

Filter Summary Report: TIA,simple,Z1,Z3,ZL

Generated by MacAnalog-Symbolix

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| 10.40INVALID-ORDER-40 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 100 |
| 10.41INVALID-ORDER-41 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 100 |
| 10.42INVALID-ORDER-42 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 100 |
| 10.43INVALID-ORDER-43 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 100 |
| 10.44INVALID-ORDER-44 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 100 |
| 10.45INVALID-ORDER-45 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 101 |
| 10.46INVALID-ORDER-46 | $Z(s) = \left(R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 101 |

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| 10.47INVALID-ORDER-47 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$ | 101 |
| 10.48INVALID-ORDER-48 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 101 |
| 10.49INVALID-ORDER-49 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 101 |
| 10.50INVALID-ORDER-50 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$ | 102 |
| 10.51INVALID-ORDER-51 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 102 |
| 10.52INVALID-ORDER-52 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 102 |
| 10.53INVALID-ORDER-53 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 102 |
| 10.54INVALID-ORDER-54 | $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 102 |
| 10.55INVALID-ORDER-55 | $Z(s) = \left(R_1, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 103 |
| 10.56INVALID-ORDER-56 | $Z(s) = \left(R_1, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 103 |
| 10.57INVALID-ORDER-57 | $Z(s) = \left(R_1, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 103 |
| 10.58INVALID-ORDER-58 | $Z(s) = \left(R_1, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 103 |
| 10.59INVALID-ORDER-59 | $Z(s) = \left(R_1, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 103 |
| 10.60INVALID-ORDER-60 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{1}{C_Ls} \right)$ | 104 |
| 10.61INVALID-ORDER-61 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$ | 104 |
| 10.62INVALID-ORDER-62 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 104 |
| 10.63INVALID-ORDER-63 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 104 |
| 10.64INVALID-ORDER-64 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$ | 104 |
| 10.65INVALID-ORDER-65 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 104 |
| 10.66INVALID-ORDER-66 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 105 |
| 10.67INVALID-ORDER-67 | $Z(s) = \left(R_1, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 105 |

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| 10.68INVALID-ORDER-68 | $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 105 |
| 10.69INVALID-ORDER-69 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 105 |
| 10.70INVALID-ORDER-70 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 105 |
| 10.71INVALID-ORDER-71 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 106 |
| 10.72INVALID-ORDER-72 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 106 |
| 10.73INVALID-ORDER-73 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 106 |
| 10.74INVALID-ORDER-74 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 106 |
| 10.75INVALID-ORDER-75 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 106 |
| 10.76INVALID-ORDER-76 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 107 |
| 10.77INVALID-ORDER-77 | $Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 107 |
| 10.78INVALID-ORDER-78 | $Z(s) = (L_1 s, \infty, R_3, \infty, \infty, R_L)$ | 107 |
| 10.79INVALID-ORDER-79 | $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 107 |
| 10.80INVALID-ORDER-80 | $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 107 |
| 10.81INVALID-ORDER-81 | $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 108 |
| 10.82INVALID-ORDER-82 | $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 108 |
| 10.83INVALID-ORDER-83 | $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 108 |
| 10.84INVALID-ORDER-84 | $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 108 |
| 10.85INVALID-ORDER-85 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 108 |
| 10.86INVALID-ORDER-86 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 109 |
| 10.87INVALID-ORDER-87 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 109 |

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| 10.88INVALID-ORDER-88 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 109 |
| 10.89INVALID-ORDER-89 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 109 |
| 10.90INVALID-ORDER-90 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 109 |
| 10.91INVALID-ORDER-91 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 110 |
| 10.92INVALID-ORDER-92 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 110 |
| 10.93INVALID-ORDER-93 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 110 |
| 10.94INVALID-ORDER-94 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 110 |
| 10.95INVALID-ORDER-95 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 110 |
| 10.96INVALID-ORDER-96 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 111 |
| 10.97INVALID-ORDER-97 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 111 |
| 10.98INVALID-ORDER-98 | $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 111 |
| 10.99INVALID-ORDER-99 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 111 |
| 10.100INVALID-ORDER-100 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 111 |
| 10.101INVALID-ORDER-101 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 112 |
| 10.102INVALID-ORDER-102 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 112 |
| 10.103INVALID-ORDER-103 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 112 |
| 10.104INVALID-ORDER-104 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 112 |
| 10.105INVALID-ORDER-105 | $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 112 |
| 10.106INVALID-ORDER-106 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 113 |
| 10.107INVALID-ORDER-107 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 113 |
| 10.108INVALID-ORDER-108 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 113 |
| 10.109INVALID-ORDER-109 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 113 |

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| 10.110INVALID-ORDER-110 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 113 |
| 10.111INVALID-ORDER-111 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 113 |
| 10.112INVALID-ORDER-112 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 114 |
| 10.113INVALID-ORDER-113 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 114 |
| 10.114INVALID-ORDER-114 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 114 |
| 10.115INVALID-ORDER-115 | $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 114 |
| 10.116INVALID-ORDER-116 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 114 |
| 10.117INVALID-ORDER-117 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 115 |
| 10.118INVALID-ORDER-118 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 115 |
| 10.119INVALID-ORDER-119 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 115 |
| 10.120INVALID-ORDER-120 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 115 |
| 10.121INVALID-ORDER-121 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 115 |
| 10.122INVALID-ORDER-122 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 115 |
| 10.123INVALID-ORDER-123 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 116 |
| 10.124INVALID-ORDER-124 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 116 |
| 10.125INVALID-ORDER-125 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 116 |
| 10.126INVALID-ORDER-126 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 116 |
| 10.127INVALID-ORDER-127 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 116 |
| 10.128INVALID-ORDER-128 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 117 |
| 10.129INVALID-ORDER-129 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 117 |
| 10.130INVALID-ORDER-130 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 117 |
| 10.131INVALID-ORDER-131 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 117 |

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| 10.132INVALID-ORDER-132 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 117 |
| 10.133INVALID-ORDER-133 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 118 |
| 10.134INVALID-ORDER-134 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 118 |
| 10.135INVALID-ORDER-135 | $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 118 |
| 10.136INVALID-ORDER-136 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 118 |
| 10.137INVALID-ORDER-137 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 118 |
| 10.138INVALID-ORDER-138 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 119 |
| 10.139INVALID-ORDER-139 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 119 |
| 10.140INVALID-ORDER-140 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 119 |
| 10.141INVALID-ORDER-141 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 119 |
| 10.142INVALID-ORDER-142 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 119 |
| 10.143INVALID-ORDER-143 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 120 |
| 10.144INVALID-ORDER-144 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 120 |
| 10.145INVALID-ORDER-145 | $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 120 |
| 10.146INVALID-ORDER-146 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 120 |
| 10.147INVALID-ORDER-147 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 120 |
| 10.148INVALID-ORDER-148 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 121 |
| 10.149INVALID-ORDER-149 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 121 |
| 10.150INVALID-ORDER-150 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 121 |
| 10.151INVALID-ORDER-151 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 121 |

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| 10.152INVALID-ORDER-152 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 121 |
| 10.153INVALID-ORDER-153 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 122 |
| 10.154INVALID-ORDER-154 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 122 |
| 10.155INVALID-ORDER-155 | $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 122 |
| 10.156INVALID-ORDER-156 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 122 |
| 10.157INVALID-ORDER-157 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 122 |
| 10.158INVALID-ORDER-158 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 123 |
| 10.159INVALID-ORDER-159 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 123 |
| 10.160INVALID-ORDER-160 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 123 |
| 10.161INVALID-ORDER-161 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 123 |
| 10.162INVALID-ORDER-162 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 123 |
| 10.163INVALID-ORDER-163 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 124 |
| 10.164INVALID-ORDER-164 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 124 |
| 10.165INVALID-ORDER-165 | $Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 124 |
| 10.166INVALID-ORDER-166 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L \right)$ | 124 |
| 10.167INVALID-ORDER-167 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 124 |
| 10.168INVALID-ORDER-168 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 125 |
| 10.169INVALID-ORDER-169 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 125 |
| 10.170INVALID-ORDER-170 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 125 |

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| 10.17 | INVALID-ORDER-171 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 125 |
| 10.17 | INVALID-ORDER-172 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 125 |
| 10.17 | INVALID-ORDER-173 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 126 |
| 10.17 | INVALID-ORDER-174 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 126 |
| 10.17 | INVALID-ORDER-175 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 126 |
| 10.17 | INVALID-ORDER-176 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 126 |
| 10.17 | INVALID-ORDER-177 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 126 |
| 10.17 | INVALID-ORDER-178 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 126 |
| 10.17 | INVALID-ORDER-179 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 127 |
| 10.18 | INVALID-ORDER-180 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 127 |
| 10.18 | INVALID-ORDER-181 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 127 |
| 10.18 | INVALID-ORDER-182 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 127 |
| 10.18 | INVALID-ORDER-183 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 127 |
| 10.18 | INVALID-ORDER-184 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 128 |
| 10.18 | INVALID-ORDER-185 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 128 |
| 10.18 | INVALID-ORDER-186 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 128 |
| 10.18 | INVALID-ORDER-187 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 128 |
| 10.18 | INVALID-ORDER-188 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 128 |
| 10.18 | INVALID-ORDER-189 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 129 |
| 10.19 | INVALID-ORDER-190 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 129 |
| 10.19 | INVALID-ORDER-191 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 129 |
| 10.19 | INVALID-ORDER-192 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 129 |

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| 10.19 3 INVALID-ORDER-193 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 129 |
| 10.19 4 INVALID-ORDER-194 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 129 |
| 10.19 5 INVALID-ORDER-195 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 130 |
| 10.19 6 INVALID-ORDER-196 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 130 |
| 10.19 7 INVALID-ORDER-197 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 130 |
| 10.19 8 INVALID-ORDER-198 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 130 |
| 10.19 9 INVALID-ORDER-199 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 130 |
| 10.20 0 INVALID-ORDER-200 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 131 |
| 10.20 1 INVALID-ORDER-201 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 131 |
| 10.20 2 INVALID-ORDER-202 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 131 |
| 10.20 3 INVALID-ORDER-203 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 131 |
| 10.20 4 INVALID-ORDER-204 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 131 |
| 10.20 5 INVALID-ORDER-205 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 132 |
| 10.20 6 INVALID-ORDER-206 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 132 |
| 10.20 7 INVALID-ORDER-207 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 132 |
| 10.20 8 INVALID-ORDER-208 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 132 |
| 10.20 9 INVALID-ORDER-209 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 132 |
| 10.21 0 INVALID-ORDER-210 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 132 |
| 10.21 1 INVALID-ORDER-211 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 133 |
| 10.21 2 INVALID-ORDER-212 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 133 |
| 10.21 3 INVALID-ORDER-213 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 133 |
| 10.21 4 INVALID-ORDER-214 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 133 |

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| 10.215 | INVALID-ORDER-215 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 133 |
| 10.216 | INVALID-ORDER-216 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 134 |
| 10.217 | INVALID-ORDER-217 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 134 |
| 10.218 | INVALID-ORDER-218 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 134 |
| 10.219 | INVALID-ORDER-219 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 134 |
| 10.220 | INVALID-ORDER-220 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 134 |
| 10.221 | INVALID-ORDER-221 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 135 |
| 10.222 | INVALID-ORDER-222 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 135 |
| 10.223 | INVALID-ORDER-223 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 135 |
| 10.224 | INVALID-ORDER-224 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 135 |
| 10.225 | INVALID-ORDER-225 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 135 |
| 10.226 | INVALID-ORDER-226 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 136 |
| 10.227 | INVALID-ORDER-227 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 136 |
| 10.228 | INVALID-ORDER-228 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 136 |
| 10.229 | INVALID-ORDER-229 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 136 |
| 10.230 | INVALID-ORDER-230 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 136 |
| 10.231 | INVALID-ORDER-231 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 137 |
| 10.232 | INVALID-ORDER-232 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 137 |
| 10.233 | INVALID-ORDER-233 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 137 |
| 10.234 | INVALID-ORDER-234 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 137 |

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| 10.235 | INVALID-ORDER-235 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 137 |
| 10.236 | INVALID-ORDER-236 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 138 |
| 10.237 | INVALID-ORDER-237 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 138 |
| 10.238 | INVALID-ORDER-238 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 138 |
| 10.239 | INVALID-ORDER-239 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 138 |
| 10.240 | INVALID-ORDER-240 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 138 |
| 10.241 | INVALID-ORDER-241 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 139 |
| 10.242 | INVALID-ORDER-242 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 139 |
| 10.243 | INVALID-ORDER-243 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 139 |
| 10.244 | INVALID-ORDER-244 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 139 |
| 10.245 | INVALID-ORDER-245 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 139 |
| 10.246 | INVALID-ORDER-246 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 140 |
| 10.247 | INVALID-ORDER-247 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 140 |
| 10.248 | INVALID-ORDER-248 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 140 |
| 10.249 | INVALID-ORDER-249 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 140 |
| 10.250 | INVALID-ORDER-250 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 140 |
| 10.251 | INVALID-ORDER-251 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 141 |
| 10.252 | INVALID-ORDER-252 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 141 |
| 10.253 | INVALID-ORDER-253 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 141 |

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| 10.251INVALID-ORDER-254 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 141 |
| 10.252INVALID-ORDER-255 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 141 |
| 10.253INVALID-ORDER-256 | $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 142 |
| 10.254INVALID-ORDER-257 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, R_L \right)$ | 142 |
| 10.255INVALID-ORDER-258 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 142 |
| 10.256INVALID-ORDER-259 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 142 |
| 10.260INVALID-ORDER-260 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 142 |
| 10.261INVALID-ORDER-261 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 143 |
| 10.262INVALID-ORDER-262 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 143 |
| 10.263INVALID-ORDER-263 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 143 |
| 10.264INVALID-ORDER-264 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 143 |
| 10.265INVALID-ORDER-265 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 143 |
| 10.266INVALID-ORDER-266 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 144 |
| 10.267INVALID-ORDER-267 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 144 |
| 10.268INVALID-ORDER-268 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 144 |
| 10.269INVALID-ORDER-269 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 144 |
| 10.270INVALID-ORDER-270 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 144 |
| 10.271INVALID-ORDER-271 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 145 |
| 10.272INVALID-ORDER-272 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 145 |
| 10.273INVALID-ORDER-273 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 145 |
| 10.274INVALID-ORDER-274 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 145 |

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| 10.275INVALID-ORDER-275 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 145 |
| 10.276INVALID-ORDER-276 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 146 |
| 10.277INVALID-ORDER-277 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 146 |
| 10.278INVALID-ORDER-278 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 146 |
| 10.279INVALID-ORDER-279 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 146 |
| 10.280INVALID-ORDER-280 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 146 |
| 10.281INVALID-ORDER-281 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 147 |
| 10.282INVALID-ORDER-282 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 147 |
| 10.283INVALID-ORDER-283 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 147 |
| 10.284INVALID-ORDER-284 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 147 |
| 10.285INVALID-ORDER-285 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 147 |
| 10.286INVALID-ORDER-286 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 147 |
| 10.287INVALID-ORDER-287 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 148 |
| 10.288INVALID-ORDER-288 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 148 |
| 10.289INVALID-ORDER-289 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 148 |
| 10.290INVALID-ORDER-290 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 148 |
| 10.291INVALID-ORDER-291 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 148 |
| 10.292INVALID-ORDER-292 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 149 |
| 10.293INVALID-ORDER-293 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 149 |
| 10.294INVALID-ORDER-294 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 149 |
| 10.295INVALID-ORDER-295 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 149 |
| 10.296INVALID-ORDER-296 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 149 |

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| 10.29 INVALID-ORDER-297 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 150 |
| 10.29 INVALID-ORDER-298 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 150 |
| 10.29 INVALID-ORDER-299 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 150 |
| 10.30 INVALID-ORDER-300 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 150 |
| 10.30 INVALID-ORDER-301 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 150 |
| 10.30 INVALID-ORDER-302 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 150 |
| 10.30 INVALID-ORDER-303 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 151 |
| 10.30 INVALID-ORDER-304 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 151 |
| 10.30 INVALID-ORDER-305 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 151 |
| 10.30 INVALID-ORDER-306 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 151 |
| 10.30 INVALID-ORDER-307 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 151 |
| 10.30 INVALID-ORDER-308 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 152 |
| 10.30 INVALID-ORDER-309 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 152 |
| 10.31 INVALID-ORDER-310 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 152 |
| 10.31 INVALID-ORDER-311 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 152 |
| 10.31 INVALID-ORDER-312 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 152 |
| 10.31 INVALID-ORDER-313 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 152 |
| 10.31 INVALID-ORDER-314 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 153 |
| 10.31 INVALID-ORDER-315 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 153 |
| 10.31 INVALID-ORDER-316 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 153 |
| 10.31 INVALID-ORDER-317 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 153 |
| 10.31 INVALID-ORDER-318 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 153 |

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| 10.31 1 INVALID-ORDER-319 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 154 |
| 10.32 0 INVALID-ORDER-320 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 154 |
| 10.32INVALID-ORDER-321 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 154 |
| 10.32 2 INVALID-ORDER-322 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 154 |
| 10.32 3 INVALID-ORDER-323 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 154 |
| 10.32 4 INVALID-ORDER-324 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 155 |
| 10.32 5 INVALID-ORDER-325 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 155 |
| 10.32 6 INVALID-ORDER-326 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 155 |
| 10.32 7 INVALID-ORDER-327 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 155 |
| 10.32 8 INVALID-ORDER-328 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 155 |
| 10.32 9 INVALID-ORDER-329 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 156 |
| 10.33 0 INVALID-ORDER-330 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 156 |
| 10.33INVALID-ORDER-331 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 156 |
| 10.33 2 INVALID-ORDER-332 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 156 |
| 10.33 3 INVALID-ORDER-333 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 156 |
| 10.33 4 INVALID-ORDER-334 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 156 |
| 10.33 5 INVALID-ORDER-335 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 157 |
| 10.33 6 INVALID-ORDER-336 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 157 |
| 10.33 7 INVALID-ORDER-337 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 157 |
| 10.33 8 INVALID-ORDER-338 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 157 |

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| 10.33 | INVALID-ORDER-339 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 157 |
| 10.34 | INVALID-ORDER-340 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 158 |
| 10.34 | INVALID-ORDER-341 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 158 |
| 10.34 | INVALID-ORDER-342 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 158 |
| 10.34 | INVALID-ORDER-343 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 158 |
| 10.34 | INVALID-ORDER-344 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 158 |
| 10.34 | INVALID-ORDER-345 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 159 |
| 10.34 | INVALID-ORDER-346 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 159 |
| 10.34 | INVALID-ORDER-347 | $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 159 |
| 10.34 | INVALID-ORDER-348 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L \right)$ | 159 |
| 10.34 | INVALID-ORDER-349 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 159 |
| 10.35 | INVALID-ORDER-350 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 160 |
| 10.35 | INVALID-ORDER-351 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 160 |
| 10.35 | INVALID-ORDER-352 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 160 |
| 10.35 | INVALID-ORDER-353 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 160 |
| 10.35 | INVALID-ORDER-354 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 160 |
| 10.35 | INVALID-ORDER-355 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 161 |
| 10.35 | INVALID-ORDER-356 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 161 |
| 10.35 | INVALID-ORDER-357 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 161 |
| 10.35 | INVALID-ORDER-358 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 161 |

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| 10.35 1 INVALID-ORDER-359 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 161 |
| 10.36 0 INVALID-ORDER-360 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 161 |
| 10.36 1 INVALID-ORDER-361 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 162 |
| 10.36 2 INVALID-ORDER-362 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 162 |
| 10.36 3 INVALID-ORDER-363 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 162 |
| 10.36 4 INVALID-ORDER-364 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 162 |
| 10.36 5 INVALID-ORDER-365 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 162 |
| 10.36 6 INVALID-ORDER-366 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 163 |
| 10.36 7 INVALID-ORDER-367 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 163 |
| 10.36 8 INVALID-ORDER-368 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 163 |
| 10.36 9 INVALID-ORDER-369 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 163 |
| 10.37 0 INVALID-ORDER-370 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 163 |
| 10.37 1 INVALID-ORDER-371 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 164 |
| 10.37 2 INVALID-ORDER-372 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 164 |
| 10.37 3 INVALID-ORDER-373 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 164 |
| 10.37 4 INVALID-ORDER-374 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 164 |
| 10.37 5 INVALID-ORDER-375 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 164 |
| 10.37 6 INVALID-ORDER-376 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 164 |
| 10.37 7 INVALID-ORDER-377 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 165 |
| 10.37 8 INVALID-ORDER-378 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 165 |
| 10.37 9 INVALID-ORDER-379 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 165 |
| 10.38 0 INVALID-ORDER-380 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 165 |

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| 10.38 | INVALID-ORDER-381 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 165 |
| 10.38 | INVALID-ORDER-382 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 166 |
| 10.38 | INVALID-ORDER-383 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 166 |
| 10.38 | INVALID-ORDER-384 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 166 |
| 10.38 | INVALID-ORDER-385 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 166 |
| 10.38 | INVALID-ORDER-386 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 166 |
| 10.38 | INVALID-ORDER-387 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 167 |
| 10.38 | INVALID-ORDER-388 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 167 |
| 10.38 | INVALID-ORDER-389 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 167 |
| 10.39 | INVALID-ORDER-390 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 167 |
| 10.39 | INVALID-ORDER-391 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 167 |
| 10.39 | INVALID-ORDER-392 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 167 |
| 10.39 | INVALID-ORDER-393 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 168 |
| 10.39 | INVALID-ORDER-394 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 168 |
| 10.39 | INVALID-ORDER-395 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 168 |
| 10.39 | INVALID-ORDER-396 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 168 |
| 10.39 | INVALID-ORDER-397 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 168 |
| 10.39 | INVALID-ORDER-398 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 169 |
| 10.39 | INVALID-ORDER-399 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 169 |
| 10.40 | INVALID-ORDER-400 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 169 |
| 10.40 | INVALID-ORDER-401 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 169 |
| 10.40 | INVALID-ORDER-402 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 169 |

