Filter Summary Report: TIA,simple,Z1,Z2,Z4

Generated by MacAnalog-Symbolix

December 7, 2024

## Contents

1 Examined H(z) for TIA simple Z1 Z2 Z4:  $\frac{Z_1Z_4(Z_2g_m+1)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$ 

$$H(z) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

- 2 HP
- 3 BP
- 4 LP
- 5 BS
- 6 **GE**
- 7 AP
- 8 INVALID-NUMER
- 9 INVALID-WZ
- 10 INVALID-ORDER
- 10.1 INVALID-ORDER-1  $Z(s) = (R_1, R_2, \infty, R_4, \infty, \infty)$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.2 INVALID-ORDER-2  $Z(s) = \left(R_1, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$ 

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.3 INVALID-ORDER-3  $Z(s) = \left(R_1, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$ 

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.4 INVALID-ORDER-4  $Z(s) = \left(R_1, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$ 

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.5 INVALID-ORDER-5 
$$Z(s) = \left(R_1, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.6 INVALID-ORDER-6 
$$Z(s) = \left(R_1, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.7** INVALID-ORDER-7 
$$Z(s) = \left(R_1, \ R_2, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.8 INVALID-ORDER-8 
$$Z(s) = \left(R_1, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.9 INVALID-ORDER-9 
$$Z(s) = \left(R_1, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.10 INVALID-ORDER-10 
$$Z(s) = \left(R_1, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.11 INVALID-ORDER-11 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.12 INVALID-ORDER-12 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.13 INVALID-ORDER-13 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.14** INVALID-ORDER-14 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.15 INVALID-ORDER-15 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.16 INVALID-ORDER-16 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.17** INVALID-ORDER-17 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.18 INVALID-ORDER-18 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.19 INVALID-ORDER-19 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.20 INVALID-ORDER-20 
$$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.21 INVALID-ORDER-21 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.22 INVALID-ORDER-22 
$$Z(s) = \left(R_1, \frac{R_2}{C_2R_2s+1}, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.23 INVALID-ORDER-23 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.24** INVALID-ORDER-24 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.25** INVALID-ORDER-25 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.26** INVALID-ORDER-26 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.27 INVALID-ORDER-27 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.28 INVALID-ORDER-28 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.29 INVALID-ORDER-29 
$$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.30** INVALID-ORDER-30 
$$Z(s) = \left(R_1, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.31** INVALID-ORDER-31 
$$Z(s) = \left(R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.32 INVALID-ORDER-32 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.33** INVALID-ORDER-33 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.34** INVALID-ORDER-34 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.35** INVALID-ORDER-35 
$$Z(s) = \left(R_1, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.36** INVALID-ORDER-36 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.37 INVALID-ORDER-37 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.38 INVALID-ORDER-38 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.39 INVALID-ORDER-39 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.40 INVALID-ORDER-40 
$$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.41 INVALID-ORDER-41 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.42 INVALID-ORDER-42 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.43** INVALID-ORDER-43 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.44** INVALID-ORDER-44 
$$Z(s) = \left(R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.45** INVALID-ORDER-45 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.46** INVALID-ORDER-46 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.47 INVALID-ORDER-47 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.48 INVALID-ORDER-48 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.49 INVALID-ORDER-49 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.50 INVALID-ORDER-50 
$$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.51** INVALID-ORDER-51 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.52** INVALID-ORDER-52 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.53 INVALID-ORDER-53 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.54 INVALID-ORDER-54 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.55** INVALID-ORDER-55 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.56 INVALID-ORDER-56 
$$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.57 INVALID-ORDER-57 
$$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.58 INVALID-ORDER-58 
$$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.59 INVALID-ORDER-59 
$$Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.60** INVALID-ORDER-60 
$$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.61 INVALID-ORDER-61 
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.62** INVALID-ORDER-62 
$$Z(s) = \left(R_1, \ \frac{L_{2}s}{C_2L_2s^2+1} + R_2, \ \infty, \ \frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.63 INVALID-ORDER-63 
$$Z(s) = \left(R_1, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.64** INVALID-ORDER-64 
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.65** INVALID-ORDER-65 
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, L_4s + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.66 INVALID-ORDER-66 
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.67** INVALID-ORDER-67 
$$Z(s) = \left(R_1, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.68 INVALID-ORDER-68 
$$Z(s) = \left(R_1, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.69** INVALID-ORDER-69 
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.70 INVALID-ORDER-70 
$$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.71 INVALID-ORDER-71 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.72 INVALID-ORDER-72 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.73 INVALID-ORDER-73 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.74 INVALID-ORDER-74 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.75 INVALID-ORDER-75 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.76 INVALID-ORDER-76 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.77 INVALID-ORDER-77 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.78 INVALID-ORDER-78 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.79 INVALID-ORDER-79 
$$Z(s) = \left(R_1, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.80 INVALID-ORDER-80 
$$Z(s) = \left(R_1, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.81** INVALID-ORDER-81  $Z(s) = (L_1 s, R_2, \infty, R_4, \infty, \infty)$ 

