L_3 L_4 R_3 g_m + 2 C_5 L_3 L_4 R_3 g_m + C_5 L_3 L_4 \right) + s \left(2 C_5 L_3 R_3 + C_5 L_4 R_3 + L_3 L_4 g_m \right)}$

10.693 **INVALID-ORDER-693** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{R_5}{C_5 R_5 s + 1},\ \infty \right)$

$H(s) = \dfrac{-C_5 L_3 L_4 R_3 R_5 s^2 + s \left(L_3 L_4 R_3 R_5 g_m - L_3 L_4 R_3 \right)}{2 L_3 R_3 R_5 g_m + 2 L_3 R_3 + L_4 R_3 R_5 g_m + L_4 R_3 + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_5 + 2 C_4 C_5 L_3 L_4 R_3 R_5 \right) + s^2 \left(C_3 L_3 L_4 R_3 R_5 g_m + C_3 L_3 L_4 R_3 + 2 C_4 L_3 L_4 R_3 R_5 g_m + 2 C_4 L_3 L_4 R_3 + 2 C_5 L_3 L_4 R_3 R_5 g_m + C_5 L_3 L_4 R_5 \right) + s \left(2 C_5 L_3 R_3 R_5 + C_5 L_4 R_3 R_5 + 2 L_3 L_4 R_3 g_m + L_3 L_4 R_5 g_m + L_3 L}$

10.694 **INVALID-ORDER-694** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ R_5 + \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \dfrac{L_3 L_4 R_3 g_m s + s^2 \left(C_5 L_3 L_4 R_3 R_5 g_m - C_5 L_3 L_4 R_3 \right)}{2 L_3 R_3 g_m + L_4 R_3 g_m + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_5 L_3 L_4 R_3 + 2 C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2 C_4 C_5 L_3 L_4 R_3 \right) + s^2 \left(C_3 L_3 L_4 R_3 g_m + 2 C_4 L_3 L_4 R_3 g_m + 2 C_5 L_3 L_4 R_3 g_m + C_5 L_3 L_4 R_5 g_m + C_5 L_3 L_4 \right) + s \left(2 C_5 L_3 R_3 R_5 g_m + 2 C_5 L_3 R_3 + C_5 L_4 R_3 R_5 g_m + C_5 L_4 R_3 + L_3 L_4 g_m \right)}$

10.695 **INVALID-ORDER-695** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ L_5 s + \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \dfrac{C_5 L_3 L_4 L_5 R_3 g_m s^3 - C_5 L_3 L_4 R_3 s^2 + L_3 L_4 R_3 g_m s}{2 L_3 R_3 g_m + L_4 R_3 g_m + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m \right) + s^3 \left(C_3 C_5 L_3 L_4 R_3 + 2 C_4 C_5 L_3 L_4 R_3 + C_5 L_3 L_4 L_5 g_m \right) + s^2 \left(C_3 L_3 L_4 R_3 g_m + 2 C_4 L_3 L_4 R_3 g_m + 2 C_5 L_3 L_4 R_3 g_m + C_5 L_3 L_4 + 2 C_5 L_3 L_5 R_3 g_m + C_5 L_4 L_5 R_3 g_m \right) + s \left(2 C_5 L_3 R_3 + C_5 L_4 R_3 + L_3 L_4 g_m \right)}$

10.696 **INVALID-ORDER-696** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty \right)$

$H(s) = \dfrac{-C_5 L_3 L_4 L_5 R_3 s^3 + L_3 L_4 L_5 R_3 g_m s^2 - L_3 L_4 R_3 s}{2 L_3 R_3 + L_4 R_3 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 + 2 C_4 C_5 L_3 L_4 L_5 R_3 \right) + s^3 \left(C_3 L_3 L_4 L_5 R_3 g_m + 2 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_5 L_3 L_4 L_5 R_3 g_m + C_5 L_3 L_4 L_5 \right) + s^2 \left(C_3 L_3 L_4 R_3 + 2 C_4 L_3 L_4 R_3 + 2 C_5 L_3 L_5 R_3 + C_5 L_4 L_5 R_3 + L_3 L_4 L_5 g_m \right) + s \left(2 L_3 L_4 R_3 g_m + L_3 L_4 + 2 L_3 L_5 R_3 g_m + L_4 L_5 R}$

10.697 **INVALID-ORDER-697** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty \right)$

$H(s) = \dfrac{C_5 L_3 L_4 L_5 R_3 g_m s^3 + L_3 L_4 R_3 g_m s + s^2 \left(C_5 L_3 L_4 R_3 R_5 g_m - C_5 L_3 L_4 R_3 \right)}{2 L_3 R_3 g_m + L_4 R_3 g_m + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m \right) + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_5 L_3 L_4 R_3 + 2 C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2 C_4 C_5 L_3 L_4 R_3 + C_5 L_3 L_4 L_5 g_m \right) + s^2 \left(C_3 L_3 L_4 R_3 g_m + 2 C_4 L_3 L_4 R_3 g_m + 2 C_5 L_3 L_4 R_3 g_m + C_5 L_3 L_4 R_5 g_m + C_5 L_3 L_4 + 2 C_5 L_3}$

10.698 **INVALID-ORDER-698** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty \right)$

$H(s) = \dfrac{-C_5 L_3 L_4 L_5 R_3 R_5 s^3 - L_3 L_4 R_3 R_5 s + s^2 \left(L_3 L_4 L_5 R_3 R_5 g_m - L_3 L_4 L_5 R_3 \right)}{2 L_3 R_3 R_5 + L_4 R_3 R_5 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_5 \right) + s^3 \left(C_3 L_3 L_4 L_5 R_3 R_5 g_m + C_3 L_3 L_4 L_5 R_3 + 2 C_4 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_4 L_3 L_4 L_5 R_3 + 2 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_5 L_3 L_4 L_5 R_5 \right) + s^2 \left(C_3 L_3 L_4 R_3 R_5 + 2 C_4 L_3 L_4 R_3 R_5 + 2 C_5 L_3 L_5 R_3 R_5 + C_5 L_4 L_5 R}$

10.699 **INVALID-ORDER-699** $Z(s) = \left(\infty,\ \infty,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1},\ \infty \right)$

$H(s) = \dfrac{L_3 L_4 L_5 R_3 g_m s^2 + s^3 \left(C_5 L_3 L_4 L_5 R_3 R_5 g_m - C_5 L_3 L_4 L_5 R_3 \right) + s \left(L_3 L_4 R_3 R_5 g_m + \cdots \right)}{2 L_3 R_3 R_5 g_m + 2 L_3 R_3 + L_4 R_3 R_5 g_m + L_4 R_3 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_3 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 \right) + s^3 \left(C_3 L_3 L_4 L_5 R_3 g_m + 2 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_5 L_3 L_4 L_5 R_3 g_m + C_5 L_3 L_4 L_5 R_5 g_m + C_5 L_3 L_4 L_5 \right) + s^2 \left(C_3 L_3 L_4 R_3 R_5 g_m + C \right.}$

10.700 INVALID-ORDER-700 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \frac{-C_5 L_3 L_4 R_3 R_5 s^2 + s^3 \left(C_5 L_3 L_4 L_5 R_3 R_5 g_m - C_5 L_3 L_4 L_5 R_3\right) + s \left(L_3 \cdots\right.}{2 L_3 R_3 R_5 g_m + 2 L_3 R_3 + L_4 R_3 R_5 g_m + L_4 R_3 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_3 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3\right) + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_5 + 2 C_4 C_5 L_3 L_4 R_3 R_5 + 2 C_5 L_3 L_4 L_5 R_3 g_m + C_5 L_3 L_4 L_5 R_5 g_m + C_5 L_3 L_4 L_5\right) + s^2 \left(C_3 L_3 L_4 R_3 R_5 g_m + C \cdots\right.}$

10.701 INVALID-ORDER-701 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$H(s) = \frac{s^3 \left(C_4 L_3 L_4 R_3 R_5 g_m - C_4 L_3 L_4 R_3\right) + s^2 \left(C_4 L_3 R_3 R_4 R_5 g_m - C_4 L_3 R_3 R_4\right) + s \left(L_3 R_3 R_5 g_m - L_3 R_3\right)}{R_3 R_5 g_m + R_3 + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3\right) + s^3 \left(C_3 C_4 L_3 R_3 R_4 R_5 g_m + C_3 C_4 L_3 R_3 R_4 + 2 C_4 L_3 L_4 R_3 g_m + C_4 L_3 L_4 R_5 g_m + C_4 L_3 L_4\right) + s^2 \left(C_3 L_3 R_3 R_5 g_m + C_3 L_3 R_3 + 2 C_4 L_3 R_3 R_4 g_m + 2 C_4 L_3 R_3 R_5 g_m + 2 C_4 L_3 R_3 + C_4 L_3 R_4 R_5 g_m + C_4 L_3 R_4 + C_4 L_4 R \cdots}$

10.702 INVALID-ORDER-702 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{-C_4 C_5 L_3 L_4 R_3 s^4 + L_3 R_3 g_m s + s^3 \left(-C_4 C_5 L_3 R_3 R_4 + C_4 L_3 L_4 R_3 g_m\right) + s^2 \left(C_4 L_3 R_3 R_4 g_m - C_5 L_3 R_3\right)}{C_3 C_4 C_5 L_3 L_4 R_3 s^5 + R_3 g_m + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 + C_3 C_4 L_3 L_4 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_4 L_3 R_3 R_4 g_m + C_3 C_5 L_3 R_3 + 2 C_4 C_5 L_3 R_3 R_4 g_m + 2 C_4 C_5 L_3 R_3 + C_4 C_5 L_3 R_4 + C_4 C_5 L_4 R_3 + C_4 L_3 L_4 g_m\right) + s^2 \left(C_3 L_3 R_3 g_m + C_4 C_5 R_3 R_4 + 2 C_4 L_3 R_3 g \cdots}$

10.703 INVALID-ORDER-703 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \frac{-C_4 C_5 L_3 L_4 R_3 R_5 s^4 + s^3 \left(-C_4 C_5 L_3 R_3 R_4 R_5 + C_4 L_3 \cdots\right.}{C_3 C_4 C_5 L_3 L_4 R_3 R_5 s^5 + R_3 R_5 g_m + R_3 + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 R_5 + C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3 + 2 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C_4 C_5 L_3 L_4 R_5\right) + s^3 \left(C_3 C_4 L_3 R_3 R_4 R_5 g_m + C_3 C_4 L_3 R_3 R_4 + C_3 C_5 L_3 R_3 R_5 + 2 C_4 C_5 L_3 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 R_3 R_5 + C_4 C_5 L_3 R_4 R_5 + \cdots}$

10.704 INVALID-ORDER-704 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{L_3 R_3 g_m s + s^4 \left(C_4 C_5 L_3 L_4 R_3 R_5 g_m - C_4 C_5 L_3 L_4 R_3\right) + s^3 \left(C_4 C_5 L_3 \cdots\right.}{R_3 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_3\right) + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 R_3 R_4 + C_3 C_4 L_3 L_4 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4 R_5 g_m + C_4 C_5 L_3 L_4\right) + s^3 \left(C_3 C_4 L_3 R_3 R_4 g_m + C_3 C_5 L_3 R_3 R_5 g_m + C_3 C_5 L_3 R_3 + 2 C_4 C_5 L_3 R_3 R_4 g_m + 2 C_4 C_5 L_3 \cdots}$

10.705 INVALID-ORDER-705 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{C_4 C_5 L_3 L_4 L_5 R_3 g_m s^5 + L_3 R_3 g_m s + s^4 \left(-C_4 C_5 L_3 L_4 R_3 + C_4 C_5 L_3 L_5 R_3 \cdots\right.}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m s^6 + R_3 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_4 C_5 L_3 L_5 R_3 R_4 g_m + C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 + C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_5 R_3 g_m + C_4 C_5 L_3 L_5 R_4 g_m + C_4 C_5 L_4 L_5 R_3 g_m\right) + s^3 \left(C \cdots}$

10.706 INVALID-ORDER-706 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \frac{-C_4 C_5 L_3 L_4 L_5 R_3 s^5 - L_3 R_3 s + s^4 \left(-C_4 C_5 L_3 L_5 R_3 R_4 + \cdots\right.}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 s^6 + R_3 + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_3 R_4 + C_3 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 + C_3 C_4 L_3 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_5 R_3 + 2 C_4 C_5 L_3 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_3 L_5 R_3 + C_4 C_5 L_3 L_5 R_4 + C_4 C_5 L_4 L_5 R_3 + C_4 L_3 L_4 L_5 g_m\right) + \cdots}$

10.707 INVALID-ORDER-707 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{C \cdots}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m s^6 + R_3 g_m + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_4 C_5 L_3 L_5 R_3 R_4 g_m + C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 R_3 R_4 + C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_3 g_m + C_4 C_5 L_3 L_4 R_5 g_m + C_4 C_5 L \cdots}$

10.708 INVALID-ORDER-708 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \frac{\cdots}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 s^6 + R_3 R_5 + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_3 R_4 R_5 + C_3 C_4 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_4 L_3 L_4 L_5 R_3 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_4 C_5 L_3 L_4 L_5 R_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 + C_3 C_4 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_4 L_3 L_5 R_3 R_4 + C_3 C_5 L_3 L_5 R_3 R_5 + 2 C_4 C_5 L_3 L_5 R_3 R_4 R_5 g_m + \cdots}$

10.709 INVALID-ORDER-709 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \frac{\cdots}{R_3 R_5 g_m + R_3 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_3\right) + s^5 \left(C_3 C_4 C_5 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_3 R_4 + C_3 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_5 g_m + C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L_3 L_4 R_3 + C_3 C_4 L_3 L_5 R_3 \cdots}$

10.710 **INVALID-ORDER-710** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{}{R_3 R_5 g_m + R_3 + s^6 \left(C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_3\right) + s^5 \left(C_3 C_4 C_5 L_3 L_4 R_3 R_5 + C_3 C_4 C_5 L_3 L_5 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_5 R_3 R_4 + 2C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_5 g_m + C_4 C_5 L_3 L_4 L_5\right) + s^4 \left(C_3 C_4 C_5 L_3 R_3 R_4 R_5 + C_3 C_4 L_3 L_4 R_3 R_5 g_m + C_3 C_4 L}$$

10.711 **INVALID-ORDER-711** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 L_4 R_3 R_4 s^2 + L_3 L_4 R_3 R_4 g_m s}{2 L_3 R_3 R_4 g_m + L_4 R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_4 + 2 C_4 C_5 L_3 L_4 R_3 R_4\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4 g_m + 2 C_4 L_3 L_4 R_3 R_4 g_m + 2 C_5 L_3 L_4 R_3 R_4 g_m + 2 C_5 L_3 L_4 R_3 + C_5 L_3 L_4 R_4\right) + s \left(2 C_5 L_3 R_3 R_4 + C_5 L_4 R_3 R_4 + 2 L_3 L_4 R_3 g_m + L_3 L_4 R_4 g_m\right)}$$

10.712 **INVALID-ORDER-712** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 L_4 R_3 R_4 R_5 s^2 + s \left(L_3 L_4 R_3 R_4 R_5 g_m - L_3 L_4 R_3 R_4\right)}{2 L_3 R_3 R_4 R_5 g_m + 2 L_3 R_3 R_4 + L_4 R_3 R_4 R_5 g_m + L_4 R_3 R_4 + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_4 R_5 + 2 C_4 C_5 L_3 L_4 R_3 R_4 R_5\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4 R_5 g_m + C_3 L_3 L_4 R_3 R_4 + 2 C_4 L_3 L_4 R_3 R_4 R_5 g_m + 2 C_4 L_3 L_4 R_3 R_4 + 2 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2 C_5 L_3 L_4 R_3 R_5 + C_5 L_3 L_4 R_4 R_5\right) + s \left(2 C_5 L_3 R_3\dots\right)}$$

10.713 **INVALID-ORDER-713** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{L_3 L_4 R_3 R_4 g_m s + s^2 \left(C_5 L_3 L_4 R_3 R_4 R_5 g_m - C_5 L_3 L_4 R_3 R_4\right)}{2 L_3 R_3 R_4 g_m + L_4 R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_4 R_3 R_4 + 2 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 R_3 R_4\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4 g_m + 2 C_4 L_3 L_4 R_3 R_4 g_m + 2 C_5 L_3 L_4 R_3 R_4 g_m + 2 C_5 L_3 L_4 R_3 R_5 g_m + 2 C_5 L_3 L_4 R_3 + C_5 L_3 L_4 R_4 R_5 g_m + C_5 L_3 L_4 R_4\right) + s \left(2 C\dots\right)}$$

10.714 **INVALID-ORDER-714** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_3 L_4 L_5 R_3 R_4 g_m s^3 - C_5 L_3 L_4 R_3 R_4 s^2 + L_3 L_4 R_3 R_4 g_m s}{2 L_3 R_3 R_4 g_m + L_4 R_3 R_4 g_m + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m\right) + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_4 + 2 C_4 C_5 L_3 L_4 R_3 R_4 + 2 C_5 L_3 L_4 L_5 R_3 g_m + C_5 L_3 L_4 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4 g_m + 2 C_4 L_3 L_4 R_3 R_4 g_m + 2 C_5 L_3 L_4 R_3 R_4 g_m + 2 C_5 L_3 L_4 R_3 + C_5 L_3 L_4 R_4 + 2 C\dots\right)}$$

10.715 **INVALID-ORDER-715** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 L_4 L_5 R_3 R_4 s^3 + L_3 L_4 L_5 R_3 R_4 g_m s^2 - L_3 L_4 R_3 R_4 s}{2 L_3 R_3 R_4 + L_4 R_3 R_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_4 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_4\right) + s^3 \left(C_3 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_4 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_4 L_5 R_3 + C_5 L_3 L_4 L_5 R_4\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4 + 2 C_4 L_3 L_4 R_3 R_4 + 2 C_5 L_3 L_5 R_3 R_4 + C_5 L_4 L_5 R_3 R_4 + 2 L_3 L_4 L_5 R_3\dots\right)}$$

10.716 **INVALID-ORDER-716** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$$H(s) = \frac{C_5 L_3 L_4 L_5 R_3 R_4 g_m s^3 + L_3 L_4 R_3 R_4 g_m s + s^2 \left(C_5 L_3 L_4 R_3 R\dots\right)}{2 L_3 R_3 R_4 g_m + L_4 R_3 R_4 g_m + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m\right) + s^3 \left(C_3 C_5 L_3 L_4 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_4 R_3 R_4 + 2 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 R_3 R_4 + 2 C_5 L_3 L_4 L_5 R_3 g_m + C_5 L_3 L_4 L_5 R_4 g_m\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4 g_m + 2 C_4 L_3 L_4 R_3 R_4 g_m + \dots\right)}$$