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| 10.403 | INVALID-ORDER-403 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 170 |
| 10.404 | INVALID-ORDER-404 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 170 |
| 10.405 | INVALID-ORDER-405 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 170 |
| 10.406 | INVALID-ORDER-406 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 170 |
| 10.407 | INVALID-ORDER-407 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 170 |
| 10.408 | INVALID-ORDER-408 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 171 |
| 10.409 | INVALID-ORDER-409 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 171 |
| 10.410 | INVALID-ORDER-410 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 171 |
| 10.411 | INVALID-ORDER-411 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 171 |
| 10.412 | INVALID-ORDER-412 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 171 |
| 10.413 | INVALID-ORDER-413 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 172 |
| 10.414 | INVALID-ORDER-414 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 172 |
| 10.415 | INVALID-ORDER-415 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 172 |
| 10.416 | INVALID-ORDER-416 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 172 |
| 10.417 | INVALID-ORDER-417 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 172 |
| 10.418 | INVALID-ORDER-418 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 173 |
| 10.419 | INVALID-ORDER-419 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 173 |
| 10.420 | INVALID-ORDER-420 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 173 |
| 10.421 | INVALID-ORDER-421 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 173 |
| 10.422 | INVALID-ORDER-422 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 173 |

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| 10.423INVALID-ORDER-423 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 174 |
| 10.424INVALID-ORDER-424 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 174 |
| 10.425INVALID-ORDER-425 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 174 |
| 10.426INVALID-ORDER-426 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 174 |
| 10.427INVALID-ORDER-427 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 174 |
| 10.428INVALID-ORDER-428 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 175 |
| 10.429INVALID-ORDER-429 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 175 |
| 10.430INVALID-ORDER-430 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 175 |
| 10.431INVALID-ORDER-431 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 175 |
| 10.432INVALID-ORDER-432 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 175 |
| 10.433INVALID-ORDER-433 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 176 |
| 10.434INVALID-ORDER-434 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 176 |
| 10.435INVALID-ORDER-435 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 176 |
| 10.436INVALID-ORDER-436 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 176 |
| 10.437INVALID-ORDER-437 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 176 |
| 10.438INVALID-ORDER-438 | $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 177 |
| 10.439INVALID-ORDER-439 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 177 |
| 10.440INVALID-ORDER-440 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 177 |
| 10.441INVALID-ORDER-441 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 177 |

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| 10.442 | INVALID-ORDER-442 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 177 |
| 10.443 | INVALID-ORDER-443 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 178 |
| 10.444 | INVALID-ORDER-444 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 178 |
| 10.445 | INVALID-ORDER-445 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 178 |
| 10.446 | INVALID-ORDER-446 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 178 |
| 10.447 | INVALID-ORDER-447 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 178 |
| 10.448 | INVALID-ORDER-448 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 179 |
| 10.449 | INVALID-ORDER-449 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 179 |
| 10.450 | INVALID-ORDER-450 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 179 |
| 10.451 | INVALID-ORDER-451 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 179 |
| 10.452 | INVALID-ORDER-452 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 179 |
| 10.453 | INVALID-ORDER-453 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 179 |
| 10.454 | INVALID-ORDER-454 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 180 |
| 10.455 | INVALID-ORDER-455 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 180 |
| 10.456 | INVALID-ORDER-456 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 180 |
| 10.457 | INVALID-ORDER-457 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 180 |
| 10.458 | INVALID-ORDER-458 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$ | 180 |
| 10.459 | INVALID-ORDER-459 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 181 |
| 10.460 | INVALID-ORDER-460 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 181 |
| 10.461 | INVALID-ORDER-461 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 181 |
| 10.462 | INVALID-ORDER-462 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 181 |
| 10.463 | INVALID-ORDER-463 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 181 |

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| 10.461INVALID-ORDER-464 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 181 |
| 10.465INVALID-ORDER-465 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 182 |
| 10.466INVALID-ORDER-466 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 182 |
| 10.467INVALID-ORDER-467 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 182 |
| 10.468INVALID-ORDER-468 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L \right)$ | 182 |
| 10.469INVALID-ORDER-469 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$ | 182 |
| 10.470INVALID-ORDER-470 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$ | 183 |
| 10.471INVALID-ORDER-471 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 183 |
| 10.472INVALID-ORDER-472 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 183 |
| 10.473INVALID-ORDER-473 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$ | 183 |
| 10.474INVALID-ORDER-474 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 183 |
| 10.475INVALID-ORDER-475 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 184 |
| 10.476INVALID-ORDER-476 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 184 |
| 10.477INVALID-ORDER-477 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 184 |
| 10.478INVALID-ORDER-478 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L \right)$ | 184 |
| 10.479INVALID-ORDER-479 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$ | 184 |
| 10.480INVALID-ORDER-480 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$ | 185 |
| 10.481INVALID-ORDER-481 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 185 |
| 10.482INVALID-ORDER-482 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 185 |
| 10.483INVALID-ORDER-483 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$ | 185 |
| 10.484INVALID-ORDER-484 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 185 |
| 10.485INVALID-ORDER-485 | $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 186 |

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| 10.486INVALID-ORDER-486 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 186 |
| 10.487INVALID-ORDER-487 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 186 |
| 10.488INVALID-ORDER-488 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 186 |
| 10.489INVALID-ORDER-489 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 186 |
| 10.490INVALID-ORDER-490 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 187 |
| 10.491INVALID-ORDER-491 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 187 |
| 10.492INVALID-ORDER-492 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 187 |
| 10.493INVALID-ORDER-493 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 187 |
| 10.494INVALID-ORDER-494 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 187 |
| 10.495INVALID-ORDER-495 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 188 |
| 10.496INVALID-ORDER-496 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 188 |
| 10.497INVALID-ORDER-497 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 188 |
| 10.498INVALID-ORDER-498 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 188 |
| 10.499INVALID-ORDER-499 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 188 |
| 10.500INVALID-ORDER-500 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 189 |
| 10.501INVALID-ORDER-501 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 189 |
| 10.502INVALID-ORDER-502 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 189 |
| 10.503INVALID-ORDER-503 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 189 |
| 10.504INVALID-ORDER-504 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 189 |
| 10.505INVALID-ORDER-505 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 190 |
| 10.506INVALID-ORDER-506 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 190 |
| 10.507INVALID-ORDER-507 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 190 |

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| 10.50 8 INVALID-ORDER-508 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 190 |
| 10.50 9 INVALID-ORDER-509 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 190 |
| 10.51 0 INVALID-ORDER-510 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 191 |
| 10.51 1 INVALID-ORDER-511 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 191 |
| 10.51 2 INVALID-ORDER-512 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 191 |
| 10.51 3 INVALID-ORDER-513 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 191 |
| 10.51 4 INVALID-ORDER-514 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 191 |
| 10.51 5 INVALID-ORDER-515 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 192 |
| 10.51 6 INVALID-ORDER-516 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 192 |
| 10.51 7 INVALID-ORDER-517 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 192 |
| 10.51 8 INVALID-ORDER-518 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 192 |
| 10.51 9 INVALID-ORDER-519 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 192 |
| 10.52 0 INVALID-ORDER-520 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 193 |
| 10.52 1 INVALID-ORDER-521 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 193 |
| 10.52 2 INVALID-ORDER-522 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 193 |
| 10.52 3 INVALID-ORDER-523 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 193 |
| 10.52 4 INVALID-ORDER-524 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 193 |
| 10.52 5 INVALID-ORDER-525 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 194 |
| 10.52 6 INVALID-ORDER-526 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 194 |
| 10.52 7 INVALID-ORDER-527 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 194 |

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| 10.52 | INVALID-ORDER-528 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 194 |
| 10.52 | INVALID-ORDER-529 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 194 |
| 10.53 | INVALID-ORDER-530 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 195 |
| 10.53 | INVALID-ORDER-531 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 195 |
| 10.53 | INVALID-ORDER-532 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 195 |
| 10.53 | INVALID-ORDER-533 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 195 |
| 10.53 | INVALID-ORDER-534 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 195 |
| 10.53 | INVALID-ORDER-535 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 196 |
| 10.53 | INVALID-ORDER-536 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 196 |
| 10.53 | INVALID-ORDER-537 | $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 196 |
| 10.53 | INVALID-ORDER-538 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 196 |
| 10.53 | INVALID-ORDER-539 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 196 |
| 10.54 | INVALID-ORDER-540 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 197 |
| 10.54 | INVALID-ORDER-541 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 197 |
| 10.54 | INVALID-ORDER-542 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 197 |
| 10.54 | INVALID-ORDER-543 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 197 |
| 10.54 | INVALID-ORDER-544 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 197 |
| 10.54 | INVALID-ORDER-545 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 197 |
| 10.54 | INVALID-ORDER-546 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 198 |

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| 10.547INVALID-ORDER-547 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 198 |
| 10.548INVALID-ORDER-548 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 198 |
| 10.549INVALID-ORDER-549 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 198 |
| 10.550INVALID-ORDER-550 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 198 |
| 10.551INVALID-ORDER-551 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 198 |
| 10.552INVALID-ORDER-552 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 199 |
| 10.553INVALID-ORDER-553 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 199 |
| 10.554INVALID-ORDER-554 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 199 |
| 10.555INVALID-ORDER-555 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 199 |
| 10.556INVALID-ORDER-556 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$ | 199 |
| 10.557INVALID-ORDER-557 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 200 |
| 10.558INVALID-ORDER-558 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 200 |
| 10.559INVALID-ORDER-559 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 200 |
| 10.560INVALID-ORDER-560 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 200 |
| 10.561INVALID-ORDER-561 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 200 |
| 10.562INVALID-ORDER-562 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 200 |
| 10.563INVALID-ORDER-563 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 201 |
| 10.564INVALID-ORDER-564 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 201 |
| 10.565INVALID-ORDER-565 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 201 |
| 10.566INVALID-ORDER-566 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 201 |
| 10.567INVALID-ORDER-567 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 201 |
| 10.568INVALID-ORDER-568 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 202 |

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| 10.569 | INVALID-ORDER-569 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 202 |
| 10.570 | INVALID-ORDER-570 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 202 |
| 10.571 | INVALID-ORDER-571 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 202 |
| 10.572 | INVALID-ORDER-572 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 202 |
| 10.573 | INVALID-ORDER-573 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 202 |
| 10.574 | INVALID-ORDER-574 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 203 |
| 10.575 | INVALID-ORDER-575 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 203 |
| 10.576 | INVALID-ORDER-576 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 203 |
| 10.577 | INVALID-ORDER-577 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 203 |
| 10.578 | INVALID-ORDER-578 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 203 |
| 10.579 | INVALID-ORDER-579 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 204 |
| 10.580 | INVALID-ORDER-580 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 204 |
| 10.581 | INVALID-ORDER-581 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 204 |
| 10.582 | INVALID-ORDER-582 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 204 |
| 10.583 | INVALID-ORDER-583 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 204 |
| 10.584 | INVALID-ORDER-584 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 205 |
| 10.585 | INVALID-ORDER-585 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 205 |
| 10.586 | INVALID-ORDER-586 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 205 |
| 10.587 | INVALID-ORDER-587 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 205 |
| 10.588 | INVALID-ORDER-588 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 205 |
| 10.589 | INVALID-ORDER-589 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 206 |
| 10.590 | INVALID-ORDER-590 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 206 |

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| 10.59 | INVALID-ORDER-591 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 206 |
| 10.59 | INVALID-ORDER-592 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 206 |
| 10.59 | INVALID-ORDER-593 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 206 |
| 10.59 | INVALID-ORDER-594 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 207 |
| 10.59 | INVALID-ORDER-595 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 207 |
| 10.59 | INVALID-ORDER-596 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 207 |
| 10.59 | INVALID-ORDER-597 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 207 |
| 10.59 | INVALID-ORDER-598 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 207 |
| 10.59 | INVALID-ORDER-599 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 208 |
| 10.60 | INVALID-ORDER-600 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 208 |
| 10.60 | INVALID-ORDER-601 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 208 |
| 10.60 | INVALID-ORDER-602 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 208 |
| 10.60 | INVALID-ORDER-603 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 208 |
| 10.60 | INVALID-ORDER-604 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 209 |
| 10.60 | INVALID-ORDER-605 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 209 |
| 10.60 | INVALID-ORDER-606 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 209 |
| 10.60 | INVALID-ORDER-607 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 209 |
| 10.60 | INVALID-ORDER-608 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 209 |
| 10.60 | INVALID-ORDER-609 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 210 |
| 10.61 | INVALID-ORDER-610 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 210 |

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| 10.61 | INVALID-ORDER-611 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 210 |
| 10.61 | INVALID-ORDER-612 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 210 |
| 10.61 | INVALID-ORDER-613 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 210 |
| 10.61 | INVALID-ORDER-614 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 211 |
| 10.61 | INVALID-ORDER-615 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 211 |
| 10.61 | INVALID-ORDER-616 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 211 |
| 10.61 | INVALID-ORDER-617 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 211 |
| 10.61 | INVALID-ORDER-618 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 211 |
| 10.61 | INVALID-ORDER-619 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 212 |
| 10.62 | INVALID-ORDER-620 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 212 |
| 10.62 | INVALID-ORDER-621 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 212 |
| 10.62 | INVALID-ORDER-622 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 212 |
| 10.62 | INVALID-ORDER-623 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 212 |
| 10.62 | INVALID-ORDER-624 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 213 |
| 10.62 | INVALID-ORDER-625 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 213 |
| 10.62 | INVALID-ORDER-626 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 213 |
| 10.62 | INVALID-ORDER-627 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 213 |
| 10.62 | INVALID-ORDER-628 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 213 |
| 10.62 | INVALID-ORDER-629 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 214 |

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| 10.630INVALID-ORDER-630 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 214 |
| 10.631INVALID-ORDER-631 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 214 |
| 10.632INVALID-ORDER-632 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 214 |
| 10.633INVALID-ORDER-633 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 214 |
| 10.634INVALID-ORDER-634 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 215 |
| 10.635INVALID-ORDER-635 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 215 |
| 10.636INVALID-ORDER-636 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 215 |
| 10.637INVALID-ORDER-637 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 215 |
| 10.638INVALID-ORDER-638 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 215 |
| 10.639INVALID-ORDER-639 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 216 |
| 10.640INVALID-ORDER-640 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 216 |
| 10.641INVALID-ORDER-641 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 216 |
| 10.642INVALID-ORDER-642 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 216 |
| 10.643INVALID-ORDER-643 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 216 |
| 10.644INVALID-ORDER-644 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 217 |
| 10.645INVALID-ORDER-645 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 217 |
| 10.646INVALID-ORDER-646 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 217 |
| 10.647INVALID-ORDER-647 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 217 |
| 10.648INVALID-ORDER-648 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 217 |
| 10.649INVALID-ORDER-649 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 218 |
| 10.650INVALID-ORDER-650 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 218 |

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| 10.65 | INVALID-ORDER-651 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 218 |
| 10.65 | INVALID-ORDER-652 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$ | 218 |
| 10.65 | INVALID-ORDER-653 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 218 |
| 10.65 | INVALID-ORDER-654 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 219 |
| 10.65 | INVALID-ORDER-655 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$ | 219 |
| 10.65 | INVALID-ORDER-656 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 219 |
| 10.65 | INVALID-ORDER-657 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 219 |
| 10.65 | INVALID-ORDER-658 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 219 |
| 10.65 | INVALID-ORDER-659 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 220 |
| 10.66 | INVALID-ORDER-660 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 220 |
| 10.66 | INVALID-ORDER-661 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 220 |
| 10.66 | INVALID-ORDER-662 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$ | 220 |
| 10.66 | INVALID-ORDER-663 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 220 |
| 10.66 | INVALID-ORDER-664 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 221 |
| 10.66 | INVALID-ORDER-665 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 221 |
| 10.66 | INVALID-ORDER-666 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 221 |
| 10.66 | INVALID-ORDER-667 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 221 |
| 10.66 | INVALID-ORDER-668 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 221 |
| 10.66 | INVALID-ORDER-669 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 222 |
| 10.67 | INVALID-ORDER-670 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 222 |
| 10.67 | INVALID-ORDER-671 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 222 |
| 10.67 | INVALID-ORDER-672 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$ | 222 |

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| 10.673INVALID-ORDER-673 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 222 |
| 10.674INVALID-ORDER-674 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 223 |
| 10.675INVALID-ORDER-675 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L \right)$ | 223 |
| 10.676INVALID-ORDER-676 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$ | 223 |
| 10.677INVALID-ORDER-677 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$ | 223 |
| 10.678INVALID-ORDER-678 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 223 |
| 10.679INVALID-ORDER-679 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 224 |
| 10.680INVALID-ORDER-680 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$ | 224 |
| 10.681INVALID-ORDER-681 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 224 |
| 10.682INVALID-ORDER-682 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 224 |
| 10.683INVALID-ORDER-683 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 224 |
| 10.684INVALID-ORDER-684 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 225 |
| 10.685INVALID-ORDER-685 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, R_L \right)$ | 225 |
| 10.686INVALID-ORDER-686 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls} \right)$ | 225 |
| 10.687INVALID-ORDER-687 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$ | 225 |
| 10.688INVALID-ORDER-688 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$ | 225 |
| 10.689INVALID-ORDER-689 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$ | 226 |
| 10.690INVALID-ORDER-690 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$ | 226 |
| 10.691INVALID-ORDER-691 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$ | 226 |
| 10.692INVALID-ORDER-692 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$ | 226 |
| 10.693INVALID-ORDER-693 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$ | 226 |
| 10.694INVALID-ORDER-694 | $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$ | 227 |

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| 10.695 | INVALID-ORDER-695 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 227 |
| 10.696 | INVALID-ORDER-696 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 227 |
| 10.697 | INVALID-ORDER-697 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 227 |
| 10.698 | INVALID-ORDER-698 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 227 |
| 10.699 | INVALID-ORDER-699 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 228 |
| 10.700 | INVALID-ORDER-700 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 228 |
| 10.701 | INVALID-ORDER-701 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 228 |
| 10.702 | INVALID-ORDER-702 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 228 |
| 10.703 | INVALID-ORDER-703 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 228 |
| 10.704 | INVALID-ORDER-704 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 229 |
| 10.705 | INVALID-ORDER-705 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 229 |
| 10.706 | INVALID-ORDER-706 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 229 |
| 10.707 | INVALID-ORDER-707 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 229 |
| 10.708 | INVALID-ORDER-708 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 229 |
| 10.709 | INVALID-ORDER-709 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 230 |
| 10.710 | INVALID-ORDER-710 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 230 |
| 10.711 | INVALID-ORDER-711 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 230 |
| 10.712 | INVALID-ORDER-712 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 230 |
| 10.713 | INVALID-ORDER-713 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 230 |
| 10.714 | INVALID-ORDER-714 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 231 |

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| 10.715 | INVALID-ORDER-715 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 231 |
| 10.716 | INVALID-ORDER-716 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 231 |
| 10.717 | INVALID-ORDER-717 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 231 |
| 10.718 | INVALID-ORDER-718 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 231 |
| 10.719 | INVALID-ORDER-719 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 232 |
| 10.720 | INVALID-ORDER-720 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 232 |
| 10.721 | INVALID-ORDER-721 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 232 |
| 10.722 | INVALID-ORDER-722 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 232 |
| 10.723 | INVALID-ORDER-723 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 232 |
| 10.724 | INVALID-ORDER-724 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 233 |
| 10.725 | INVALID-ORDER-725 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 233 |
| 10.726 | INVALID-ORDER-726 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 233 |
| 10.727 | INVALID-ORDER-727 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 233 |
| 10.728 | INVALID-ORDER-728 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 233 |
| 10.729 | INVALID-ORDER-729 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 234 |
| 10.730 | INVALID-ORDER-730 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 234 |
| 10.731 | INVALID-ORDER-731 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 234 |
| 10.732 | INVALID-ORDER-732 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 234 |
| 10.733 | INVALID-ORDER-733 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 234 |

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| 10.73 | INVALID-ORDER-734 | $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3(L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L(L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 235 |
| 10.73 | INVALID-ORDER-735 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 235 |
| 10.73 | INVALID-ORDER-736 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 235 |
| 10.73 | INVALID-ORDER-737 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 235 |
| 10.73 | INVALID-ORDER-738 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 235 |
| 10.73 | INVALID-ORDER-739 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 236 |
| 10.74 | INVALID-ORDER-740 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 236 |
| 10.74 | INVALID-ORDER-741 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 236 |
| 10.74 | INVALID-ORDER-742 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 236 |
| 10.74 | INVALID-ORDER-743 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{R_L(L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 236 |
| 10.74 | INVALID-ORDER-744 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 237 |
| 10.74 | INVALID-ORDER-745 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 237 |
| 10.74 | INVALID-ORDER-746 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 237 |
| 10.74 | INVALID-ORDER-747 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 237 |
| 10.74 | INVALID-ORDER-748 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 237 |
| 10.74 | INVALID-ORDER-749 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 238 |
| 10.75 | INVALID-ORDER-750 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 238 |
| 10.75 | INVALID-ORDER-751 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 238 |