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.82 INVALID-ORDER-82 
$$Z(s) = \left(L_1 s, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.83 INVALID-ORDER-83 
$$Z(s) = \left(L_1 s, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.84 INVALID-ORDER-84 
$$Z(s) = \left(L_1 s, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.85 INVALID-ORDER-85 
$$Z(s) = \left(L_1 s, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.86 INVALID-ORDER-86 
$$Z(s) = \left(L_1 s, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.87** INVALID-ORDER-87 
$$Z(s) = \left(L_1 s, \ R_2, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.88 INVALID-ORDER-88 
$$Z(s) = \left(L_1 s, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.89 INVALID-ORDER-89 
$$Z(s) = \left(L_1 s, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.90 INVALID-ORDER-90 
$$Z(s) = \left(L_1 s, R_2, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.91 INVALID-ORDER-91 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.92 INVALID-ORDER-92 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.93 INVALID-ORDER-93 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.94 INVALID-ORDER-94 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.95 INVALID-ORDER-95 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.96 INVALID-ORDER-96 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.97** INVALID-ORDER-97 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.98 INVALID-ORDER-98 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.99 INVALID-ORDER-99 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.100 INVALID-ORDER-100 
$$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.101** INVALID-ORDER-101 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.102 INVALID-ORDER-102 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.103** INVALID-ORDER-103 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.104** INVALID-ORDER-104 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.105** INVALID-ORDER-105 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.106** INVALID-ORDER-106 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.107 INVALID-ORDER-107 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.108 INVALID-ORDER-108 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.109 INVALID-ORDER-109 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.110 INVALID-ORDER-110 
$$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.111** INVALID-ORDER-111 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.112 INVALID-ORDER-112 
$$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.113** INVALID-ORDER-113 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.114** INVALID-ORDER-114 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.115** INVALID-ORDER-115 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.116** INVALID-ORDER-116 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.117** INVALID-ORDER-117 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.118 INVALID-ORDER-118 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.119** INVALID-ORDER-119 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.120 INVALID-ORDER-120 
$$Z(s) = \left(L_1 s, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.121** INVALID-ORDER-121 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.122 INVALID-ORDER-122 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.123 INVALID-ORDER-123 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.124** INVALID-ORDER-124 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.125** INVALID-ORDER-125 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.126** INVALID-ORDER-126 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.127** INVALID-ORDER-127 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.128 INVALID-ORDER-128 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.129** INVALID-ORDER-129 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.130 INVALID-ORDER-130 
$$Z(s) = \left(L_1 s, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.131** INVALID-ORDER-131 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.132** INVALID-ORDER-132 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.133** INVALID-ORDER-133 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.134** INVALID-ORDER-134 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.135** INVALID-ORDER-135 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.136 INVALID-ORDER-136 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.137** INVALID-ORDER-137 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.138** INVALID-ORDER-138 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.139 INVALID-ORDER-139 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.140 INVALID-ORDER-140 
$$Z(s) = \left(L_1 s, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.141 INVALID-ORDER-141 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.142 INVALID-ORDER-142 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.143 INVALID-ORDER-143 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.144** INVALID-ORDER-144 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.145 INVALID-ORDER-145 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.146** INVALID-ORDER-146 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.147 INVALID-ORDER-147 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.148 INVALID-ORDER-148 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.149 INVALID-ORDER-149 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.150 INVALID-ORDER-150 
$$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.151 INVALID-ORDER-151 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.152 INVALID-ORDER-152 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.153** INVALID-ORDER-153 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.154** INVALID-ORDER-154 
$$Z(s) = \left(L_1 s, \frac{R_2\left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.155 INVALID-ORDER-155 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.156 INVALID-ORDER-156 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.157 INVALID-ORDER-157 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.158 INVALID-ORDER-158 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.159 INVALID-ORDER-159 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.160 INVALID-ORDER-160 
$$Z(s) = \left(L_1 s, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.161 INVALID-ORDER-161 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.162 INVALID-ORDER-162 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.163 INVALID-ORDER-163 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.164** INVALID-ORDER-164 
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.165** INVALID-ORDER-165 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.166** INVALID-ORDER-166 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.167** INVALID-ORDER-167 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.168 INVALID-ORDER-168 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.169** INVALID-ORDER-169 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.170 INVALID-ORDER-170 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.171 INVALID-ORDER-171 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.172 INVALID-ORDER-172 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.173** INVALID-ORDER-173 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.174** INVALID-ORDER-174 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.175** INVALID-ORDER-175 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.176** INVALID-ORDER-176 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.177 INVALID-ORDER-177 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.178 INVALID-ORDER-178 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.179 INVALID-ORDER-179 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.180** INVALID-ORDER-180 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.181 INVALID-ORDER-181 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.182 INVALID-ORDER-182 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.183** INVALID-ORDER-183 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.184** INVALID-ORDER-184 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.185** INVALID-ORDER-185 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.186** INVALID-ORDER-186 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.187 INVALID-ORDER-187 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.188** INVALID-ORDER-188 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.189 INVALID-ORDER-189 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.190** INVALID-ORDER-190 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.191** INVALID-ORDER-191 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.192** INVALID-ORDER-192 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.193** INVALID-ORDER-193 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.194** INVALID-ORDER-194 
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.195** INVALID-ORDER-195 
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.196 INVALID-ORDER-196 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.197** INVALID-ORDER-197 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.198** INVALID-ORDER-198 
$$Z(s) = \left(\frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.199** INVALID-ORDER-199 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.200 INVALID-ORDER-200 
$$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.201** INVALID-ORDER-201 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.202** INVALID-ORDER-202 
$$Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.203** INVALID-ORDER-203 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.204 INVALID-ORDER-204 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.205** INVALID-ORDER-205 
$$Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.206 INVALID-ORDER-206 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.207 INVALID-ORDER-207 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.208 INVALID-ORDER-208 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.209** INVALID-ORDER-209 
$$Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.210 INVALID-ORDER-210 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.211** INVALID-ORDER-211 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.212 INVALID-ORDER-212 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.213** INVALID-ORDER-213 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.214** INVALID-ORDER-214 
$$Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.215** INVALID-ORDER-215 
$$Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.216 INVALID-ORDER-216 
$$Z(s) = \left(\frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.217 INVALID-ORDER-217 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.218 INVALID-ORDER-218 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.219 INVALID-ORDER-219 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.220 INVALID-ORDER-220 
$$Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 (C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.221 INVALID-ORDER-221 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.222** INVALID-ORDER-222 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.223** INVALID-ORDER-223 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.224 INVALID-ORDER-224 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.225 INVALID-ORDER-225 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.226** INVALID-ORDER-226 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.227 INVALID-ORDER-227 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.228 INVALID-ORDER-228 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.229 INVALID-ORDER-229 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.230 INVALID-ORDER-230 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.231 INVALID-ORDER-231 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.232 INVALID-ORDER-232 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.233 INVALID-ORDER-233 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.234 INVALID-ORDER-234 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.235 INVALID-ORDER-235 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.236 INVALID-ORDER-236 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.237 INVALID-ORDER-237 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.238** INVALID-ORDER-238 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.239 INVALID-ORDER-239 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.240 INVALID-ORDER-240 