10.717 **INVALID-ORDER-717** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$$H(s) = \frac{-C_5 L_3 L_4 L_5 R_3 R_4 R_5 s^3 - L_3 L_4 R_3 R_4\dots}{2 L_3 R_3 R_4 R_5 + L_4 R_3 R_4 R_5 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_4 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5\right) + s^3 \left(C_3 L_3 L_4 L_5 R_3 R_4 R_5 g_m + C_3 L_3 L_4 L_5 R_3 R_4 + 2 C_4 L_3 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_4 L_3 L_4 L_5 R_3 R_4 + 2 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_5 L_3 L_4 L_5 R_3 R_5 + C_5 L_3 L_4 L_5 R_4 R_5\right) + s^2 \left(C_3 L_3 L_4 R_3 R_4\dots\right)}$$

10.718 **INVALID-ORDER-718** $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$$H(s) = \frac{L_3\dots}{2 L_3 R_3 R_4 R_5 g_m + 2 L_3 R_3 R_4 + L_4 R_3 R_4 R_5 g_m + L_4 R_3 R_4 + s^4 \left(C_3 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_3 R_4 + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 R_3 R_4\right) + s^3 \left(C_3 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_4 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_5\dots\right)}$$

10.719 INVALID-ORDER-719 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \frac{}{2L_3 R_3 R_4 R_5 g_m + 2L_3 R_3 R_4 + L_4 R_3 R_4 R_5 g_m + L_4 R_3 R_4 + s^4\left(C_3 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_3 R_4 + 2C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 R_4\right) + s^3\left(C_3 C_5 L_3 L_4 R_3 R_4 R_5 + 2C_4 C_5 L_3 L_4 R_3 R_4 R_5 + 2C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2C_5\cdots}$

10.720 INVALID-ORDER-720 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty\right)$

$H(s) = \frac{s^3\left(C_4 L_3 L_4 R_3 R_4 R_5 g_m - C_4 L_3 L_4 R_3 R_4\right) + s^2\left(L_3 L_4 R_3 R_5 g_m - L_3 L_4 R_3\right) + s\left(L_3 R_3 R_4 R_5 g_m - L_3 R_3 R_4\right)}{R_3 R_4 R_5 g_m + R_3 R_4 + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_3 R_4\right) + s^3\left(C_3 L_3 L_4 R_3 R_5 g_m + C_3 L_3 L_4 R_3 + 2C_4 L_3 L_4 R_3 R_4 g_m + 2C_4 L_3 L_4 R_3 R_5 g_m + 2C_4 L_3 L_4 R_3 + C_4 L_3 L_4 R_4 R_5 g_m + C_4 L_3 L_4 R_4\right) + s^2\left(C_3 L_3 R_3 R_4 R_5 g_m + C_3 L_3 R_3 R_4 + C_4 L_4 R_3 R_4 R_5 g_m + C_4 L_4 R_3\cdots\right)}$

10.721 INVALID-ORDER-721 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{-C_4 C_5 L_3 L_4 R_3 R_4 s^4 + L_3 R_3 R_4 g_m s + s^3\left(C_4 L_3 L_4 R_3 R_4 g_m - C_5 L_3 L_4 R_3\right) + s^2\left(-C_5 L_3 R_3 R_4 + L_3 L_4 R_3 g_m\right)}{C_3 C_4 C_5 L_3 L_4 R_3 R_4 s^5 + R_3 R_4 g_m + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 g_m + C_3 C_5 L_3 L_4 R_3 + 2C_4 C_5 L_3 L_4 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 R_3 + C_4 C_5 L_3 L_4 R_4\right) + s^3\left(C_3 C_5 L_3 R_3 R_4 + C_3 L_3 L_4 R_3 g_m + C_4 C_5 L_4 R_3 R_4 + 2C_4 L_3 L_4 R_3 g_m + C_4 L_3 L_4 R_4 g_m + 2C_5 L_3 L_4 R_3 g_m + C_5 L_3 L_4\right) + s^2\left(C_3 L_3\cdots\right)}$

10.722 INVALID-ORDER-722 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \frac{-C_4 C_5 L_3 L_4 R_3 R_4\cdots}{C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 s^5 + R_3 R_4 R_5 g_m + R_3 R_4 + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_3 R_4 + C_3 C_5 L_3 L_4 R_3 R_5 + 2C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 R_3 R_5 + C_4 C_5 L_3 L_4 R_4 R_5\right) + s^3\left(C_3 C_5 L_3 R_3 R_4 R_5 + C_3 L_3 L_4 R_3 R_5 g_m + C_3 L_3 L_4 R_3 + C_4 C_5 L_4 R_3 R_4 R_5 + 2C_4\cdots\right)}$

10.723 INVALID-ORDER-723 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{L_3 R_3 R_4 g_m s + s^4\left(C_4 C_5 L_3 L_4 R_3 R_4\cdots\right)}{R_3 R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_3 R_4\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 g_m + C_3 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_5 L_3 L_4 R_3 + 2C_4 C_5 L_3 L_4 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2C_4 C_5 L_3 L_4 R_3 + C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_4 C_5 L_3 L_4 R_4\right) + s^3\left(C_3 C_5 L_3 R_3 R_4 R_5 g_m + C_3 C\cdots\right)}$

10.724 INVALID-ORDER-724 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m s^5 + L_3 R_3 R_4 g\cdots}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m s^6 + R_3 R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_3 R_4 + C_3 C_5 L_3 L_4 L_5 R_3 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 g_m + C_3 C_5 L_3 L_4 R_3 + C_3 C_5 L_3 L_5 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 R_3 + C_4 C_5 L_3 L_4 R_4 + C_4 C_5 L\cdots\right)}$

10.725 INVALID-ORDER-725 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \frac{-C_4 C_5 L_3 L_4 L_5 R_3 R\cdots}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 s^6 + R_3 R_4 + s^5\left(C_3 C_4 L_3 L_4 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_4 L_5 R_3 + 2C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 + C_4 C_5 L_3 L_4 L_5 R_4\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 + C_3 C_5 L_3 L_5 R_3 R_4 + C_3 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_4 L_5 R_3 R_4 + 2C_4 L_3 L_4 L_5 R_3 g_m + C_4 L_3 L_4 L_5 R_4\cdots\right)}$

10.726 INVALID-ORDER-726 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m s^6 + R_3 R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_3 R_4 + C_3 C_5 L_3 L_4 L_5 R_3 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 g_m + C_3 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_5 L_3 L_4 R_3 + C_3 C_5 L_3 L_5 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 R_3\cdots\right)}$

10.727 INVALID-ORDER-727 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \frac{}{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5 s^6 + R_3 R_4 R_5 + s^5\left(C_3 C_4 L_3 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_4 L_3 L_4 L_5 R_3 R_4 + C_3 C_5 L_3 L_4 L_5 R_3 R_5 + 2C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 R_5 + C_4 C_5 L_3 L_4 L_5 R_4 R_5\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 R_5 + C_3 C_5 L_3 L_5 R_3 R_4 R_5 + C_3 L_3 L_4 L_5 R_3 R_5 g_m + C_3\cdots\right)}$

10.728 INVALID-ORDER-728 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \frac{}{R_3 R_4 R_5 g_m + R_3 R_4 + s^6\left(C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4\right) + s^5\left(C_3 C_4 L_3 L_4 L_5 R_3 R_4 g_m + C_3 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_3 + 2C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2C_4 C_5 L_3 L_4 L_5 R_3 + C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_4 C_5 L_3 L_4 L\cdots\right)}$

10.729 INVALID-ORDER-729 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{}{R_3R_4R_5g_m + R_3R_4 + s^6\left(C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(C_3C_4C_5L_3L_4R_3R_4R_5 + C_3C_5L_3L_4L_5R_3R_5g_m + C_3C_5L_3L_4L_5R_3 + 2C_4C_5L_3L_4L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5R_3R_5g_m + 2C_4C_5L_3L_4L_5R_3 + C_4C_5L_3L_4L_5R_4R_5g_m + C_4C_5L_3L_4L_5 \cdots}$

10.730 INVALID-ORDER-730 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{s^3\left(C_4L_3L_4R_3R_4R_5g_m - C_4L_3L_4R_3R_4\right) + s\left(L_3R_3R_4R_5g_m - L_3R_3R_4\right)}{R_3R_4R_5g_m + R_3R_4 + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m + C_3C_4L_3L_4R_3R_4\right) + s^3\left(2C_4L_3L_4R_3R_4g_m + 2C_4L_3L_4R_3R_5g_m + 2C_4L_3L_4R_3 + C_4L_3L_4R_4R_5g_m + C_4L_3L_4R_4\right) + s^2\left(C_3L_3R_3R_4R_5g_m + C_3L_3R_3R_4 + 2C_4L_3R_3R_4R_5g_m + 2C_4L_3R_3R_4 + C_4L_4R_3R_4R_5g_m + C_4L_4 \cdots}$

10.731 INVALID-ORDER-731 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{-C_4C_5L_3L_4R_3R_4s^4 + C_4L_3L_4R_3R_4g_ms^3 - C_5L_3R_3R_4s^2 + L_3R_3R_4g_ms}{C_3C_4C_5L_3L_4R_3R_4s^5 + R_3R_4g_m + s^4\left(C_3C_4L_3L_4R_3R_4g_m + 2C_4C_5L_3L_4R_3R_4g_m + 2C_4C_5L_3L_4R_3 + C_4C_5L_3L_4R_4\right) + s^3\left(C_3C_5L_3R_3R_4 + 2C_4C_5L_3R_3R_4 + C_4C_5L_4R_3R_4 + 2C_4L_3L_4R_3g_m + C_4L_3L_4R_4g_m\right) + s^2\left(C_3L_3R_3R_4g_m + 2C_4L_3R_3R_4g_m + C_4L_4R_3R_4g_m + \cdots}$

10.732 INVALID-ORDER-732 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{-C_4C_5L_3L_4R_3R_4R_5s^4 - C_5L_3R_3R_4R_5s^2 + s \cdots}{C_3C_4C_5L_3L_4R_3R_4R_5s^5 + R_3R_4R_5g_m + R_3R_4 + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m + C_3C_4L_3L_4R_3R_4 + 2C_4C_5L_3L_4R_3R_4R_5g_m + 2C_4C_5L_3L_4R_3R_5 + C_4C_5L_3L_4R_4R_5\right) + s^3\left(C_3C_5L_3R_3R_4R_5 + 2C_4C_5L_3R_3R_4R_5 + C_4C_5L_4R_3R_4R_5 + 2C_4L_3L_4R_3R_4g_m + 2C_4L_3L_4R_3R_5 \cdots}$

10.733 INVALID-ORDER-733 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_4L_3L_4R_3R_4g_ms^3 + L_3R_3R_4g_ms + s^4\left(C_4C_5L_3L_4R_3 \cdots \right)}{R_3R_4g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_4R_5g_m + C_3C_4C_5L_3L_4R_3R_4\right) + s^4\left(C_3C_4L_3L_4R_3R_4g_m + 2C_4C_5L_3L_4R_3R_4g_m + 2C_4C_5L_3L_4R_3R_5g_m + 2C_4C_5L_3L_4R_3 + C_4C_5L_3L_4R_4R_5g_m + C_4C_5L_3L_4R_4\right) + s^3\left(C_3C_5L_3R_3R_4R_5g_m + C_3C_5L_3R_3R_4 + 2C_4C_5L_3R_3R_4R_5g_m + 2C \cdots}$

10.734 INVALID-ORDER-734 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_4C_5L_3L_4L_5R_3R_4g_ms^5 - C_4C_5L_3L_4R_3R_4s^4 - C_5L_3 \cdots}{C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + R_3R_4g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_4 + 2C_4C_5L_3L_4L_5R_3g_m + C_4C_5L_3L_4L_5R_4g_m\right) + s^4\left(C_3C_4L_3L_4R_3R_4g_m + C_3C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_4R_3R_4g_m + 2C_4C_5L_3L_4R_3 + C_4C_5L_3L_4R_4 + 2C_4C_5L_3L_5R_3R_4g_m + C_4C_5L_4L_5R_3R_4g_m\right) + \cdots}$

10.735 INVALID-ORDER-735 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{-C_4C_5L_3L_4L_5R_3R_4s^5 + C_4L_3L_4L_5R_3R_4g_ms \cdots}{C_3C_4C_5L_3L_4L_5R_3R_4s^6 + R_3R_4 + s^5\left(C_3C_4L_3L_4L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5R_3 + C_4C_5L_3L_4L_5R_4\right) + s^4\left(C_3C_4L_3L_4R_3R_4 + C_3C_5L_3L_5R_3R_4 + 2C_4C_5L_3L_5R_3R_4 + C_4C_5L_4L_5R_3R_4 + 2C_4L_3L_4L_5R_3g_m + C_4L_3L_4L_5R_4g_m\right) + s^3\left(C_3L_3L_5 \cdots}$

10.736 INVALID-ORDER-736 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{}{C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + R_3R_4g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_4R_5g_m + C_3C_4C_5L_3L_4R_3R_4 + 2C_4C_5L_3L_4L_5R_3g_m + C_4C_5L_3L_4L_5R_4g_m\right) + s^4\left(C_3C_4L_3L_4R_3R_4g_m + C_3C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_4R_3R_4g_m + 2C_4C_5L_3L_4R_3R_5g_m + 2C_4C_5L_3L_4R_3 + C_4C_5L_3L_4 \cdots}$

10.737 INVALID-ORDER-737 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3}, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \dfrac{}{C_3C_4C_5L_3L_4L_5R_3R_4R_5s^6 + R_3R_4R_5 + s^5\left(C_3C_4L_3L_4L_5R_3R_4R_5g_m + C_3C_4L_3L_4L_5R_3R_4 + 2C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_4C_5L_3L_4L_5R_3R_5 + C_4C_5L_3L_4L_5R_4R_5\right) + s^4\left(C_3C_4L_3L_4R_3R_4R_5 + C_3C_5L_3L_5R_3R_4R_5 + 2C_4C_5L_3L_5R_3R_4R_5 + C_4C_5L_4L_5R_3R_4R_5 + 2 \cdots}$

10.738 INVALID-ORDER-738 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \frac{}{R_3R_4R_5g_m + R_3R_4 + s^6\left(C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(C_3C_4L_3L_4L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5R_3R_5g_m + 2C_4C_5L_3L_4L_5R_3 + C_4C_5L_3L_4L_5R_4R_5g_m + C_4C_5L_3L_4L_5R_4\right) + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m + C_3C_4L\cdots\right)}$

10.739 INVALID-ORDER-739 $Z(s) = \left(\infty,\ \infty,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1},\ \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$H(s) = \frac{}{R_3R_4R_5g_m + R_3R_4 + s^6\left(C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(C_3C_4C_5L_3L_4R_3R_4R_5 + 2C_4C_5L_3L_4L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5R_3R_5g_m + 2C_4C_5L_3L_4L_5R_3 + C_4C_5L_3L_4L_5R_4R_5g_m + C_4C_5L_3L_4L_5R_4\right) + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m + C_3C_4L\cdots\right)}$

10.740 INVALID-ORDER-740 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{-C_3C_5L_3R_3R_4s^3 + R_3R_4g_m + s^2\left(C_3L_3R_3R_4g_m - C_5L_3R_4\right) + s\left(-C_5R_3R_4 + L_3R_4g_m\right)}{2R_3g_m + R_4g_m + s^3\left(2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_5L_3R_4g_m + 2C_5L_3\right) + s\left(2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4 + 2L_3g_m\right)}$$

10.741 INVALID-ORDER-741 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$H(s) = \frac{-C_3C_5L_3R_3R_4R_5s^3 + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R_4 - C_5L_3R_4R_5\right) + s\left(-C_5R_3R_4R_5 + L_3R_4R_5g_m - L_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(2C_3C_5L_3R_3R_4R_5g_m + 2C_3C_5L_3R_3R_5 + C_3C_5L_3R_4R_5\right) + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_3R_4R_5g_m + C_3L_3R_4 + 2C_5L_3R_4R_5g_m + 2C_5L_3R_5\right) + s\left(2C_5R_3R_4R_5g_m + 2C_5R_3R_5 + C_5R_4R_5\cdots\right)}$

10.742 INVALID-ORDER-742 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \frac{R_3R_4g_m + s^3\left(C_3C_5L_3R_3R_4R_5g_m - C_3C_5L_3R_3R_4\right) + s^2\left(C_3L_3R_3R_4g_m + C_5L_3R_4R_5g_m - C_5L_3R_4\right) + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4 + L_3R_4g_m\right)}{2R_3g_m + R_4g_m + s^3\left(2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4R_5g_m + C_3C_5L_3R_4\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_5L_3R_4g_m + 2C_5L_3R_5g_m + 2C_5L_3\right) + s\left(2C_5R_3R_4g_m + 2C_5R_3R_5g_m + 2C_5R_3 + C_5R_4R_5g_m + C_5R_4 + 2L_3g_m\right)}$

10.743 INVALID-ORDER-743 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \frac{C_3C_5L_3L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(-C_3C_5L_3R_3R_4 + C_5L_3L_5R_4g_m\right) + s^2\left(C_3L_3R_3R_4g_m - C_5L_3R_4 + C_5L_5R_3R_4g_m\right) + s\left(-C_5R_3R_4 + L_3R_4g_m\right)}{2R_3g_m + R_4g_m + s^4\left(2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_4g_m\right) + s^3\left(2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4 + 2C_5L_3L_5g_m\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_5L_3R_4g_m + 2C_5L_3 + 2C_5L_5R_3g_m + C_5L_5R_4g_m\right) + s\left(2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4 + 2L_3g_m\right)}$

10.744 INVALID-ORDER-744 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3R_4s^4 - R_3R_4 + s^3\left(C_3L_3L_5R_3R_4g_m - C_5L_3L_5R_4\right) + s^2\left(-C_3L_3R_3R_4 - C_5L_3R_4 + L_3L_5R_4g_m\right) + s\left(-L_3R_4 + L_5R_3R_4g_m\right)}{2R_3R_4g_m + 2R_3 + R_4 + s^4\left(2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3L_3L_5R_3g_m + C_3L_3L_5R_4g_m + 2C_5L_3L_5R_4g_m + 2C_5L_3L_5\right) + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3 + C_3L_3R_4 + 2C_5L_5R_3R_4g_m + 2C_5L_5R_3 + C_5L_5R_4 + 2L_3L_5g_m\right) + s\left(2L_3R\cdots\right)}$

10.745 INVALID-ORDER-745 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \frac{C_3C_5L_3L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(C_3C_5L_3R_3R_4R_5g_m - C_3C_5L_3R_3R_4 + C_5L_3L_5R_4g_m\right) + s^2\left(C_3L_3R_3R_4g_m + C_5L_3R_4R_5g_m - C_5L_3R_4 + C_5L_5R_3R_4g_m\right) + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4 + \cdots\right)}{2R_3g_m + R_4g_m + s^4\left(2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_4g_m\right) + s^3\left(2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4R_5g_m + C_3C_5L_3R_4 + 2C_5L_3L_5g_m\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_5L_3R_4g_m + 2C_5L_3R_5g_m + 2C_5L_3 + 2C_5L_5R_3g_m + C_5L\cdots\right)}$