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| 10.752 | INVALID-ORDER-752 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 238 |
| 10.753 | INVALID-ORDER-753 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$ | 238 |
| 10.754 | INVALID-ORDER-754 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 239 |
| 10.755 | INVALID-ORDER-755 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 239 |
| 10.756 | INVALID-ORDER-756 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 239 |
| 10.757 | INVALID-ORDER-757 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 239 |
| 10.758 | INVALID-ORDER-758 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 239 |
| 10.759 | INVALID-ORDER-759 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 240 |
| 10.760 | INVALID-ORDER-760 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 240 |
| 10.761 | INVALID-ORDER-761 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 240 |
| 10.762 | INVALID-ORDER-762 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 240 |
| 10.763 | INVALID-ORDER-763 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 240 |
| 10.764 | INVALID-ORDER-764 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 241 |
| 10.765 | INVALID-ORDER-765 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 241 |
| 10.766 | INVALID-ORDER-766 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 241 |
| 10.767 | INVALID-ORDER-767 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 241 |
| 10.768 | INVALID-ORDER-768 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 241 |
| 10.769 | INVALID-ORDER-769 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 242 |

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| 10.770INVALID-ORDER-770 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 242 |
| 10.771INVALID-ORDER-771 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 242 |
| 10.772INVALID-ORDER-772 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 242 |
| 10.773INVALID-ORDER-773 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 242 |
| 10.774INVALID-ORDER-774 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 243 |
| 10.775INVALID-ORDER-775 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 243 |
| 10.776INVALID-ORDER-776 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 243 |
| 10.777INVALID-ORDER-777 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 243 |
| 10.778INVALID-ORDER-778 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 243 |
| 10.779INVALID-ORDER-779 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 244 |
| 10.780INVALID-ORDER-780 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 244 |
| 10.781INVALID-ORDER-781 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 244 |
| 10.782INVALID-ORDER-782 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 244 |
| 10.783INVALID-ORDER-783 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 244 |
| 10.784INVALID-ORDER-784 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 245 |
| 10.785INVALID-ORDER-785 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 245 |
| 10.786INVALID-ORDER-786 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 245 |
| 10.787INVALID-ORDER-787 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 245 |

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| 10.788 | INVALID-ORDER-788 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 245 |
| 10.789 | INVALID-ORDER-789 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 246 |
| 10.790 | INVALID-ORDER-790 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 246 |
| 10.791 | INVALID-ORDER-791 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 246 |
| 10.792 | INVALID-ORDER-792 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 246 |
| 10.793 | INVALID-ORDER-793 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 246 |
| 10.794 | INVALID-ORDER-794 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 247 |
| 10.795 | INVALID-ORDER-795 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 247 |
| 10.796 | INVALID-ORDER-796 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 247 |
| 10.797 | INVALID-ORDER-797 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 247 |
| 10.798 | INVALID-ORDER-798 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 247 |
| 10.799 | INVALID-ORDER-799 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 248 |
| 10.800 | INVALID-ORDER-800 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 248 |
| 10.801 | INVALID-ORDER-801 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 248 |
| 10.802 | INVALID-ORDER-802 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 248 |
| 10.803 | INVALID-ORDER-803 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 248 |
| 10.804 | INVALID-ORDER-804 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 249 |
| 10.805 | INVALID-ORDER-805 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 249 |

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| 10.806INVALID-ORDER-806 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 249 |
| 10.807INVALID-ORDER-807 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 249 |
| 10.808INVALID-ORDER-808 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 249 |
| 10.809INVALID-ORDER-809 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 250 |
| 10.810INVALID-ORDER-810 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 250 |
| 10.811INVALID-ORDER-811 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 250 |
| 10.812INVALID-ORDER-812 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 250 |
| 10.813INVALID-ORDER-813 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 250 |
| 10.814INVALID-ORDER-814 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 251 |
| 10.815INVALID-ORDER-815 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 251 |
| 10.816INVALID-ORDER-816 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 251 |
| 10.817INVALID-ORDER-817 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 251 |
| 10.818INVALID-ORDER-818 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 251 |
| 10.819INVALID-ORDER-819 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 252 |
| 10.820INVALID-ORDER-820 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 252 |
| 10.821INVALID-ORDER-821 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 252 |
| 10.822INVALID-ORDER-822 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 252 |
| 10.823INVALID-ORDER-823 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 252 |

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| 10.821INVALID-ORDER-824 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 253 |
| 10.825INVALID-ORDER-825 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 253 |
| 10.826INVALID-ORDER-826 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 253 |
| 10.827INVALID-ORDER-827 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 253 |
| 10.828INVALID-ORDER-828 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 253 |
| 10.829INVALID-ORDER-829 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 254 |
| 10.830INVALID-ORDER-830 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 254 |
| 10.831INVALID-ORDER-831 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 254 |
| 10.832INVALID-ORDER-832 | $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 254 |
| 10.833INVALID-ORDER-833 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 254 |
| 10.834INVALID-ORDER-834 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 255 |
| 10.835INVALID-ORDER-835 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 255 |
| 10.836INVALID-ORDER-836 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 255 |
| 10.837INVALID-ORDER-837 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 255 |
| 10.838INVALID-ORDER-838 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 255 |
| 10.839INVALID-ORDER-839 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 256 |
| 10.840INVALID-ORDER-840 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 256 |
| 10.841INVALID-ORDER-841 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 256 |
| 10.842INVALID-ORDER-842 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 256 |
| 10.843INVALID-ORDER-843 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 256 |

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| 10.841INVALID-ORDER-844 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 257 |
| 10.845INVALID-ORDER-845 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 257 |
| 10.846INVALID-ORDER-846 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 257 |
| 10.847INVALID-ORDER-847 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 257 |
| 10.848INVALID-ORDER-848 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 257 |
| 10.849INVALID-ORDER-849 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 258 |
| 10.850INVALID-ORDER-850 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 258 |
| 10.851INVALID-ORDER-851 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 258 |
| 10.852INVALID-ORDER-852 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$ | 258 |
| 10.853INVALID-ORDER-853 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 258 |
| 10.854INVALID-ORDER-854 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 259 |
| 10.855INVALID-ORDER-855 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 259 |
| 10.856INVALID-ORDER-856 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 259 |
| 10.857INVALID-ORDER-857 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 259 |
| 10.858INVALID-ORDER-858 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 259 |
| 10.859INVALID-ORDER-859 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 260 |
| 10.860INVALID-ORDER-860 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 260 |
| 10.861INVALID-ORDER-861 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 260 |
| 10.862INVALID-ORDER-862 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 260 |
| 10.863INVALID-ORDER-863 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 260 |
| 10.864INVALID-ORDER-864 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 261 |
| 10.865INVALID-ORDER-865 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 261 |

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| 10.866INVALID-ORDER-866 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 261 |
| 10.867INVALID-ORDER-867 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 261 |
| 10.868INVALID-ORDER-868 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 261 |
| 10.869INVALID-ORDER-869 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 262 |
| 10.870INVALID-ORDER-870 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 262 |
| 10.871INVALID-ORDER-871 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 262 |
| 10.872INVALID-ORDER-872 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 262 |
| 10.873INVALID-ORDER-873 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 262 |
| 10.874INVALID-ORDER-874 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 263 |
| 10.875INVALID-ORDER-875 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 263 |
| 10.876INVALID-ORDER-876 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 263 |
| 10.877INVALID-ORDER-877 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 263 |
| 10.878INVALID-ORDER-878 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 263 |
| 10.879INVALID-ORDER-879 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 264 |
| 10.880INVALID-ORDER-880 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 264 |
| 10.881INVALID-ORDER-881 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 264 |
| 10.882INVALID-ORDER-882 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 264 |
| 10.883INVALID-ORDER-883 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 264 |
| 10.884INVALID-ORDER-884 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 265 |
| 10.885INVALID-ORDER-885 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 265 |
| 10.886INVALID-ORDER-886 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 265 |
| 10.887INVALID-ORDER-887 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 265 |

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| 10.88 | INVALID-ORDER-888 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 265 |
| 10.88 | INVALID-ORDER-889 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 266 |
| 10.89 | INVALID-ORDER-890 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 266 |
| 10.89 | INVALID-ORDER-891 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 266 |
| 10.89 | INVALID-ORDER-892 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 266 |
| 10.89 | INVALID-ORDER-893 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 266 |
| 10.89 | INVALID-ORDER-894 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 267 |
| 10.89 | INVALID-ORDER-895 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 267 |
| 10.89 | INVALID-ORDER-896 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 267 |
| 10.89 | INVALID-ORDER-897 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 267 |
| 10.89 | INVALID-ORDER-898 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 267 |
| 10.89 | INVALID-ORDER-899 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 268 |
| 10.90 | INVALID-ORDER-900 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 268 |
| 10.90 | INVALID-ORDER-901 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 268 |
| 10.90 | INVALID-ORDER-902 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 268 |
| 10.90 | INVALID-ORDER-903 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 268 |
| 10.90 | INVALID-ORDER-904 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 269 |
| 10.90 | INVALID-ORDER-905 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 269 |
| 10.90 | INVALID-ORDER-906 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 269 |
| 10.90 | INVALID-ORDER-907 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 269 |

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| 10.908INVALID-ORDER-908 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 269 |
| 10.909INVALID-ORDER-909 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 270 |
| 10.910INVALID-ORDER-910 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 270 |
| 10.911INVALID-ORDER-911 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 270 |
| 10.912INVALID-ORDER-912 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 270 |
| 10.913INVALID-ORDER-913 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 270 |
| 10.914INVALID-ORDER-914 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 271 |
| 10.915INVALID-ORDER-915 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 271 |
| 10.916INVALID-ORDER-916 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 271 |
| 10.917INVALID-ORDER-917 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 271 |
| 10.918INVALID-ORDER-918 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 271 |
| 10.919INVALID-ORDER-919 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 272 |
| 10.920INVALID-ORDER-920 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 272 |
| 10.921INVALID-ORDER-921 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 272 |
| 10.922INVALID-ORDER-922 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$ | 272 |
| 10.923INVALID-ORDER-923 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 272 |
| 10.924INVALID-ORDER-924 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 273 |
| 10.925INVALID-ORDER-925 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 273 |
| 10.926INVALID-ORDER-926 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 273 |

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| 10.92 | INVALID-ORDER-927 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 273 |
| 10.92 | INVALID-ORDER-928 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 273 |
| 10.92 | INVALID-ORDER-929 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 274 |
| 10.93 | INVALID-ORDER-930 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 274 |
| 10.93 | INVALID-ORDER-931 | $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 274 |
| 10.93 | INVALID-ORDER-932 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$ | 274 |
| 10.93 | INVALID-ORDER-933 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 274 |
| 10.93 | INVALID-ORDER-934 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 275 |
| 10.93 | INVALID-ORDER-935 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 275 |
| 10.93 | INVALID-ORDER-936 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 275 |
| 10.93 | INVALID-ORDER-937 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 275 |
| 10.93 | INVALID-ORDER-938 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 275 |
| 10.93 | INVALID-ORDER-939 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 276 |
| 10.94 | INVALID-ORDER-940 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 276 |
| 10.94 | INVALID-ORDER-941 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 276 |
| 10.94 | INVALID-ORDER-942 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 276 |
| 10.94 | INVALID-ORDER-943 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 276 |

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| 10.944 | INVALID-ORDER-944 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 277 |
| 10.945 | INVALID-ORDER-945 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 277 |
| 10.946 | INVALID-ORDER-946 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 277 |
| 10.947 | INVALID-ORDER-947 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 277 |
| 10.948 | INVALID-ORDER-948 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 277 |
| 10.949 | INVALID-ORDER-949 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 278 |
| 10.950 | INVALID-ORDER-950 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 278 |
| 10.951 | INVALID-ORDER-951 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$ | 278 |
| 10.952 | INVALID-ORDER-952 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 278 |
| 10.953 | INVALID-ORDER-953 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 278 |
| 10.954 | INVALID-ORDER-954 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 279 |
| 10.955 | INVALID-ORDER-955 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 279 |
| 10.956 | INVALID-ORDER-956 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 279 |
| 10.957 | INVALID-ORDER-957 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 279 |
| 10.958 | INVALID-ORDER-958 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 279 |
| 10.959 | INVALID-ORDER-959 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 280 |
| 10.960 | INVALID-ORDER-960 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 280 |

| | | | |
|-------|-------------------|---|-----|
| 10.96 | INVALID-ORDER-961 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 280 |
| 10.96 | INVALID-ORDER-962 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 280 |
| 10.96 | INVALID-ORDER-963 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 280 |
| 10.96 | INVALID-ORDER-964 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 281 |
| 10.96 | INVALID-ORDER-965 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 281 |
| 10.96 | INVALID-ORDER-966 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 281 |
| 10.96 | INVALID-ORDER-967 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 281 |
| 10.96 | INVALID-ORDER-968 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$ | 281 |
| 10.96 | INVALID-ORDER-969 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 282 |
| 10.97 | INVALID-ORDER-970 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 282 |
| 10.97 | INVALID-ORDER-971 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 282 |
| 10.97 | INVALID-ORDER-972 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 282 |
| 10.97 | INVALID-ORDER-973 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 282 |
| 10.97 | INVALID-ORDER-974 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 283 |
| 10.97 | INVALID-ORDER-975 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 283 |
| 10.97 | INVALID-ORDER-976 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 283 |
| 10.97 | INVALID-ORDER-977 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 283 |

| | | | |
|-------|-------------------|---|-----|
| 10.97 | INVALID-ORDER-978 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 283 |
| 10.97 | INVALID-ORDER-979 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 284 |
| 10.98 | INVALID-ORDER-980 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 284 |
| 10.98 | INVALID-ORDER-981 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$ | 284 |
| 10.98 | INVALID-ORDER-982 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$ | 284 |
| 10.98 | INVALID-ORDER-983 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 284 |
| 10.98 | INVALID-ORDER-984 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 285 |
| 10.98 | INVALID-ORDER-985 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 285 |
| 10.98 | INVALID-ORDER-986 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 285 |
| 10.98 | INVALID-ORDER-987 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 285 |
| 10.98 | INVALID-ORDER-988 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 285 |
| 10.98 | INVALID-ORDER-989 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 286 |
| 10.99 | INVALID-ORDER-990 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 286 |
| 10.99 | INVALID-ORDER-991 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$ | 286 |
| 10.99 | INVALID-ORDER-992 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$ | 286 |
| 10.99 | INVALID-ORDER-993 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 286 |
| 10.99 | INVALID-ORDER-994 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 287 |

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|---------------------------|---|-----|
| 10.995INVALID-ORDER-995 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 287 |
| 10.996INVALID-ORDER-996 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 287 |
| 10.997INVALID-ORDER-997 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 287 |
| 10.998INVALID-ORDER-998 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 287 |
| 10.999INVALID-ORDER-999 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 288 |
| 10.1000INVALID-ORDER-1000 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 288 |
| 10.1001INVALID-ORDER-1001 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$ | 288 |
| 10.1002INVALID-ORDER-1002 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$ | 288 |
| 10.1003INVALID-ORDER-1003 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$ | 288 |
| 10.1004INVALID-ORDER-1004 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$ | 289 |
| 10.1005INVALID-ORDER-1005 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$ | 289 |
| 10.1006INVALID-ORDER-1006 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$ | 289 |
| 10.1007INVALID-ORDER-1007 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$ | 289 |
| 10.1008INVALID-ORDER-1008 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ | 289 |
| 10.1009INVALID-ORDER-1009 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 290 |
| 10.1010INVALID-ORDER-1010 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 290 |
| 10.1011INVALID-ORDER-1011 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$ | 290 |

[illegible]

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|---------|--------------------|--|-----|
| 10.1029 | INVALID-ORDER-1029 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ | 294 |
| 10.1030 | INVALID-ORDER-1030 | $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ | 294 |

1 Examined $H(z)$ for TIA simple Z1 Z3 ZL: $\frac{Z_1 Z_3 Z_L g_m}{Z_1 Z_3 g_m + Z_1 Z_L g_m + Z_3 + Z_L}$

$$H(z) = \frac{Z_1 Z_3 Z_L g_m}{Z_1 Z_3 g_m + Z_1 Z_L g_m + Z_3 + Z_L}$$

2 HP

3 BP

3.1 BP-1 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 R_3 g_m s}{(R_1 g_m + 1) (C_L L_L R_3 s^2 + L_L s + R_3)}$$

Parameters:

Q: $C_L R_3 \sqrt{\frac{1}{C_L L_L}}$

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

bandwidth: $\frac{1}{C_L R_3}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$

Qz: 0

Wz: None

3.2 BP-2 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s}{(R_1 g_m + 1) (C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_L R_3 R_L \sqrt{\frac{1}{C_L L_L}}}{R_3 + R_L} \\
\text{wo: } & \sqrt{\frac{1}{C_L L_L}} \\
\text{bandwidth: } & \frac{R_3 + R_L}{C_L R_3 R_L} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_1 R_3 R_L g_m}{(R_3 + R_L)(R_1 g_m + 1)} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

$$\mathbf{3.3 \quad BP-3} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L g_m s}{(R_1 g_m + 1)(C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & R_L \sqrt{\frac{1}{L_L(C_3 + C_L)}} (C_3 + C_L) \\
\text{wo: } & \sqrt{\frac{1}{L_L(C_3 + C_L)}} \\
\text{bandwidth: } & \frac{1}{R_L(C_3 + C_L)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_1 R_L g_m}{R_1 g_m + 1} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

$$\mathbf{3.4 \quad BP-4} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_3 g_m s}{(R_1 g_m + 1)(C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

Parameters:

$$\text{Q: } R_3 \sqrt{\frac{1}{L_L(C_3 + C_L)}} (C_3 + C_L)$$

wo: $\sqrt{\frac{1}{L_L(C_3+C_L)}}$
 bandwidth: $\frac{1}{R_3(C_3+C_L)}$
 K-LP: 0
 K-HP: 0
 K-BP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$
 QZ: 0
 Wz: None

$$\mathbf{3.5 \quad BP-5} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s}{(R_1 g_m + 1)(C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

Parameters:

Q: $\frac{R_3 R_L \sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3+C_L)}{R_3+R_L}$
 wo: $\sqrt{\frac{1}{L_L(C_3+C_L)}}$
 bandwidth: $\frac{R_3+R_L}{R_3 R_L(C_3+C_L)}$
 K-LP: 0
 K-HP: 0
 K-BP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$
 QZ: 0
 Wz: None

$$\mathbf{3.6 \quad BP-6} \quad Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_1 R_L g_m s}{(R_1 g_m + 1)(C_3 L_3 R_L s^2 + L_3 s + R_L)}$$

Parameters:

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

bandwidth: $\frac{1}{C_3 R_L}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$
QZ: 0
Wz: None

3.7 BP-7 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_1 R_L g_m s}{(R_1 g_m + 1) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

Parameters:

Q: $R_L \sqrt{\frac{1}{L_3 (C_3 + C_L)}} (C_3 + C_L)$
wo: $\sqrt{\frac{1}{L_3 (C_3 + C_L)}}$
bandwidth: $\frac{1}{R_L (C_3 + C_L)}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$
QZ: 0
Wz: None

3.8 BP-8 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_1 R_L g_m s}{(R_1 g_m + 1) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

Parameters:

Q: $R_L \sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}} (C_3 + C_L)$
wo: $\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}}$
bandwidth: $\frac{1}{R_L (C_3 + C_L)}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$
QZ: 0
Wz: None

3.9 BP-9 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s}{(R_1 g_m + 1) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

Parameters:

Q: $\frac{C_3 R_3 R_L \sqrt{\frac{1}{C_3 L_3}}}{R_3 + R_L}$
wo: $\sqrt{\frac{1}{C_3 L_3}}$
bandwidth: $\frac{R_3 + R_L}{C_3 R_3 R_L}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_3 R_L g_m}{(R_3 + R_L)(R_1 g_m + 1)}$
QZ: 0
Wz: None

3.10 BP-10 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 R_3 g_m s}{(R_1 g_m + 1) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

Parameters:

Q: $R_3 \sqrt{\frac{1}{L_3 (C_3 + C_L)}} (C_3 + C_L)$
wo: $\sqrt{\frac{1}{L_3 (C_3 + C_L)}}$
bandwidth: $\frac{1}{R_3 (C_3 + C_L)}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$
QZ: 0
Wz: None

$$\mathbf{3.11 \quad BP-11} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s}{(R_1 g_m + 1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

Parameters:

Q: $\frac{R_3 R_L \sqrt{\frac{1}{L_3 (C_3 + C_L)}} (C_3 + C_L)}{R_3 + R_L}$
wo: $\sqrt{\frac{1}{L_3 (C_3 + C_L)}}$
bandwidth: $\frac{R_3 + R_L}{R_3 R_L (C_3 + C_L)}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$
QZ: 0
Wz: None

$$\mathbf{3.12 \quad BP-12} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_1 R_3 g_m s}{(R_1 g_m + 1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

Parameters:

Q: $R_3 \sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}} (C_3 + C_L)$
wo: $\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}}$
bandwidth: $\frac{1}{R_3 (C_3 + C_L)}$

K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$
QZ: 0
Wz: None

3.13 BP-13 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_1 R_3 R_L g_m s}{(R_1 g_m + 1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

Parameters:

Q: $\frac{R_3 R_L \sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}} (C_3 + C_L)}{R_3 + R_L}$
wo: $\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}}$
bandwidth: $\frac{R_3 + R_L}{R_3 R_L (C_3 + C_L)}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$
QZ: 0
Wz: None

3.14 BP-14 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s}{(C_L R_3 s + 1) (L_1 g_m s + 1)}$$

Parameters:

Q: $\frac{C_L L_1 R_3 g_m \sqrt{\frac{1}{C_L L_1 R_3 g_m}}}{C_L R_3 + L_1 g_m}$
wo: $\sqrt{\frac{1}{C_L L_1 R_3 g_m}}$
bandwidth: $\frac{C_L R_3 + L_1 g_m}{C_L L_1 R_3 g_m}$