$$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.241 INVALID-ORDER-241 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.242 INVALID-ORDER-242 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.243** INVALID-ORDER-243 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.244** INVALID-ORDER-244 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.245** INVALID-ORDER-245 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.246 INVALID-ORDER-246 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.247** INVALID-ORDER-247 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.248 INVALID-ORDER-248 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.249** INVALID-ORDER-249 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.250 INVALID-ORDER-250 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.251 INVALID-ORDER-251 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.252 INVALID-ORDER-252 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.253** INVALID-ORDER-253 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.254 INVALID-ORDER-254 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.255 INVALID-ORDER-255 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.256** INVALID-ORDER-256 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.257** INVALID-ORDER-257 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.258** INVALID-ORDER-258 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.259** INVALID-ORDER-259 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.260 INVALID-ORDER-260 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.261** INVALID-ORDER-261 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.262** INVALID-ORDER-262 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.263** INVALID-ORDER-263 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.264 INVALID-ORDER-264 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.265 INVALID-ORDER-265 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.266** INVALID-ORDER-266 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.267** INVALID-ORDER-267 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.268** INVALID-ORDER-268 
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.269** INVALID-ORDER-269 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.270 INVALID-ORDER-270 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.271 INVALID-ORDER-271 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.272 INVALID-ORDER-272 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.273** INVALID-ORDER-273 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.274 INVALID-ORDER-274 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.275 INVALID-ORDER-275 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.276 INVALID-ORDER-276 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.277 INVALID-ORDER-277 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.278 INVALID-ORDER-278 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.279** INVALID-ORDER-279 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.280 INVALID-ORDER-280 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.281** INVALID-ORDER-281 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.282** INVALID-ORDER-282 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.283** INVALID-ORDER-283 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.284 INVALID-ORDER-284 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.285 INVALID-ORDER-285 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.286** INVALID-ORDER-286 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.287 INVALID-ORDER-287 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.288 INVALID-ORDER-288 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.289 INVALID-ORDER-289 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.290 INVALID-ORDER-290 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 (C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.291** INVALID-ORDER-291 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.292 INVALID-ORDER-292 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.293** INVALID-ORDER-293 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.294** INVALID-ORDER-294 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.295** INVALID-ORDER-295 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.296** INVALID-ORDER-296 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.297** INVALID-ORDER-297 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.298 INVALID-ORDER-298 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.299** INVALID-ORDER-299 
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.300** INVALID-ORDER-300 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.301** INVALID-ORDER-301 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.302 INVALID-ORDER-302 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.303** INVALID-ORDER-303 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.304** INVALID-ORDER-304 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.305 INVALID-ORDER-305 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.306** INVALID-ORDER-306 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.307 INVALID-ORDER-307 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.308 INVALID-ORDER-308 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.309 INVALID-ORDER-309 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.310 INVALID-ORDER-310 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.311** INVALID-ORDER-311 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.312 INVALID-ORDER-312 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.313 INVALID-ORDER-313 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.314** INVALID-ORDER-314 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.315 INVALID-ORDER-315 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.316 INVALID-ORDER-316 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.317 INVALID-ORDER-317 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.318 INVALID-ORDER-318 
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.319 INVALID-ORDER-319 
$$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.320 INVALID-ORDER-320 
$$Z(s) = \left(\frac{R_1}{C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.321** INVALID-ORDER-321 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.322** INVALID-ORDER-322 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.323 INVALID-ORDER-323 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.324 INVALID-ORDER-324 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.325 INVALID-ORDER-325 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.326 INVALID-ORDER-326 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.327 INVALID-ORDER-327 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.328 INVALID-ORDER-328 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.329 INVALID-ORDER-329 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.330 INVALID-ORDER-330 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.331** INVALID-ORDER-331 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.332** INVALID-ORDER-332 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.333 INVALID-ORDER-333 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.334 INVALID-ORDER-334 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.335 INVALID-ORDER-335 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.336** INVALID-ORDER-336 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.337 INVALID-ORDER-337 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.338 INVALID-ORDER-338 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.339 INVALID-ORDER-339 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.340** INVALID-ORDER-340 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.341 INVALID-ORDER-341 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.342 INVALID-ORDER-342 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.343** INVALID-ORDER-343 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.344** INVALID-ORDER-344 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.345** INVALID-ORDER-345 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.346** INVALID-ORDER-346 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.347 INVALID-ORDER-347 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.348** INVALID-ORDER-348 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.349 INVALID-ORDER-349 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.350** INVALID-ORDER-350 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.351** INVALID-ORDER-351 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.352 INVALID-ORDER-352 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.353** INVALID-ORDER-353 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.354** INVALID-ORDER-354 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.355 INVALID-ORDER-355 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.356** INVALID-ORDER-356 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.357 INVALID-ORDER-357 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.358 INVALID-ORDER-358 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.359 INVALID-ORDER-359 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.360** INVALID-ORDER-360 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.361** INVALID-ORDER-361 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.362** INVALID-ORDER-362 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.363** INVALID-ORDER-363 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.364** INVALID-ORDER-364 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.365 INVALID-ORDER-365 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.366** INVALID-ORDER-366 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.367 INVALID-ORDER-367 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.368 INVALID-ORDER-368 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.369** INVALID-ORDER-369 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.370 INVALID-ORDER-370 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.371 INVALID-ORDER-371 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.372 INVALID-ORDER-372 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.373 INVALID-ORDER-373 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.374 INVALID-ORDER-374 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.375 INVALID-ORDER-375 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.376** INVALID-ORDER-376 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.377 INVALID-ORDER-377 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.378 INVALID-ORDER-378 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.379 INVALID-ORDER-379 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.380 INVALID-ORDER-380 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.381 INVALID-ORDER-381 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.382 INVALID-ORDER-382 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.383 INVALID-ORDER-383 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.384 INVALID-ORDER-384 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.385 INVALID-ORDER-385 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.386** INVALID-ORDER-386 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.387 INVALID-ORDER-387 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.388 INVALID-ORDER-388 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.389 INVALID-ORDER-389 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.390 INVALID-ORDER-390 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.391 INVALID-ORDER-391 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.392 INVALID-ORDER-392 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.393 INVALID-ORDER-393 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.394** INVALID-ORDER-394 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.395 INVALID-ORDER-395 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.396 INVALID-ORDER-396 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.397 INVALID-ORDER-397 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.398 INVALID-ORDER-398 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.399 INVALID-ORDER-399 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.400** INVALID-ORDER-400 