10.746 INVALID-ORDER-746 $Z(s) = \left(\infty,\ \infty,\ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1},\ R_4,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3R_4R_5s^4 - R_3R_4R_5 + s^3\left(C_3L_3L_5R_3R_4R_5g_m - C_3L_3L_5R_3R_4 - C_5L_3L_5R_4R_5\right) + s^2\left(-C_3L_3R_3R_4R_5 - C_5L_3R_4R_5 + \cdots\right)}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^4\left(2C_3C_5L_3L_5R_3R_4R_5g_m + 2C_3C_5L_3L_5R_3R_5 + C_3C_5L_3L_5R_4R_5\right) + s^3\left(2C_3L_3L_5R_3R_4g_m + 2C_3L_3L_5R_3R_5g_m + 2C_3L_3L_5R_3 + C_3L_3L_5R_4R_5g_m + C_3L_3L_5R_4 + 2C_5L_3L_5R_4R_5g_m + 2C_5L_3L_5R_5\right) + s^2\left(2C_3L_3R_3R_4R_5g_m + 2C_3L\cdots\right)}$

10.747 INVALID-ORDER-747 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_3C_5L_3L_5R_3R_4R_5g_m - C_3C_5L_3L_5R_3R_4\right) + s^3\left(C_3L_3L_5R_3R_4g_m + C_5L_5L_5R_4R_5g_m - C_5L_3L_5R_4\right) + s^2\left(C_3L_3R_3R_4R_5g_m - C_3\ldots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3L_3L_5R_3g_m + C_3L_3L_5R_4g_m + 2C_5L_3L_5R_4g_m + 2C_5L_3L_5R_5g_m + 2C_5L_3L_5\right) + s^2\left(2C_3L_3R_3R_4g_m + \ldots\right.}$

10.748 INVALID-ORDER-748 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_3C_5L_3L_5R_3R_4R_5g_m - C_3C_5L_3L_5R_3R_4\right) + s^3\left(-C_3C_5L_3R_3R_4R_5 + C_5L_3L_5R_4R_5g_m - C_5L_3L_5R_4\right.}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3C_5L_3R_3R_4R_5g_m + 2C_3C_5L_3R_3R_5 + C_3C_5L_3R_4R_5 + 2C_5L_3L_5R_4g_m + 2C_5L_3L_5R_5g_m + 2C_5L_3L_5\ldots\right.}$

10.749 INVALID-ORDER-749 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right) + s\left(L_3R_5g_m - L_3\right)}{2R_3g_m + R_5g_m + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3 + 2C_4L_3R_5g_m + 2C_4L_3\right) + s\left(2C_4R_3R_5g_m + 2C_4R_3 + 2L_3g_m\right) + 1}$

10.750 INVALID-ORDER-750 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3R_3s^3 + R_3g_m + s^2\left(C_3L_3R_3g_m - C_5L_3\right) + s\left(-C_5R_3 + L_3g_m\right)}{2C_3C_4C_5L_3R_3s^4 + g_m + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4C_5R_3 + 2C_4L_3g_m + 2C_5L_3g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$

10.751 INVALID-ORDER-751 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3R_3R_5s^3 + R_3R_5g_m - R_3 + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 - C_5L_3R_5\right) + s\left(-C_5R_3R_5 + L_3R_5g_m - L_3\right)}{2C_3C_4C_5L_3R_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5 + 2C_4C_5L_3R_5\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3 + 2C_4C_5R_3R_5 + 2C_4L_3R_5g_m + 2C_4L_3 + 2C_5L_3R_5g_m\right) + s\left(2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5\ldots\right.}$

10.752 INVALID-ORDER-752 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{R_3g_m + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3\right) + s^2\left(C_3L_3R_3g_m + C_5L_3R_5g_m - C_5L_3\right) + s\left(C_5R_3R_5g_m - C_5R_3 + L_3g_m\right)}{g_m + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3 + 2C_4L_3g_m + 2C_5L_3g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$

10.753 INVALID-ORDER-753 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_5L_3L_5R_3g_ms^4 + R_3g_m + s^3\left(-C_3C_5L_3R_3 + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_3g_m - C_5L_3 + C_5L_5R_3g_m\right) + s\left(-C_5R_3 + L_3g_m\right)}{2C_3C_4C_5L_3L_5R_3g_ms^5 + g_m + s^4\left(2C_3C_4C_5L_3R_3 + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_3 + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3L_3g_m + 2C_4C_5R_3 + 2C_4L_3g_m + 2C_5L_3g_m + C_5L_5g_m\right) + s\left(2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$

10.754 INVALID-ORDER-754 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_5R_3s^4 - R_3 + s^3\left(C_3L_3L_5R_3g_m - C_5L_3L_5\right) + s^2\left(-C_3L_3R_3 - C_5L_5R_3 + L_3L_5g_m\right) + s\left(-L_3 + L_5R_3g_m\right)}{2C_3C_4C_5L_3L_5R_3s^5 + 2R_3g_m + s^4\left(2C_3C_4L_3L_5R_3g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3 + C_3L_3L_5g_m + 2C_4C_5L_5R_3 + 2C_4L_3L_5g_m + 2C_5L_3L_5g_m\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3 + 2C_4L_3 + 2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5\right) + s\left(2\ldots\right.}$

10.755 INVALID-ORDER-755 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_5L_3L_5R_3g_ms^4 + R_3g_m + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3 + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R_3g_m + C_5L_3R_5g_m - C_5L_3 + C_5L_5R_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3 + L_3g_m\right)}{2C_3C_4C_5L_3L_5R_3g_ms^5 + g_m + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3 + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3L_3g_m + 2C_4C_5R_3R_5g_m + 2C_4\ldots\right.}$

10.756 INVALID-ORDER-756 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3R_5s^4 - R_3R_5 + s^3\left(C_3L_3L_5R_3R_5g_m - C_3L_3L_5R_3 - C_5L_3L_5R_5\right) + s^2\left(-C_3L_3R_3R_5 - C_5L_5R_3R_5 + L_3L_5R_5\cdots\right)}{2C_3C_4C_5L_3L_5R_3R_5s^5 + 2R_3R_5g_m + R_5 + s^4\left(2C_3C_4L_3L_5R_3R_5g_m + 2C_3C_4L_3L_5R_3 + 2C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_5 + 2C_4C_5L_3L_5R_5\right) + s^3\left(2C_3C_4L_3R_3R_5 + 2C_3L_3L_5R_3g_m + C_3L_3L_5R_5g_m + C_3L_3L_5 + 2C_4C_5L_5R_3R_5 + 2C_4L_3L_5R_5g_m + 2C_4L_3L_5 + 2C\cdots\right)}$

10.757 INVALID-ORDER-757 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^3\left(C_3L_3L_5R_3g_m + C_5L_5L_5R_5g_m - C_5L_3L_5\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L\cdots\right)}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3\right) + s^4\left(2C_3C_4L_3L_5R_3g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5R_5g_m + 2C_4C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3L_3L_5g_m + 2C_4C_5L_5R_3R_5g_m + 2C_4C_5\cdots\right)}$

10.758 INVALID-ORDER-758 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^3\left(-C_3C_5L_3R_3R_5 + C_5L_3L_5R_5g_m - C_5L_3L_5\right) + \cdots}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3\right) + s^4\left(2C_3C_4C_5L_3R_3R_5 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5R_5g_m + 2C_4C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5 + 2C_4C_5\cdots\right)}$

10.759 INVALID-ORDER-759 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ R_5, \ \infty\right)$

$H(s) = \frac{R_3R_4R_5g_m - R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R_4\right) + s\left(L_3R_4R_5g_m - L_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(2C_3C_4L_3R_3R_4R_5g_m + 2C_3C_4L_3R_3R_4\right) + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_3R_4R_5g_m + C_3L_3R_4 + 2C_4L_3R_4R_5g_m + 2C_4L_3R_4\right) + s\left(2C_4R_3R_4R_5g_m + 2C_4R_3R_4 + 2L_3R_4g_m + 2L_3R_5g_m + \cdots\right)}$

10.760 INVALID-ORDER-760 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \frac{-C_3C_5L_3R_3R_4s^3 + R_3R_4g_m + s^2\left(C_3L_3R_3R_4g_m - C_5L_3R_4\right) + s\left(-C_5R_3R_4 + L_3R_4g_m\right)}{2C_3C_4C_5L_3R_3R_4s^4 + 2R_3g_m + R_4g_m + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4 + 2C_4C_5L_3R_4\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_4C_5R_3R_4 + 2C_4L_3R_4g_m + 2C_5L_3R_4g_m + 2C_5L_3\right) + s\left(2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C\cdots\right)}$

10.761 INVALID-ORDER-761 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \frac{-C_3C_5L_3R_3R_4R_5s^3 + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R_4 - C_5L_3R_4R_5\right) + s\left(-\cdots\right)}{2C_3C_4C_5L_3R_3R_4R_5s^4 + 2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(2C_3C_4L_3R_3R_4R_5g_m + 2C_3C_4L_3R_3R_4 + 2C_3C_5L_3R_3R_4R_5g_m + 2C_3C_5L_3R_3R_5 + C_3C_5L_3R_4R_5 + 2C_4C_5L_3R_4R_5\right) + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_3R_4R_5g_m + \cdots\right)}$

10.762 INVALID-ORDER-762 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \frac{R_3R_4g_m + s^3\left(C_3C_5L_3R_3R_4R_5g_m - C_3C_5L_3R_3R_4\right) + s^2\left(C_3L_3R_3R_4g_m + C_5L_3R_4R_5g_m - C_5L_3R_4\right) + s\left(C_5R_3R_4R_5g_m + \cdots\right)}{2R_3g_m + R_4g_m + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4R_5g_m + C_3C_5L_3R_4 + 2C_4C_5L_3R_4R_5g_m + 2C_4C_5L_3R_4\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_4C_5R_3R\cdots\right)}$

10.763 INVALID-ORDER-763 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \frac{C_3C_5L_3L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(-C_3C_5L_3R_3R_4 + C_5L_3L_5R_4g_m\right) + s^2\left(C_3L_3R_3R_4g_m - C_5L_3R_4 + C_5L_5R_3R_4g_m\right) + \cdots}{2C_3C_4C_5L_3L_5R_3R_4g_ms^5 + 2R_3g_m + R_4g_m + s^4\left(2C_3C_4C_5L_3L_5R_3R_4 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_4g_m + 2C_4C_5L_3L_5R_4g_m\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4 + 2C_4C_5L_3R_4 + 2C_4C_5L_5R_3R_4g_m + 2C_5L_3L_5g_m\right) + s^2\left(2C\cdots\right)}$

10.764 INVALID-ORDER-764 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3R_4s^4 - R_3R_4 + s^3\left(C_3L_3L_5R_3R_4g_m - C_5L_3L_5R_4\right) + s^2\left(-C_3L_3R_3R_4 - C_5L_5R_3R_4 + L\cdots\right)}{2C_3C_4C_5L_3L_5R_3R_4s^5 + 2R_3R_4g_m + 2R_3 + R_4 + s^4\left(2C_3C_4L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4 + 2C_4C_5L_3L_5R_4\right) + s^3\left(2C_3C_4L_3R_3R_4 + 2C_3L_3L_5R_3g_m + C_3L_3L_5R_4g_m + 2C_4C_5L_5R_3R_4 + 2C_4L_3L_5R_4g_m + 2C_5L_3L_5R_4g_m + 2\cdots\right)}$

10.765 **INVALID-ORDER-765** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_5L_3L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(C_3C_5L_3R_3R_4R_5g_m - C_3C_5L_3R\dots\right)}{2C_3C_4C_5L_3L_5R_3R_4g_ms^5 + 2R_3g_m + R_4g_m + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_4g_m + 2C_4C_5L_3L_5R_4g_m\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4R_5g_m + C_3C_5\dots\right)}$

10.766 **INVALID-ORDER-766** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_5R_3\dots}{2C_3C_4C_5L_3L_5R_3R_4R_5s^5 + 2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^4\left(2C_3C_4L_3L_5R_3R_4R_5g_m + 2C_3C_4L_3L_5R_3R_4 + 2C_3C_5L_3L_5R_3R_4R_5g_m + 2C_3C_5L_3L_5R_3R_5 + C_3C_5L_3L_5R_4R_5 + 2C_4C_5L_3L_5R_4R_5\right) + s^3\left(2C_3C_4L_3R_3R_4R_5 + 2C_3L_3L_5R_3R_4g_m + 2C_3L_3L_5R_3R_5g_m + \dots\right)}$

10.767 **INVALID-ORDER-767** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R\dots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4\right) + s^4\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4 + 2C_4C_5L_3L_5R_4R_5g_m + 2C_4C_\dots\right)}$

10.768 **INVALID-ORDER-768** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{\dots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4\right) + s^4\left(2C_3C_4L_3R_3R_4R_5 + 2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4 + 2C_4C_5L_3L_5R_4R_5g_m + 2C_4C_\dots\right)}$

10.769 **INVALID-ORDER-769** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4+\frac{1}{C_4s}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^3\left(C_3C_4L_3R_3R_4R_5g_m - C_3C_4L_3R_3R_4\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_4L_3R_4R_5g_m - C_4L_3R_4\right) + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4 + L_3R_5g_m - L_3\right)}{2R_3g_m + R_5g_m + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4R_5g_m + C_3C_4L_3R_4\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3 + 2C_4L_3R_4g_m + 2C_4L_3R_5g_m + 2C_4L_3\right) + s\left(2C_4R_3R_4g_m + 2C_4R_3R_5g_m + 2C_4R_3 + C_4R_4R_5g_m + C_4R_4 + 2L_3\dots\right)}$

10.770 **INVALID-ORDER-770** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4+\frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3R_3R_4s^4 + R_3g_m + s^3\left(C_3C_4L_3R_3R_4g_m - C_3C_5L_3R_3 - C_4C_5L_3R_4\right) + s^2\left(C_3L_3R_3g_m - C_4C_5R_3R_4 + C_4L_3R_4g_m - C_5L_3\right) + s\left(C_4R_3R_4g_m - C_5R_3 + L_3g_m\right)}{g_m + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_3R_4g_m + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3 + C_4C_5R_4 + 2C_4L_3g_m + 2C_5L_3g_m\right) + s\left(2C_4R_3g_m + C\dots\right)}$

10.771 **INVALID-ORDER-771** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4+\frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3R_3R_4R_5s^4 + R_3R_5g_m - R_3 + s^3\left(C_3C_4L_3R_3R_4R_5g_m - C_3C_4L_3R_3R_4 - C_3C_5L_3R_3R_5 - C_4C_5L_3R_4R_5\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3\dots\right)}{2R_3g_m + R_5g_m + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_3R_4R_5\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4R_5g_m + C_3C_4L_3R_4 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5 + 2C_4C_5L_3R_4R_5g_m + 2C_4C_5L_3R_5\right) + s^2\left(2C_3L_3\dots\right)}$

10.772 **INVALID-ORDER-772** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4+\frac{1}{C_4s}, \ R_5+\frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3 + C_4C_5L_3R_4R_5g_m - C_4C_5L_3R_4\right) + s^2\left(C_3L_3R_3g_m + C_4C_5R_3R_4R_5g_m - C_4C_5R_3R_4\dots\right)}{g_m + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_4g_m + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3\right) + s^2\left(C_3L_3g_m + 2C\dots\right)}$

10.773 **INVALID-ORDER-773** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4+\frac{1}{C_4s}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_5R_3R_4g_ms^5 + R_3g_m + s^4\left(-C_3C_4C_5L_3R_3R_4 + C_3C_5L_3L_5R_3g_m + C_4C_5L_3L_5R_4g_m\right) + s^3\left(C_3C_4L_3R_3R_4g_m - C_3C_5L_3R_3 - C_4C_5L_3R_4 + C_4C_5L_5R_3R_4g_m + C_5L_3L_5g_m\right) + s^2\left(C_3L_3R\dots\right)}{g_m + s^5\left(2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4 + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_3R_4g_m + 2C_4C_5L_3 + 2C_4C_5L_5R_3g_m + \dots\right)}$

10.774 INVALID-ORDER-774 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_5R_3R_4s^5 - R_3 + s^4\left(C_3C_4L_3L_5R_3R_4g_m - C_3C_5L_3L_5R_3 - C_4C_5L_3L_5R_4\right) + s^3\left(-C_3C_4L_3R_3R_4 + C_3L_3L_5R_3g_m - C_4C_5L_5R_3R_4 + C_4\ldots\right.}{2R_3g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4\right) + s^4\left(2C_3C_4L_3L_5R_3g_m + C_3C_4L_3L_5R_4g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5R_4g_m + 2C_4C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4 + C_3L_3L_5g_m + 2C\ldots\right.}$

10.775 INVALID-ORDER-775 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_5R_3R_4g_ms^5 + R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4 + C_3C_5L_3L_5R_3g_m + C_4C_5L_3L_5R_4g_m\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3 + C_4C_5L_3\ldots\right.}{g_m + s^5\left(2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4 + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L\ldots\right.}$

10.776 INVALID-ORDER-776 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_5R_3R_4R_5s^5 - R_3R_5 + s^4\left(C_3C_4L_3L_5R_3R_4R_5g_m - C_3C_4L\ldots\right.}{2R_3R_5g_m + R_5 + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_5 + C_3C_4C_5L_3L_5R_4R_5\right) + s^4\left(2C_3C_4L_3L_5R_3R_4g_m + 2C_3C_4L_3L_5R_3R_5g_m + 2C_3C_4L_3L_5R_3 + C_3C_4L_3L_5R_4R_5g_m + C_3C_4L_3L_5R_4 + 2C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_5 + 2C_4C_5L_3L_5R_4R_5g_m\ldots}$

10.777 INVALID-ORDER-777 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^5\left(C_3C_4C_5L_3L_5R_3R_4R_5g_m - C_3C_4C_5L_3L_5R_3R_4\right) + s^4\left(C_3C_4L_3L_5R_3R_4g_m + C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R\ldots\right.}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4\right) + s^4\left(2C_3C_4L_3L_5R_3g_m + C_3C_4L_3L_5R_4g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5R_4g_m + 2C_4C_5\ldots}$

10.778 INVALID-ORDER-778 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^5\left(C_3C_4C_5L_3L_5R_3R_4R_5g_m - C_3C_4C_5L_3L_5R_3R_4\right) + s^4\ldots}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_3R_4R_5 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5 + 2\ldots}$