K-LP: 0
K-HP: 0
K-BP: $\frac{L_1 R_3 g_m}{C_L R_3 + L_1 g_m}$
QZ: 0
Wz: None

3.15 BP-15 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(L_1 g_m s + 1)(C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_L L_1 R_3 R_L g_m \sqrt{\frac{R_3 + R_L}{C_L L_1 R_3 R_L g_m}}}{C_L R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}$
wo: $\sqrt{\frac{R_3 + R_L}{C_L L_1 R_3 R_L g_m}}$
bandwidth: $\frac{C_L R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}{C_L L_1 R_3 R_L g_m}$
K-LP: 0
K-HP: 0
K-BP: $\frac{L_1 R_3 R_L g_m}{C_L R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}$
QZ: 0
Wz: None

3.16 BP-16 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s}{(C_3 R_L s + 1)(L_1 g_m s + 1)}$$

Parameters:

Q: $\frac{C_3 L_1 R_L g_m \sqrt{\frac{1}{C_3 L_1 R_L g_m}}}{C_3 R_L + L_1 g_m}$
wo: $\sqrt{\frac{1}{C_3 L_1 R_L g_m}}$
bandwidth: $\frac{C_3 R_L + L_1 g_m}{C_3 L_1 R_L g_m}$
K-LP: 0

K-HP: 0

K-BP: $\frac{L_1 R_L g_m}{C_3 R_L + L_1 g_m}$

QZ: 0

Wz: None

3.17 BP-17 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s}{(L_1 g_m s + 1)(C_3 R_L s + C_L R_L s + 1)}$$

Parameters:

Q: $\frac{L_1 R_L g_m \sqrt{\frac{1}{L_1 R_L g_m (C_3 + C_L)}} (C_3 + C_L)}{C_3 R_L + C_L R_L + L_1 g_m}$

wo: $\sqrt{\frac{1}{L_1 R_L g_m (C_3 + C_L)}}$

bandwidth: $\frac{C_3 R_L + C_L R_L + L_1 g_m}{L_1 R_L g_m (C_3 + C_L)}$

K-LP: 0

K-HP: 0

K-BP: $\frac{L_1 R_L g_m}{C_3 R_L + C_L R_L + L_1 g_m}$

QZ: 0

Wz: None

3.18 BP-18 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(L_1 g_m s + 1)(C_3 R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_3 L_1 R_3 R_L g_m \sqrt{\frac{R_3 + R_L}{C_3 L_1 R_3 R_L g_m}}}{C_3 R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}$

wo: $\sqrt{\frac{R_3 + R_L}{C_3 L_1 R_3 R_L g_m}}$

bandwidth: $\frac{C_3 R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}{C_3 L_1 R_3 R_L g_m}$

K-LP: 0

K-HP: 0

K-BP: $\frac{L_1 R_3 R_L g_m}{C_3 R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}$
 QZ: 0
 Wz: None

3.19 BP-19 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s}{(L_1 g_m s + 1)(C_3 R_3 s + C_L R_3 s + 1)}$$

Parameters:

Q: $\frac{L_1 R_3 g_m \sqrt{\frac{1}{L_1 R_3 g_m (C_3 + C_L)}} (C_3 + C_L)}{C_3 R_3 + C_L R_3 + L_1 g_m}$
 wo: $\sqrt{\frac{1}{L_1 R_3 g_m (C_3 + C_L)}}$
 bandwidth: $\frac{C_3 R_3 + C_L R_3 + L_1 g_m}{L_1 R_3 g_m (C_3 + C_L)}$
 K-LP: 0
 K-HP: 0
 K-BP: $\frac{L_1 R_3 g_m}{C_3 R_3 + C_L R_3 + L_1 g_m}$
 QZ: 0
 Wz: None

3.20 BP-20 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(L_1 g_m s + 1)(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{L_1 R_3 R_L g_m \sqrt{\frac{R_3 + R_L}{L_1 R_3 R_L g_m (C_3 + C_L)}} (C_3 + C_L)}{C_3 R_3 R_L + C_L R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}$
 wo: $\sqrt{\frac{R_3 + R_L}{L_1 R_3 R_L g_m (C_3 + C_L)}}$
 bandwidth: $\frac{C_3 R_3 R_L + C_L R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}{L_1 R_3 R_L g_m (C_3 + C_L)}$
 K-LP: 0
 K-HP: 0

K-BP: $\frac{L_1 R_3 R_L g_m}{C_3 R_3 R_L + C_L R_3 R_L + L_1 R_3 g_m + L_1 R_L g_m}$
 QZ: 0
 Wz: None

3.21 BP-21 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(R_3 + R_L)(C_1 L_1 s^2 + L_1 g_m s + 1)}$$

Parameters:

Q: $\frac{C_1 \sqrt{\frac{1}{C_1 L_1}}}{g_m}$
 wo: $\sqrt{\frac{1}{C_1 L_1}}$
 bandwidth: $\frac{g_m}{C_1}$
 K-LP: 0
 K-HP: 0
 K-BP: $\frac{R_3 R_L}{R_3 + R_L}$
 QZ: 0
 Wz: None

3.22 BP-22 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s}{(R_3 + R_L)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

Parameters:

Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$
 wo: $\sqrt{\frac{1}{C_1 L_1}}$
 bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$
 K-LP: 0
 K-HP: 0
 K-BP: $\frac{R_1 R_3 R_L g_m}{(R_3 + R_L)(R_1 g_m + 1)}$

Qz: 0
Wz: None

4 LP

4.1 LP-1 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m}{(C_1 s + g_m)(C_L R_3 s + 1)}$$

Parameters:

Q: $\frac{C_1 C_L R_3 \sqrt{\frac{g_m}{C_1 C_L R_3}}}{C_1 + C_L R_3 g_m}$
 wo: $\sqrt{\frac{g_m}{C_1 C_L R_3}}$
 bandwidth: $\frac{C_1 + C_L R_3 g_m}{C_1 C_L R_3}$
 K-LP: R_3
 K-HP: 0
 K-BP: 0
 Qz: None
 Wz: None

4.2 LP-2 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m}{(C_1 s + g_m)(C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_1 C_L R_3 R_L \sqrt{\frac{g_m(R_3 + R_L)}{C_1 C_L R_3 R_L}}}{C_1 R_3 + C_1 R_L + C_L R_3 R_L g_m}$
 wo: $\sqrt{\frac{g_m(R_3 + R_L)}{C_1 C_L R_3 R_L}}$
 bandwidth: $\frac{C_1 R_3 + C_1 R_L + C_L R_3 R_L g_m}{C_1 C_L R_3 R_L}$

K-LP: $\frac{R_3 R_L}{R_3 + R_L}$
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.3 LP-3 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m}{(C_1 s + g_m)(C_3 R_L s + 1)}$$

Parameters:

Q: $\frac{C_1 C_3 R_L \sqrt{\frac{g_m}{C_1 C_3 R_L}}}{C_1 + C_3 R_L g_m}$
wo: $\sqrt{\frac{g_m}{C_1 C_3 R_L}}$
bandwidth: $\frac{C_1 + C_3 R_L g_m}{C_1 C_3 R_L}$
K-LP: R_L
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.4 LP-4 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m}{(C_1 s + g_m)(C_3 R_L s + C_L R_L s + 1)}$$

Parameters:

Q: $\frac{C_1 R_L \sqrt{\frac{g_m}{C_1 R_L (C_3 + C_L)}} (C_3 + C_L)}{C_1 + C_3 R_L g_m + C_L R_L g_m}$
wo: $\sqrt{\frac{g_m}{C_1 R_L (C_3 + C_L)}}$
bandwidth: $\frac{C_1 + C_3 R_L g_m + C_L R_L g_m}{C_1 R_L (C_3 + C_L)}$
K-LP: R_L

K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.5 LP-5 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_3 R_L g_m}{(C_1 s + g_m)(C_3 R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_1 C_3 R_3 R_L \sqrt{\frac{g_m(R_3 + R_L)}{C_1 C_3 R_3 R_L}}}{C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m}$
wo: $\sqrt{\frac{g_m(R_3 + R_L)}{C_1 C_3 R_3 R_L}}$
bandwidth: $\frac{C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m}{C_1 C_3 R_3 R_L}$
K-LP: $\frac{R_3 R_L}{R_3 + R_L}$
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.6 LP-6 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m}{(C_1 s + g_m)(C_3 R_3 s + C_L R_3 s + 1)}$$

Parameters:

Q: $\frac{C_1 R_3 \sqrt{\frac{g_m}{C_1 R_3 (C_3 + C_L)}} (C_3 + C_L)}{C_1 + C_3 R_3 g_m + C_L R_3 g_m}$
wo: $\sqrt{\frac{g_m}{C_1 R_3 (C_3 + C_L)}}$
bandwidth: $\frac{C_1 + C_3 R_3 g_m + C_L R_3 g_m}{C_1 R_3 (C_3 + C_L)}$
K-LP: R_3

K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.7 LP-7 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m}{(C_1 s + g_m)(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_1 R_3 R_L \sqrt{\frac{g_m(R_3 + R_L)}{C_1 R_3 R_L (C_3 + C_L)}} (C_3 + C_L)}{C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m}$
wo: $\sqrt{\frac{g_m(R_3 + R_L)}{C_1 R_3 R_L (C_3 + C_L)}}$
bandwidth: $\frac{C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m}{C_1 R_3 R_L (C_3 + C_L)}$
K-LP: $\frac{R_3 R_L}{R_3 + R_L}$
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.8 LP-8 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m}{(C_L R_3 s + 1)(C_1 R_1 s + R_1 g_m + 1)}$$

Parameters:

Q: $\frac{C_1 C_L R_1 R_3 \sqrt{\frac{R_1 g_m + 1}{C_1 C_L R_1 R_3}}}{C_1 R_1 + C_L R_1 R_3 g_m + C_L R_3}$
wo: $\sqrt{\frac{R_1 g_m + 1}{C_1 C_L R_1 R_3}}$
bandwidth: $\frac{C_1 R_1 + C_L R_1 R_3 g_m + C_L R_3}{C_1 C_L R_1 R_3}$
K-LP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$

K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.9 LP-9 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(C_1 R_1 s + R_1 g_m + 1)(C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_1 C_L R_1 R_3 R_L \sqrt{\frac{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}{C_1 C_L R_1 R_3 R_L}}}{C_1 R_1 R_3 + C_1 R_1 R_L + C_L R_1 R_3 R_L g_m + C_L R_3 R_L}$
wo: $\sqrt{\frac{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}{C_1 C_L R_1 R_3 R_L}}$
bandwidth: $\frac{C_1 R_1 R_3 + C_1 R_1 R_L + C_L R_1 R_3 R_L g_m + C_L R_3 R_L}{C_1 C_L R_1 R_3 R_L}$
K-LP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.10 LP-10 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m}{(C_3 R_L s + 1)(C_1 R_1 s + R_1 g_m + 1)}$$

Parameters:

Q: $\frac{C_1 C_3 R_1 R_L \sqrt{\frac{R_1 g_m + 1}{C_1 C_3 R_1 R_L}}}{C_1 R_1 + C_3 R_1 R_L g_m + C_3 R_L}$
wo: $\sqrt{\frac{R_1 g_m + 1}{C_1 C_3 R_1 R_L}}$
bandwidth: $\frac{C_1 R_1 + C_3 R_1 R_L g_m + C_3 R_L}{C_1 C_3 R_1 R_L}$
K-LP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$

K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.11 LP-11 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m}{(C_1 R_1 s + R_1 g_m + 1)(C_3 R_L s + C_L R_L s + 1)}$$

Parameters:

Q: $\frac{C_1 R_1 R_L \sqrt{\frac{R_1 g_m + 1}{C_1 R_1 R_L (C_3 + C_L)}} (C_3 + C_L)}{C_1 R_1 + C_3 R_1 R_L g_m + C_3 R_L + C_L R_1 R_L g_m + C_L R_L}$
wo: $\sqrt{\frac{R_1 g_m + 1}{C_1 R_1 R_L (C_3 + C_L)}}$
bandwidth: $\frac{C_1 R_1 + C_3 R_1 R_L g_m + C_3 R_L + C_L R_1 R_L g_m + C_L R_L}{C_1 R_1 R_L (C_3 + C_L)}$
K-LP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.12 LP-12 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(C_1 R_1 s + R_1 g_m + 1)(C_3 R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_1 C_3 R_1 R_3 R_L \sqrt{\frac{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}{C_1 C_3 R_1 R_3 R_L}}}{C_1 R_1 R_3 + C_1 R_1 R_L + C_3 R_1 R_3 R_L g_m + C_3 R_3 R_L}$
wo: $\sqrt{\frac{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}{C_1 C_3 R_1 R_3 R_L}}$
bandwidth: $\frac{C_1 R_1 R_3 + C_1 R_1 R_L + C_3 R_1 R_3 R_L g_m + C_3 R_3 R_L}{C_1 C_3 R_1 R_3 R_L}$
K-LP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$

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

4.13 LP-13 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m}{(C_1 R_1 s + R_1 g_m + 1)(C_3 R_3 s + C_L R_3 s + 1)}$$

Parameters:

Q: $\frac{C_1 R_1 R_3 \sqrt{\frac{R_1 g_m + 1}{C_1 R_1 R_3 (C_3 + C_L)}} (C_3 + C_L)}{C_1 R_1 + C_3 R_1 R_3 g_m + C_3 R_3 + C_L R_1 R_3 g_m + C_L R_3}$
wo: $\sqrt{\frac{R_1 g_m + 1}{C_1 R_1 R_3 (C_3 + C_L)}}$
bandwidth: $\frac{C_1 R_1 + C_3 R_1 R_3 g_m + C_3 R_3 + C_L R_1 R_3 g_m + C_L R_3}{C_1 R_1 R_3 (C_3 + C_L)}$
K-LP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

4.14 LP-14 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(C_1 R_1 s + R_1 g_m + 1)(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

Q: $\frac{C_1 R_1 R_3 R_L \sqrt{\frac{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}{C_1 R_1 R_3 R_L (C_3 + C_L)}} (C_3 + C_L)}{C_1 R_1 R_3 + C_1 R_1 R_L + C_3 R_1 R_3 R_L g_m + C_3 R_3 R_L + C_L R_1 R_3 R_L g_m + C_L R_3 R_L}$
wo: $\sqrt{\frac{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}{C_1 R_1 R_3 R_L (C_3 + C_L)}}$
bandwidth: $\frac{C_1 R_1 R_3 + C_1 R_1 R_L + C_3 R_1 R_3 R_L g_m + C_3 R_3 R_L + C_L R_1 R_3 R_L g_m + C_L R_3 R_L}{C_1 R_1 R_3 R_L (C_3 + C_L)}$
K-LP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$

K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.15 LP-15 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m}{(C_3 + C_L)(C_1 L_1 s^2 + L_1 g_m s + 1)}$$

Parameters:

Q: $\frac{C_1 \sqrt{\frac{1}{C_1 L_1}}}{g_m}$
wo: $\sqrt{\frac{1}{C_1 L_1}}$
bandwidth: $\frac{g_m}{C_1}$
K-LP: $\frac{L_1 g_m}{C_3 + C_L}$
K-HP: 0
K-BP: 0
QZ: None
Wz: None

4.16 LP-16 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m}{(C_3 + C_L)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

Parameters:

Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$
wo: $\sqrt{\frac{1}{C_1 L_1}}$
bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$
K-LP: $\frac{L_1 g_m}{C_3 + C_L}$

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

5 BS

5.1 BS-1 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_L L_L s^2 + C_L R_3 s + 1)}$$

Parameters:

Q: $\frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_3}$
wo: $\sqrt{\frac{1}{C_L L_L}}$
bandwidth: $\frac{R_3}{L_L}$
K-LP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$
K-HP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$
K-BP: 0
Qz: None
Wz: $\sqrt{\frac{1}{C_L L_L}}$

5.2 BS-2 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

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

$$\begin{aligned}
\text{wo: } & \sqrt{\frac{1}{C_L L_L}} \\
\text{bandwidth: } & \frac{R_3 R_L}{L_L (R_3 + R_L)} \\
\text{K-LP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\
\text{K-HP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\
\text{K-BP: } & 0 \\
\text{Qz: } & \text{None} \\
\text{Wz: } & \sqrt{\frac{1}{C_L L_L}}
\end{aligned}$$

$$5.3 \quad \text{BS-3 } Z(s) = \left(R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 L_3 s^2 + C_3 R_L s + 1)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_3 \sqrt{\frac{1}{C_3 L_3}}}{R_L} \\
\text{wo: } & \sqrt{\frac{1}{C_3 L_3}} \\
\text{bandwidth: } & \frac{R_L}{L_3} \\
\text{K-LP: } & \frac{R_1 R_L g_m}{R_1 g_m + 1} \\
\text{K-HP: } & \frac{R_1 R_L g_m}{R_1 g_m + 1} \\
\text{K-BP: } & 0 \\
\text{Qz: } & \text{None} \\
\text{Wz: } & \sqrt{\frac{1}{C_3 L_3}}
\end{aligned}$$

$$5.4 \quad \text{BS-4 } Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_3 \sqrt{\frac{1}{C_3 L_3}} (R_3 + R_L)}{R_3 R_L} \\
\text{wo: } & \sqrt{\frac{1}{C_3 L_3}} \\
\text{bandwidth: } & \frac{R_3 R_L}{L_3 (R_3 + R_L)} \\
\text{K-LP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\
\text{K-HP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\
\text{K-BP: } & 0 \\
\text{Qz: } & \text{None} \\
\text{Wz: } & \sqrt{\frac{1}{C_3 L_3}}
\end{aligned}$$

$$\mathbf{5.5 \quad BS-5} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(R_3 + R_L) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & L_1 g_m \sqrt{\frac{1}{C_1 L_1}} \\
\text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\
\text{bandwidth: } & \frac{1}{L_1 g_m} \\
\text{K-LP: } & \frac{R_3 R_L}{R_3 + R_L} \\
\text{K-HP: } & \frac{R_3 R_L}{R_3 + R_L} \\
\text{K-BP: } & 0 \\
\text{Qz: } & \text{None} \\
\text{Wz: } & \sqrt{\frac{1}{C_1 L_1}}
\end{aligned}$$

$$\mathbf{5.6 \quad BS-6} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_1 \sqrt{\frac{1}{C_1 L_1}} (R_1 g_m + 1)}{R_1} \\
\text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\
\text{bandwidth: } & \frac{R_1}{L_1 (R_1 g_m + 1)} \\
\text{K-LP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\
\text{K-HP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\
\text{K-BP: } & 0 \\
\text{Qz: } & \text{None} \\
\text{Wz: } & \sqrt{\frac{1}{C_1 L_1}}
\end{aligned}$$

6 GE

6.1 GE-1 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(R_1 g_m + 1) (C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_3 + R_L} \\
\text{wo: } & \sqrt{\frac{1}{C_L L_L}} \\
\text{bandwidth: } & \frac{R_3 + R_L}{L_L} \\
\text{K-LP: } & \frac{R_1 R_3 g_m}{R_1 g_m + 1} \\
\text{K-HP: } & \frac{R_1 R_3 g_m}{R_1 g_m + 1} \\
\text{K-BP: } & \frac{R_1 R_3 R_L g_m}{(R_3 + R_L) (R_1 g_m + 1)} \\
\text{Qz: } & \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L} \\
\text{Wz: } & \sqrt{\frac{1}{C_L L_L}}
\end{aligned}$$

6.2 GE-2 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

Parameters:

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

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

bandwidth: $\frac{1}{C_L (R_3 + R_L)}$

K-LP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$

K-HP: $\frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$

K-BP: $\frac{R_1 R_3 g_m}{R_1 g_m + 1}$

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

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

6.3 GE-3 $Z(s) = \left(R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(R_1 g_m + 1) (C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1)}$$

Parameters:

Q: $\frac{L_3 \sqrt{\frac{1}{C_3 L_3}}}{R_3 + R_L}$

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

bandwidth: $\frac{R_3 + R_L}{L_3}$

K-LP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$

K-HP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$

K-BP: $\frac{R_1 R_3 R_L g_m}{(R_3 + R_L)(R_1 g_m + 1)}$

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

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

$$\mathbf{6.4 \quad GE-4} \quad Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

Parameters:

$$\text{Q: } C_3 \sqrt{\frac{1}{C_3 L_3}} (R_3 + R_L)$$

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

$$\text{bandwidth: } \frac{1}{C_3 (R_3 + R_L)}$$

$$\text{K-LP: } \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$$

$$\text{K-HP: } \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$$

$$\text{K-BP: } \frac{R_1 R_L g_m}{R_1 g_m + 1}$$

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

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

$$\mathbf{6.5 \quad GE-5} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(R_3 + R_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\text{Q: } \frac{L_1 g_m \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$$

$$\text{wo: } \sqrt{\frac{1}{C_1 L_1}}$$

$$\text{bandwidth: } \frac{R_1 g_m + 1}{L_1 g_m}$$

$$\text{K-LP: } \frac{R_3 R_L}{R_3 + R_L}$$

$$\text{K-HP: } \frac{R_3 R_L}{R_3 + R_L}$$

$$\text{K-BP: } \frac{R_1 R_3 R_L g_m}{(R_3 + R_L)(R_1 g_m + 1)}$$

$$\text{QZ: } \frac{L_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1}$$

$$\text{WZ: } \sqrt{\frac{1}{C_1 L_1}}$$

$$\mathbf{6.6 \quad GE-6} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

Parameters:

$$\text{Q: } \frac{C_1 \sqrt{\frac{1}{C_1 L_1}} (R_1 g_m + 1)}{g_m}$$

$$\text{wo: } \sqrt{\frac{1}{C_1 L_1}}$$

$$\text{bandwidth: } \frac{g_m}{C_1 (R_1 g_m + 1)}$$

$$\text{K-LP: } \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$$

$$\text{K-HP: } \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L}$$

$$\text{K-BP: } \frac{R_3 R_L}{R_3 + R_L}$$

$$\text{QZ: } C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}$$

$$\text{WZ: } \sqrt{\frac{1}{C_1 L_1}}$$

7 AP

8 INVALID-NUMER

$$\mathbf{8.1 \quad INVALID-NUMER-1} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_L R_L s + 1)}{(R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_3 C_L R_3 R_L \sqrt{\frac{1}{C_3 C_L R_3 R_L}}}{C_3 R_3 + C_L R_3 + C_L R_L} \\
wo: & \sqrt{\frac{1}{C_3 C_L R_3 R_L}} \\
bandwidth: & \frac{C_3 R_3 + C_L R_3 + C_L R_L}{C_3 C_L R_3 R_L} \\
K-LP: & \frac{R_1 R_3 g_m}{R_1 g_m + 1} \\
K-HP: & 0 \\
K-BP: & \frac{C_L R_1 R_3 R_L g_m}{(R_1 g_m + 1)(C_3 R_3 + C_L R_3 + C_L R_L)} \\
Qz: & 0 \\
Wz: & \text{None}
\end{aligned}$$