$$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.401** INVALID-ORDER-401 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.402 INVALID-ORDER-402 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.403 INVALID-ORDER-403 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.404** INVALID-ORDER-404 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.405 INVALID-ORDER-405 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.406** INVALID-ORDER-406 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.407** INVALID-ORDER-407 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.408 INVALID-ORDER-408 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.409** INVALID-ORDER-409 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.410** INVALID-ORDER-410 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.411** INVALID-ORDER-411 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.412** INVALID-ORDER-412 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.413** INVALID-ORDER-413 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.414** INVALID-ORDER-414 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.415 INVALID-ORDER-415 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.416** INVALID-ORDER-416 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.417** INVALID-ORDER-417 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.418 INVALID-ORDER-418 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.419 INVALID-ORDER-419 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.420 INVALID-ORDER-420 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.421 INVALID-ORDER-421 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.422 INVALID-ORDER-422 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.423 INVALID-ORDER-423 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.424 INVALID-ORDER-424 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.425 INVALID-ORDER-425 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.426** INVALID-ORDER-426 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.427 INVALID-ORDER-427 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.428 INVALID-ORDER-428 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.429 INVALID-ORDER-429 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.430 INVALID-ORDER-430 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.431** INVALID-ORDER-431 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.432** INVALID-ORDER-432 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.433** INVALID-ORDER-433 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.434** INVALID-ORDER-434 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.435 INVALID-ORDER-435 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.436** INVALID-ORDER-436 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.437** INVALID-ORDER-437 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.438** INVALID-ORDER-438 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.439 INVALID-ORDER-439 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.440 INVALID-ORDER-440 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.441** INVALID-ORDER-441 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.442** INVALID-ORDER-442 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.443** INVALID-ORDER-443 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.444 INVALID-ORDER-444 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.445** INVALID-ORDER-445 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.446** INVALID-ORDER-446 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.447** INVALID-ORDER-447 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.448** INVALID-ORDER-448 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.449 INVALID-ORDER-449 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.450 INVALID-ORDER-450 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.451** INVALID-ORDER-451 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.452 INVALID-ORDER-452 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.453 INVALID-ORDER-453 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.454** INVALID-ORDER-454 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.455 INVALID-ORDER-455 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.456 INVALID-ORDER-456 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.457 INVALID-ORDER-457 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.458 INVALID-ORDER-458 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.459 INVALID-ORDER-459 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.460 INVALID-ORDER-460 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.461** INVALID-ORDER-461 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.462** INVALID-ORDER-462 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.463 INVALID-ORDER-463 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.464 INVALID-ORDER-464 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.465 INVALID-ORDER-465 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.466** INVALID-ORDER-466 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.467** INVALID-ORDER-467 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.468 INVALID-ORDER-468 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.469** INVALID-ORDER-469 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.470 INVALID-ORDER-470 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.471 INVALID-ORDER-471 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.472 INVALID-ORDER-472 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.473 INVALID-ORDER-473 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.474 INVALID-ORDER-474 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.475 INVALID-ORDER-475 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.476 INVALID-ORDER-476 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.477 INVALID-ORDER-477 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.478 INVALID-ORDER-478 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.479 INVALID-ORDER-479 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.480 INVALID-ORDER-480 
$$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.481** INVALID-ORDER-481 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.482** INVALID-ORDER-482 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.483** INVALID-ORDER-483 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.484** INVALID-ORDER-484 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.485** INVALID-ORDER-485 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.486** INVALID-ORDER-486 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.487** INVALID-ORDER-487 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.488 INVALID-ORDER-488 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.489** INVALID-ORDER-489 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.490** INVALID-ORDER-490 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \frac{R_4 (C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.491 INVALID-ORDER-491 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.492** INVALID-ORDER-492 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.493** INVALID-ORDER-493 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.494** INVALID-ORDER-494 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.495** INVALID-ORDER-495 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.496 INVALID-ORDER-496 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.497** INVALID-ORDER-497 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.498 INVALID-ORDER-498 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.499** INVALID-ORDER-499 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.500** INVALID-ORDER-500 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.501** INVALID-ORDER-501 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.502 INVALID-ORDER-502 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.503** INVALID-ORDER-503 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.504** INVALID-ORDER-504 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.505** INVALID-ORDER-505 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.506 INVALID-ORDER-506 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.507** INVALID-ORDER-507 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.508 INVALID-ORDER-508 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.509** INVALID-ORDER-509 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.510** INVALID-ORDER-510 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.511** INVALID-ORDER-511 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.512** INVALID-ORDER-512 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.513** INVALID-ORDER-513 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.514** INVALID-ORDER-514 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.515** INVALID-ORDER-515 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.516** INVALID-ORDER-516 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.517 INVALID-ORDER-517 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.518** INVALID-ORDER-518 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.519** INVALID-ORDER-519 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.520** INVALID-ORDER-520 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.521 INVALID-ORDER-521 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.522 INVALID-ORDER-522 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.523** INVALID-ORDER-523 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.524 INVALID-ORDER-524 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.525** INVALID-ORDER-525 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.526** INVALID-ORDER-526 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.527 INVALID-ORDER-527 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.528 INVALID-ORDER-528 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.529 INVALID-ORDER-529 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.530 INVALID-ORDER-530 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.531** INVALID-ORDER-531 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.532 INVALID-ORDER-532 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.533** INVALID-ORDER-533 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.534 INVALID-ORDER-534 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.535** INVALID-ORDER-535 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.536** INVALID-ORDER-536 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.537 INVALID-ORDER-537 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.538 INVALID-ORDER-538 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.539 INVALID-ORDER-539 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.540 INVALID-ORDER-540 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.541 INVALID-ORDER-541 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.542 INVALID-ORDER-542 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.543** INVALID-ORDER-543 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.544** INVALID-ORDER-544 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.545** INVALID-ORDER-545 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.546** INVALID-ORDER-546 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.547** INVALID-ORDER-547 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.548 INVALID-ORDER-548 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.549** INVALID-ORDER-549 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.550** INVALID-ORDER-550 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.551** INVALID-ORDER-551 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.552 INVALID-ORDER-552 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.553 INVALID-ORDER-553 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