10.779 INVALID-ORDER-779 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s + \frac{1}{C_4s}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^4\left(C_3C_4L_3L_4R_3R_5g_m - C_3C_4L_3L_4R_3\right) + s^3\left(C_4L_3L_4R_5g_m - C_4L_3L_4\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_4L_4R_3R_5g_m - C_4L_4R_3\right) + s\left(L_3R_5g_m - L_3\right)}{2R_3g_m + R_5g_m + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + 2C_4L_3L_4g_m\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3 + 2C_4L_3R_5g_m + 2C_4L_3 + 2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4\right) + s\left(2C_4R_3R_5g_m + 2C_4R_3 + 2\ldots\right.}$

10.780 INVALID-ORDER-780 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3s^5 + R_3g_m + s^4\left(C_3C_4L_3L_4R_3g_m - C_4C_5L_3L_4\right) + s^3\left(-C_3C_5L_3R_3 - C_4C_5L_4R_3 + C_4L_3L_4g_m\right) + s^2\left(C_3L_3R_3g_m + C_4L_4R_3g_m - C_5L_3\right) + s\left(-C_5R_3 + L_3g_m\right)}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3 + C_3C_4L_3L_4g_m + 2C_4C_5L_3L_4g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_3 + 2C_4C_5L_4R_3g_m + C_4C_5L_4\right) + s^2\left(C_3L_3g_m + 2C_4C_5R_3 + 2C_4L_3g_m + C_4L_4g_m + 2C_5L_3g_m\right) + s\ldots}$

10.781 INVALID-ORDER-781 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3R_5s^5 + R_3R_5g_m - R_3 + s^4\left(C_3C_4L_3L_4R_3R_5g_m - C_3C_4L_3L_4R_3 - C_4C_5L_3L_4R_5\right) + s^3\left(-C_3C_5L_3R_3R_5 - C_4C_5L_4R_3R_5 + C_4L_3\ldots\right.}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5\right) + s^4\left(2C_3C_4C_5L_3R_3R_5 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4 + 2C_4C_5L_3L_4R_5g_m\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5 + 2C_4C_5L_3R_5 + 2C_4C_5L\ldots}$

10.782 INVALID-ORDER-782 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3\right) + s^4\left(C_3C_4L_3L_4R_3g_m + C_4C_5L_3L_4R_5g_m - C_4C_5L_3L_4\right) + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3 + C_4C_5L_4R_3R_5g_m - C_4C_5L_4R_3 + C_4L_3L_4g_m\right) + \ldots}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4L_3L_4g_m + 2C_4C_5L_3L_4g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5L_3R_5g_m + 2C_4C_5L_3 + 2C_4C_5L_4R_3g_m\ldots}$

10.783 **INVALID-ORDER-783** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s+\frac{1}{C_4s}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(-C_3C_4C_5L_3L_4R_3 + C_4C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4L_3L_4R_3g_m + C_3C_5L_3L_5R_3g_m - C_4C_5L_3L_4 + C_4C_5L_4L_5R_3g_m\right) + s^3\left(-C_3C_5L_3R_3 - C_4C_5L_4R_3 + C_4L_3L_4g_m\right)}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m\right) + s^4\left(2C_3C_4C_5L_3R_3 + C_3C_4L_3L_4g_m + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_4g_m + 2C_4C_5L_3L_5g_m + C_4C_5L_4L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_3\right)}$

10.784 **INVALID-ORDER-784** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s+\frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_3s^6 - R_3 + s^5\left(C_3C_4L_3L_4L_5R_3g_m - C_4C_5L_3L_4L_5\right) + s^4\left(-C_3C_4L_3L_4R_3 - C_3C_5L_3L_5R_3 - C_4C_5L_4L_5R_3 + C_4L_3L_4L_5g_m\right) + s^3(\ldots)}{2R_3g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3 + C_3C_4L_3L_4L_5g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4 + 2C_3C_4L_3L_5R_3g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5 + 2C_4C_5L_3L_5 + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L_5\right)}$

10.785 **INVALID-ORDER-785** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s+\frac{1}{C_4s}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3 + C_4C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4L_3L_4R_3g_m + C_3C_5L_3L_5R_3g_m + C_4C_5L_3L_4R_5g_m - C_4C_5L_3L_4 + C_4C_5L_4L_5\ldots\right)}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4L_3L_4g_m + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_4g_m + 2C_4C_5L_3L_5g_m + C_4C_5L_4L_5g_m\right) + s^3\left(2C_3C_4L_3\ldots\right)}$

10.786 **INVALID-ORDER-786** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s+\frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_3R_5s^6 - R_3R_5 + s^5\left(C_3C_4L_3L_4L_5R_3R_5g_m - C_3C_4L_3\ldots\right)}{2R_3R_5g_m + R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_5g_m + C_3C_4C_5L_3L_4L_5R_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_5 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_5g_m + C_3C_4L_3L_4L_5 + 2C_4C_5L_3L_4L_5R_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + C_3C_4L_3L_4R_5 + 2C_3C_4L_3L_5R_3R_5g_m + 2C_3C_4L_3\ldots\right)}$

10.787 **INVALID-ORDER-787** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s+\frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^6\left(C_3C_4C_5L_3L_4L_5R_3R_5g_m - C_3C_4C_5L_3L_4L_5R_3\right) + s^5\left(C_3C_4L_3L_4L_5R_3g_m + C_4C_5L_3L_4L_5R_5g_m - C_4C_5L_3L_4L_5\ldots\right)}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4L_3L_4L_5g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4 + 2C_3C_4L_3L_5R_3g_m + 2C_3\ldots\right)}$

10.788 **INVALID-ORDER-788** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ L_4s+\frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^6\left(C_3C_4C_5L_3L_4L_5R_3R_5g_m - C_3C_4C_5L_3L_4L_5R_3\right) + s^5\left(-\ldots\right)}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5 + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_5 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4\ldots\right)}$

10.789 **INVALID-ORDER-789** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{s^3\left(C_3L_3L_4R_3R_5g_m - C_3L_3L_4R_3\right) + s^2\left(L_3L_4R_5g_m - L_3L_4\right) + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2R_3R_5g_m + 2R_3 + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3\right) + s^3\left(2C_3L_3L_4R_3g_m + C_3L_3L_4R_5g_m + C_3L_3L_4 + 2C_4L_3L_4R_5g_m + 2C_4L_3L_4\right) + s^2\left(2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3 + 2L_3L_4g_m\right) + s\left(2L_3R_5g_m + 2L_3 + 2L_4R_3g_m + L_4R_5g_m\ldots\right)}$

10.790 **INVALID-ORDER-790** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_4R_3s^4 + L_4R_3g_ms + s^3\left(C_3L_3L_4R_3g_m - C_5L_3L_4\right) + s^2\left(-C_5L_4R_3 + L_3L_4g_m\right)}{2C_3C_4C_5L_3L_4R_3s^5 + 2R_3g_m + s^4\left(2C_3C_4L_3L_4R_3g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4 + 2C_4C_5L_3L_4\right) + s^3\left(2C_3C_5L_3R_3 + C_3L_3L_4g_m + 2C_4C_5L_4R_3 + 2C_4L_3L_4g_m + 2C_5L_3L_4g_m\right) + s^2\left(2C_3L_3R_3g_m + 2C_4L_4R_3g_m + 2C_5L_3 + 2C_5L_4R_3g_m + C_5L_4\right) + s\left(2C_5R_3 + \ldots\right)}$

10.791 **INVALID-ORDER-791** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_4R_3R_5s^4 + s^3\left(C_3L_3L_4R_3R_5g_m - C_3L_3L_4R_3 - C_5L_3L_4R_5\right) + s^2\left(-C_5L_4R_3R_5 + L_3L_4R_5g_m\ldots\right)}{2C_3C_4C_5L_3L_4R_3R_5s^5 + 2R_3R_5g_m + 2R_3 + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + 2C_3C_5L_3L_4R_3R_5g_m + C_3C_5L_3L_4R_5 + 2C_4C_5L_3L_4R_5\right) + s^3\left(2C_3C_5L_3R_3R_5 + 2C_3L_3L_4R_3g_m + C_3L_3L_4R_5g_m + C_3L_3L_4 + 2C_4C_5L_4R_3R_5 + 2C_4L_3L_4R_5g_m + 2C_4L_3L_4 + 2\ldots\right)}$

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10.792 INVALID-ORDER-792 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{L_4 R_3 g_m s + s^4 (C_3 C_5 L_3 L_4 R_3 R_5 g_m - C_3 C_5 L_3 L_4 R_3) + s^3 (C_3 L_3 L_4 R_3 g_m + C_5 L_3 L_4 R_5 g_m - C_5 L_3 L_4) + s^2 (C_5 L_4 R_3 R_5 \cdots}{2 R_3 g_m + s^5 (2 C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_3) + s^4 (2 C_3 C_4 L_3 L_4 R_3 g_m + 2 C_3 C_5 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_4 R_5 g_m + C_3 C_5 L_3 L_4 + 2 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_4 C_5 L_3 L_4) + s^3 (2 C_3 C_5 L_3 R_3 R_5 g_m + 2 C_3 C_5 L_3 R_3 + C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_3 R_5 g_m + 2 C_4 C_5 L_4 R_3 + \cdots}$

10.793 INVALID-ORDER-793 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{C_3 C_5 L_3 L_4 L_5 R_3 g_m s^5 + L_4 R_3 g_m s + s^4 (-C_3 C_5 L_3 L_4 R_3 + C_5 L_3 L_4 L_5 g_m) + s^3 (C_3 L_3 L_4 R_3 g_m - C_5 L_3 L_4 + C_5 L_4 L_5 R_3 g_m) \cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m s^6 + 2 R_3 g_m + s^5 (2 C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_5 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 g_m) + s^4 (2 C_3 C_4 L_3 L_4 R_3 g_m + 2 C_3 C_5 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_4 + 2 C_3 C_5 L_3 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 + 2 C_4 C_5 L_4 L_5 R_3 g_m) + s^3 (2 C_3 C_5 L_3 R_3 + C_3 L_3 L_4 g_m + 2 C_4 C_5 L_4 R_3 + \cdots}$

10.794 INVALID-ORDER-794 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \frac{-C_3 C_5 L_3 L_4 L_5 R_3 s^5 - L_4 R_3 s + s^4 (C_3 L_3 L_4 L_5 R_3 g_m - C_5 L_3 L_4 L_5) + s^3 (-C_3 L_3 L_4 R_3 - C_5 L_4 L_5 R_3 + L \cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_3 s^6 + 2 R_3 + s^5 (2 C_3 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5) + s^4 (2 C_3 C_4 L_3 L_4 R_3 + 2 C_3 C_5 L_3 L_5 R_3 + C_3 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_4 L_5 R_3 + 2 C_4 L_3 L_4 L_5 g_m + 2 C_5 L_3 L_4 L_5 g_m) + s^3 (2 C_3 L_3 L_4 R_3 g_m + C_3 L_3 L_4 + 2 C_3 L_3 \cdots}$

10.795 INVALID-ORDER-795 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{C_3 C_5 L_3 L_4 L_5 R_3 g_m s^5 + L_4 R_3 g_m s + s^4 (C_3 C_5 L_3 L_4 R_3 R_5 g_m - C_3 C_5 L_3 \cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m s^6 + 2 R_3 g_m + s^5 (2 C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_5 L_3 L_4 L_5 g_m + 2 C_4 C_5 L_3 L_4 L_5 g_m) + s^4 (2 C_3 C_4 L_3 L_4 R_3 g_m + 2 C_3 C_5 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_4 R_5 g_m + C_3 C_5 L_3 L_4 + 2 C_3 C_5 L_3 L_5 R_3 g_m + 2 C_4 C_5 L_3 L_4 R_5 g_m + 2 C_4 C_5 L_3 L_4 + 2 \cdots}$

10.796 INVALID-ORDER-796 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \frac{-C_3 C_5 L_3 L_4 L_5 \cdots}{2 C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 s^6 + 2 R_3 R_5 + s^5 (2 C_3 C_4 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 L_3 L_4 L_5 R_3 + 2 C_3 C_5 L_3 L_4 L_5 R_3 R_5 g_m + C_3 C_5 L_3 L_4 L_5 R_5 + 2 C_4 C_5 L_3 L_4 L_5 R_5) + s^4 (2 C_3 C_4 L_3 L_4 R_3 R_5 + 2 C_3 C_5 L_3 L_5 R_3 R_5 + 2 C_3 L_3 L_4 L_5 R_3 g_m + C_3 L_3 L_4 L_5 R_5 g_m + C_3 L_3 L_4 L_5 + 2 C_4 C_5 L_4 L_5 \cdots}$

10.797 INVALID-ORDER-797 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \frac{s^5 (C_3 \cdots}{2 R_3 R_5 g_m + 2 R_3 + s^6 (2 C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_3) + s^5 (2 C_3 C_4 L_3 L_4 L_5 R_3 g_m + 2 C_3 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5) + s^4 (2 C_3 C_4 L_3 L_4 R_3 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_3 + 2 C_3 C_5 L_3 L_5 R \cdots}$

10.798 INVALID-ORDER-798 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \frac{\cdots}{2 R_3 R_5 g_m + 2 R_3 + s^6 (2 C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2 C_3 C_4 C_5 L_3 L_4 L_5 R_3) + s^5 (2 C_3 C_4 C_5 L_3 L_4 R_3 R_5 + 2 C_3 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_5 L_3 L_4 L_5 R_5 g_m + C_3 C_5 L_3 L_4 L_5 + 2 C_4 C_5 L_3 L_4 L_5 R_5 g_m + 2 C_4 C_5 L_3 L_4 L_5) + s^4 (2 C_3 C_4 L_3 L_4 R_3 R_5 g_m + 2 C_3 C_4 L_3 L_4 R_3 + 2 C_3 C_5 L_3 L_4 R \cdots}$

10.799 INVALID-ORDER-799 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$

$H(s) = \frac{R_3 R_5 g_m - R_3 + s^4 (C_3 C_4 L_3 L_4 R_3 R_5 g_m - C_3 C_4 L_3 L_4 R_3) + s^3 (C_3 C_4 L_3 R_3 R_4 R_5 g_m - C_3 C_4 L_3 R_3 R_4 + C_4 L_3 L_4 R_5 g_m - C_4 L_3 L_4) + s^2 (C_3 L_3 R_3 R_5 g_m - C_3 L_3 R_3 + C_4 L_3 R_4 R_5 g_m - C_4 L_3 R_4 + C_4 L_4 R_5 g_m \cdots}{2 R_3 g_m + R_5 g_m + s^4 (2 C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_4 L_3 L_4 R_5 g_m + C_3 C_4 L_3 L_4) + s^3 (2 C_3 C_4 L_3 R_3 R_4 g_m + 2 C_3 C_4 L_3 R_3 R_5 g_m + 2 C_3 C_4 L_3 R_3 + C_3 C_4 L_3 R_4 R_5 g_m + C_3 C_4 L_3 R_4 + 2 C_4 L_3 L_4 g_m) + s^2 (2 C_3 L_3 R_3 g_m + C_3 L_3 R_5 g_m + C_3 L_3 + 2 C_4 L_3 R_4 g_m + 2 C_4 L_3 R_5 g_m + 2 C_4 L_3 \cdots}$

10.800 INVALID-ORDER-800 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \frac{-C_3 C_4 C_5 L_3 L_4 R_3 s^5 + R_3 g_m + s^4 (-C_3 C_4 C_5 L_3 R_3 R_4 + C_3 C_4 L_3 L_4 R_3 g_m - C_4 C_5 L_3 L_4) + s^3 (C_3 C_4 L_3 R_3 R_4 g_m - C_3 C_5 L_3 R_3 - C_4 C_5 L_3 R_4 - C_4 C_5 L_4 R_3 + C_4 L_3 L_4 g_m) + s^2 (C_3 L_3 R_3 g_m - C_4 C_5 R \cdots}{g_m + s^5 (2 C_3 C_4 C_5 L_3 L_4 R_3 g_m + C_3 C_4 C_5 L_3 L_4) + s^4 (2 C_3 C_4 C_5 L_3 R_3 R_4 g_m + 2 C_3 C_4 C_5 L_3 R_3 + C_3 C_4 C_5 L_3 R_4 + C_3 C_4 L_3 L_4 g_m + 2 C_4 C_5 L_3 L_4 g_m) + s^3 (2 C_3 C_4 L_3 R_3 g_m + C_3 C_4 L_3 R_4 g_m + 2 C_3 C_5 L_3 R_3 g_m + C_3 C_5 L_3 + 2 C_4 C_5 L_3 + 2 C_4 C_5 L_4 R_3 g_m + C_4 \cdots}$

10.801 **INVALID-ORDER-801** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; \frac{R_5}{C_5R_5s+1}, \; \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3R_5s^5 + R_3R_5g_m - R_3 + s^4\left(-C_3C_4C_5L_3R_3R_4R_5 + C_3C_4L_3L_4R_3R_5g_m - C_3C_4L_3L_4R_3 - C_4C_5L_3\ldots\right.}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_3R_4R_5 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4 + 2C_4C_5L_3L_4R_5g_m\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3R_5g_m + 2C_3C\ldots\right.}$

10.802 **INVALID-ORDER-802** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; R_5+\frac{1}{C_5s}, \; \infty\right)$

$H(s) = \dfrac{R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3\right) + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4 + C_3C_4L_3L_4R_3g_m + C_4C_5L_3L_4R_5g_m - C_4C_5L_3L_4\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3R_5g_m\ldots\right.}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4 + C_3C_4L_3L_4g_m + 2C_4C_5L_3L_4g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R\ldots\right.}$

10.803 **INVALID-ORDER-803** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; L_5s+\frac{1}{C_5s}, \; \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(-C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_5R_3R_4g_m + C_4C_5L_3L_4L_5g_m\right) + s^4\left(-C_3C_4C_5L_3R_3R_4 + C_3C_4L_3L_4R_3g_m + C_3C_5L_3L_5R_3g_m - C_4C_5L_3L_4 + C_4C_5L_3L_5R_4g_m + \ldots\right.}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4 + C_3C_4L_3L_4g_m + C_3C_5L_3L_5g_m + 2C_4C_5L_3L_4g_m + 2C_4C_5L_3L_5g_m + C_4C_5L_4L_5g_m\right)}$

10.804 **INVALID-ORDER-804** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; \frac{L_5s}{C_5L_5s^2+1}, \; \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_3s^6 - R_3 + s^5\left(-C_3C_4C_5L_3L_5R_3R_4 + C_3C_4L_3L_4L_5R_3g_m - C_4C_5L_3L_4L_5\right) + s^4\left(-C_3C_4L_3L_4R_3 + C_3\ldots\right.}{2R_3g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4 + C_3C_4L_3L_4L_5g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4 + 2C_3C_4L_3L_5R_3g_m + C_3C_4L_3L_5R_4g_m + 2C_3C_5L_3L_5R_3g_m\ldots\right.}$