8.2 INVALID-NUMER-2 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 R_3 s + 1)}{(R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_3 C_L R_3 R_L \sqrt{\frac{1}{C_3 C_L R_3 R_L}}}{C_3 R_3 + C_3 R_L + C_L R_L} \\
wo: & \sqrt{\frac{1}{C_3 C_L R_3 R_L}} \\
bandwidth: & \frac{C_3 R_3 + C_3 R_L + C_L R_L}{C_3 C_L R_3 R_L} \\
K-LP: & \frac{R_1 R_L g_m}{R_1 g_m + 1} \\
K-HP: & 0 \\
K-BP: & \frac{C_3 R_1 R_3 R_L g_m}{(R_1 g_m + 1)(C_3 R_3 + C_3 R_L + C_L R_L)} \\
Qz: & 0 \\
Wz: & \text{None}
\end{aligned}$$

8.3 INVALID-NUMER-3 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_L R_3 s + C_L R_L s + 1)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_L L_1 g_m \sqrt{\frac{1}{C_L L_1 g_m (R_3 + R_L)}} (R_3 + R_L)}{C_L R_3 + C_L R_L + L_1 g_m} \\ \text{wo: } & \sqrt{\frac{1}{C_L L_1 g_m (R_3 + R_L)}} \\ \text{bandwidth: } & \frac{C_L R_3 + C_L R_L + L_1 g_m}{C_L L_1 g_m (R_3 + R_L)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & \frac{R_3 R_L}{R_3 + R_L} \\ \text{K-BP: } & \frac{L_1 R_3 g_m}{C_L R_3 + C_L R_L + L_1 g_m} \\ \text{Qz: } & C_L R_L \sqrt{\frac{1}{C_L L_1 g_m (R_3 + R_L)}} \\ \text{Wz: } & \text{None} \end{aligned}$$

8.4 INVALID-NUMER-4 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L R_L s + C_3 + C_L)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_3 C_L L_1 R_L g_m \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 R_L g_m}}}{C_3 C_L R_L + C_3 L_1 g_m + C_L L_1 g_m} \\ \text{wo: } & \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 R_L g_m}} \\ \text{bandwidth: } & \frac{C_3 C_L R_L + C_3 L_1 g_m + C_L L_1 g_m}{C_3 C_L L_1 R_L g_m} \\ \text{K-LP: } & \frac{L_1 g_m}{C_3 + C_L} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_L L_1 R_L g_m}{C_3 C_L R_L + C_3 L_1 g_m + C_L L_1 g_m} \\ \text{Qz: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.5 INVALID-NUMER-5 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 R_3 s + C_3 R_L s + 1)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_3 L_1 g_m \sqrt{\frac{1}{C_3 L_1 g_m (R_3 + R_L)}} (R_3 + R_L)}{C_3 R_3 + C_3 R_L + L_1 g_m} \\ \text{wo: } & \sqrt{\frac{1}{C_3 L_1 g_m (R_3 + R_L)}} \\ \text{bandwidth: } & \frac{C_3 R_3 + C_3 R_L + L_1 g_m}{C_3 L_1 g_m (R_3 + R_L)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & \frac{R_3 R_L}{R_3 + R_L} \\ \text{K-BP: } & \frac{L_1 R_L g_m}{C_3 R_3 + C_3 R_L + L_1 g_m} \\ \text{Qz: } & C_3 R_3 \sqrt{\frac{1}{C_3 L_1 g_m (R_3 + R_L)}} \\ \text{Wz: } & \text{None} \end{aligned}$$

8.6 INVALID-NUMER-6 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L R_3 s + C_3 + C_L)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_3 C_L L_1 R_3 g_m \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 R_3 g_m}}}{C_3 C_L R_3 + C_3 L_1 g_m + C_L L_1 g_m} \\ \text{wo: } & \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 R_3 g_m}} \\ \text{bandwidth: } & \frac{C_3 C_L R_3 + C_3 L_1 g_m + C_L L_1 g_m}{C_3 C_L L_1 R_3 g_m} \\ \text{K-LP: } & \frac{L_1 g_m}{C_3 + C_L} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_3 L_1 R_3 g_m}{C_3 C_L R_3 + C_3 L_1 g_m + C_L L_1 g_m} \\ \text{Qz: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.7 INVALID-NUMER-7 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L R_L s + 1)}{(C_1 s + g_m) (C_L R_3 s + C_L R_L s + 1)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_L \sqrt{\frac{g_m}{C_1 C_L (R_3 + R_L)}} (R_3 + R_L)}{C_1 + C_L R_3 g_m + C_L R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 C_L (R_3 + R_L)}} \\ \text{bandwidth: } & \frac{C_1 + C_L R_3 g_m + C_L R_L g_m}{C_1 C_L (R_3 + R_L)} \\ \text{K-LP: } & R_3 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_L R_3 R_L g_m}{C_1 + C_L R_3 g_m + C_L R_L g_m} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.8 INVALID-NUMER-8 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 R_3 s + C_3 R_L s + 1)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_3 \sqrt{\frac{g_m}{C_1 C_3 (R_3 + R_L)}} (R_3 + R_L)}{C_1 + C_3 R_3 g_m + C_3 R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 C_3 (R_3 + R_L)}} \\ \text{bandwidth: } & \frac{C_1 + C_3 R_3 g_m + C_3 R_L g_m}{C_1 C_3 (R_3 + R_L)} \\ \text{K-LP: } & R_L \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_3 R_3 R_L g_m}{C_1 + C_3 R_3 g_m + C_3 R_L g_m} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.9 INVALID-NUMER-9 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_L R_3 s + C_L R_L s + 1)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_1 C_L R_1 \sqrt{\frac{R_1 g_m + 1}{C_1 C_L R_1 (R_3 + R_L)}} (R_3 + R_L)}{C_1 R_1 + C_L R_1 R_3 g_m + C_L R_1 R_L g_m + C_L R_3 + C_L R_L} \\
\text{wo: } & \sqrt{\frac{R_1 g_m + 1}{C_1 C_L R_1 (R_3 + R_L)}} \\
\text{bandwidth: } & \frac{C_1 R_1 + C_L R_1 R_3 g_m + C_L R_1 R_L g_m + C_L R_3 + C_L R_L}{C_1 C_L R_1 (R_3 + R_L)} \\
\text{K-LP: } & \frac{R_1 R_3 g_m}{R_1 g_m + 1} \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{C_L R_1 R_3 R_L g_m}{C_1 R_1 + C_L R_1 R_3 g_m + C_L R_1 R_L g_m + C_L R_3 + C_L R_L} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

8.10 INVALID-NUMER-10 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 R_3 s + C_3 R_L s + 1)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_1 C_3 R_1 \sqrt{\frac{R_1 g_m + 1}{C_1 C_3 R_1 (R_3 + R_L)}} (R_3 + R_L)}{C_1 R_1 + C_3 R_1 R_3 g_m + C_3 R_1 R_L g_m + C_3 R_3 + C_3 R_L} \\
\text{wo: } & \sqrt{\frac{R_1 g_m + 1}{C_1 C_3 R_1 (R_3 + R_L)}} \\
\text{bandwidth: } & \frac{C_1 R_1 + C_3 R_1 R_3 g_m + C_3 R_1 R_L g_m + C_3 R_3 + C_3 R_L}{C_1 C_3 R_1 (R_3 + R_L)} \\
\text{K-LP: } & \frac{R_1 R_L g_m}{R_1 g_m + 1} \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{C_3 R_1 R_3 R_L g_m}{C_1 R_1 + C_3 R_1 R_3 g_m + C_3 R_1 R_L g_m + C_3 R_3 + C_3 R_L} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

8.11 INVALID-NUMER-11 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1)}{(C_L R_3 s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_L R_3 \sqrt{\frac{g_m}{C_1 C_L R_3 (R_1 g_m + 1)}} (R_1 g_m + 1)}{C_1 R_1 g_m + C_1 + C_L R_3 g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 C_L R_3 (R_1 g_m + 1)}} \\ \text{bandwidth: } & \frac{C_1 R_1 g_m + C_1 + C_L R_3 g_m}{C_1 C_L R_3 (R_1 g_m + 1)} \\ \text{K-LP: } & R_3 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_1 R_1 R_3 g_m}{C_1 R_1 g_m + C_1 + C_L R_3 g_m} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{8.12 \quad INVALID-NUMER-12} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_L R_3 R_L \sqrt{\frac{g_m (R_3 + R_L)}{C_1 C_L R_3 R_L (R_1 g_m + 1)}} (R_1 g_m + 1)}{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_L R_3 R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m (R_3 + R_L)}{C_1 C_L R_3 R_L (R_1 g_m + 1)}} \\ \text{bandwidth: } & \frac{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_L R_3 R_L g_m}{C_1 C_L R_3 R_L (R_1 g_m + 1)} \\ \text{K-LP: } & \frac{R_3 R_L}{R_3 + R_L} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_1 R_1 R_3 R_L g_m}{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_L R_3 R_L g_m} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{8.13 \quad INVALID-NUMER-13} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1)}{(C_3 R_L s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_3 R_L \sqrt{\frac{g_m}{C_1 C_3 R_L (R_1 g_m + 1)}} (R_1 g_m + 1)}{C_1 R_1 g_m + C_1 + C_3 R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 C_3 R_L (R_1 g_m + 1)}} \\ \text{bandwidth: } & \frac{C_1 R_1 g_m + C_1 + C_3 R_L g_m}{C_1 C_3 R_L (R_1 g_m + 1)} \\ \text{K-LP: } & R_L \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_1 R_1 R_L g_m}{C_1 R_1 g_m + C_1 + C_3 R_L g_m} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{8.14 \quad INVALID-NUMER-14} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1)}{(C_3 R_L s + C_L R_L s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 R_L \sqrt{\frac{g_m}{C_1 R_L (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}} (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}{C_1 R_1 g_m + C_1 + C_3 R_L g_m + C_L R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 R_L (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}} \\ \text{bandwidth: } & \frac{C_1 R_1 g_m + C_1 + C_3 R_L g_m + C_L R_L g_m}{C_1 R_L (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)} \\ \text{K-LP: } & R_L \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_1 R_1 R_L g_m}{C_1 R_1 g_m + C_1 + C_3 R_L g_m + C_L R_L g_m} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{8.15 \quad INVALID-NUMER-15} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 R_3 R_L s + R_3 + R_L)}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_1 C_3 R_3 R_L \sqrt{\frac{g_m (R_3 + R_L)}{C_1 C_3 R_3 R_L (R_1 g_m + 1)}} (R_1 g_m + 1)}{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m} \\
wo: & \sqrt{\frac{g_m (R_3 + R_L)}{C_1 C_3 R_3 R_L (R_1 g_m + 1)}} \\
bandwidth: & \frac{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m}{C_1 C_3 R_3 R_L (R_1 g_m + 1)} \\
K-LP: & \frac{R_3 R_L}{R_3 + R_L} \\
K-HP: & 0 \\
K-BP: & \frac{C_1 R_1 R_3 R_L g_m}{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

8.16 INVALID-NUMER-16 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1)}{(C_3 R_3 s + C_L R_3 s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_1 R_3 \sqrt{\frac{g_m}{C_1 R_3 (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}} (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}{C_1 R_1 g_m + C_1 + C_3 R_3 g_m + C_L R_3 g_m} \\
wo: & \sqrt{\frac{g_m}{C_1 R_3 (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}} \\
bandwidth: & \frac{C_1 R_1 g_m + C_1 + C_3 R_3 g_m + C_L R_3 g_m}{C_1 R_3 (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)} \\
K-LP: & R_3 \\
K-HP: & 0 \\
K-BP: & \frac{C_1 R_1 R_3 g_m}{C_1 R_1 g_m + C_1 + C_3 R_3 g_m + C_L R_3 g_m} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

8.17 INVALID-NUMER-17 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_1 R_3 R_L \sqrt{\frac{g_m (R_3 + R_L)}{C_1 R_3 R_L (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}} (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m} \\
\text{wo: } & \sqrt{\frac{g_m (R_3 + R_L)}{C_1 R_3 R_L (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)}} \\
\text{bandwidth: } & \frac{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m}{C_1 R_3 R_L (C_3 R_1 g_m + C_3 + C_L R_1 g_m + C_L)} \\
\text{K-LP: } & \frac{R_3 R_L}{R_3 + R_L} \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{C_1 R_1 R_3 R_L g_m}{C_1 R_1 R_3 g_m + C_1 R_1 R_L g_m + C_1 R_3 + C_1 R_L + C_3 R_3 R_L g_m + C_L R_3 R_L g_m} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

9 INVALID-WZ

9.1 INVALID-WZ-1 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1) (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_3 C_L L_1 g_m \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 g_m (R_3 + R_L)}} (R_3 + R_L)}{C_3 C_L R_3 + C_3 C_L R_L + C_3 L_1 g_m + C_L L_1 g_m} \\
\text{wo: } & \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 g_m (R_3 + R_L)}} \\
\text{bandwidth: } & \frac{C_3 C_L R_3 + C_3 C_L R_L + C_3 L_1 g_m + C_L L_1 g_m}{C_3 C_L L_1 g_m (R_3 + R_L)} \\
\text{K-LP: } & \frac{L_1 g_m}{C_3 + C_L} \\
\text{K-HP: } & \frac{R_3 R_L}{R_3 + R_L} \\
\text{K-BP: } & \frac{L_1 g_m (C_3 R_3 + C_L R_L)}{C_3 C_L R_3 + C_3 C_L R_L + C_3 L_1 g_m + C_L L_1 g_m} \\
\text{QZ: } & \frac{C_3 C_L R_3 R_L \sqrt{\frac{C_3 + C_L}{C_3 C_L L_1 g_m (R_3 + R_L)}}}{C_3 R_3 + C_L R_L} \\
\text{Wz: } & \sqrt{\frac{1}{C_3 C_L R_3 R_L}}
\end{aligned}$$

9.2 INVALID-WZ-2 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L R_L s + 1)}{(C_L R_3 s + C_L R_L s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_L \sqrt{\frac{g_m}{C_1 C_L (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}} (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}{C_1 R_1 g_m + C_1 + C_L R_3 g_m + C_L R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 C_L (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}} \\ \text{bandwidth: } & \frac{C_1 R_1 g_m + C_1 + C_L R_3 g_m + C_L R_L g_m}{C_1 C_L (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)} \\ \text{K-LP: } & R_3 \\ \text{K-HP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\ \text{K-BP: } & \frac{R_3 g_m (C_1 R_1 + C_L R_L)}{C_1 R_1 g_m + C_1 + C_L R_3 g_m + C_L R_L g_m} \\ \text{QZ: } & \frac{C_1 C_L R_1 R_L \sqrt{\frac{g_m}{C_1 C_L (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}}}{C_1 R_1 + C_L R_L} \\ \text{Wz: } & \sqrt{\frac{1}{C_1 C_L R_1 R_L}} \end{aligned}$$

9.3 INVALID-WZ-3 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1)}{(C_3 R_3 s + C_3 R_L s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_3 \sqrt{\frac{g_m}{C_1 C_3 (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}} (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}{C_1 R_1 g_m + C_1 + C_3 R_3 g_m + C_3 R_L g_m} \\ \text{wo: } & \sqrt{\frac{g_m}{C_1 C_3 (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}} \\ \text{bandwidth: } & \frac{C_1 R_1 g_m + C_1 + C_3 R_3 g_m + C_3 R_L g_m}{C_1 C_3 (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)} \\ \text{K-LP: } & R_L \\ \text{K-HP: } & \frac{R_1 R_3 R_L g_m}{R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L} \\ \text{K-BP: } & \frac{R_L g_m (C_1 R_1 + C_3 R_3)}{C_1 R_1 g_m + C_1 + C_3 R_3 g_m + C_3 R_L g_m} \\ \text{QZ: } & \frac{C_1 C_3 R_1 R_3 \sqrt{\frac{g_m}{C_1 C_3 (R_1 R_3 g_m + R_1 R_L g_m + R_3 + R_L)}}}{C_1 R_1 + C_3 R_3} \end{aligned}$$

$$W_Z: \sqrt{\frac{1}{C_1 C_3 R_1 R_3}}$$

10 INVALID-ORDER

10.1 INVALID-ORDER-1 $Z(s) = (R_1, \infty, R_3, \infty, \infty, R_L)$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(R_3 + R_L)(R_1 g_m + 1)}$$

10.2 INVALID-ORDER-2 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 R_3 g_m}{(R_1 g_m + 1)(C_L R_3 s + 1)}$$

10.3 INVALID-ORDER-3 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(R_1 g_m + 1)(C_L R_3 R_L s + R_3 + R_L)}$$

10.4 INVALID-ORDER-4 $Z(s) = \left(R_1, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L R_L s + 1)}{(R_1 g_m + 1)(C_L R_3 s + C_L R_L s + 1)}$$

10.5 INVALID-ORDER-5 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L\right)$

$$H(s) = \frac{R_1 R_L g_m}{(R_1 g_m + 1)(C_3 R_L s + 1)}$$

10.6 INVALID-ORDER-6 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m}{s (C_3 + C_L) (R_1 g_m + 1)}$$

10.7 INVALID-ORDER-7 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m}{(R_1 g_m + 1) (C_3 R_L s + C_L R_L s + 1)}$$

10.8 INVALID-ORDER-8 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L R_L s + 1)}{s (R_1 g_m + 1) (C_3 C_L R_L s + C_3 + C_L)}$$

10.9 INVALID-ORDER-9 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + 1)}{s (R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.10 INVALID-ORDER-10 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s}{(R_1 g_m + 1) (C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.11 INVALID-ORDER-11 $Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + C_L R_L s + 1)}{s (R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

$$10.12 \quad \text{INVALID-ORDER-12} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.13 \quad \text{INVALID-ORDER-13} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.14 \quad \text{INVALID-ORDER-14} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(R_1 g_m + 1) (C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.15 \quad \text{INVALID-ORDER-15} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m}{(R_1 g_m + 1) (C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.16 \quad \text{INVALID-ORDER-16} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(R_1 g_m + 1) (C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.17 \quad \text{INVALID-ORDER-17} \quad Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.18 INVALID-ORDER-18 $Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.19 INVALID-ORDER-19 $Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.20 INVALID-ORDER-20 $Z(s) = \left(R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.21 INVALID-ORDER-21 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 R_3 s + 1)}{(R_1 g_m + 1) (C_3 R_3 s + C_3 R_L s + 1)}$$

10.22 INVALID-ORDER-22 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1)}{s (R_1 g_m + 1) (C_3 C_L R_3 s + C_3 + C_L)}$$

10.23 INVALID-ORDER-23 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L R_L s + 1)}{s (R_1 g_m + 1) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.24 INVALID-ORDER-24 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{s (R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.25 INVALID-ORDER-25 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_3 R_3 s + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.26 INVALID-ORDER-26 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.27 INVALID-ORDER-27 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_3 R_3 s + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.28 INVALID-ORDER-28 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.29 INVALID-ORDER-29 $Z(s) = \left(R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.30 INVALID-ORDER-30 $Z(s) = \left(R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1)}{s (R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

10.31 INVALID-ORDER-31 $Z(s) = \left(R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.32 INVALID-ORDER-32 $Z(s) = \left(R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{s (R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.33 INVALID-ORDER-33 $Z(s) = \left(R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{s (R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.34 INVALID-ORDER-34 $Z(s) = \left(R_1, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_LR_1g_ms(C_3L_3s^2+1)}{(R_1g_m+1)(C_3C_LL_3L_Ls^4+C_3L_3s^2+C_3L_Ls^2+C_LL_Ls^2+1)}$$

10.35 INVALID-ORDER-35 $Z(s) = \left(R_1, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{R_1g_m(C_3L_3s^2+1)(C_LL_Ls^2+C_LR_Ls+1)}{s(R_1g_m+1)(C_3C_LL_3s^2+C_3C_LL_Ls^2+C_3C_LR_Ls+C_3+C_L)}$$

10.36 INVALID-ORDER-36 $Z(s) = \left(R_1, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_LR_1R_Lg_ms(C_3L_3s^2+1)}{(R_1g_m+1)(C_3C_LL_3L_LR_Ls^4+C_3L_3L_Ls^3+C_3L_3R_Ls^2+C_3L_LR_Ls^2+C_LL_LR_Ls^2+L_Ls+R_L)}$$