$$\begin{aligned} \textbf{10.554} \quad \textbf{INVALID-ORDER-554} \ \ Z(s) &= \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty \right) \\ & H(s) &= \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4} \end{aligned}$$

10.555 INVALID-ORDER-555 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.556} \quad \textbf{INVALID-ORDER-556} \ \ Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.557} \quad \textbf{INVALID-ORDER-557} \ \ Z(s) = \left( \frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.558} \quad \textbf{INVALID-ORDER-558} \ Z(s) = \left( \frac{L_{1}s}{C_{1}L_{1}s^{2}+1}, \ \frac{R_{2}\left(C_{2}L_{2}s^{2}+1\right)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \ \infty, \ \frac{L_{4}R_{4}s}{C_{4}L_{4}R_{4}s^{2}+L_{4}s+R_{4}}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_{1}Z_{4}\left(Z_{2}g_{m}+1\right)}{2Z_{1}Z_{2}g_{m}+2Z_{1}+2Z_{2}+Z_{4}}$$

$$\textbf{10.559} \quad \textbf{INVALID-ORDER-559} \ \ Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.560 INVALID-ORDER-560 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.561 INVALID-ORDER-561 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.562 INVALID-ORDER-562 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.563** INVALID-ORDER-563 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.564** INVALID-ORDER-564 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.565 INVALID-ORDER-565 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.566 INVALID-ORDER-566 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.567** INVALID-ORDER-567 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.568 INVALID-ORDER-568 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.569 INVALID-ORDER-569 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.570 INVALID-ORDER-570 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.571 INVALID-ORDER-571 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.572 INVALID-ORDER-572 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.573 INVALID-ORDER-573 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.574** INVALID-ORDER-574 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.575 INVALID-ORDER-575 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.576** INVALID-ORDER-576 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.577** INVALID-ORDER-577 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.578 INVALID-ORDER-578 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.579 INVALID-ORDER-579 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.580** INVALID-ORDER-580 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.581** INVALID-ORDER-581 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.582 INVALID-ORDER-582 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.583 INVALID-ORDER-583 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.584** INVALID-ORDER-584 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.585 INVALID-ORDER-585 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.586** INVALID-ORDER-586 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.587 INVALID-ORDER-587 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.588 INVALID-ORDER-588 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.589 INVALID-ORDER-589 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.590** INVALID-ORDER-590 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.591 INVALID-ORDER-591 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.592 INVALID-ORDER-592 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.593** INVALID-ORDER-593 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.594** INVALID-ORDER-594 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.595 INVALID-ORDER-595 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.596 INVALID-ORDER-596 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.597** INVALID-ORDER-597 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.598** INVALID-ORDER-598 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.599 INVALID-ORDER-599 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.600 INVALID-ORDER-600 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.601 INVALID-ORDER-601 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.602** INVALID-ORDER-602 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.603 INVALID-ORDER-603 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.604** INVALID-ORDER-604 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.605** INVALID-ORDER-605 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.606** INVALID-ORDER-606 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.607** INVALID-ORDER-607 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.608** INVALID-ORDER-608 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.609** INVALID-ORDER-609 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.610 INVALID-ORDER-610 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.611 INVALID-ORDER-611 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.612** INVALID-ORDER-612 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.613** INVALID-ORDER-613 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.614** INVALID-ORDER-614 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.615** INVALID-ORDER-615 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.616 INVALID-ORDER-616 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.617 INVALID-ORDER-617 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.618 INVALID-ORDER-618 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.619 INVALID-ORDER-619 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.620 INVALID-ORDER-620 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.621 INVALID-ORDER-621 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.622 INVALID-ORDER-622 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.623 INVALID-ORDER-623 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.624** INVALID-ORDER-624 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.625 INVALID-ORDER-625 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.626** INVALID-ORDER-626 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.627 INVALID-ORDER-627 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.628 INVALID-ORDER-628 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.629 INVALID-ORDER-629 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.630** INVALID-ORDER-630 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.631 INVALID-ORDER-631 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2(C_2 L_2 s^2 + 1)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.632 INVALID-ORDER-632 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.633 INVALID-ORDER-633 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.634 INVALID-ORDER-634 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.635 INVALID-ORDER-635 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.636} \quad \textbf{INVALID-ORDER-636} \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.637 INVALID-ORDER-637 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.638} \quad \textbf{INVALID-ORDER-638} \ Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.639 INVALID-ORDER-639 
$$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.640} \quad \textbf{INVALID-ORDER-640} \ \ Z(s) = \left( L_1 s + R_1 + \frac{1}{C_1 s}, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.641** INVALID-ORDER-641 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.642 INVALID-ORDER-642 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.643** INVALID-ORDER-643 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.644** INVALID-ORDER-644 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.645 INVALID-ORDER-645 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.646 INVALID-ORDER-646 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.647** INVALID-ORDER-647 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.648 INVALID-ORDER-648 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.649** INVALID-ORDER-649 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.650 INVALID-ORDER-650 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2, \infty, \frac{R_4 (C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.651** INVALID-ORDER-651 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.652 INVALID-ORDER-652 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.653** INVALID-ORDER-653 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.654** INVALID-ORDER-654 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.655 INVALID-ORDER-655 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.656 INVALID-ORDER-656 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.657 INVALID-ORDER-657 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.658 INVALID-ORDER-658 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.659 INVALID-ORDER-659 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.660 INVALID-ORDER-660 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.661** INVALID-ORDER-661 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.662** INVALID-ORDER-662 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.663 INVALID-ORDER-663 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.664** INVALID-ORDER-664 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.665 INVALID-ORDER-665 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.666 INVALID-ORDER-666 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.667** INVALID-ORDER-667 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.668** INVALID-ORDER-668 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.669** INVALID-ORDER-669 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.670 INVALID-ORDER-670 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.671 INVALID-ORDER-671 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.672 INVALID-ORDER-672 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.673 INVALID-ORDER-673 