10.805 **INVALID-ORDER-805** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; L_5s+R_5+\frac{1}{C_5s}, \; \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_5R_3R_4g_m + C_4C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4 + C_3C_4L_3L_4R_3g_m + C_3C_5L_3\ldots\right.}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4 + C_3C_4L_3L_4g_m + \ldots\right.}$

10.806 **INVALID-ORDER-806** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \; \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_3R\ldots}{2R_3R_5g_m + R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_5g_m + C_3C_4C_5L_3L_4L_5R_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_5 + C_3C_4C_5L_3L_5R_4R_5 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_5g_m + C_3C_4L_3L_4L_5 + 2C_4C_5L_3L_4L_5R_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + \ldots\right.}$

10.807 **INVALID-ORDER-807** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \; \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^6\left(C_3C_4C_5L_3L_4L_5R_3R_5g_m - C_3C_4C_5L_3L_4L_5R_3\right) + s^5\left(C_3C_4C_5L_3L_5R_3R_4R_5g_m - C_3C_4C_5L_3L_5R_3R_4 + C_3C\ldots\right.}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4 + C_3C_4L_3L_4L_5g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4\ldots\right.}$

10.808 **INVALID-ORDER-808** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; L_4s+R_4+\frac{1}{C_4s}, \; \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \; \infty\right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^6\left(C_3C_4C_5L_3L_4L_5\ldots\right.}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5 + 2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4 + 2C_4C\ldots\right.}$

10.809 **INVALID-ORDER-809** $Z(s) = \left(\infty, \; \infty, \; \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \; \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \; R_5, \; \infty\right)$

$H(s) = \dfrac{s^3\left(C_3L_3L_4R_3R_4R_5g_m - C_3L_3L_4R_3R_4\right) + s^2\left(L_3L_4R_4R_5g_m - L_3L_4R_4\right) + s\left(L_4R_3R_4R_5g_m - L_4R_3R_4\right)}{2R_3R_4R_5g_m + 2R_3R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4R_5g_m + 2C_3C_4L_3L_4R_3R_4\right) + s^3\left(2C_3L_3L_4R_3R_4g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3L_4R_3 + C_3L_3L_4R_4R_5g_m + C_3L_3L_4R_4 + 2C_4L_3L_4R_4R_5g_m + 2C_4L_3L_4R_4\right) + s^2\left(2C_3L_3R_3R_4R_5g_m + 2C_3L_3R_3R_4 + 2C_4L_4R_3R_4R_5g_m\ldots\right.}$

10.810 **INVALID-ORDER-810** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_4R_3R_4s^4 + L_4R_3R_4g_ms + s^3\left(C_3L_3L_4R_3R_4g_m - C_5L_3L_4R_4\right) + s^2\left(-C_5L_4R_3R_4 + L_3L_4R_4g_m\right)}{2C_3C_4C_5L_3L_4R_3R_4s^5 + 2R_3R_4g_m + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4 + 2C_4C_5L_3L_4R_4\right) + s^3\left(2C_3C_5L_3R_3R_4 + 2C_3L_3L_4R_3g_m + C_3L_3L_4R_4g_m + 2C_4C_5L_4R_3R_4 + 2C_4L_3L_4R_4g_m + 2C_5L_3L_4R_4g_m + 2C_5L_3L_4\right) + s^2\cdots}$

10.811 **INVALID-ORDER-811** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C\cdots}{2C_3C_4C_5L_3L_4R_3R_4R_5s^5 + 2R_3R_4R_5g_m + 2R_3R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4R_5g_m + 2C_3C_4L_3L_4R_3R_4 + 2C_3C_5L_3L_4R_3R_4R_5g_m + 2C_3C_5L_3L_4R_3R_5 + C_3C_5L_3L_4R_4R_5 + 2C_4C_5L_3L_4R_4R_5\right) + s^3\left(2C_3C_5L_3R_3R_4R_5 + 2C_3L_3L_4R_3R_4g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3\cdots\right)}$

10.812 **INVALID-ORDER-812** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{L_4R_3R_4g_ms + s^4\left(C_3\cdots\right)}{2R_3R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_4\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_5g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4R_5g_m + C_3C_5L_3L_4R_4 + 2C_4C_5L_3L_4R_4R_5g_m + 2C_4C_5L_3L_4R_4\right) + s^3\left(2C_3C_5L_3R_3R_4R_5g_m + \cdots\right)}$

10.813 **INVALID-ORDER-813** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_5L_3L_4L_5R_3R_4g_ms^5 + \cdots}{2C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + 2R_3R_4g_m + s^5\left(2C_3C_4L_3L_4R_3R_4 + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5R_4g_m + 2C_4C_5L_3L_4L_5R_4g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4 + 2C_3C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_4R_4 + \cdots\right)}$

10.814 **INVALID-ORDER-814** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5\cdots}{2C_3C_4C_5L_3L_4L_5R_3R_4s^6 + 2R_3R_4 + s^5\left(2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3 + C_3C_5L_3L_4L_5R_4 + 2C_4C_5L_3L_4L_5R_4\right) + s^4\left(2C_3C_4L_3L_4R_3R_4 + 2C_3C_5L_3L_5R_3R_4 + 2C_3L_3L_4L_5R_3g_m + C_3L_3L_4L_5R_4g_m + 2C_4C_5L_4L_5R_3R_4 + 2C_4L_\cdots\right)}$

10.815 **INVALID-ORDER-815** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{\cdots}{2C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + 2R_3R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_4 + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5R_4g_m + 2C_4C_5L_3L_4L_5R_4g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_5g_m + 2C_3C_5L_3L_4R_3 + C_3C\cdots\right)}$

10.816 **INVALID-ORDER-816** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{\cdots}{2C_3C_4C_5L_3L_4L_5R_3R_4R_5s^6 + 2R_3R_4R_5 + s^5\left(2C_3C_4L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4L_3L_4L_5R_3R_4 + 2C_3C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_5L_3L_4L_5R_3R_5 + C_3C_5L_3L_4L_5R_4R_5 + 2C_4C_5L_3L_4L_5R_4R_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_4R_5 + 2C_3C_5L_3L_5R_3R_4R_5 + 2C_3L_3L_4L_5R_3\cdots\right)}$

10.817 **INVALID-ORDER-817** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{\cdots}{2R_3R_4R_5g_m + 2R_3R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_5g_m + 2C_3C_5L_3L_4L_5R_3 + C_3C_5L_3L_4L_5R_4R_5g_m + C_3C_5L_3L_4L_5R_4 + 2C_4C_5L_3L_4L_5R_4R_5g_m + 2C_4C\cdots\right)}$

10.818 **INVALID-ORDER-818** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{\cdots}{2R_3R_4R_5g_m + 2R_3R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5 + 2C_3C_5L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_5g_m + 2C_3C_5L_3L_4L_5R_3 + C_3C_5L_3L_4L_5R_4R_5g_m + C_3C_5L_3L_4L_5R_4 + 2C_4C_5L_3L_4L_5R_4R_5g_m + 2C_4C\cdots\right)}$

10.819 **INVALID-ORDER-819** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_3 R_4 R_5 g_m - R_3 R_4 + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 R_5 g_m - C_3 C_4 L_3 L_4 R_3 R_4\right) + s^3\left(C_3 L_3 L_4 R_3 R_5 g_m - C_3 L_3 L_4 R_3 + C_4 L_3 L_4 R_4 R_5 g_m - C_4 L_3 L_4 R_4\right) + s^2\left(C_3 L_3 R_3 R_4 R_5 g_m + \cdots\right.}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^4\left(2C_3 C_4 L_3 L_4 R_3 R_4 g_m + 2C_3 C_4 L_3 L_4 R_3 R_5 g_m + 2C_3 C_4 L_3 L_4 R_3 + C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4\right) + s^3\left(2C_3 L_3 L_4 R_3 g_m + C_3 L_3 L_4 R_5 g_m + C_3 L_3 L_4 + 2C_4 L_3 L_4 R_4 g_m + 2C_4 L_3 L_4 R_5 g_m + 2C_4 L_3 L_4\right) + s^2\left(2C_3 L_3 \cdots\right.}$

10.820 **INVALID-ORDER-820** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_3 R_4 s^5 + R_3 R_4 g_m + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 g_m - C_3 C_5 L_3 L_4 R_3 - C_4 C_5 L_3 L_4 R_4\right) + s^3\left(-C_3 C_5 L_3 R_3 R_4 + C_3 L_3 L_4 R_3 g_m - C_4 C_5 L_4 R_3 R_4 + \cdots\right.}{2R_3 g_m + R_4 g_m + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4\left(2C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_4 L_3 L_4 R_4 g_m + 2C_3 C_5 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_4 + 2C_4 C_5 L_3 L_4 R_4 g_m + 2C_4 C_5 L_3 L_4\right) + s^3\left(2C_3 C_5 L_3 R_3 R_4 g_m + 2C_3 C_5 L_3 R_3 + C_3 C_5 L_3 R_4 + C_3 L_3 L_4 \cdots\right.}$

10.821 **INVALID-ORDER-821** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 s^5 + R_3 R_4 R_5 g_m - R_3 R_4 \cdots}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 R_5 + C_3 C_4 C_5 L_3 L_4 R_4 R_5\right) + s^4\left(2C_3 C_4 L_3 L_4 R_3 R_4 g_m + 2C_3 C_4 L_3 L_4 R_3 R_5 g_m + 2C_3 C_4 L_3 L_4 R_3 + C_3 C_4 L_3 L_4 R_4 R_5 g_m + C_3 C_4 L_3 L_4 R_4 + 2C_3 C_5 L_3 L_4 R_3 R_5 g_m + C_3 C_5 \cdots\right.}$

10.822 **INVALID-ORDER-822** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{R_3 R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_3 R_4\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 R_4 g_m + C_3 C_5 L_3 L_4 R_3 R_5 g_m - C_3 C_5 L_3 L_4 R_3 \cdots\right.}{2R_3 g_m + R_4 g_m + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_4\right) + s^4\left(2C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_4 L_3 L_4 R_4 g_m + 2C_3 C_5 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_4 R_5 g_m + C_3 C_5 L_3 L_4 + 2C_4 C_5 L_3 L_4 R_4 g_m + 2C_4 C_5 \cdots\right.}$

10.823 **INVALID-ORDER-823** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m s^6 + R_3 R_4 g_m + s^5\left(-C_3 C_4 C_5 L_3 L_4 R_3 R_4 + C_3 C_5 L_3 L_4 L_5 R_3 g_m + C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^4\left(C_3 C_4 L_3 L_4 R_3 \cdots\right.}{2R_3 g_m + R_4 g_m + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_3 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_5 L_3 L_4 L_5 g_m + 2C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_4 L_3 L_4 R_4 g_m + 2C_3 C_5 L_3 L_4 R_3 g_m + C_3 C_5 L_3 L_4 + 2C \cdots\right.}$

10.824 **INVALID-ORDER-824** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{-C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 s^6 - R_3 R_4 + s^5\left(C_3 C_4 L_3 L_4 \cdots\right.}{2R_3 R_4 g_m + 2R_3 + R_4 + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5\left(2C_3 C_4 L_3 L_4 L_5 R_3 g_m + C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2C_3 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_5 L_3 L_4 L_5 + 2C_4 C_5 L_3 L_4 L_5 R_4 g_m + 2C_4 C_5 L_3 L_4 L_5\right) + s^4\left(2C_3 C_4 L_3 L_4 R_3 R_4 g_m + 2C_3 \cdots\right.}$

10.825 **INVALID-ORDER-825** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$

$H(s) = \dfrac{C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m s^6 + R_3 R_4 g_m + s^5\left(C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m - C_3 C_4 C_5 L_3 L_4 R_3 R_4 + C_3 C_5 L_3 \cdots\right.}{2R_3 g_m + R_4 g_m + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4 g_m\right) + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 + C_3 C_4 C_5 L_3 L_4 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 R_4 + C_3 C_5 L_3 L_4 L_5 g_m + 2C_4 C_5 L_3 L_4 L_5 g_m\right) + s^4\left(2C_3 C_4 L_3 L_4 R_3 g_m + C_3 C_4 \cdots\right.}$

10.826 **INVALID-ORDER-826** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

$H(s) = \dfrac{}{2R_3 R_4 R_5 g_m + 2R_3 R_5 + R_4 R_5 + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 + C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5\right) + s^5\left(2C_3 C_4 L_3 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 L_3 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 L_3 L_4 L_5 R_3 + C_3 C_4 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 L_3 L_4 L_5 R_4 + 2C_3 C_5 L_3 L_4 L_5 R_3 R_5 g_m + \cdots\right.}$

10.827 **INVALID-ORDER-827** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$

$H(s) = \dfrac{R \cdots}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 + C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5\left(2C_3 C_4 L_3 L_4 L_5 R_3 g_m + C_3 C_4 L_3 L_4 L_5 R_4 g_m + 2C_3 C_5 L_3 L_4 L_5 R_3 g_m + C_3 C_5 L_3 \cdots\right.}$

10.828 **INVALID-ORDER-828** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$

$H(s) = \dfrac{}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^6\left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 + C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4\right) + s^5\left(2C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 R_5 + C_3 C_4 C_5 L_3 L_4 R_4 R_5 + 2C \cdots\right.}$

10.829 INVALID-ORDER-829 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ R_5, \ \infty \right)$

$H(s) = \frac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m - C_3C_4L_3L_4R_3R_4\right) + s^3\left(C_4L_3L_4R_4R_5g_m - C_4L_3L_4R_4\right) + s^2\left(C_3\right.}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4R_5g_m + C_3C_4L_3L_4R_4\right) + s^3\left(2C_3C_4L_3R_3R_4R_5g_m + 2C_3C_4L_3R_3R_4 + 2C_4L_3L_4R_4g_m + 2C_4L_3L_4R_5g_m + 2C_4L_3L_4\right) + s^2\left(2C_3L_3R_3\right.}$

10.830 INVALID-ORDER-830 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3L_4R_3R_4s^5 + R_3R_4g_m + s^4\left(C_3C_4L_3L_4R_3R_4g_m - C_4C_5L_3L_4R_4\right) + s^3\left(-C_3C_5L_3R_3R_4 - C_4C_5L\right.}{2R_3g_m + R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m + 2C_4C_5L_3L_4R_4g_m + 2C_4C_5L_3L_4\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4 + 2\right.}$

10.831 INVALID-ORDER-831 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_5 + C_3C_4C_5L_3L_4R_4R_5\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5 + 2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4R_5g_m + C_3C_4L_3L_4R_4 + 2C_4C_5\right.}$

10.832 INVALID-ORDER-832 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{R_3R_4g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_4R_5g_m\right.}{2R_3g_m + R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4R_5g_m + C_3C_4C_5L_3L_4R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m + 2C_4C_5L_3L_4R_4g_m + 2C_4C_5L_3L_4R\right.}$

10.833 INVALID-ORDER-833 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + R_3R_4g_m + s\left.\right.}{2R_3g_m + R_4g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_4g_m\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4 + 2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m + 2C_3C_5L_3\right.}$

10.834 INVALID-ORDER-834 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{}{2R_3R_4g_m + 2R_3 + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_4g_m + 2C_4C_5L_3L_4L_5R_4g_m + 2C_4C_5L_3L_4L_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3 + C_3\right.}$

10.835 INVALID-ORDER-835 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{}{2R_3g_m + R_4g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_4g_m\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4R_5g_m + C_3C_4C_5L_3L_4R_4 + 2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_4C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R\right.}$

10.836 INVALID-ORDER-836 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \frac{}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5 + C_3C_4C_5L_3L_4L_5R_4R_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5 + 2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_4L_3L_4L_5R_3R_5g_m + 2C_3C_4L_3L_4L_5R_3 + C_3C_4L_3L_4L_5R_4R_5g_m + C_3C_4L_3L_4L_5R_4\right.}$

10.837 INVALID-ORDER-837 $Z(s) = \left(\infty, \ \infty, \ \frac{C_3L_3R_3s^2+L_3s+R_3}{C_3L_3s^2+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_4 + 2C_3C_4L_3L_4L_5R_3g_m + C\right.}$

10.838 **INVALID-ORDER-838** $Z(s) = \left(\infty, \ \infty, \ \frac{C_3 L_3 R_3 s^2 + L_3 s + R_3}{C_3 L_3 s^2 + 1}, \ \frac{R_4 \left(C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^6 \left(2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_4 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 L_5 R_3 + C_3 C_4 C_5 L_3 L_4 L_5 R_4 R_5 g_m + C_3 C_4 C_5 L_3 L_4 L_5 R_4 \right) + s^5 \left(2C_3 C_4 C_5 L_3 L_4 R_3 R_4 R_5 g_m + 2C_3 C_4 C_5 L_3 L_4 R_3 R_5 + C_3 C_4 C_5 L_3 L_4 R_4 R_5 + 2C }$

10.839 **INVALID-ORDER-839** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 R_3 R_4 s^3 + C_3 L_3 R_3 R_4 g_m s^2 - C_5 R_3 R_4 s + R_3 R_4 g_m}{2R_3 g_m + R_4 g_m + s^3 \left(2C_3 C_5 L_3 R_3 R_4 g_m + 2C_3 C_5 L_3 R_3 + C_3 C_5 L_3 R_4 \right) + s^2 \left(C_3 C_5 R_3 R_4 + 2C_3 L_3 R_3 g_m + C_3 L_3 R_4 g_m \right) + s \left(C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4 \right)}$

10.840 **INVALID-ORDER-840** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 R_3 R_4 R_5 s^3 - C_5 R_3 R_4 R_5 s + R_3 R_4 R_5 g_m - R_3 R_4 + s^2 \left(C_3 L_3 R_3 R_4 R_5 g_m - C_3 L_3 R_3 R_4 \right)}{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^3 \left(2C_3 C_5 L_3 R_3 R_4 R_5 g_m + 2C_3 C_5 L_3 R_3 R_5 + C_3 C_5 L_3 R_4 R_5 \right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 + 2C_3 L_3 R_3 R_4 g_m + 2C_3 L_3 R_3 R_5 g_m + 2C_3 L_3 R_3 + C_3 L_3 R_4 R_5 g_m + C_3 L_3 R_4 \right) + s \left(C_3 R_3 R_4 R_5 g_m + C_3 R_3 R_4 + 2C_5 R_3 R_4 R_5 g_m + 2C_5 R }$

10.841 **INVALID-ORDER-841** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 L_3 R_3 R_4 g_m s^2 + R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 R_3 R_4 R_5 g_m - C_3 C_5 L_3 R_3 R_4 \right) + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4 \right)}{2R_3 g_m + R_4 g_m + s^3 \left(2C_3 C_5 L_3 R_3 R_4 g_m + 2C_3 C_5 L_3 R_3 R_5 g_m + 2C_3 C_5 L_3 R_3 + C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 \right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m + C_3 C_5 R_3 R_4 + 2C_3 L_3 R_3 g_m + C_3 L_3 R_4 g_m \right) + s \left(C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 R_5 g_m + 2C_5 R_3 + C_5 R_4 R_5 g_m + C_5 R_4 \right)}$