10.37 INVALID-ORDER-37 $Z(s) = \left(R_1, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{R_1g_m(C_3L_3s^2+1)(C_LL_LR_Ls^2+L_Ls+R_L)}{(R_1g_m+1)(C_3C_LL_3L_Ls^4+C_3C_LL_LR_Ls^3+C_3L_3s^2+C_3L_Ls^2+C_3R_Ls+C_LL_Ls^2+1)}$$

10.38 INVALID-ORDER-38 $Z(s) = \left(R_1, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_1R_Lg_m(C_3L_3s^2+1)(C_LL_Ls^2+1)}{(R_1g_m+1)(C_3C_LL_3L_Ls^4+C_3C_LL_3R_Ls^3+C_3C_LL_LR_Ls^3+C_3L_3s^2+C_3R_Ls+C_LL_Ls^2+C_LR_Ls+1)}$$

10.39 INVALID-ORDER-39 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 g_m s}{(R_1 g_m + 1)(C_3 L_3 s^2 + C_L L_3 s^2 + 1)}$$

10.40 INVALID-ORDER-40 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_L R_L s + 1)}{(R_1 g_m + 1)(C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.41 INVALID-ORDER-41 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_L L_L s^2 + 1)}{(R_1 g_m + 1)(C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.42 INVALID-ORDER-42 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L R_1 g_m s}{(R_1 g_m + 1)(C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.43 INVALID-ORDER-43 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(R_1 g_m + 1)(C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.44 INVALID-ORDER-44 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1)(C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

10.45 INVALID-ORDER-45 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_3 R_1 R_L g_m s (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

10.46 INVALID-ORDER-46 $Z(s) = \left(R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.47 INVALID-ORDER-47 $Z(s) = \left(R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.48 INVALID-ORDER-48 $Z(s) = \left(R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.49 INVALID-ORDER-49 $Z(s) = \left(R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.50 INVALID-ORDER-50 $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_LR_1g_ms(C_3L_3s^2 + C_3R_3s + 1)}{(R_1g_m + 1)(C_3C_LL_3L_Ls^4 + C_3C_LL_LR_3s^3 + C_3L_3s^2 + C_3L_Ls^2 + C_3R_3s + C_LL_Ls^2 + 1)}$$

10.51 INVALID-ORDER-51 $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{R_1g_m(C_3L_3s^2 + C_3R_3s + 1)(C_LL_Ls^2 + C_LR_Ls + 1)}{s(R_1g_m + 1)(C_3C_LL_3s^2 + C_3C_LL_Ls^2 + C_3C_LR_3s + C_3C_LR_Ls + C_3 + C_L)}$$

10.52 INVALID-ORDER-52 $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_LR_1R_Lg_ms(C_3L_3s^2 + C_3R_3s + 1)}{(R_1g_m + 1)(C_3C_LL_3L_LR_Ls^4 + C_3C_LL_LR_3R_Ls^3 + C_3L_3L_Ls^3 + C_3L_3R_Ls^2 + C_3L_LR_3s^2 + C_3L_LR_Ls^2 + C_3R_3R_Ls + C_LL_LR_Ls^2 + L_Ls + R_L)}$$

10.53 INVALID-ORDER-53 $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{R_1g_m(C_3L_3s^2 + C_3R_3s + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)}{(R_1g_m + 1)(C_3C_LL_3L_Ls^4 + C_3C_LL_LR_3s^3 + C_3C_LL_LR_Ls^3 + C_3L_3s^2 + C_3L_Ls^2 + C_3R_3s + C_3R_Ls + C_LL_Ls^2 + 1)}$$

10.54 INVALID-ORDER-54 $Z(s) = \left(R_1, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_1R_Lg_m(C_LL_Ls^2 + 1)(C_3L_3s^2 + C_3R_3s + 1)}{(R_1g_m + 1)(C_3C_LL_3L_Ls^4 + C_3C_LL_3R_Ls^3 + C_3C_LL_LR_3s^3 + C_3C_LL_LR_Ls^3 + C_3C_LR_3R_Ls^2 + C_3L_3s^2 + C_3R_3s + C_3R_Ls + C_LL_Ls^2 + C_LR_Ls + 1)}$$

$$10.55 \quad \text{INVALID-ORDER-55} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L R_L s + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.56 \quad \text{INVALID-ORDER-56} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.57 \quad \text{INVALID-ORDER-57} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.58 \quad \text{INVALID-ORDER-58} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_3 R_L)}$$

$$10.59 \quad \text{INVALID-ORDER-59} \quad Z(s) = \left(R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.60 INVALID-ORDER-60 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

10.61 INVALID-ORDER-61 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.62 INVALID-ORDER-62 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.63 INVALID-ORDER-63 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.64 INVALID-ORDER-64 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.65 INVALID-ORDER-65 $Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.66 \quad \text{INVALID-ORDER-66} \quad Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.67 \quad \text{INVALID-ORDER-67} \quad Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.68 \quad \text{INVALID-ORDER-68} \quad Z(s) = \left(R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.69 \quad \text{INVALID-ORDER-69} \quad Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.70 \quad \text{INVALID-ORDER-70} \quad Z(s) = \left(R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.71 \quad \text{INVALID-ORDER-71} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.72 \quad \text{INVALID-ORDER-72} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.73 \quad \text{INVALID-ORDER-73} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_3 g_m s (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.74 \quad \text{INVALID-ORDER-74} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.75 \quad \text{INVALID-ORDER-75} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.76 \quad \text{INVALID-ORDER-76} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.77 \quad \text{INVALID-ORDER-77} \quad Z(s) = \left(R_1, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + L_L s + R_L)}$$

$$10.78 \quad \text{INVALID-ORDER-78} \quad Z(s) = (L_1 s, \infty, R_3, \infty, \infty, R_L)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(R_3 + R_L) (L_1 g_m s + 1)}$$

$$10.79 \quad \text{INVALID-ORDER-79} \quad Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.80 \quad \text{INVALID-ORDER-80} \quad Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_3 g_m s^2}{(L_1 g_m s + 1) (C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.81 INVALID-ORDER-81 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.82 INVALID-ORDER-82 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_3 R_L g_m s^2}{(L_1 g_m s + 1) (C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.83 INVALID-ORDER-83 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.84 INVALID-ORDER-84 $Z(s) = \left(L_1 s, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.85 INVALID-ORDER-85 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m}{(C_3 + C_L) (L_1 g_m s + 1)}$$

10.86 INVALID-ORDER-86 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.87 INVALID-ORDER-87 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.88 INVALID-ORDER-88 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.89 INVALID-ORDER-89 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.90 INVALID-ORDER-90 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.91 INVALID-ORDER-91 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.92 INVALID-ORDER-92 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.93 INVALID-ORDER-93 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.94 INVALID-ORDER-94 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_3 g_m s^2}{(L_1 g_m s + 1) (C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.95 INVALID-ORDER-95 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.96 INVALID-ORDER-96 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_3 R_L g_m s^2}{(L_1 g_m s + 1)(C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.97 INVALID-ORDER-97 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1)(C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.98 INVALID-ORDER-98 $Z(s) = \left(L_1 s, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(L_1 g_m s + 1)(C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.99 INVALID-ORDER-99 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 R_3 s + 1)}{(L_1 g_m s + 1)(C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.100 INVALID-ORDER-100 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(L_1 g_m s + 1)(C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.101 INVALID-ORDER-101 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.102 INVALID-ORDER-102 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.103 INVALID-ORDER-103 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.104 INVALID-ORDER-104 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.105 INVALID-ORDER-105 $Z(s) = \left(L_1 s, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.106 INVALID-ORDER-106 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 L_3 s^2 + C_3 R_L s + 1)}$$

10.107 INVALID-ORDER-107 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

10.108 INVALID-ORDER-108 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.109 INVALID-ORDER-109 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.110 INVALID-ORDER-110 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.111 INVALID-ORDER-111 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.112 INVALID-ORDER-112 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.113 INVALID-ORDER-113 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.114 INVALID-ORDER-114 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.115 INVALID-ORDER-115 $Z(s) = \left(L_1 s, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.116 INVALID-ORDER-116 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_3 R_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 R_L s^2 + L_3 s + R_L)}$$

10.117 INVALID-ORDER-117 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2}{(L_1 g_m s + 1)(C_3 L_3 s^2 + C_L L_3 s^2 + 1)}$$

10.118 INVALID-ORDER-118 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 L_3 R_L g_m s^2}{(L_1 g_m s + 1)(C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.119 INVALID-ORDER-119 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L R_L s + 1)}{(L_1 g_m s + 1)(C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.120 INVALID-ORDER-120 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L L_L s^2 + 1)}{(L_1 g_m s + 1)(C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.121 INVALID-ORDER-121 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_3 L_L g_m s^2}{(L_1 g_m s + 1)(C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.122 INVALID-ORDER-122 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1)(C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.123 INVALID-ORDER-123 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

10.124 INVALID-ORDER-124 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

10.125 INVALID-ORDER-125 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 L_3 R_L g_m s^2 (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

10.126 INVALID-ORDER-126 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1)}$$

10.127 INVALID-ORDER-127 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.128 INVALID-ORDER-128 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.129 INVALID-ORDER-129 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.130 INVALID-ORDER-130 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.131 INVALID-ORDER-131 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.132 INVALID-ORDER-132 $Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

$$10.133 \quad \text{INVALID-ORDER-133} \quad Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.134 \quad \text{INVALID-ORDER-134} \quad Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.135 \quad \text{INVALID-ORDER-135} \quad Z(s) = \left(L_1 s, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_L g_m s (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.136 \quad \text{INVALID-ORDER-136} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 L_3 R_3 R_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.137 \quad \text{INVALID-ORDER-137} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

$$10.138 \quad \text{INVALID-ORDER-138} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 L_3 R_3 R_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.139 \quad \text{INVALID-ORDER-139} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.140 \quad \text{INVALID-ORDER-140} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.141 \quad \text{INVALID-ORDER-141} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_3 L_L R_3 g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.142 \quad \text{INVALID-ORDER-142} \quad Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.143 INVALID-ORDER-143 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_3 R_L g_m s^2}{(L_1 g_m s + 1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

10.144 INVALID-ORDER-144 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_3 R_L)}$$

10.145 INVALID-ORDER-145 $Z(s) = \left(L_1 s, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 L_3 R_3 R_L g_m s^2 (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.146 INVALID-ORDER-146 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

10.147 INVALID-ORDER-147 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

10.148 INVALID-ORDER-148 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.149 INVALID-ORDER-149 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.150 INVALID-ORDER-150 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.151 INVALID-ORDER-151 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.152 INVALID-ORDER-152 $Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.153 \quad \text{INVALID-ORDER-153} \quad Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.154 \quad \text{INVALID-ORDER-154} \quad Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.155 \quad \text{INVALID-ORDER-155} \quad Z(s) = \left(L_1 s, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_L g_m s (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + L_3 s)}$$

$$10.156 \quad \text{INVALID-ORDER-156} \quad Z(s) = \left(L_1 s, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.157 \quad \text{INVALID-ORDER-157} \quad Z(s) = \left(L_1 s, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.158 \quad \text{INVALID-ORDER-158} \quad Z(s) = \left(L_1 s, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.159 \quad \text{INVALID-ORDER-159} \quad Z(s) = \left(L_1 s, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.160 \quad \text{INVALID-ORDER-160} \quad Z(s) = \left(L_1 s, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.161 \quad \text{INVALID-ORDER-161} \quad Z(s) = \left(L_1 s, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_3 g_m s^2 (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.162 \quad \text{INVALID-ORDER-162} \quad Z(s) = \left(L_1 s, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.163 \quad \text{INVALID-ORDER-163} \quad Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_3 R_L g_m s^2 (C_3 L_3 s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.164 \quad \text{INVALID-ORDER-164} \quad Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.165 \quad \text{INVALID-ORDER-165} \quad Z(s) = \left(L_1 s, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_L)}$$

$$10.166 \quad \text{INVALID-ORDER-166} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m}{(R_3 + R_L) (C_1 s + g_m)}$$

$$10.167 \quad \text{INVALID-ORDER-167} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_L L_L s^2 + C_L R_3 s + 1)}$$

10.168 INVALID-ORDER-168 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s}{(C_1 s + g_m)(C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.169 INVALID-ORDER-169 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 s + g_m)(C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.170 INVALID-ORDER-170 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s}{(C_1 s + g_m)(C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.171 INVALID-ORDER-171 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m)(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.172 INVALID-ORDER-172 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_L L_L s^2 + 1)}{(C_1 s + g_m)(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.173 INVALID-ORDER-173 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m}{s(C_3 + C_L)(C_1 s + g_m)}$$

10.174 INVALID-ORDER-174 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L R_L s + 1)}{s(C_1 s + g_m)(C_3 C_L R_L s + C_3 + C_L)}$$

10.175 INVALID-ORDER-175 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1)}{s(C_1 s + g_m)(C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.176 INVALID-ORDER-176 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s}{(C_1 s + g_m)(C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.177 INVALID-ORDER-177 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + C_L R_L s + 1)}{s(C_1 s + g_m)(C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.178 INVALID-ORDER-178 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s}{(C_1 s + g_m)(C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.179 INVALID-ORDER-179 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.180 INVALID-ORDER-180 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.181 INVALID-ORDER-181 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.182 INVALID-ORDER-182 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.183 INVALID-ORDER-183 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s}{(C_1 s + g_m) (C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.184 **INVALID-ORDER-184** $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.185 **INVALID-ORDER-185** $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s}{(C_1 s + g_m) (C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.186 **INVALID-ORDER-186** $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.187 **INVALID-ORDER-187** $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.188 **INVALID-ORDER-188** $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1)}{s (C_1 s + g_m) (C_3 C_L R_3 s + C_3 + C_L)}$$

10.189 INVALID-ORDER-189 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.190 INVALID-ORDER-190 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L R_L s + 1)}{s (C_1 s + g_m) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.191 INVALID-ORDER-191 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{s (C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.192 INVALID-ORDER-192 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.193 INVALID-ORDER-193 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.194 INVALID-ORDER-194 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.195 INVALID-ORDER-195 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.196 INVALID-ORDER-196 $Z(s) = \left(\frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.197 INVALID-ORDER-197 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 L_3 s^2 + C_3 R_L s + 1)}$$

10.198 INVALID-ORDER-198 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

10.199 INVALID-ORDER-199 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.200 INVALID-ORDER-200 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.201 INVALID-ORDER-201 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.202 INVALID-ORDER-202 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.203 INVALID-ORDER-203 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.204 INVALID-ORDER-204 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.205 INVALID-ORDER-205 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.206 INVALID-ORDER-206 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.207 INVALID-ORDER-207 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_L g_m s}{(C_1 s + g_m) (C_3 L_3 R_L s^2 + L_3 s + R_L)}$$

10.208 INVALID-ORDER-208 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s}{(C_1 s + g_m) (C_3 L_3 s^2 + C_L L_3 s^2 + 1)}$$

10.209 INVALID-ORDER-209 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_L g_m s}{(C_1 s + g_m) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.210 INVALID-ORDER-210 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.211 INVALID-ORDER-211 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.212 INVALID-ORDER-212 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L g_m s}{(C_1 s + g_m) (C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.213 INVALID-ORDER-213 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.214 INVALID-ORDER-214 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_L g_m s}{(C_1 s + g_m) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

10.215 INVALID-ORDER-215 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

10.216 INVALID-ORDER-216 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

10.217 INVALID-ORDER-217 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1)}$$

10.218 INVALID-ORDER-218 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.219 INVALID-ORDER-219 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.220 INVALID-ORDER-220 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.221 INVALID-ORDER-221 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.222 INVALID-ORDER-222 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.223 INVALID-ORDER-223 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.224 INVALID-ORDER-224 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.225 INVALID-ORDER-225 $Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.226 \quad \text{INVALID-ORDER-226} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.227 \quad \text{INVALID-ORDER-227} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s}{(C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.228 \quad \text{INVALID-ORDER-228} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s}{(C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

$$10.229 \quad \text{INVALID-ORDER-229} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s}{(C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.230 \quad \text{INVALID-ORDER-230} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.231 INVALID-ORDER-231 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_3 g_m s (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

10.232 INVALID-ORDER-232 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L R_3 g_m s}{(C_1 s + g_m) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

10.233 INVALID-ORDER-233 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.234 INVALID-ORDER-234 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_3 R_L g_m s}{(C_1 s + g_m) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

10.235 INVALID-ORDER-235 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_3 R_L)}$$

10.236 INVALID-ORDER-236 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.237 INVALID-ORDER-237 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

10.238 INVALID-ORDER-238 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

10.239 INVALID-ORDER-239 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.240 INVALID-ORDER-240 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.241 INVALID-ORDER-241 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.242 INVALID-ORDER-242 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.243 INVALID-ORDER-243 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.244 INVALID-ORDER-244 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.245 INVALID-ORDER-245 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.246 \quad \text{INVALID-ORDER-246} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.247 \quad \text{INVALID-ORDER-247} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.248 \quad \text{INVALID-ORDER-248} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.249 \quad \text{INVALID-ORDER-249} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.250 \quad \text{INVALID-ORDER-250} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.251 \quad \text{INVALID-ORDER-251} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.252 \quad \text{INVALID-ORDER-252} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_3 g_m s (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.253 \quad \text{INVALID-ORDER-253} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.254 \quad \text{INVALID-ORDER-254} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.255 \quad \text{INVALID-ORDER-255} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.256 \quad \text{INVALID-ORDER-256} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + C_L R_L s)}$$

$$10.257 \quad \text{INVALID-ORDER-257} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m}{(R_3 + R_L) (C_1 R_1 s + R_1 g_m + 1)}$$

$$10.258 \quad \text{INVALID-ORDER-258} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.259 \quad \text{INVALID-ORDER-259} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_3 g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.260 \quad \text{INVALID-ORDER-260} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.261 INVALID-ORDER-261 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1)(C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.262 INVALID-ORDER-262 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1)(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.263 INVALID-ORDER-263 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1)(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.264 INVALID-ORDER-264 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m}{s (C_3 + C_L) (C_1 R_1 s + R_1 g_m + 1)}$$

10.265 INVALID-ORDER-265 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L R_L s + C_3 + C_L)}$$

10.266 INVALID-ORDER-266 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.267 INVALID-ORDER-267 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.268 INVALID-ORDER-268 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.269 INVALID-ORDER-269 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.270 INVALID-ORDER-270 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.271 INVALID-ORDER-271 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.272 INVALID-ORDER-272 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.273 INVALID-ORDER-273 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.274 INVALID-ORDER-274 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 R_3 g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.275 INVALID-ORDER-275 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.276 INVALID-ORDER-276 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1)(C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.277 INVALID-ORDER-277 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1)(C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.278 INVALID-ORDER-278 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1)(C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.279 INVALID-ORDER-279 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1)}{s (C_1 R_1 s + R_1 g_m + 1)(C_3 C_L R_3 s + C_3 + C_L)}$$

10.280 INVALID-ORDER-280 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1)(C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.281 INVALID-ORDER-281 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.282 INVALID-ORDER-282 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.283 INVALID-ORDER-283 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.284 INVALID-ORDER-284 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.285 INVALID-ORDER-285 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.286 INVALID-ORDER-286 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.287 \quad \text{INVALID-ORDER-287} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.288 \quad \text{INVALID-ORDER-288} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 s^2 + C_3 R_L s + 1)}$$

$$10.289 \quad \text{INVALID-ORDER-289} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

$$10.290 \quad \text{INVALID-ORDER-290} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

$$10.291 \quad \text{INVALID-ORDER-291} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.292 INVALID-ORDER-292 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.293 INVALID-ORDER-293 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.294 INVALID-ORDER-294 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.295 INVALID-ORDER-295 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.296 INVALID-ORDER-296 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.297 \quad \text{INVALID-ORDER-297} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.298 \quad \text{INVALID-ORDER-298} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_1 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_L s^2 + L_3 s + R_L)}$$

$$10.299 \quad \text{INVALID-ORDER-299} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 s^2 + C_L L_3 s^2 + 1)}$$

$$10.300 \quad \text{INVALID-ORDER-300} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_1 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

$$10.301 \quad \text{INVALID-ORDER-301} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 g_m s (C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

$$10.302 \quad \text{INVALID-ORDER-302} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 g_m s (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.303 INVALID-ORDER-303 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L R_1 g_m s}{(C_1 R_1 s + R_1 g_m + 1)(C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.304 INVALID-ORDER-304 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1)(C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.305 INVALID-ORDER-305 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_1 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1)(C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

10.306 INVALID-ORDER-306 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1)(C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

10.307 INVALID-ORDER-307 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_3 R_1 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1)(C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

10.308 INVALID-ORDER-308 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1)}$$

10.309 INVALID-ORDER-309 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.310 INVALID-ORDER-310 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.311 INVALID-ORDER-311 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.312 INVALID-ORDER-312 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.313 INVALID-ORDER-313 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.314 INVALID-ORDER-314 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.315 INVALID-ORDER-315 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.316 INVALID-ORDER-316 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.317 INVALID-ORDER-317 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.318 INVALID-ORDER-318 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.319 \quad \text{INVALID-ORDER-319} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

$$10.320 \quad \text{INVALID-ORDER-320} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.321 \quad \text{INVALID-ORDER-321} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.322 \quad \text{INVALID-ORDER-322} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.323 \quad \text{INVALID-ORDER-323} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_1 R_3 g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.324 \quad \text{INVALID-ORDER-324} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.325 \quad \text{INVALID-ORDER-325} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_3 L_L R_1 R_3 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

$$10.326 \quad \text{INVALID-ORDER-326} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_3 R_L)}$$

$$10.327 \quad \text{INVALID-ORDER-327} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.328 \quad \text{INVALID-ORDER-328} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