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.674 INVALID-ORDER-674 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.675 INVALID-ORDER-675 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.676 INVALID-ORDER-676 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.677 INVALID-ORDER-677 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.678** INVALID-ORDER-678 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.679 INVALID-ORDER-679 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.680 INVALID-ORDER-680 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 (C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.681 INVALID-ORDER-681 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.682** INVALID-ORDER-682 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.683 INVALID-ORDER-683 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.684** INVALID-ORDER-684 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.685 INVALID-ORDER-685 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.686** INVALID-ORDER-686 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.687 INVALID-ORDER-687 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.688** INVALID-ORDER-688 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.689** INVALID-ORDER-689 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.690 INVALID-ORDER-690 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.691** INVALID-ORDER-691 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.692** INVALID-ORDER-692 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.693 INVALID-ORDER-693 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.694** INVALID-ORDER-694 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.695 INVALID-ORDER-695 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.696** INVALID-ORDER-696 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.697 INVALID-ORDER-697 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.698 INVALID-ORDER-698 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.699 INVALID-ORDER-699 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.700 INVALID-ORDER-700 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.701 INVALID-ORDER-701 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.702 INVALID-ORDER-702 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.703** INVALID-ORDER-703 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.704** INVALID-ORDER-704 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.705 INVALID-ORDER-705 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.706** INVALID-ORDER-706 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.707 INVALID-ORDER-707 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.708 INVALID-ORDER-708 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.709 INVALID-ORDER-709 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.710 INVALID-ORDER-710 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.711 INVALID-ORDER-711 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.712 INVALID-ORDER-712 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.713} \quad \textbf{INVALID-ORDER-713} \ \ Z(s) = \left( \frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ \frac{R_4}{C_4 R_4 s + 1}, \ \ \infty, \ \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.714} \quad \textbf{INVALID-ORDER-714} \ \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ R_4 + \frac{1}{C_4 s}, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.715 INVALID-ORDER-715 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.716} \quad \textbf{INVALID-ORDER-716} \ \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.717 INVALID-ORDER-717 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.718} \quad \textbf{INVALID-ORDER-718} \ \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.719} \quad \textbf{INVALID-ORDER-719} \ \ Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \ \ \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.720 INVALID-ORDER-720 
$$Z(s) = \left(\frac{L_1 R_1 s}{C_1 L_1 R_1 s^2 + L_1 s + R_1}, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.721 INVALID-ORDER-721 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.722 INVALID-ORDER-722 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.723** INVALID-ORDER-723 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.724 INVALID-ORDER-724 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.725 INVALID-ORDER-725 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.726 INVALID-ORDER-726 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.727 INVALID-ORDER-727 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.728 INVALID-ORDER-728 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.729 INVALID-ORDER-729 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.730 INVALID-ORDER-730 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.731 INVALID-ORDER-731 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.732 INVALID-ORDER-732 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.733** INVALID-ORDER-733 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.734 INVALID-ORDER-734 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.735 INVALID-ORDER-735 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.736** INVALID-ORDER-736 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.737 INVALID-ORDER-737 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.738 INVALID-ORDER-738 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.739 INVALID-ORDER-739 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.740 INVALID-ORDER-740 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.741 INVALID-ORDER-741 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.742 INVALID-ORDER-742 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.743** INVALID-ORDER-743 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.744 INVALID-ORDER-744 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.745 INVALID-ORDER-745 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.746** INVALID-ORDER-746 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.747 INVALID-ORDER-747 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.748 INVALID-ORDER-748 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.749 INVALID-ORDER-749 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.750 INVALID-ORDER-750 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.751** INVALID-ORDER-751 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.752 INVALID-ORDER-752 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.753 INVALID-ORDER-753 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.754 INVALID-ORDER-754 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.755 INVALID-ORDER-755 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.756 INVALID-ORDER-756 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.757 INVALID-ORDER-757 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.758 INVALID-ORDER-758 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, R_2 + \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.759 INVALID-ORDER-759 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.760** INVALID-ORDER-760 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.761 INVALID-ORDER-761 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.762 INVALID-ORDER-762 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 q_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.763** INVALID-ORDER-763 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.764 INVALID-ORDER-764 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.765 INVALID-ORDER-765 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.766** INVALID-ORDER-766 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + \frac{1}{C_2s}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.767 INVALID-ORDER-767 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.768 INVALID-ORDER-768 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.769 INVALID-ORDER-769 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.770 INVALID-ORDER-770 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.771 INVALID-ORDER-771 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.772 INVALID-ORDER-772 
$$Z(s) = \left(\frac{L_{1s}}{C_1L_1s^2+1} + R_1, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.773 INVALID-ORDER-773 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.774 INVALID-ORDER-774 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.775 INVALID-ORDER-775 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.776 INVALID-ORDER-776 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.777 INVALID-ORDER-777 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.778 INVALID-ORDER-778 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.779 INVALID-ORDER-779 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.780 INVALID-ORDER-780 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.781 INVALID-ORDER-781 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.782 INVALID-ORDER-782 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.783 INVALID-ORDER-783 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.784 INVALID-ORDER-784 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.785 INVALID-ORDER-785 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.786** INVALID-ORDER-786 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.787 INVALID-ORDER-787 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.788 INVALID-ORDER-788 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.789 INVALID-ORDER-789 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.790 INVALID-ORDER-790 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.791 INVALID-ORDER-791 
$$Z(s) = \left(\frac{L_{1s}}{C_{1}L_{1}s^{2}+1} + R_{1}, \frac{R_{2}(C_{2}L_{2}s^{2}+1)}{C_{2}L_{2}s^{2}+C_{2}R_{2}s+1}, \infty, R_{4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_{1}Z_{4}(Z_{2}g_{m}+1)}{2Z_{1}Z_{2}g_{m}+2Z_{1}+2Z_{2}+Z_{4}}$$