10.842 **INVALID-ORDER-842** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_5 L_3 L_5 R_3 R_4 g_m s^4 - C_3 C_5 L_3 R_3 R_4 s^3 - C_5 R_3 R_4 s + R_3 R_4 g_m + s^2 \left(C_3 L_3 R_3 R_4 g_m + C_5 L_5 R_3 R_4 g_m \right)}{2R_3 g_m + R_4 g_m + s^4 \left(2C_3 C_5 L_3 L_5 R_3 g_m + C_3 C_5 L_3 L_5 R_4 g_m \right) + s^3 \left(2C_3 C_5 L_3 R_3 R_4 g_m + 2C_3 C_5 L_3 R_3 + C_3 C_5 L_3 R_4 + C_3 C_5 L_5 R_3 R_4 g_m \right) + s^2 \left(C_3 C_5 R_3 R_4 + 2C_3 L_3 R_3 g_m + C_3 L_3 R_4 g_m + 2C_5 L_5 R_3 g_m + C_5 L_5 R_4 g_m \right) + s \left(C_3 R_3 R_4 g_m + 2C_5 R_3 R_4 g_m + 2C_5 R_3 + C_5 R_4 \right)}$

10.843 **INVALID-ORDER-843** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_5 R_3 R_4 s^4 + C_3 L_3 L_5 R_3 R_4 g_m s^3 + L_5 R_3 R_4 g_m s - R_3 R_4 + s^2 \left(-C_3 L_3 R_3 R_4 - C_5 L_5 R_3 R_4 \right)}{2R_3 R_4 g_m + 2R_3 + R_4 + s^4 \left(2C_3 C_5 L_3 L_5 R_3 R_4 g_m + 2C_3 C_5 L_3 L_5 R_3 + C_3 C_5 L_3 L_5 R_4 \right) + s^3 \left(C_3 C_5 L_5 R_3 R_4 + 2C_3 L_3 L_5 R_3 g_m + C_3 L_3 L_5 R_4 g_m \right) + s^2 \left(2C_3 L_3 R_3 R_4 g_m + 2C_3 L_3 R_3 + C_3 L_3 R_4 + C_3 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 R_4 g_m + 2C_5 L_5 R_3 + C_5 L_5 R_4 \right) + s \left(C_3 R_3 R_4 + 2L_5 R }$

10.844 **INVALID-ORDER-844** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$

$H(s) = \dfrac{C_3 C_5 L_3 L_5 R_3 R_4 g_m s^4 + R_3 R_4 g_m + s^3 \left(C_3 C_5 L_3 R_3 R_4 R_5 g_m - C_3 C_5 L_3 R_3 R_4 \right) + s^2 \left(C_3 L_3 R_3 R_4 g_m + C_5 L_5 R_3 R_4 g_m \right) + s \left(C_5 R_3 R_4 R_5 g_m - C_5 R_3 R_4 \right)}{2R_3 g_m + R_4 g_m + s^4 \left(2C_3 C_5 L_3 L_5 R_3 g_m + C_3 C_5 L_3 L_5 R_4 g_m \right) + s^3 \left(2C_3 C_5 L_3 R_3 R_4 g_m + 2C_3 C_5 L_3 R_3 R_5 g_m + 2C_3 C_5 L_3 R_3 + C_3 C_5 L_3 R_4 R_5 g_m + C_3 C_5 L_3 R_4 + C_3 C_5 L_5 R_3 R_4 g_m \right) + s^2 \left(C_3 C_5 R_3 R_4 R_5 g_m + C_3 C_5 R_3 R_4 + 2C_3 L_3 R_3 g_m + C_3 L_3 R_4 g_m + 2C_5 L_5 R_3 g_m + C_5 L_5 }$

10.845 **INVALID-ORDER-845** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_3 C_5 L_3 L_5 R_3 R_4 R_5 s^4 - R_3 R_4 R_5 + s^3 \left(C_3 L_3 L_5 R_3 R_4 R_5 g_m - C_3 L_3 L_5 R_3 R_4 \right) + s^2 \left(-C_3 L_3 R_3 R_4 R_5 - C_5 L_5 R_3 R_4 R_5 \right) + s}{2R_3 R_4 R_5 g_m + 2R_3 R_5 + R_4 R_5 + s^4 \left(2C_3 C_5 L_3 L_5 R_3 R_4 R_5 g_m + 2C_3 C_5 L_3 L_5 R_3 R_5 + C_3 C_5 L_3 L_5 R_4 R_5 \right) + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 + 2C_3 L_3 L_5 R_3 R_4 g_m + 2C_3 L_3 L_5 R_3 R_5 g_m + 2C_3 L_3 L_5 R_3 + C_3 L_3 L_5 R_4 R_5 g_m + C_3 L_3 L_5 R_4 \right) + s^2 \left(2C_3 L_3 R_3 R_4 R_5 g_m + 2C_3 L_3 R_3 R_5 + C_3 L_3 R }$

10.846 **INVALID-ORDER-846** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3 \left(C_3 L_3 s^2 + 1 \right)}{C_3 L_3 s^2 + C_3 R_3 s + 1}, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$

$H(s) = \dfrac{C_3 L_3 L_5 R_3 R_4 g_m s^3 + L_5 R_3 R_4 g_m s + R_3 R_4 R_5 g_m - R_3 R_4 + s^4 \left(C_3 C_5 L_3 L_5 R_3 R_4 R_5 g_m - C_3 C_5 L_3 L_5 R_3 R_4 \right) + s^2 \left(C_3 L_3 R_3 R }{2R_3 R_4 g_m + 2R_3 R_5 g_m + 2R_3 + R_4 R_5 g_m + R_4 + s^4 \left(2C_3 C_5 L_3 L_5 R_3 R_4 g_m + 2C_3 C_5 L_3 L_5 R_3 R_5 g_m + 2C_3 C_5 L_3 L_5 R_3 + C_3 C_5 L_3 L_5 R_4 R_5 g_m + C_3 C_5 L_3 L_5 R_4 \right) + s^3 \left(C_3 C_5 L_5 R_3 R_4 R_5 g_m + C_3 C_5 L_5 R_3 R_4 + 2C_3 L_3 L_5 R_3 g_m + C_3 L_3 L_5 R_4 g_m \right) + s^2 \left(2C_3 L_3 R_3 R_4 g_m + 2C_3 L_3 R }$

10.847 **INVALID-ORDER-847** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ R_4, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{-C_3C_5L_3R_3R_4R_5s^3 - C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4 + s^4\left(C_3C_5L_3L_5R_3R_4R_5g_m - C_3C_5L_3L_5R\cdots\right.}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3C_5L_3R_3R_4R_5g_m + 2C_3C_5L_3R_3R_5 + C_3C_5L_3R_4R_5 + C_3C_5L_5R_3R_4R_5g_m + C_3C_5L_5R_3R_4\right) + s^2\left(C\cdots\right.}$

10.848 **INVALID-ORDER-848** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ R_5, \ \infty \right)$

$H(s) = \frac{R_3R_5g_m - R_3 + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right)}{2R_3g_m + R_5g_m + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3\right) + 1}$

10.849 **INVALID-ORDER-849** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{-C_3C_5L_3R_3s^3 + C_3L_3R_3g_ms^2 - C_5R_3s + R_3g_m}{2C_3C_4C_5L_3R_3s^4 + g_m + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3\right) + s^2\left(C_3C_5R_3 + C_3L_3g_m + 2C_4C_5R_3\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$

10.850 **INVALID-ORDER-850** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{-C_3C_5L_3R_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right)}{2C_3C_4C_5L_3R_3R_5s^4 + 2R_3g_m + R_5g_m + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5\right) + s^2\left(C_3C_5R_3R_5 + 2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3 + 2C_4C_5R_3R_5\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5g_m + 2C_4R_3 + 2C_5R_3R_5g_m + C_5R_5\right) + 1}$

10.851 **INVALID-ORDER-851** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3L_3R_3g_ms^2 + R_3g_m + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{g_m + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3\right) + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3 + C_3L_3g_m + 2C_4C_5R_3R_5g_m + 2C_4C_5R_3\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5R_5g_m + C_5\right)}$

10.852 **INVALID-ORDER-852** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_5L_3L_5R_3g_ms^4 - C_3C_5L_3R_3s^3 - C_5R_3s + R_3g_m + s^2\left(C_3L_3R_3g_m + C_5L_5R_3g_m\right)}{2C_3C_4C_5L_3L_5R_3g_ms^5 + g_m + s^4\left(2C_3C_4C_5L_3R_3 + C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + C_3C_5L_5R_3g_m + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3 + C_3L_3g_m + 2C_4C_5R_3 + C_5L_5g_m\right) + s\left(C_3R_3g_m + 2C_4R_3g_m + 2C_5R_3g_m + C_5\right)}$

10.853 **INVALID-ORDER-853** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3s^4 + C_3L_3L_5R_3g_ms^3 + L_5R_3g_ms - R_3 + s^2\left(-C_3L_3R_3 - C_5L_5R_3\right)}{2C_3C_4C_5L_3L_5R_3s^5 + 2R_3g_m + s^4\left(2C_3C_4L_3L_5R_3g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3 + C_3C_5L_5R_3 + C_3L_3L_5g_m + 2C_4C_5L_5R_3\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3 + C_3L_5R_3g_m + 2C_4L_5R_3g_m + 2C_5L_5R_3g_m + C_5L_5\right) + s\left(C_3R_3 + 2C_4R_3 + L_5g_m\right) + \cdots}$

10.854 **INVALID-ORDER-854** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_5L_3L_5R_3g_ms^4 + R_3g_m + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3\right) + s^2\left(C_3L_3R_3g_m + C_5L_5R_3g_m\right) + s\left(C_5R_3R_5g_m - C_5R_3\right)}{2C_3C_4C_5L_3L_5R_3g_ms^5 + g_m + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_5L_3L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3 + C_3C_5L_5R_3g_m + 2C_4C_5L_5R_3g_m\right) + s^2\left(C_3C_5R_3R_5g_m + C_3C_5R_3 + C_3L_3g_m + 2C_4C_5R_3R_5g_m + 2C_4C_5\cdots\right.}$

10.855 **INVALID-ORDER-855** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3R_5s^4 - R_3R_5 + s^3\left(C_3L_3L_5R_3R_5g_m - C_3L_3L_5R_3\right) + s^2\left(-C_3L_3R_3R_5 - C_5L_5R_3R_5\right) + s\left(L_5R_3R_5g_m - L_5R\cdots\right.}{2C_3C_4C_5L_3L_5R_3R_5s^5 + 2R_3R_5g_m + R_5 + s^4\left(2C_3C_4L_3L_5R_3R_5g_m + 2C_3C_4L_3L_5R_3 + 2C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_5\right) + s^3\left(2C_3C_4L_3R_3R_5 + C_3C_5L_5R_3R_5 + 2C_3L_3L_5R_3g_m + C_3L_3L_5R_5g_m + C_3L_3L_5 + 2C_4C_5L_5R_3R_5\right) + s^2\left(2C_3L_3R_3R_5g_m + C_3L_3R_5 + \cdots\right.}$

10.856 **INVALID-ORDER-856** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{C_3L_3L_5R_3g_ms^3 + L_5R_3g_ms + R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right)}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3\right) + s^4\left(2C_3C_4L_3L_5R_3g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + C_3L_3L_5g_m + 2C_4C_5L_5R_3R_5g_m + 2C_4C_5L_5}$

10.857 **INVALID-ORDER-857** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3R_3R_5s^3 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^4\left(C_3C_5L_3L_5R_3R_5g_m - C_3C_5L_3L_5R_3\right) + s^2\left(C_3L_3\ldots}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3\right) + s^4\left(2C_3C_4L_3L_5R_3R_5 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_5g_m + C_3C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5 + C_3C_5L_5R_3R_5g_m + C_3C_5L_5R_3 + 2C_4C_5L_5}$

10.858 **INVALID-ORDER-858** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R_4\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(2C_3C_4L_3R_3R_4R_5g_m + 2C_3C_4L_3R_3R_4\right) + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_3R_4R_5g_m + C_3L_3R_4\right) + s\left(C_3R_3R_4R_5g_m + C_3R_3R_4 + 2C_4R_3R_4R_5g_m + 2C_4R_3R_4\right)}$

10.859 **INVALID-ORDER-859** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3R_3R_4s^3 + C_3L_3R_3R_4g_ms^2 - C_5R_3R_4s + R_3R_4g_m}{2C_3C_4C_5L_3R_3R_4s^4 + 2R_3g_m + R_4g_m + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4\right) + s^2\left(C_3C_5R_3R_4 + 2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_4C_5R_3R_4\right) + s\left(C_3R_3R_4g_m + 2C_4R_3R_4g_m + 2C_5R_3R_4g_m + 2C_5R_3 + C_5R_4\right)}$

10.860 **INVALID-ORDER-860** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3R_3R_4R_5s^3 - C_5R_3R_4R_5s + R_3R_4R_5g_m - R_3R_4 + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R_4\right)}{2C_3C_4C_5L_3R_3R_4R_5s^4 + 2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^3\left(2C_3C_4L_3R_3R_4R_5g_m + 2C_3C_4L_3R_3R_4 + 2C_3C_5L_3R_3R_4R_5g_m + 2C_3C_5L_3R_3R_5 + C_3C_5L_3R_4R_5\right) + s^2\left(C_3C_5R_3R_4R_5 + 2C_3L_3R_3R_4g_m + 2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_3R_4R_5g_m + \ldots\right)}$

10.861 **INVALID-ORDER-861** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3L_3R_3R_4g_ms^2 + R_3R_4g_m + s^3\left(C_3C_5L_3R_3R_4R_5g_m - C_3C_5L_3R_3R_4\right) + s\left(C_5R_3R_4R_5g_m - C_5R_3R_4\right)}{2R_3g_m + R_4g_m + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4R_5g_m + C_3C_5L_3R_4\right) + s^2\left(C_3C_5R_3R_4R_5g_m + C_3C_5R_3R_4 + 2C_3L_3R_3g_m + C_3L_3R_4g_m + 2C_4C_5R_3R_4\ldots\right)}$

10.862 **INVALID-ORDER-862** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_5L_3L_5R_3R_4g_ms^4 - C_3C_5L_3R_3R_4s^3 - C_5R_3R_4s + R_3R_4g_m + s^2\left(C_3L_3R_3R_4g_m + C_5L_5R_3R_4g_m\right)}{2C_3C_4C_5L_3L_5R_3R_4g_ms^5 + 2R_3g_m + R_4g_m + s^4\left(2C_3C_4C_5L_3L_5R_3R_4 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_4g_m\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4 + C_3C_5L_5R_3R_4g_m + 2C_4C_5L_5R_3R_4g_m\right) + s^2\left(C_3C_5R_3R_4 + 2C_3L_3R_3g_m + C_3L_3\ldots\right)}$

10.863 **INVALID-ORDER-863** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3L_5R_3R_4s^4 + C_3L_3L_5R_3R_4g_ms^3 + L_5R_3R_4g_ms - R_3R_4 + s^2\left(-C_3L_3R_3R_4 - C_5L_5R_3R_4\right)}{2C_3C_4C_5L_3L_5R_3R_4s^5 + 2R_3R_4g_m + 2R_3 + R_4 + s^4\left(2C_3C_4L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3C_4L_3R_3R_4 + C_3C_5L_5R_3R_4 + 2C_3L_3L_5R_3g_m + C_3L_3L_5R_4g_m + 2C_4C_5L_5R_3R_4\right) + s^2\left(2C_3L_3R_3R_4g_m + 2C_3L_3R_3 + C_3\ldots\right)}$

10.864 **INVALID-ORDER-864** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4}{C_4R_4s+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_5L_3L_5R_3R_4g_ms^4 + R_3R_4g_m + s^3\left(C_3C_5L_3R_3R_4R_5g_m - C_3C_5L_3R_3R_4\right) +}{2C_3C_4C_5L_3L_5R_3R_4g_ms^5 + 2R_3g_m + R_4g_m + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5R_4g_m\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4R_5g_m + C_3C_5L_3R_4 + C_3C_5L_5\ldots\right)}$

10.865 INVALID-ORDER-865 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; \frac{R_4}{C_4R_4s+1}, \; \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \; \infty \right)$

$H(s) = \frac{-C_3C_5L_3L_5R_3R_4R_5s^4 - R_3R_4R_5 + s}{2C_3C_4C_5L_3L_5R_3R_4R_5s^5 + 2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^4\left(2C_3C_4L_3L_5R_3R_4R_5g_m + 2C_3C_4L_3L_5R_3R_4 + 2C_3C_5L_3L_5R_3R_4R_5g_m + 2C_3C_5L_3L_5R_3R_5 + C_3C_5L_3L_5R_4R_5\right) + s^3\left(2C_3C_4L_3R_3R_4R_5 + C_3C_5L_5R_3R_4R_5 + 2C_3L_3L_5R_3R_4g_m + 2C_3L_3L_5R_3R_5g_m +}$

10.866 INVALID-ORDER-866 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; \frac{R_4}{C_4R_4s+1}, \; \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \; \infty \right)$

$H(s) = \frac{C_3L_3L_5R_3R_4g_m}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_4\right) + s^4\left(2C_3C_4L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3C_4L_3R_3R_4R_5g_m +}$

10.867 INVALID-ORDER-867 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; \frac{R_4}{C_4R_4s+1}, \; \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \; \infty \right)$

$H(s) = \frac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5 + 2C_3C_5L_3L_5R_3R_4g_m + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_3L_5R_4R_5g_m + C_3C_5L_3L_5R_4\right) + s^3\left(2C_3C_4L_3R_3R_4R_5g_m +}$

10.868 INVALID-ORDER-868 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; R_4 + \frac{1}{C_4s}, \; R_5, \; \infty \right)$

$H(s) = \frac{R_3R_5g_m - R_3 + s^3\left(C_3C_4L_3R_3R_4R_5g_m - C_3C_4L_3R_3R_4\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3\right) + s\left(C_4R_3R_4R_5g_m - C_4R_3R_4\right)}{2R_3g_m + R_5g_m + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4R_5g_m + C_3C_4L_3R_4\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + 2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_4g_m + 2C_4R_3R_5g_m + 2C_4R_3 + C_4R_4R_5g_m +}$

10.869 INVALID-ORDER-869 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; R_4 + \frac{1}{C_4s}, \; \frac{1}{C_5s}, \; \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3R_3R_4s^4 + R_3g_m + s^3\left(C_3C_4L_3R_3R_4g_m - C_3C_5L_3R_3\right) + s^2\left(C_3L_3R_3g_m - C_4C_5R_3R_4\right) + s\left(C_4R_3R_4g_m - C_5R_3\right)}{g_m + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4\right) + s^3\left(C_3C_4C_5R_3R_4 + 2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5R_3 + C_3L_3g_m + 2C_4C_5R_3R_4g_m + 2C_4C_5R_3 + C_4C_5R_4\right) + s\left(C_3R_3g_m + 2C_4R_3g_m +}$