10.329 INVALID-ORDER-329 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

10.330 INVALID-ORDER-330 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.331 INVALID-ORDER-331 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.332 INVALID-ORDER-332 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.333 INVALID-ORDER-333 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.334 INVALID-ORDER-334 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.335 \quad \text{INVALID-ORDER-335} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.336 \quad \text{INVALID-ORDER-336} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 g_m (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.337 \quad \text{INVALID-ORDER-337} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L)}$$

$$10.338 \quad \text{INVALID-ORDER-338} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.339 \quad \text{INVALID-ORDER-339} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.340 \quad \text{INVALID-ORDER-340} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.341 \quad \text{INVALID-ORDER-341} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.342 \quad \text{INVALID-ORDER-342} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.343 \quad \text{INVALID-ORDER-343} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_3 g_m s (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.344 \quad \text{INVALID-ORDER-344} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.345 \quad \text{INVALID-ORDER-345} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.346 \quad \text{INVALID-ORDER-346} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L L_L R_L s^2)}$$

$$10.347 \quad \text{INVALID-ORDER-347} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L L_L R_L s^2)}$$

$$10.348 \quad \text{INVALID-ORDER-348} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1)}{(R_3 + R_L) (C_1 R_1 g_m s + C_1 s + g_m)}$$

$$10.349 \quad \text{INVALID-ORDER-349} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_L L_L s^2 + C_L R_3 s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

10.350 INVALID-ORDER-350 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.351 INVALID-ORDER-351 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.352 INVALID-ORDER-352 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.353 INVALID-ORDER-353 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.354 INVALID-ORDER-354 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.355 INVALID-ORDER-355 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1)}{s (C_3 + C_L) (C_1 R_1 g_m s + C_1 s + g_m)}$$

10.356 INVALID-ORDER-356 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L R_L s + C_3 + C_L)}$$

10.357 INVALID-ORDER-357 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.358 INVALID-ORDER-358 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 R_1 s + 1)}{(C_3 L_L s^2 + C_L L_L s^2 + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

10.359 INVALID-ORDER-359 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.360 INVALID-ORDER-360 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.361 INVALID-ORDER-361 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.362 INVALID-ORDER-362 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.363 INVALID-ORDER-363 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.364 INVALID-ORDER-364 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.365 INVALID-ORDER-365 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.366 INVALID-ORDER-366 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.367 INVALID-ORDER-367 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.368 INVALID-ORDER-368 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.369 INVALID-ORDER-369 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.370 INVALID-ORDER-370 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L R_3 s + C_3 + C_L)}$$

10.371 INVALID-ORDER-371 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.372 INVALID-ORDER-372 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1) (C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.373 INVALID-ORDER-373 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.374 INVALID-ORDER-374 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 R_1 s + 1) (C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.375 INVALID-ORDER-375 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.376 INVALID-ORDER-376 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 R_1 s + 1) (C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.377 INVALID-ORDER-377 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.378 INVALID-ORDER-378 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.379 INVALID-ORDER-379 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_3 L_3 s^2 + C_3 R_L s + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

10.380 INVALID-ORDER-380 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

10.381 INVALID-ORDER-381 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.382 INVALID-ORDER-382 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.383 INVALID-ORDER-383 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.384 INVALID-ORDER-384 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.385 INVALID-ORDER-385 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.386 INVALID-ORDER-386 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.387 INVALID-ORDER-387 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.388 INVALID-ORDER-388 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.389 INVALID-ORDER-389 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_L s^2 + L_3 s + R_L)}$$

10.390 INVALID-ORDER-390 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 R_1 s + 1)}{(C_3 L_3 s^2 + C_L L_3 s^2 + 1) (C_1 R_1 g_m s + C_1 s + g_m)}$$

10.391 INVALID-ORDER-391 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.392 INVALID-ORDER-392 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 R_1 s + 1) (C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.393 INVALID-ORDER-393 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.394 INVALID-ORDER-394 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.395 INVALID-ORDER-395 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.396 INVALID-ORDER-396 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

10.397 INVALID-ORDER-397 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3 g_m s (C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

$$10.398 \quad \text{INVALID-ORDER-398} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_L g_m s (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

$$10.399 \quad \text{INVALID-ORDER-399} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1)}$$

$$10.400 \quad \text{INVALID-ORDER-400} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

$$10.401 \quad \text{INVALID-ORDER-401} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

$$10.402 \quad \text{INVALID-ORDER-402} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.403 INVALID-ORDER-403 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.404 INVALID-ORDER-404 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.405 INVALID-ORDER-405 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.406 INVALID-ORDER-406 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.407 INVALID-ORDER-407 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.408 INVALID-ORDER-408 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.409 INVALID-ORDER-409 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.410 INVALID-ORDER-410 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

10.411 INVALID-ORDER-411 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.412 INVALID-ORDER-412 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 R_1 s + 1) (C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.413 \quad \text{INVALID-ORDER-413} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.414 \quad \text{INVALID-ORDER-414} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_3 g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.415 \quad \text{INVALID-ORDER-415} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.416 \quad \text{INVALID-ORDER-416} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_3 L_L R_3 R_L g_m s (C_1 R_1 s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

$$10.417 \quad \text{INVALID-ORDER-417} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_L)}$$

$$10.418 \quad \text{INVALID-ORDER-418} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.419 \quad \text{INVALID-ORDER-419} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

$$10.420 \quad \text{INVALID-ORDER-420} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

$$10.421 \quad \text{INVALID-ORDER-421} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

$$10.422 \quad \text{INVALID-ORDER-422} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.423 INVALID-ORDER-423 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.424 INVALID-ORDER-424 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.425 INVALID-ORDER-425 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.426 INVALID-ORDER-426 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_L)}$$

10.427 INVALID-ORDER-427 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.428 \quad \text{INVALID-ORDER-428} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_1 R_1 s + 1) (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 s + R_L)}$$

$$10.429 \quad \text{INVALID-ORDER-429} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.430 \quad \text{INVALID-ORDER-430} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.431 \quad \text{INVALID-ORDER-431} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.432 \quad \text{INVALID-ORDER-432} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.433 \quad \text{INVALID-ORDER-433} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.434 \quad \text{INVALID-ORDER-434} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_3 g_m s (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.435 \quad \text{INVALID-ORDER-435} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.436 \quad \text{INVALID-ORDER-436} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.437 \quad \text{INVALID-ORDER-437} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_3 g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s)}$$

$$H(s) = \frac{R_3 R_L g_m (C_1 R_1 s + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_1 R_1 C_3 L_3 L_L R_3 s^4 + C_1 R_1 C_3 L_3 L_L R_L s^4 + C_1 R_1 C_3 L_3 R_3 R_L s^3 + C_1 R_1 C_3 L_L R_3 R_L s^3 + C_1 R_1 C_3 L_3 R_3 s^2 + C_1 R_1 C_3 L_3 R_L s^2 + C_1 R_1 C_3 R_3 R_L s + C_1 R_1 C_L L_L R_3 s^2 + C_1 R_1 C_L L_L R_L s^2 + C_1 R_1 C_L s + C_1 R_1 g_m s + C_1 s + g_m)}$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1)}{(C_L R_3 s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m)(C_L R_3 R_L s + R_3 + R_L)}$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_L R_3 s + C_L R_L s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_L L_L s^2 + C_L R_3 s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.443 INVALID-ORDER-443 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.444 INVALID-ORDER-444 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.445 INVALID-ORDER-445 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.446 INVALID-ORDER-446 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.447 INVALID-ORDER-447 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.448 INVALID-ORDER-448 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1)}{(C_3 R_L s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.449 INVALID-ORDER-449 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1)}{s (C_3 + C_L) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.450 INVALID-ORDER-450 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1)}{(C_3 R_L s + C_L R_L s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.451 INVALID-ORDER-451 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L R_L s + C_3 + C_L)}$$

10.452 INVALID-ORDER-452 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.453 INVALID-ORDER-453 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_L s^2 + C_L L_L s^2 + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.454 **INVALID-ORDER-454** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.455 **INVALID-ORDER-455** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.456 **INVALID-ORDER-456** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.457 **INVALID-ORDER-457** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.458 **INVALID-ORDER-458** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 R_3 R_L s + R_3 + R_L)}$$

10.459 INVALID-ORDER-459 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1)}{(C_3 R_3 s + C_L R_3 s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.460 INVALID-ORDER-460 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

10.461 INVALID-ORDER-461 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.462 INVALID-ORDER-462 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.463 INVALID-ORDER-463 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.464 INVALID-ORDER-464 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.465 INVALID-ORDER-465 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.466 INVALID-ORDER-466 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.467 INVALID-ORDER-467 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.468 INVALID-ORDER-468 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

10.469 INVALID-ORDER-469 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L R_3 s + C_3 + C_L)}$$

10.470 INVALID-ORDER-470 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.471 INVALID-ORDER-471 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.472 INVALID-ORDER-472 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.473 INVALID-ORDER-473 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.474 INVALID-ORDER-474 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

$$10.475 \quad \text{INVALID-ORDER-475} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.476 \quad \text{INVALID-ORDER-476} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.477 \quad \text{INVALID-ORDER-477} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.478 \quad \text{INVALID-ORDER-478} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_3 L_3 s^2 + C_3 R_L s + 1) (C_1 L_1 g_m s^2 + C_1 s + g_m)}$$

$$10.479 \quad \text{INVALID-ORDER-479} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

10.480 INVALID-ORDER-480 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.481 INVALID-ORDER-481 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.482 INVALID-ORDER-482 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.483 INVALID-ORDER-483 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.484 INVALID-ORDER-484 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.485 INVALID-ORDER-485 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_LR_Lg_ms(C_1L_1s^2 + 1)(C_3L_3s^2 + 1)}{(C_1L_1g_ms^2 + C_1s + g_m)(C_3C_LL_3L_LR_Ls^4 + C_3L_3L_Ls^3 + C_3L_3R_Ls^2 + C_3L_LR_Ls^2 + C_LL_LR_Ls^2 + L_Ls + R_L)}$$

10.486 INVALID-ORDER-486 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m(C_1L_1s^2 + 1)(C_3L_3s^2 + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)}{(C_1L_1g_ms^2 + C_1s + g_m)(C_3C_LL_3L_LR_Ls^4 + C_3C_LL_LR_Ls^3 + C_3L_3s^2 + C_3L_Ls^2 + C_3R_Ls + C_LL_Ls^2 + 1)}$$

10.487 INVALID-ORDER-487 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_Lg_m(C_1L_1s^2 + 1)(C_3L_3s^2 + 1)(C_LL_Ls^2 + 1)}{(C_1L_1g_ms^2 + C_1s + g_m)(C_3C_LL_3L_LR_Ls^4 + C_3C_LL_3R_Ls^3 + C_3C_LL_LR_Ls^3 + C_3L_3s^2 + C_3R_Ls + C_LL_Ls^2 + C_LR_Ls + 1)}$$

10.488 INVALID-ORDER-488 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3R_Lg_ms(C_1L_1s^2 + 1)}{(C_1L_1g_ms^2 + C_1s + g_m)(C_3L_3R_Ls^2 + L_3s + R_L)}$$

10.489 INVALID-ORDER-489 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_3g_ms(C_1L_1s^2 + 1)}{(C_3L_3s^2 + C_LL_3s^2 + 1)(C_1L_1g_ms^2 + C_1s + g_m)}$$

10.490 INVALID-ORDER-490 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.491 INVALID-ORDER-491 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.492 INVALID-ORDER-492 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.493 INVALID-ORDER-493 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.494 INVALID-ORDER-494 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.495 INVALID-ORDER-495 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_3L_LR_Lg_ms(C_1L_1s^2+1)}{(C_1L_1g_ms^2+C_1s+g_m)(C_3L_3L_LR_Ls^2+C_LL_3L_LR_Ls^2+L_3L_Ls+L_3R_L+L_LR_L)}$$

10.496 INVALID-ORDER-496 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{L_3g_ms(C_1L_1s^2+1)(C_LL_LR_Ls^2+L_Ls+R_L)}{(C_1L_1g_ms^2+C_1s+g_m)(C_3C_LL_3L_LR_Ls^4+C_3L_3L_Ls^3+C_3L_3R_Ls^2+C_LL_3L_Ls^3+C_LL_LR_Ls^2+L_3s+L_Ls+R_L)}$$

10.497 INVALID-ORDER-497 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{L_3R_Lg_ms(C_1L_1s^2+1)(C_LL_Ls^2+1)}{(C_1L_1g_ms^2+C_1s+g_m)(C_3C_LL_3L_LR_Ls^4+C_3L_3R_Ls^2+C_LL_3L_Ls^3+C_LL_3R_Ls^2+C_LL_LR_Ls^2+L_3s+R_L)}$$

10.498 INVALID-ORDER-498 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_Lg_m(C_1L_1s^2+1)(C_3L_3s^2+C_3R_3s+1)}{(C_1L_1g_ms^2+C_1s+g_m)(C_3L_3s^2+C_3R_3s+C_3R_Ls+1)}$$

10.499 INVALID-ORDER-499 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m(C_1L_1s^2+1)(C_3L_3s^2+C_3R_3s+1)}{s(C_1L_1g_ms^2+C_1s+g_m)(C_3C_LL_3s^2+C_3C_LR_3s+C_3+C_L)}$$

10.500 INVALID-ORDER-500 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.501 INVALID-ORDER-501 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.502 INVALID-ORDER-502 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.503 INVALID-ORDER-503 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.504 INVALID-ORDER-504 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

$$10.505 \quad \text{INVALID-ORDER-505} \quad Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.506 \quad \text{INVALID-ORDER-506} \quad Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.507 \quad \text{INVALID-ORDER-507} \quad Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.508 \quad \text{INVALID-ORDER-508} \quad Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.509 \quad \text{INVALID-ORDER-509} \quad Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

$$10.510 \quad \text{INVALID-ORDER-510} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.511 \quad \text{INVALID-ORDER-511} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.512 \quad \text{INVALID-ORDER-512} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.513 \quad \text{INVALID-ORDER-513} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.514 \quad \text{INVALID-ORDER-514} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.515 \quad \text{INVALID-ORDER-515} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_3 L_L R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

$$10.516 \quad \text{INVALID-ORDER-516} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_L)}$$

$$10.517 \quad \text{INVALID-ORDER-517} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.518 \quad \text{INVALID-ORDER-518} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

$$10.519 \quad \text{INVALID-ORDER-519} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

10.520 INVALID-ORDER-520 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.521 INVALID-ORDER-521 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.522 INVALID-ORDER-522 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.523 INVALID-ORDER-523 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.524 INVALID-ORDER-524 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.525 \quad \text{INVALID-ORDER-525} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_L)}$$

$$10.526 \quad \text{INVALID-ORDER-526} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.527 \quad \text{INVALID-ORDER-527} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 s + R_L)}$$

$$10.528 \quad \text{INVALID-ORDER-528} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.529 \quad \text{INVALID-ORDER-529} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.530 \quad \text{INVALID-ORDER-530} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.531 \quad \text{INVALID-ORDER-531} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.532 \quad \text{INVALID-ORDER-532} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.533 \quad \text{INVALID-ORDER-533} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_3 g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.534 \quad \text{INVALID-ORDER-534} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.535 \quad \text{INVALID-ORDER-535} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.536 \quad \text{INVALID-ORDER-536} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L L_L R_L s + R_3 R_L)}$$

$$10.537 \quad \text{INVALID-ORDER-537} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 g_m s^2 + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L L_L R_L s + R_3 R_L)}$$

$$10.538 \quad \text{INVALID-ORDER-538} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s}{(C_L R_3 s + 1) (C_1 L_1 s^2 + L_1 g_m s + 1)}$$

$$10.539 \quad \text{INVALID-ORDER-539} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L R_3 R_L s + R_3 + R_L)}$$

10.540 INVALID-ORDER-540 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L R_3 s + C_L R_L s + 1)}$$

10.541 INVALID-ORDER-541 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L L_L s^2 + C_L R_3 s + 1)}$$

10.542 INVALID-ORDER-542 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_3 g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.543 INVALID-ORDER-543 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.544 INVALID-ORDER-544 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.545 INVALID-ORDER-545 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.546 INVALID-ORDER-546 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.547 INVALID-ORDER-547 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s}{(C_3 R_L s + 1) (C_1 L_1 s^2 + L_1 g_m s + 1)}$$

10.548 INVALID-ORDER-548 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 R_L s + C_L R_L s + 1)}$$

10.549 INVALID-ORDER-549 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L R_L s + C_3 + C_L)}$$

10.550 INVALID-ORDER-550 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.551 INVALID-ORDER-551 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.552 INVALID-ORDER-552 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.553 INVALID-ORDER-553 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.554 INVALID-ORDER-554 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.555 INVALID-ORDER-555 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.556 INVALID-ORDER-556 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 R_3 R_L s + R_3 + R_L)}$$

10.557 INVALID-ORDER-557 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 R_3 s + C_L R_3 s + 1)}$$

10.558 INVALID-ORDER-558 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

10.559 INVALID-ORDER-559 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.560 INVALID-ORDER-560 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.561 INVALID-ORDER-561 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_3 g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.562 INVALID-ORDER-562 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.563 INVALID-ORDER-563 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.564 INVALID-ORDER-564 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.565 INVALID-ORDER-565 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.566 INVALID-ORDER-566 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 R_3 s + C_3 R_L s + 1)}$$

10.567 INVALID-ORDER-567 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1)(C_3 C_L R_3 s + C_3 + C_L)}$$

10.568 INVALID-ORDER-568 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.569 INVALID-ORDER-569 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1) (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.570 INVALID-ORDER-570 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.571 INVALID-ORDER-571 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.572 INVALID-ORDER-572 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.573 INVALID-ORDER-573 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.574 INVALID-ORDER-574 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.575 INVALID-ORDER-575 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.576 INVALID-ORDER-576 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 s^2 + C_3 R_L s + 1)}$$

10.577 INVALID-ORDER-577 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 + C_L)}$$

10.578 INVALID-ORDER-578 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.579 INVALID-ORDER-579 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.580 INVALID-ORDER-580 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.581 INVALID-ORDER-581 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.582 INVALID-ORDER-582 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.583 INVALID-ORDER-583 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.584 INVALID-ORDER-584 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.585 INVALID-ORDER-585 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.586 INVALID-ORDER-586 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_L s^2 + L_3 s + R_L)}$$

10.587 INVALID-ORDER-587 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 s^2 + C_L L_3 s^2 + 1)}$$

10.588 INVALID-ORDER-588 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 L_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.589 INVALID-ORDER-589 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.590 INVALID-ORDER-590 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.591 INVALID-ORDER-591 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_3 L_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.592 INVALID-ORDER-592 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.593 INVALID-ORDER-593 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

10.594 INVALID-ORDER-594 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 L_3 g_m s^2 (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

10.595 INVALID-ORDER-595 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 L_3 R_L g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

10.596 INVALID-ORDER-596 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1)}$$

10.597 INVALID-ORDER-597 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.598 INVALID-ORDER-598 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.599 INVALID-ORDER-599 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.600 INVALID-ORDER-600 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.601 INVALID-ORDER-601 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.602 INVALID-ORDER-602 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.603 INVALID-ORDER-603 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.604 INVALID-ORDER-604 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.605 INVALID-ORDER-605 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L g_m s (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.606 INVALID-ORDER-606 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_3 R_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.607 INVALID-ORDER-607 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

10.608 INVALID-ORDER-608 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 L_3 R_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.609 INVALID-ORDER-609 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.610 INVALID-ORDER-610 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

10.611 INVALID-ORDER-611 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_3 g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

10.612 INVALID-ORDER-612 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.613 INVALID-ORDER-613 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_3 R_L g_m s^2}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

$$10.614 \quad \text{INVALID-ORDER-614} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 L_3 R_3 g_m s^2 (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + L_L R_3 s + R_3)}$$

$$10.615 \quad \text{INVALID-ORDER-615} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 L_3 R_3 R_L g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.616 \quad \text{INVALID-ORDER-616} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

$$10.617 \quad \text{INVALID-ORDER-617} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

$$10.618 \quad \text{INVALID-ORDER-618} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.619 INVALID-ORDER-619 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.620 INVALID-ORDER-620 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.621 INVALID-ORDER-621 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L g_m s^2 (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.622 INVALID-ORDER-622 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 g_m s (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.623 INVALID-ORDER-623 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L g_m s^2 (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + L_L R_L s + R_3)}$$

$$10.624 \quad \text{INVALID-ORDER-624} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_3 + R_L)}$$

$$10.625 \quad \text{INVALID-ORDER-625} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_L g_m s (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s^2 + C_L R_3 R_L s^2)}$$

$$10.626 \quad \text{INVALID-ORDER-626} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.627 \quad \text{INVALID-ORDER-627} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.628 \quad \text{INVALID-ORDER-628} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.629 \quad \text{INVALID-ORDER-629} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.630 \quad \text{INVALID-ORDER-630} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.631 \quad \text{INVALID-ORDER-631} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_3 g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.632 \quad \text{INVALID-ORDER-632} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.633 \quad \text{INVALID-ORDER-633} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_3 R_L g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.634 INVALID-ORDER-634 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L}$$

10.635 INVALID-ORDER-635 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 s^2 + L_1 g_m s + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.636 INVALID-ORDER-636 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_L R_3 s + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.637 INVALID-ORDER-637 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.638 INVALID-ORDER-638 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_L R_3 s + C_L R_L s + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.639 INVALID-ORDER-639 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{R_3g_m(C_LL_Ls^2 + 1)(C_1L_1s^2 + C_1R_1s + 1)}{(C_LL_Ls^2 + C_LR_3s + 1)(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$$

10.640 INVALID-ORDER-640 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$

$$H(s) = \frac{L_LR_3g_ms(C_1L_1s^2 + C_1R_1s + 1)}{(C_LL_LR_3s^2 + L_Ls + R_3)(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$$