10.792 INVALID-ORDER-792 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.793 INVALID-ORDER-793 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.794 INVALID-ORDER-794 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.795 INVALID-ORDER-795 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.796 INVALID-ORDER-796 
$$Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.797 INVALID-ORDER-797 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.798} \quad \textbf{INVALID-ORDER-798} \ \ Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2 + C_2R_2s+1}, \ \ \infty, \ \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m + 1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.799 INVALID-ORDER-799 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.800 INVALID-ORDER-800 
$$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \frac{R_2 \left(C_2 L_2 s^2 + 1\right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 \left(Z_2 g_m + 1\right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.801** INVALID-ORDER-801 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.802 INVALID-ORDER-802 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.803** INVALID-ORDER-803 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.804 INVALID-ORDER-804 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.805** INVALID-ORDER-805 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, L_4s + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.806 INVALID-ORDER-806 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.807 INVALID-ORDER-807 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

$$\textbf{10.808} \quad \textbf{INVALID-ORDER-808} \ Z(s) = \left( \frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.809 INVALID-ORDER-809 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.810} \quad \textbf{INVALID-ORDER-810} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ R_2, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.811 INVALID-ORDER-811 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.812** INVALID-ORDER-812 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

**10.813** INVALID-ORDER-813 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.814 INVALID-ORDER-814 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.815 INVALID-ORDER-815 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, L_4s + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

**10.816** INVALID-ORDER-816 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.817 INVALID-ORDER-817 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m + 1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.818 INVALID-ORDER-818 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.819 INVALID-ORDER-819 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{1}{C_2s}, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.820} \quad \textbf{INVALID-ORDER-820} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.821 INVALID-ORDER-821 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, R_4, \infty, \infty\right)$$
 
$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.822} \quad \textbf{INVALID-ORDER-822} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.823} \quad \textbf{INVALID-ORDER-823} \ \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ \frac{R_2}{C_2R_2s+1}, \ \ \infty, \ \ \frac{R_4}{C_4R_4s+1}, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.824} \quad \textbf{INVALID-ORDER-824} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.825 INVALID-ORDER-825 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.826 INVALID-ORDER-826 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.827 INVALID-ORDER-827 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.828 INVALID-ORDER-828 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.829 INVALID-ORDER-829 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.830 INVALID-ORDER-830 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.831 INVALID-ORDER-831 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 q_m + 2Z_1 + 2Z_2 + Z_4}$$

10.832 INVALID-ORDER-832 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.833 INVALID-ORDER-833 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.834 INVALID-ORDER-834 
$$Z(s) = \left(\frac{R_1(C_1L_1s^2+1)}{C_1L_1s^2+C_1R_1s+1}, R_2 + \frac{1}{C_2s}, \infty, R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1 Z_4 (Z_2 g_m + 1)}{2Z_1 Z_2 g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.835 INVALID-ORDER-835 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m + 1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.836 INVALID-ORDER-836 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.837 INVALID-ORDER-837 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

$$\textbf{10.838} \quad \textbf{INVALID-ORDER-838} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.839 INVALID-ORDER-839 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1} + R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m + 1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

$$\textbf{10.840} \quad \textbf{INVALID-ORDER-840} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ R_2 + \frac{1}{C_2 s}, \ \ \infty, \ \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \ \infty, \ \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.841 INVALID-ORDER-841 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+\frac{1}{C_2s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$
 