10.870 INVALID-ORDER-870 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; R_4 + \frac{1}{C_4s}, \; \frac{R_5}{C_5R_5s+1}, \; \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3R_3R_4R_5s^4 + R_3R_5g_m - R_3 + s^3\left(C_3C_4L_3R_3R_4R_5g_m - C_3C_4L_3R_3R_4 - C_3C_5L_3R_3R_5\right) + s^2\left(C_3L_3R_3}{2R_3g_m + R_5g_m + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_3R_4R_5\right) + s^3\left(2C_3C_4C_5R_3R_4R_5 + 2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4R_5g_m + C_3C_4L_3R_4 + 2C_3C_5L_3R_3R_5g_m + C_3C_5L_3R_5\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4}$

10.871 INVALID-ORDER-871 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; R_4 + \frac{1}{C_4s}, \; R_5 + \frac{1}{C_5s}, \; \infty \right)$

$H(s) = \frac{R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4\right) + s^3\left(C_3C_4L_3R_3R_4g_m + C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3\right) + s^2\left(C_3L_3R_3g_m + C_4C_5R_3R_4R_5}{g_m + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4\right) + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3C_4C_5R_3R_4 + 2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3\right) + s^2\left(C_3C_4R_3R_4g_m + C_3C_5}$

10.872 INVALID-ORDER-872 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; R_4 + \frac{1}{C_4s}, \; L_5s + \frac{1}{C_5s}, \; \infty \right)$

$H(s) = \frac{C_3C_4C_5L_3L_5R_3R_4g_ms^5 + R_3g_m + s^4\left(-C_3C_4C_5L_3R_3R_4 + C_3C_5L_3L_5R_3g_m\right) + s^3\left(C_3C_4L_3R_3R_4g_m - C_3C_5L_3R_3 + C_4C_5L_5R_3R_4g_m\right) + s^2\left(C_3L}{g_m + s^5\left(2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4 + C_3C_4C_5L_5R_3R_4g_m + C_3C_5L_3L_5g_m\right) + s^3\left(C_3C_4C_5R_3R_4 + 2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + C_3C_5L_5R_3g_m + 2C_4C_5}$

10.873 INVALID-ORDER-873 $Z(s) = \left(\infty, \; \infty, \; \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \; R_4 + \frac{1}{C_4s}, \; \frac{L_5s}{C_5L_5s^2+1}, \; \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3L_5R_3R_4s^5 - R_3 + s^4\left(C_3C_4L_3L_5R_3R_4g_m - C_3C_5L_3L_5R_3\right) + s^3\left(-C_3C_4L_3R_3R_4 + C_3L_3L_5R_3g_m - C_4C_5}{2R_3g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4\right) + s^4\left(C_3C_4C_5L_5R_3R_4 + 2C_3C_4L_3L_5R_3g_m + C_3C_4L_3L_5R_4g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4 + C_3C_4L_5R_3R_4g_m + C_3C_5L_5R_3 +}$

10.874 INVALID-ORDER-874 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_4C_5L_3L_5R_3R_4g_ms^5 + R_3g_m + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4 + C_3C_5L_3L_5R_3g_m\right) + s^3\left(C_3\cdots\right.}{g_m + s^5\left(2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4 + C_3C_4C_5L_5R_3R_4g_m + C_3C_5L_3L_5g_m\right) + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3C_4C_5R_3R_4 + 2C_3C_4L_3R_3g_m + C_3\cdots\right.}$

10.875 INVALID-ORDER-875 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3L_5R_3R_4R_5s^5 - R_3\cdots}{2R_3R_5g_m + R_5 + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_5 + C_3C_4C_5L_3L_5R_4R_5\right) + s^4\left(C_3C_4C_5L_5R_3R_4R_5 + 2C_3C_4L_3L_5R_3R_4g_m + 2C_3C_4L_3L_5R_3R_5g_m + 2C_3C_4L_3L_5R_3 + C_3C_4L_3L_5R_4R_5g_m + C_3C_4L_3L_5R_4 + 2C_3C_5L_3L_5R_3R_5g_m + C_3C_5L_3L_5R_5\right)\cdots}$

10.876 INVALID-ORDER-876 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{R_3R_5g_m - R_3 + s^5\left(C_3C_4C_5L_3L_5R_3R_4R_5g_m\cdots\right.}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4\right) + s^4\left(C_3C_4C_5L_5R_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4 + 2C_3C_4L_3L_5R_3g_m + C_3C_4L_3L_5R_4g_m + 2C_3C_5L_3L_5R_3g_m + 2C_3C_5L_3L_5R_5g_m\cdots\right.}$

10.877 INVALID-ORDER-877 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{R_3R_5\cdots}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4R_5g_m + C_3C_4C_5L_5R_3R_4 + 2C_3C_5L_3\cdots\right.}$

10.878 INVALID-ORDER-878 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ R_5, \ \infty \right)$

$H(s) = \frac{R_3R_5g_m - R_3 + s^4\left(C_3C_4L_3L_4R_3R_5g_m - C_3C_4L_3L_4R_3\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_4L_4R_3R_5g_m - C_4L_4R_3\right)}{2R_3g_m + R_5g_m + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3\right) + s^2\left(2C_3L_3R_3g_m + C_3L_3R_5g_m + C_3L_3 + 2C_4L_4R_3g_m + C_4L_4R_5g_m + C_4L_4\right) + s\left(C_3R_3R_5g_m + C_3R_3 + 2C_4R_3R_5\cdots\right.}$

10.879 INVALID-ORDER-879 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3L_4R_3s^5 + C_3C_4L_3L_4R_3g_ms^4 - C_5R_3s + R_3g_m + s^3\left(-C_3C_5L_3R_3 - C_4C_5L_4R_3\right) + s^2\left(C_3L_3R_3g_m + C_4L_4R_3g_m\right)}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3 + C_3C_4C_5L_4R_3 + C_3C_4L_3L_4g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_4R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_4R_3g_m + C_4C_5L_4\right) + s^2\left(C_3C_5R_3 + C_3L_3g_m + 2C_4C_5R_3 + C_4L_4g_m\right) + s\left(C_3R_3g_m + \cdots\right.}$

10.880 INVALID-ORDER-880 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3L_4R_3R_5s^5 - C_5R_3R_5s + R_3R_5g_m - R_3 + s^4\left(C_3C_4L_3L_4R_3R_5g_m - C_3C_4L_3L_4R_3\right) + s^3\left(-C_3C_5L_3R_3\cdots\right.}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5\right) + s^4\left(2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_4R_3R_5 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4\right) + s^3\left(2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_4R_3R_5g_m + 2C_3C_5L_3R_3R_5g_m + C_3C_5\cdots\right.}$

10.881 INVALID-ORDER-881 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_4L_3L_4R_3g_ms^4 + R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3\right) + s^3\left(C_3C_5L_3R_3R_5g_m - C_3C_5L_3R_3 + C_4C_5L_4R_3R_5g_m - C_4C_5L_4R_3\cdots\right.}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_4R_3R_5g_m + C_3C_4C_5L_4R_3 + C_3C_4L_3L_4g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_4R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3R_5g_m + C_3C_5L_3 + 2C_4C_5\cdots\right.}$

10.882 INVALID-ORDER-882 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 - C_3C_4C_5L_3L_4R_3s^5 - C_5R_3s + R_3g_m + s^4\left(C_3C_4L_3L_4R_3g_m + C_3C_5L_3L_5R_3g_m + C_4C_5L_4L_5R_3g_m\right) + s^3\left(-C_3C_5L_3R_3\cdots\right.}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_4L_5R_3g_m\right) + s^4\left(2C_3C_4C_5L_3R_3 + C_3C_4C_5L_4R_3 + C_3C_4L_3L_4g_m + C_3C_5L_3L_5g_m + C_4C_5L_4L_5g_m\right) + s^3\left(2C_3C_4L_3R_3g_m + C_3C_4L_4R_3g_m + 2C_3C_5L_3R_3g_m + \cdots\right.}$

10.883 **INVALID-ORDER-883** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_3s^6 + C_3C_4L_3L_4L_5R_3g_ms^5 + L_5R_3g_ms - R_3 + s^4\left(-C_3C_4L_3L_4R_3 - C_3C_5L_3L_5R_3 - C_4C_5L_4L_5\dots\right)}{2R_3g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_4L_5R_3 + C_3C_4L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4 + 2C_3C_4L_3L_5R_3g_m + C_3C_4L_4L_5R_3g_m + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_3L_5 + 2C_4C_5L_4L_5R_3g_m + C_4C_5L_4L\dots}$

10.884 **INVALID-ORDER-884** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3\right) + s^4\left(C_3C_4L_3L_4R_3g_m + C_3C_5\dots\right)}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_4L_5R_3g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_4R_3R_5g_m + C_3C_4C_5L_4R_3 + C_3C_4L_3L_4g_m + C_3C_5L_3L_5g_m + C_4C_5\dots}$

10.885 **INVALID-ORDER-885** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4L_5R_3R_5s^6 - R_3\dots}{2R_3R_5g_m + R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_5g_m + C_3C_4C_5L_3L_4L_5R_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_5 + C_3C_4C_5L_4L_5R_3R_5 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_5g_m + C_3C_4L_3L_4L_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + C_3C_4L_3L_4R_5 + 2C_3C_4L_3L_5R_3R_5g_m + 2C_3C_4L_3L\dots}$

10.886 **INVALID-ORDER-886** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{C_3C_4L_3L_4L_5R_3g_ms^5 + L_5R_3g_ms + R_3R_5g_m\dots}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_5g_m + C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_4L_5R_3R_5g_m + C_3C_4C_5L_4L_5R_3 + C_3C_4L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4 + \dots}$

10.887 **INVALID-ORDER-887** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3\dots}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5 + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_4L_5R_3R_5g_m + C_3C_4C_5L_4L_5R_3\right) + s^4\left(2C_3C_4C_5L_3R_3R_5 + C_3C_4C\dots}$

10.888 **INVALID-ORDER-888** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{s^3\left(C_3L_3L_4R_3R_5g_m - C_3L_3L_4R_3\right) + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2R_3R_5g_m + 2R_3 + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3\right) + s^3\left(2C_3L_3L_4R_3g_m + C_3L_3L_4R_5g_m + C_3L_3L_4\right) + s^2\left(2C_3L_3R_3R_5g_m + 2C_3L_3R_3 + C_3L_4R_3R_5g_m + C_3L_4R_3 + 2C_4L_4R_3R_5g_m + 2C_4L_4R_3\right) + s\left(2L_4R_3g_m + L_4R_5g_m + L_4\right)}$

10.889 **INVALID-ORDER-889** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3L_4R_3s^4 + C_3L_3L_4R_3g_ms^3 - C_5L_4R_3s^2 + L_4R_3g_ms}{2C_3C_4C_5L_3L_4R_3s^5 + 2R_3g_m + s^4\left(2C_3C_4L_3L_4R_3g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4\right) + s^3\left(2C_3C_5L_3R_3 + C_3C_5L_4R_3 + C_3L_3L_4g_m + 2C_4C_5L_4R_3\right) + s^2\left(2C_3L_3R_3g_m + C_3L_4R_3g_m + 2C_4L_4R_3g_m + 2C_5L_4R_3g_m + C_5L_4\right) + s\left(2C_5R_3 + L_4g_m\right)}$

10.890 **INVALID-ORDER-890** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3L_4R_3R_5s^4 - C_5L_4R_3R_5s^2 + s^3\left(C_3L_3L_4R_3R_5g_m - C_3L_3L_4R_3\right) + s\left(L_4R_3R_5g_m - L_4R_3\right)}{2C_3C_4C_5L_3L_4R_3R_5s^5 + 2R_3R_5g_m + 2R_3 + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + 2C_3C_5L_3L_4R_3R_5g_m + C_3C_5L_3L_4R_5\right) + s^3\left(2C_3C_5L_3R_3R_5 + C_3C_5L_4R_3R_5 + 2C_3L_3L_4R_3g_m + C_3L_3L_4R_5g_m + C_3L_3L_4 + 2C_4C_5L_4R_3R_5\right) + s^2\left(2C_3L_3R_3R_5g_m + 2C_3L_3R_3\dots}$

10.891 **INVALID-ORDER-891** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3L_3L_4R_3g_ms^3 + L_4R_3g_ms + s^4\left(C_3C_5L_3L_4R_3R_5g_m - C_3C_5L_3L_4R_3\right) + s^2\left(C_5L_4R_3R_5g_m - C_5L_4R_3\right)}{2R_3g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4R_5g_m + C_3C_5L_3L_4\right) + s^3\left(2C_3C_5L_3R_3R_5g_m + 2C_3C_5L_3R_3 + C_3C_5L_4R_3R_5g_m + C_3C_5L_4R_3 + C_3L_3L_4g_m + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_3\right) + s\dots}$

10.892 INVALID-ORDER-892 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_5L_3L_4L_5R_3g_ms^5 - C_3C_5L_3L_4R_3s^4 - C_5L_4R_3s^2 + L_4R_3g_ms + s^3\left(C_3L_3L_4R_3g_m + C_5L_4L_5R_3g_m\right)}{2C_3C_4C_5L_3L_4L_5R_3g_ms^6 + 2R_3g_m + s^5\left(2C_3C_4C_5L_3L_4R_3 + C_3C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m\right) + s^3\left(2C_3C_5L_3R_3 + C_3C_5L_4R_3 + C_3L_3L_4g_m + 2C_4C_5L_4R_3 + C}$

10.893 INVALID-ORDER-893 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3L_4L_5R_3s^5 + C_3L_3L_4L_5R_3g_ms^4 + L_4L_5R_3g_ms^2 - L_4R_3s + s^3\left(-C_3L_3L_4R_3 - C_5L_4L_5R_3\right)}{2C_3C_4C_5L_3L_4L_5R_3s^6 + 2R_3 + s^5\left(2C_3C_4L_3L_4L_5R_3g_m + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5\right) + s^4\left(2C_3C_4L_3L_4R_3 + 2C_3C_5L_3L_5R_3 + C_3C_5L_4L_5R_3 + C_3L_3L_4L_5g_m + 2C_4C_5L_4L_5R_3\right) + s^3\left(2C_3L_3L_4R_3g_m + C_3L_3L_4 + 2C_3L_3L_5R_3g_m + C_3L_4L_5R_3g_m + 2C_4L_4L}$

10.894 INVALID-ORDER-894 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_5L_3L_4L_5R_3g_ms^5 + L_4R_3g_ms + s^4\left(C_3C_5L_3L_4R_3R_5g_m - C_3C_5L_3L_4R_3\right) + \ldots}{2C_3C_4C_5L_3L_4L_5R_3g_ms^6 + 2R_3g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_5L_3L_4L_5g_m\right) + s^4\left(2C_3C_4L_3L_4R_3g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4R_5g_m + C_3C_5L_3L_4 + 2C_3C_5L_3L_5R_3g_m + C_3C_5L_4L_5R_3g_m + 2C_4C_5L_4L_5R_3g_m\right) + s^3\left(2C_3C_5L_3R_3}$

10.895 INVALID-ORDER-895 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_5L_3L_4L_5R_3R_5s^5 - L_4R_3R_5s + s \ldots}{2C_3C_4C_5L_3L_4L_5R_3R_5s^6 + 2R_3R_5 + s^5\left(2C_3C_4L_3L_4L_5R_3R_5g_m + 2C_3C_4L_3L_4L_5R_3 + 2C_3C_5L_3L_4L_5R_3R_5g_m + C_3C_5L_3L_4L_5R_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_5 + 2C_3C_5L_3L_5R_3R_5 + C_3C_5L_4L_5R_3R_5 + 2C_3L_3L_4L_5R_3g_m + C_3L_3L_4L_5R_5g_m + C_3L_3L_4L_5 + 2C_4C_5L_4L_}$

10.896 INVALID-ORDER-896 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{C_3L_3L_4L_5R_3g_ms^\ldots}{2R_3R_5g_m + 2R_3 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3\right) + s^5\left(2C_3C_4L_3L_4L_5R_3g_m + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5R_5g_m + C_3C_5L_3L_4L_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + 2C_3C_5L_3L_5R_3R_5g_m + 2C_3C_5L_3L_5R_3 + C_3C_5L_4L_5R_3}$

10.897 INVALID-ORDER-897 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{\ldots}{2R_3R_5g_m + 2R_3 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_5 + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5R_5g_m + C_3C_5L_3L_4L_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + 2C_3C_5L_3L_4R_3R_5g_m + C_3C_5L_3L_4R_5 + 2C_3C_5L_3L_5R_3}$

10.898 INVALID-ORDER-898 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ R_5, \ \infty \right)$

$H(s) = \dfrac{R_3R_5g_m - R_3 + s^4\left(C_3C_4L_3L_4R_3R_5g_m - C_3C_4L_3L_4R_3\right) + s^3\left(C_3C_4L_3R_3R_4R_5g_m - C_3C_4L_3R_3R_4\right) + s^2\left(C_3L_3R_3R_5g_m - C_3L_3R_3 + C_4L_4R_3R_5g_m - C_4L \ldots\right)}{2R_3g_m + R_5g_m + s^4\left(2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + 2C_3C_4L_3R_3R_5g_m + 2C_3C_4L_3R_3 + C_3C_4L_3R_4R_5g_m + C_3C_4L_3R_4 + C_3C_4L_4R_3R_5g_m + C_3C_4L_4R_3\right) + s^2\left(C_3C_4R_3R_4R_5g_m + C_3C_4R_3R_4 + 2C_3L_3R_3g_m + C_3L_3R}$

10.899 INVALID-ORDER-899 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3s^5 + R_3g_m + s^4\left(-C_3C_4C_5L_3R_3R_4 + C_3C_4L_3L_4R_3g_m\right) + s^3\left(C_3C_4L_3R_3R_4g_m - C_3C_5L_3R_3 - C_4C_5L_4R_3\right) + s^2\left(C_3L_3R_3g_m - C_4C \ldots\right)}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4 + C_3C_4C_5L_4R_3 + C_3C_4L_3L_4g_m\right) + s^3\left(C_3C_4C_5R_3R_4 + 2C_3C_4L_3R_3g_m + C_3C_4L_3R_4g_m + C_3C_4L_4R_3g_m + 2C_3C_5L_3R_3g_m + C_3C_5L_3 + 2C_4C_5L_4R_3g_m + C}$

10.900 INVALID-ORDER-900 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3R_5s^5 + R_3R_5g_m - R_3 + s^4\left(-C_3C_4C_5 \ldots\right)}{2R_3g_m + R_5g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_5 + C_3C_4C_5L_3R_4R_5 + C_3C_4C_5L_4R_3R_5 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_5g_m + C_3C_4L_3L_4\right) + s^3\left(C_3C_4C_5R_3R_4R_5 + 2C_3C_4L_3R_3R_4g_m + 2C_3C_4L}$

10.901 INVALID-ORDER-901 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - C_3C_4C_5L_3L_4R_3\right) + s^4\left(C_3C_4C_5L_3R_3R_4R_5g_m - C_3C_4C_5L_3R_3R_4 + C\ldots\right.}{g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L_3R_4 + C_3C_4C_5L_4R_3R_5g_m + C_3C_4C_5L_4R_3 + C_3C_4L_3L_4g_m\right) + s^3\left(C_3C_4C_5R_3R_4R_5g_m + C_3\ldots\right.}$

10.902 INVALID-ORDER-902 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(-C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_5R_3R_4g_m\right) + s^4\left(-C_3C_4C_5L_3R_3R_4 + \ldots\right.}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m + C_3C_4C_5L_4L_5R_3g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4 + C_3C_4C_5L_4R_3 + C_3C_4C_5L_5R_3R_4g_m + C_3C_4L_3L_4g_m + C_3C_5\ldots\right.}$

10.903 INVALID-ORDER-903 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{-C_3C_4C_5L_3L_4L_5R_3s^6 - R_3 + s^5\left(-C_3C_4C_5L_3L_5R_3R_4 + C_3\ldots\right.}{2R_3g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4 + C_3C_4C_5L_4L_5R_3 + C_3C_4L_3L_4L_5g_m\right) + s^4\left(C_3C_4C_5L_5R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4 + 2C_3C_4L_3L_5R_3g_m + C_3C_4L_3L_5R_4g_m + \ldots\right.}$

10.904 INVALID-ORDER-904 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{C_3C_4C_5L_3L_4L_5R_3g_ms^6 + R_3g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_5g_m - \ldots\right.}{C_3C_4C_5L_3L_4L_5g_ms^6 + g_m + s^5\left(2C_3C_4C_5L_3L_4R_3g_m + C_3C_4C_5L_3L_4R_5g_m + C_3C_4C_5L_3L_4 + 2C_3C_4C_5L_3L_5R_3g_m + C_3C_4C_5L_3L_5R_4g_m + C_3C_4C_5L_4L_5R_3g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4g_m + 2C_3C_4C_5L_3R_3R_5g_m + 2C_3C_4C_5L_3R_3 + C_3C_4C_5L_3R_4R_5g_m + C_3C_4C_5L\ldots\right.}$

10.905 INVALID-ORDER-905 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \frac{\ldots}{2R_3R_5g_m + R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_5g_m + C_3C_4C_5L_3L_4L_5R_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_5 + C_3C_4C_5L_3L_5R_4R_5 + C_3C_4C_5L_4L_5R_3R_5 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_5g_m + C_3C_4L_3L_4L_5\right) + s^4\left(C_3C_4C_5L_5R_3R_4R_5 + 2C\ldots\right.}$

10.906 INVALID-ORDER-906 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \frac{\ldots}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4 + C_3C_4C_5L_4L_5R_3R_5g_m + C_3C_4L\ldots\right.}$

10.907 INVALID-ORDER-907 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{\ldots}{2R_3g_m + R_5g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_5g_m + C_3C_4C_5L_3L_4L_5\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_5g_m + C_3C_4C_5L_3L_4R_5 + 2C_3C_4C_5L_3L_5R_3R_4g_m + 2C_3C_4C_5L_3L_5R_3R_5g_m + 2C_3C_4C_5L_3L_5R_3 + C_3C_4C_5L_3L_5R_4R_5g_m + C_3C_4C_5L_3L_5R_4 + C_3C_4\ldots\right.}$

10.908 INVALID-ORDER-908 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5, \ \infty \right)$

$H(s) = \frac{s^3\left(C_3L_3L_4R_3R_4R_5g_m - C_3L_3L_4R_3R_4\right) + s\left(L_4R_3R_4R_5g_m - L_4R_3R_4\right)}{2R_3R_4R_5g_m + 2R_3R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4R_5g_m + 2C_3C_4L_3L_4R_3R_4\right) + s^3\left(2C_3L_3L_4R_3R_4g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3L_4R_3 + C_3L_3L_4R_4R_5g_m + C_3L_3L_4R_4\right) + s^2\left(2C_3L_3R_3R_4R_5g_m + 2C_3L_3R_3R_4 + C_3L_4R_3R_4R_5g_m + C_3L_4R_3R_4 + 2C_4L_4R_3R_4R_5g_m + \ldots\right.}$

10.909 INVALID-ORDER-909 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \frac{-C_3C_5L_3L_4R_3R_4s^4 + C_3L_3L_4R_3R_4g_ms^3 - C_5L_4R_3R_4s^2 + L_4R_3R_4g_ms}{2C_3C_4C_5L_3L_4R_3R_4s^5 + 2R_3R_4g_m + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4\right) + s^3\left(2C_3C_5L_3R_3R_4 + C_3C_5L_4R_3R_4 + 2C_3L_3L_4R_3g_m + C_3L_3L_4R_4g_m + 2C_4C_5L_4R_3R_4\right) + s^2\left(2C_3L_3R_3R_4g_m + C_3L_4R_3R_4g_m + 2C_4L_4R_3R_4\ldots\right.}$

10.910 **INVALID-ORDER-910** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_4R_3R_4R_5s^4 - C_5L_4R_3R_4R_5s}{2C_3C_4C_5L_3L_4R_3R_4R_5s^5 + 2R_3R_4R_5g_m + 2R_3R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4R_5g_m + 2C_3C_4L_3L_4R_3R_4 + 2C_3C_5L_3L_4R_3R_4R_5g_m + 2C_3C_5L_3L_4R_3R_5 + C_3C_5L_3L_4R_4R_5\right) + s^3\left(2C_3C_5L_3R_3R_4R_5 + C_3C_5L_4R_3R_4R_5 + 2C_3L_3L_4R_3R_4g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3L_4R_3R_5g_m + 2C_3L_3L_4R_3R_5g_m +}$

10.911 **INVALID-ORDER-911** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3L_3L_4R_3R_4g_ms^3 + L_4R_3R_4g_ms + s^4\left(C_3C_5L_3L_4\ldots\right)}{2R_3R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_4\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_5g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4R_5g_m + C_3C_5L_3L_4R_4\right) + s^3\left(2C_3C_5L_3R_3R_4R_5g_m + 2C_3C_5L_3R_3R_4 + C_3C_5L_4R_3R_4R_5g_m +}$

10.912 **INVALID-ORDER-912** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{C_3C_5L_3L_4L_5R_3R_4g_ms^5 - C_3C_5L_3L_4R_3R_4s^4 - C}{2C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + 2R_3R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4 + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5R_4g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4 + 2C_3C_5L_3L_5R_3R_4g_m + 2C_4C_5L_4L_5R_3R_4}$

10.913 **INVALID-ORDER-913** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{-C_3C_5L_3L_4L_5R_3R_4s^5 + C_3L_3L_4L_5R_3\ldots}{2C_3C_4C_5L_3L_4L_5R_3R_4s^6 + 2R_3R_4 + s^5\left(2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3 + C_3C_5L_3L_4L_5R_4\right) + s^4\left(2C_3C_4L_3L_4R_3R_4 + 2C_3C_5L_3L_5R_3R_4 + C_3C_5L_4L_5R_3R_4 + 2C_3L_3L_4L_5R_3g_m + C_3L_3L_4L_5R_4g_m + 2C_4C_5L_4L_5R_3R_4\right) + s^3\left(2C\ldots\right.}$

10.914 **INVALID-ORDER-914** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$

$H(s) = \dfrac{\ldots}{2C_3C_4C_5L_3L_4L_5R_3R_4g_ms^6 + 2R_3R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_4 + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5R_4g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_4g_m + 2C_3C_5L_3L_4R_3R_5g_m + 2C_3C_5L_3L_4R_3 + C_3C_5L_3L_4R_4R_5g_m + C_3C_5\ldots}$

10.915 **INVALID-ORDER-915** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$

$H(s) = \dfrac{\ldots}{2C_3C_4C_5L_3L_4L_5R_3R_4R_5s^6 + 2R_3R_4R_5 + s^5\left(2C_3C_4L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4L_3L_4L_5R_3R_4 + 2C_3C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_5L_3L_4L_5R_3R_5 + C_3C_5L_3L_4L_5R_4R_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_4R_5 + 2C_3C_5L_3L_5R_3R_4R_5 + C_3C_5L_4L_5R_3R_4R_5 + 2C_3L_3L_4L_5R_3R_4\ldots}$

10.916 **INVALID-ORDER-916** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$

$H(s) = \dfrac{\ldots}{2R_3R_4R_5g_m + 2R_3R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_5g_m + 2C_3C_5L_3L_4L_5R_3 + C_3C_5L_3L_4L_5R_4R_5g_m + C_3C_5L_3L_4L_5R_4\right) + s^4\left(2C_3C_4L_3L_4R_3R_4R_5g_m +}$

10.917 **INVALID-ORDER-917** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$

$H(s) = \dfrac{\ldots}{2R_3R_4R_5g_m + 2R_3R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_4\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5 + 2C_3C_5L_3L_4L_5R_3R_4g_m + 2C_3C_5L_3L_4L_5R_3R_5g_m + 2C_3C_5L_3L_4L_5R_3 + C_3C_5L_3L_4L_5R_4R_5g_m + C_3C_5L_3L_4L_5R_4\right) + s^4\left(2C_3C_4L_3L_4R_3R_4R_5g_m +}$

10.918 **INVALID-ORDER-918** $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5, \ \infty\right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m - C_3C_4L_3L_4R_3R_4\right) + s^3\left(C_3L_3L_4R_3R_5g_m - C_3L_3L_4R_3\right) + s^2\left(C_3L_3R_3\ldots\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4R_5g_m + C_3C_4L_3L_4R_4\right) + s^3\left(C_3C_4L_4R_3R_4R_5g_m + C_3C_4L_4R_3R_4 + 2C_3L_3L_4R_3g_m + C_3L_3L_4R_5g_m + C_3L_3L_4\right) + s^2\left(2C_3L_3R_3R_4g_m +}$

10.919 INVALID-ORDER-919 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3R_4s^5 + R_3R_4g_m + s^4\left(C_3C_4L_3L_4R_3R_4g_m - C_3C_5L_3L_4R_3\right) + s^3\left(-C_3C_5L_3R_3R_4 + C_3L_3L_4R_3g_m\right)}{2R_3g_m + R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4\right) + s^4\left(C_3C_4C_5L_4R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4\right) + s^3\left(C_3C_4L_4R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R_4 + C_3C_5 \dots\right)}$

10.920 INVALID-ORDER-920 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_5 + C_3C_4C_5L_3L_4R_4R_5\right) + s^4\left(C_3C_4C_5L_4R_3R_4R_5 + 2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4R_5g_m + C_3C_4L_3L_4R_4 + 2C_3C_5 \dots\right)}$

10.921 INVALID-ORDER-921 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{R_3R_4g_m + s^5\left(C_3C_4C_5L_3L_4R_3R_4R_5g_m - C_3C_4 \dots\right)}{2R_3g_m + R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4R_5g_m + C_3C_4C_5L_3L_4R_4\right) + s^4\left(C_3C_4C_5L_4R_3R_4R_5g_m + C_3C_4C_5L_4R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m + 2C_3C_5L_3L_4R_3g_m + C_3C_5L_3L_4R_5g_m \dots\right)}$

10.922 INVALID-ORDER-922 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3R_4g_m s^6 + R_3R_4g_m + s^5\left(-C_3C \dots\right)}{2R_3g_m + R_4g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_4g_m\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4 + C_3C_4C_5L_4L_5R_3R_4g_m + C_3C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4C_5L_4R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m + 2C_3C_5L_3L_4 \dots\right)}$

10.923 INVALID-ORDER-923 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{-C \dots}{2R_3R_4g_m + 2R_3 + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(C_3C_4C_5L_4L_5R_3R_4 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_4g_m + 2C_3C_5L_3L_4L_5R_3g_m + C_3C_5L_3L_4L_5\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3 + C_3C \dots\right)}$

10.924 INVALID-ORDER-924 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty \right)$

$H(s) = \dfrac{}{2R_3g_m + R_4g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_4g_m\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4R_5g_m + C_3C_4C_5L_3L_4R_4 + C_3C_4C_5L_4L_5R_3R_4g_m + C_3C_5L_3L_4L_5g_m\right) + s^4\left(C_3C_4C_5L_4R_3R_4R_5g_m \dots\right)}$

10.925 INVALID-ORDER-925 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)$

$H(s) = \dfrac{}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5 + C_3C_4C_5L_3L_4L_5R_4R_5\right) + s^5\left(C_3C_4C_5L_4L_5R_3R_4R_5 + 2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_4L_3L_4L_5R_3R_5g_m + 2C_3C_4L_3L_4L_5R_3 + C_3C_4L_3L_4L_5R_4R_5g_m + C_3C_4L_3L_4L_5R_4 + \dots\right)}$

10.926 INVALID-ORDER-926 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)$

$H(s) = \dfrac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(C_3C_4C_5L_4L_5R_3R_4R_5g_m + C_3C_4C_5L_4L_5R_3R_4 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C \dots\right)}$

10.927 INVALID-ORDER-927 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \dfrac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_5 + C_3C_4C_5L_3L_4R_4R_5 + C_3 \dots\right)}$

10.928 INVALID-ORDER-928 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ R_5,\ \infty\right)$

$H(s) = \dfrac{R_3R_4R_5g_m - R_3R_4 + s^4\left(C_3C_4L_3L_4R_3R_4R_5g_m - C_3C_4L_3L_4R_3R_4\right) + s^2\left(C_3L_3R_3R_4R_5g_m - C_3L_3R_3R\dots\right)}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4R_5g_m + C_3C_4L_3L_4R_4\right) + s^3\left(2C_3C_4L_3R_3R_4R_5g_m + 2C_3C_4L_3R_3R_4 + C_3C_4L_3R_4R_5g_m + C_3C_4L_4R_3R_4\right) + s^2\left(2C_3L_3R_3R_4g_m + 2\dots\right)}$

10.929 INVALID-ORDER-929 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{-C_3C_4C_5L_3L_4R_3R_4s^5 + C_3C_4L_3L_4R_3R_4g_ms^4 - C_5R_3R_4s + R_3R_4g_m + s^3\left(-C_3C_5L_3R_3R_4 - C_4C_5\dots\right)}{2R_3g_m + R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4 + C_3C_4C_5L_4R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3L_4R_4g_m\right) + s^3\left(2C_3C_4L_3R_3R_4g_m + C_3C_4L_4R_3R_4g_m + 2C_3C_5L_3R_3R_4g_m + 2C_3C_5L_3R_3 + C_3C_5L_3R\dots\right)}$

10.930 INVALID-ORDER-930 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$H(s) = \dfrac{\dots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_5 + C_3C_4C_5L_3L_4R_4R_5\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5 + C_3C_4C_5L_4R_3R_4R_5 + 2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3R_5g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4R_5g_m + \dots}$

10.931 INVALID-ORDER-931 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{C_3C_4L_3L_4R_3R_4g_ms^4\dots}{2R_3g_m + R_4g_m + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4R_5g_m + C_3C_4C_5L_3L_4R_4\right) + s^4\left(2C_3C_4C_5L_3R_3R_4R_5g_m + 2C_3C_4C_5L_3R_3R_4 + C_3C_4C_5L_4R_3R_4R_5g_m + 2C_3C_4C_5L_4R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4L_3\dots}$

10.932 INVALID-ORDER-932 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{C_3C_4C_5L_3L_4L_5R_3R\dots}{2R_3g_m + R_4g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_4g_m\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4 + 2C_3C_4C_5L_3L_5R_3R_4g_m + C_3C_4C_5L_4L_5R_3R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R_3R_4 + C_3C_4C_5L_4R_3R_4 + 2C_3C_4L_3L_4R_3g_m + C_3C_4\dots}$

10.933 INVALID-ORDER-933 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \dfrac{\dots}{2R_3R_4g_m + 2R_3 + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4 + C_3C_4C_5L_4L_5R_3R_4 + 2C_3C_4L_3L_4L_5R_3g_m + C_3C_4L_3L_4L_5R_4g_m\right) + s^4\left(2C_3C_4L_3L_4R_3R_4g_m + 2C_3C_4L_3L_4R_3 + C_3C_4L_3L_4R_4 + 2C_3C_4\dots}$

10.934 INVALID-ORDER-934 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$H(s) = \dfrac{\dots}{2R_3g_m + R_4g_m + s^6\left(2C_3C_4C_5L_3L_4L_5R_3g_m + C_3C_4C_5L_3L_4L_5R_4g_m\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4g_m + 2C_3C_4C_5L_3L_4R_3R_5g_m + 2C_3C_4C_5L_3L_4R_3 + C_3C_4C_5L_3L_4R_4R_5g_m + C_3C_4C_5L_3L_4R_4 + 2C_3C_4C_5L_3L_5R_3R_4g_m + C_3C_4C_5L_4L_5R_3R_4g_m\right) + s^4\left(2C_3C_4C_5L_3R\dots}$

10.935 INVALID-ORDER-935 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$H(s) = \dfrac{\dots}{2R_3R_4R_5g_m + 2R_3R_5 + R_4R_5 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5 + C_3C_4C_5L_3L_4L_5R_4R_5\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5 + C_3C_4C_5L_4L_5R_3R_4R_5 + 2C_3C_4L_3L_4L_5R_3R_4g_m + 2C_3C_4L_3L_4L_5R_3R_5g_m + 2C_3C_4L_3L_4L_5R_3 + C_3C_4L_3L_4L_5R_4\dots}$

10.936 INVALID-ORDER-936 $Z(s) = \left(\infty,\ \infty,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)$

$H(s) = \dfrac{\dots}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(2C_3C_4C_5L_3L_5R_3R_4R_5g_m + 2C_3C_4C_5L_3L_5R_3R_4 + C_3C_4C_5L_4L_5R_3R_4R_5g_m\dots}$

10.937 INVALID-ORDER-937 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1}, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right)$

$H(s) = \frac{}{2R_3R_4g_m + 2R_3R_5g_m + 2R_3 + R_4R_5g_m + R_4 + s^6\left(2C_3C_4C_5L_3L_4L_5R_3R_4g_m + 2C_3C_4C_5L_3L_4L_5R_3R_5g_m + 2C_3C_4C_5L_3L_4L_5R_3 + C_3C_4C_5L_3L_4L_5R_4R_5g_m + C_3C_4C_5L_3L_4L_5R_4\right) + s^5\left(2C_3C_4C_5L_3L_4R_3R_4R_5g_m + 2C_3C_4C_5L_3L_4R_3R_5 + C_3C_4C_5L_3L_4R_4R_5 + 2C\right.}$

11 PolynomialError