$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.842} \quad \textbf{INVALID-ORDER-842} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4 }$$

$$\textbf{10.843} \quad \textbf{INVALID-ORDER-843} \ \ Z(s) = \left( \frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ L_2s + \frac{1}{C_2s}, \ \ \infty, \ \ \frac{R_4}{C_4R_4s+1}, \ \ \infty, \ \ \infty \right)$$
 
$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.844 INVALID-ORDER-844 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+\frac{1}{C_2s}, \ \infty, \ R_4+\frac{1}{C_4s}, \ \infty, \ \infty\right)$$
 
$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.845 INVALID-ORDER-845 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+\frac{1}{C_2s}, \ \infty, \ L_4s+\frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.846} \quad \textbf{INVALID-ORDER-846} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ L_2 s + \frac{1}{C_2 s}, \ \ \infty, \ \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \ \infty, \ \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.847} \quad \textbf{INVALID-ORDER-847} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.848} \quad \textbf{INVALID-ORDER-848} \ \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ L_2s+\frac{1}{C_2s}, \ \infty, \ \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \infty, \ \infty\right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.849} \quad \textbf{INVALID-ORDER-849} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.850} \quad \textbf{INVALID-ORDER-850} \ \ Z(s) = \left( \frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ L_2s + \frac{1}{C_2s}, \ \ \infty, \ \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \ \infty, \ \ \infty \right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.851 INVALID-ORDER-851 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+R_2+\frac{1}{C_2s}, \ \infty, \ R_4, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.852} \quad \textbf{INVALID-ORDER-852} \ \ Z(s) = \left( \frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ L_2s+R_2+\frac{1}{C_2s}, \ \infty, \ \frac{1}{C_4s}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.853 INVALID-ORDER-853 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+R_2+\frac{1}{C_2s}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.854 INVALID-ORDER-854 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+R_2+\frac{1}{C_2s}, \ \infty, \ R_4+\frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.855 INVALID-ORDER-855 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+R_2+\frac{1}{C_2s}, \ \infty, \ L_4s+\frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.856} \quad \textbf{INVALID-ORDER-856} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4 }$$

10.857 INVALID-ORDER-857 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ L_2s+R_2+\frac{1}{C_2s}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ \infty, \ \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.858} \quad \textbf{INVALID-ORDER-858} \ \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ L_2s+R_2+\frac{1}{C_2s}, \ \ \infty, \ \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \ \infty, \ \ \infty\right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.859} \quad \textbf{INVALID-ORDER-859} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.860} \quad \textbf{INVALID-ORDER-860} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \ \infty, \ \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \ \infty, \ \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4 }$$

10.861 INVALID-ORDER-861 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

10.862 INVALID-ORDER-862 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.863} \quad \textbf{INVALID-ORDER-863} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \ \infty, \ \ \frac{R_4}{C_4 R_4 s + 1}, \ \ \infty, \ \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.864 INVALID-ORDER-864 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

$$\textbf{10.865} \quad \textbf{INVALID-ORDER-865} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \ \infty, \ \ L_4 s + \frac{1}{C_4 s}, \ \ \infty, \ \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.866} \quad \textbf{INVALID-ORDER-866} \ \ Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \ \frac{L_4s}{C_4L_4s^2+1}, \ \infty, \ \infty\right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.867} \quad \textbf{INVALID-ORDER-867} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.868} \quad \textbf{INVALID-ORDER-868} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

$$\textbf{10.869} \quad \textbf{INVALID-ORDER-869} \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4 }$$

10.870 INVALID-ORDER-870 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.871 INVALID-ORDER-871 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.872 INVALID-ORDER-872 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.873} \quad \textbf{INVALID-ORDER-873} \ \ Z(s) = \left( \frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \infty, \ \infty \right)$$
 
$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.874} \quad \textbf{INVALID-ORDER-874} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ R_4 + \frac{1}{C_4 s}, \ \ \infty, \ \ \infty \right) \\ H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.875 INVALID-ORDER-875 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

$$\textbf{10.876} \quad \textbf{INVALID-ORDER-876} \ \ Z(s) = \left( \frac{R_1 \left( C_1 L_1 s^2 + 1 \right)}{C_1 L_1 s^2 + C_1 R_1 s + 1}, \ \frac{R_2 \left( C_2 L_2 s^2 + 1 \right)}{C_2 L_2 s^2 + C_2 R_2 s + 1}, \ \ \infty, \ \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \ \infty, \ \ \infty \right)$$
 
$$H(s) = \frac{Z_1 Z_4 \left( Z_2 g_m + 1 \right)}{2 Z_1 Z_2 g_m + 2 Z_1 + 2 Z_2 + Z_4}$$

10.877 INVALID-ORDER-877 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m + 2Z_1 + 2Z_2 + Z_4}$$

$$\textbf{10.878} \quad \textbf{INVALID-ORDER-878} \ \ Z(s) = \left( \frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \infty, \ \infty \right) \\ H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.879 INVALID-ORDER-879 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$

10.880 INVALID-ORDER-880 
$$Z(s) = \left(\frac{R_1\left(C_1L_1s^2+1\right)}{C_1L_1s^2+C_1R_1s+1}, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \infty, \infty\right)$$

$$H(s) = \frac{Z_1Z_4\left(Z_2g_m+1\right)}{2Z_1Z_2g_m+2Z_1+2Z_2+Z_4}$$