10.641 INVALID-ORDER-641 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{R_3g_m(C_1L_1s^2 + C_1R_1s + 1)(C_LL_Ls^2 + C_LR_Ls + 1)}{(C_LL_Ls^2 + C_LR_3s + C_LR_Ls + 1)(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$$

10.642 INVALID-ORDER-642 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_LR_3R_Lg_ms(C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)(C_LL_LR_3R_Ls^2 + L_LR_3s + L_LR_Ls + R_3R_L)}$$

10.643 INVALID-ORDER-643 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3g_m(C_1L_1s^2 + C_1R_1s + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)(C_LL_LR_3s^2 + C_LL_LR_Ls^2 + L_Ls + R_3 + R_L)}$$

$$10.644 \quad \text{INVALID-ORDER-644} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.645 \quad \text{INVALID-ORDER-645} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 R_L s + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

$$10.646 \quad \text{INVALID-ORDER-646} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_3 + C_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

$$10.647 \quad \text{INVALID-ORDER-647} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 R_L s + C_L R_L s + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

$$10.648 \quad \text{INVALID-ORDER-648} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.649 INVALID-ORDER-649 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_3 C_L L_L s^2 + C_3 + C_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.650 INVALID-ORDER-650 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 L_L s^2 + C_L L_L s^2 + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.651 INVALID-ORDER-651 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.652 INVALID-ORDER-652 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.653 INVALID-ORDER-653 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.654 INVALID-ORDER-654 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.655 INVALID-ORDER-655 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 R_3 R_L s + R_3 + R_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.656 INVALID-ORDER-656 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 R_3 s + C_L R_3 s + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.657 INVALID-ORDER-657 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

10.658 INVALID-ORDER-658 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.659 INVALID-ORDER-659 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.660 INVALID-ORDER-660 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.661 INVALID-ORDER-661 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.662 INVALID-ORDER-662 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.663 INVALID-ORDER-663 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.664 INVALID-ORDER-664 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_3R_Lg_m(C_LL_Ls^2 + 1)(C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)(C_3C_LL_LR_3R_Ls^3 + C_3R_3R_Ls + C_LL_LR_3s^2 + C_LL_LR_Ls^2 + C_LR_3R_Ls + R_3 + R_L)}$$

10.665 INVALID-ORDER-665 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_Lg_m(C_3R_3s + 1)(C_1L_1s^2 + C_1R_1s + 1)}{(C_3R_3s + C_3R_Ls + 1)(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$$

10.666 INVALID-ORDER-666 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m(C_3R_3s + 1)(C_1L_1s^2 + C_1R_1s + 1)}{s(C_3C_LR_3s + C_3 + C_L)(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$$

10.667 INVALID-ORDER-667 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{R_Lg_m(C_3R_3s + 1)(C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)(C_3C_LR_3R_Ls^2 + C_3R_3s + C_3R_Ls + C_LR_Ls + 1)}$$

10.668 INVALID-ORDER-668 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m(C_3R_3s + 1)(C_LR_Ls + 1)(C_1L_1s^2 + C_1R_1s + 1)}{s(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)(C_3C_LR_3s + C_3C_LR_Ls + C_3 + C_L)}$$

10.669 INVALID-ORDER-669 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.670 INVALID-ORDER-670 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 R_3 s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.671 INVALID-ORDER-671 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.672 INVALID-ORDER-672 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_3 R_3 s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.673 INVALID-ORDER-673 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.674 INVALID-ORDER-674 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.675 INVALID-ORDER-675 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 L_3 s^2 + C_3 R_L s + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.676 INVALID-ORDER-676 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_3 C_L L_3 s^2 + C_3 + C_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.677 INVALID-ORDER-677 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.678 INVALID-ORDER-678 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.679 INVALID-ORDER-679 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_3L_3s^2 + 1) (C_LL_Ls^2 + 1) (C_1L_1s^2 + C_1R_1s + 1)}{s (C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3s^2 + C_3C_LL_Ls^2 + C_3 + C_L)}$$

10.680 INVALID-ORDER-680 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_Lg_ms (C_3L_3s^2 + 1) (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_Ls^4 + C_3L_3s^2 + C_3L_Ls^2 + C_LL_Ls^2 + 1)}$$

10.681 INVALID-ORDER-681 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_3L_3s^2 + 1) (C_1L_1s^2 + C_1R_1s + 1) (C_LL_Ls^2 + C_LR_Ls + 1)}{s (C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3s^2 + C_3C_LL_Ls^2 + C_3C_LR_Ls + C_3 + C_L)}$$

10.682 INVALID-ORDER-682 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_LR_Lg_ms (C_3L_3s^2 + 1) (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_LR_Ls^4 + C_3L_3L_Ls^3 + C_3L_3R_Ls^2 + C_3L_LR_Ls^2 + C_LL_LR_Ls^2 + L_Ls + R_L)}$$

10.683 INVALID-ORDER-683 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{g_m (C_3L_3s^2 + 1) (C_1L_1s^2 + C_1R_1s + 1) (C_LL_LR_Ls^2 + L_Ls + R_L)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_LR_Ls^4 + C_3C_LL_LR_Ls^3 + C_3L_3s^2 + C_3L_Ls^2 + C_3R_Ls + C_LL_Ls^2 + 1)}$$

10.684 INVALID-ORDER-684 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.685 INVALID-ORDER-685 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 L_3 R_L s^2 + L_3 s + R_L) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.686 INVALID-ORDER-686 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_3 L_3 s^2 + C_L L_3 s^2 + 1) (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$$

10.687 INVALID-ORDER-687 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.688 INVALID-ORDER-688 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.689 INVALID-ORDER-689 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_3g_ms (C_LL_Ls^2 + 1) (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_Ls^4 + C_3L_3s^2 + C_LL_3s^2 + C_LL_Ls^2 + 1)}$$

10.690 INVALID-ORDER-690 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{L_3L_Lg_ms (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3L_3L_Ls^2 + C_LL_3L_Ls^2 + L_3 + L_L)}$$

10.691 INVALID-ORDER-691 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_3g_ms (C_1L_1s^2 + C_1R_1s + 1) (C_LL_Ls^2 + C_LR_Ls + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_Ls^4 + C_3C_LL_3R_Ls^3 + C_3L_3s^2 + C_LL_3s^2 + C_LL_Ls^2 + C_LR_Ls + 1)}$$

10.692 INVALID-ORDER-692 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_3L_LR_Lg_ms (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3L_3L_LR_Ls^2 + C_LL_3L_LR_Ls^2 + L_3L_Ls + L_3R_L + L_LR_L)}$$

10.693 INVALID-ORDER-693 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{L_3g_ms (C_1L_1s^2 + C_1R_1s + 1) (C_LL_LR_Ls^2 + L_Ls + R_L)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_LR_Ls^4 + C_3L_3L_Ls^3 + C_3L_3R_Ls^2 + C_LL_3L_Ls^3 + C_LL_LR_Ls^2 + L_3s + L_Ls + R_L)}$$

10.694 INVALID-ORDER-694 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{L_3R_Lg_ms (C_LL_Ls^2 + 1) (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3L_LR_Ls^4 + C_3L_3R_Ls^2 + C_LL_3L_Ls^3 + C_LL_3R_Ls^2 + C_LL_LR_Ls^2 + L_3s + R_L)}$$

10.695 INVALID-ORDER-695 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_Lg_m (C_1L_1s^2 + C_1R_1s + 1) (C_3L_3s^2 + C_3R_3s + 1)}{(C_3L_3s^2 + C_3R_3s + C_3R_Ls + 1) (C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$$

10.696 INVALID-ORDER-696 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1L_1s^2 + C_1R_1s + 1) (C_3L_3s^2 + C_3R_3s + 1)}{s (C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3s^2 + C_3C_LR_3s + C_3 + C_L)}$$

10.697 INVALID-ORDER-697 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{R_Lg_m (C_1L_1s^2 + C_1R_1s + 1) (C_3L_3s^2 + C_3R_3s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3R_Ls^3 + C_3C_LR_3R_Ls^2 + C_3L_3s^2 + C_3R_3s + C_3R_Ls + C_LR_Ls + 1)}$$

10.698 INVALID-ORDER-698 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_LR_Ls + 1) (C_1L_1s^2 + C_1R_1s + 1) (C_3L_3s^2 + C_3R_3s + 1)}{s (C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_3s^2 + C_3C_LR_3s + C_3C_LR_Ls + C_3 + C_L)}$$

10.699 INVALID-ORDER-699 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.700 INVALID-ORDER-700 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.701 INVALID-ORDER-701 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.702 INVALID-ORDER-702 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.703 INVALID-ORDER-703 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.704 \quad \text{INVALID-ORDER-704} \quad Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \quad \infty, \quad L_3s + R_3 + \frac{1}{C_3s}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s +$$

$$10.705 \quad \text{INVALID-ORDER-705} \quad Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \quad \infty, \quad \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.706 \quad \text{INVALID-ORDER-706} \quad Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \quad \infty, \quad \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

$$10.707 \quad \text{INVALID-ORDER-707} \quad Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \quad \infty, \quad \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.708 \quad \text{INVALID-ORDER-708} \quad Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \quad \infty, \quad \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.709 INVALID-ORDER-709 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_3R_3g_ms (C_LL_Ls^2 + 1) (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_LR_3s^4 + C_3L_3R_3s^2 + C_LL_LR_3s^3 + C_LL_LR_3s^2 + C_LL_LR_3s^2 + L_3s + R_3)}$$

10.710 INVALID-ORDER-710 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$

$$H(s) = \frac{L_3L_LR_3g_ms (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3L_3L_LR_3s^2 + C_LL_LR_3s^2 + L_3L_Ls + L_3R_3 + L_LR_3)}$$

10.711 INVALID-ORDER-711 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_3R_3g_ms (C_1L_1s^2 + C_1R_1s + 1) (C_LL_Ls^2 + C_LR_Ls + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_LR_3s^4 + C_3C_LL_LR_3R_Ls^3 + C_3L_3R_3s^2 + C_LL_LR_3s^3 + C_LL_LR_3s^2 + C_LL_LR_3s^2 + C_LL_LR_3s^2 + C_LR_Ls^2 + C_LL_LR_3s^2 + C_LR_Ls + L_3s + R_3)}$$

10.712 INVALID-ORDER-712 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_3L_LR_3R_Lg_ms (C_1L_1s^2 + C_1R_1s + 1)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3L_3L_LR_3R_Ls^2 + C_LL_LR_3R_Ls^2 + L_3L_LR_3s + L_3L_LR_Ls + L_3R_3R_L + L_LR_3R_L)}$$

10.713 INVALID-ORDER-713 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3R_3g_ms (C_1L_1s^2 + C_1R_1s + 1) (C_LL_LR_Ls^2 + L_Ls + R_L)}{(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m) (C_3C_LL_LR_3R_Ls^4 + C_3L_3L_LR_3s^3 + C_3L_3R_3R_Ls^2 + C_LL_LR_3s^3 + C_LL_LR_3s^3 + C_LL_LR_3R_Ls^2 + L_3L_Ls^2 + L_3R_3s + L_3R_Ls + L_LR_3R_L)}$$

$$10.714 \quad \text{INVALID-ORDER-714} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.715 \quad \text{INVALID-ORDER-715} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

$$10.716 \quad \text{INVALID-ORDER-716} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

$$10.717 \quad \text{INVALID-ORDER-717} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

$$10.718 \quad \text{INVALID-ORDER-718} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.719 INVALID-ORDER-719 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.720 INVALID-ORDER-720 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{L_Ls}{C_L L_L s^2+1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.721 INVALID-ORDER-721 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.722 INVALID-ORDER-722 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s)}$$

10.723 INVALID-ORDER-723 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \infty, \frac{L_Ls}{C_L L_L s^2+1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

$$10.724 \quad \text{INVALID-ORDER-724} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_3 s + R_L)}$$

$$10.725 \quad \text{INVALID-ORDER-725} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.726 \quad \text{INVALID-ORDER-726} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.727 \quad \text{INVALID-ORDER-727} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.728 \quad \text{INVALID-ORDER-728} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.729 \quad \text{INVALID-ORDER-729} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.730 \quad \text{INVALID-ORDER-730} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_3 g_m s (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.731 \quad \text{INVALID-ORDER-731} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.732 \quad \text{INVALID-ORDER-732} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.733 \quad \text{INVALID-ORDER-733} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3)}$$

$$10.734 \quad \text{INVALID-ORDER-734} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + C_L R_L s + C_L s + g_m)}$$

$$10.735 \quad \text{INVALID-ORDER-735} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s}{(C_L R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.736 \quad \text{INVALID-ORDER-736} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s}{(C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.737 \quad \text{INVALID-ORDER-737} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L R_L s + 1)}{(C_L R_3 s + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.738 \quad \text{INVALID-ORDER-738} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L L_L s^2 + 1)}{(C_L L_L s^2 + C_L R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.739 \quad \text{INVALID-ORDER-739} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_3 g_m s^2}{(C_L L_L R_3 s^2 + L_L s + R_3)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.740 \quad \text{INVALID-ORDER-740} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.741 \quad \text{INVALID-ORDER-741} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_3 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.742 \quad \text{INVALID-ORDER-742} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

$$10.743 \quad \text{INVALID-ORDER-743} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.744 \quad \text{INVALID-ORDER-744} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L g_m s}{(C_3 R_L s + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.745 \quad \text{INVALID-ORDER-745} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L g_m s}{(C_3 R_L s + C_L R_L s + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.746 \quad \text{INVALID-ORDER-746} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m (C_L R_L s + 1)}{(C_3 C_L R_L s + C_3 + C_L)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.747 \quad \text{INVALID-ORDER-747} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m (C_L L_L s^2 + 1)}{(C_3 C_L L_L s^2 + C_3 + C_L)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.748 \quad \text{INVALID-ORDER-748} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 g_m s^2}{(C_3 L_L s^2 + C_L L_L s^2 + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.749 INVALID-ORDER-749 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.750 INVALID-ORDER-750 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_1 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.751 INVALID-ORDER-751 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_1 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.752 INVALID-ORDER-752 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.753 INVALID-ORDER-753 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s}{(C_3 R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.754 \quad \text{INVALID-ORDER-754} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s}{(C_3 R_3 s + C_L R_3 s + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

$$10.755 \quad \text{INVALID-ORDER-755} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.756 \quad \text{INVALID-ORDER-756} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.757 \quad \text{INVALID-ORDER-757} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.758 \quad \text{INVALID-ORDER-758} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_3 g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

10.759 INVALID-ORDER-759 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.760 INVALID-ORDER-760 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_1 R_3 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

10.761 INVALID-ORDER-761 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

10.762 INVALID-ORDER-762 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

10.763 INVALID-ORDER-763 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 R_3 s + 1)}{(C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.764 INVALID-ORDER-764 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 R_3 s + 1)}{(C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.765 INVALID-ORDER-765 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.766 INVALID-ORDER-766 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 R_3 s + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.767 INVALID-ORDER-767 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.768 INVALID-ORDER-768 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 g_m s^2 (C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.769 INVALID-ORDER-769 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.770 INVALID-ORDER-770 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_1 R_L g_m s^2 (C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 R_L s^3 + C_3 C_L R_3 s^2 + C_3 C_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.771 INVALID-ORDER-771 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_1 g_m s (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.772 INVALID-ORDER-772 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.773 INVALID-ORDER-773 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_3 L_3 s^2 + C_3 R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.774 INVALID-ORDER-774 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 L_3 s^2 + 1)}{(C_3 C_L L_3 s^2 + C_3 + C_L) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.775 INVALID-ORDER-775 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.776 INVALID-ORDER-776 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.777 INVALID-ORDER-777 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L)}$$

10.778 INVALID-ORDER-778 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.779 INVALID-ORDER-779 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L)}$$

10.780 INVALID-ORDER-780 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_1 R_L g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.781 INVALID-ORDER-781 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_1 g_m s (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.782 INVALID-ORDER-782 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.783 INVALID-ORDER-783 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_L g_m s^2}{(C_3 L_3 R_L s^2 + L_3 s + R_L) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.784 INVALID-ORDER-784 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 g_m s^2}{(C_3 L_3 s^2 + C_L L_3 s^2 + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.785 INVALID-ORDER-785 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L)}$$

10.786 INVALID-ORDER-786 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 g_m s^2 (C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.787 INVALID-ORDER-787 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.788 INVALID-ORDER-788 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_1 g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)(C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L)}$$

10.789 INVALID-ORDER-789 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 g_m s^2 (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

10.790 INVALID-ORDER-790 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_1 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

10.791 INVALID-ORDER-791 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 L_3 R_1 g_m s^2 (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

10.792 INVALID-ORDER-792 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_L g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

10.793 INVALID-ORDER-793 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$$

10.794 INVALID-ORDER-794 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.795 INVALID-ORDER-795 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.796 INVALID-ORDER-796 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.797 INVALID-ORDER-797 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L)}$$

10.798 INVALID-ORDER-798 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 g_m s^2 (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

$$10.799 \quad \text{INVALID-ORDER-799} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

$$10.800 \quad \text{INVALID-ORDER-800} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_L g_m s^2 (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.801 \quad \text{INVALID-ORDER-801} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 R_1 g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.802 \quad \text{INVALID-ORDER-802} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s +)}$$

$$10.803 \quad \text{INVALID-ORDER-803} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 L_3 R_1 R_3 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.804 INVALID-ORDER-804 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_3 g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3)}$$

10.805 INVALID-ORDER-805 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_3 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

10.806 INVALID-ORDER-806 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_3 g_m s^2 (C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

10.807 INVALID-ORDER-807 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_3 R_1 R_3 g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

10.808 INVALID-ORDER-808 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_3 L_L R_1 R_3 g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.809 \quad \text{INVALID-ORDER-809} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_3 R_1 R_3 g_m s^2 (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.810 \quad \text{INVALID-ORDER-810} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_3 L_L R_1 R_3 R_L g_m s^2}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

$$10.811 \quad \text{INVALID-ORDER-811} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 L_3 R_1 R_3 g_m s^2 (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.812 \quad \text{INVALID-ORDER-812} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 L_3 R_1 R_3 R_L g_m s^2 (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.813 \quad \text{INVALID-ORDER-813} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L)}$$

$$10.814 \quad \text{INVALID-ORDER-814} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

$$10.815 \quad \text{INVALID-ORDER-815} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

$$10.816 \quad \text{INVALID-ORDER-816} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m s (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.817 \quad \text{INVALID-ORDER-817} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m s (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.818 \quad \text{INVALID-ORDER-818} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 g_m s^2 (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

$$10.819 \quad \text{INVALID-ORDER-819} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 g_m s (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.820 \quad \text{INVALID-ORDER-820} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_L g_m s^2 (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s + L_L R_3 s + 1)}$$

$$10.821 \quad \text{INVALID-ORDER-821} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 R_1 g_m s (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + 1)}$$

$$10.822 \quad \text{INVALID-ORDER-822} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_1 R_L g_m s (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + L_L s + 1)}$$

$$10.823 \quad \text{INVALID-ORDER-823} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L)}$$

$$10.824 \quad \text{INVALID-ORDER-824} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.825 \quad \text{INVALID-ORDER-825} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.826 \quad \text{INVALID-ORDER-826} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.827 \quad \text{INVALID-ORDER-827} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.828 \quad \text{INVALID-ORDER-828} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_3 g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.829 \quad \text{INVALID-ORDER-829} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.830 \quad \text{INVALID-ORDER-830} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_3 R_L g_m s^2 (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.831 \quad \text{INVALID-ORDER-831} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_3 g_m s (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3)}$$

$$10.832 \quad \text{INVALID-ORDER-832} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_1 R_3 R_L g_m s (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L R_3 s)}$$

$$10.833 \quad \text{INVALID-ORDER-833} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L R_3 s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.834 INVALID-ORDER-834 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.835 INVALID-ORDER-835 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L R_3 s + C_L R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.836 INVALID-ORDER-836 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L L_L s^2 + C_L R_3 s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.837 INVALID-ORDER-837 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L L_L R_3 s^2 + L_L s + R_3) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.838 INVALID-ORDER-838 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.839 INVALID-ORDER-839 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.840 INVALID-ORDER-840 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.841 INVALID-ORDER-841 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.842 INVALID-ORDER-842 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.843 INVALID-ORDER-843 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.844 INVALID-ORDER-844 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 R_L s + C_L R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.845 INVALID-ORDER-845 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.846 INVALID-ORDER-846 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_L s^2 + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.847 INVALID-ORDER-847 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_L s^2 + C_L L_L s^2 + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.848 INVALID-ORDER-848 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.849 INVALID-ORDER-849 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.850 INVALID-ORDER-850 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.851 INVALID-ORDER-851 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.852 INVALID-ORDER-852 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.853 INVALID-ORDER-853 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 R_3 s + C_L R_3 s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.854 INVALID-ORDER-854 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_3 R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.855 INVALID-ORDER-855 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

10.856 INVALID-ORDER-856 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.857 INVALID-ORDER-857 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.858 INVALID-ORDER-858 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_3 g_m (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.859 \quad \text{INVALID-ORDER-859} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.860 \quad \text{INVALID-ORDER-860} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_3 g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

$$10.861 \quad \text{INVALID-ORDER-861} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.862 \quad \text{INVALID-ORDER-862} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$10.863 \quad \text{INVALID-ORDER-863} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.864 INVALID-ORDER-864 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.865 INVALID-ORDER-865 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.866 INVALID-ORDER-866 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.867 INVALID-ORDER-867 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.868 INVALID-ORDER-868 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.869 INVALID-ORDER-869 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L g_m s (C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.870 INVALID-ORDER-870 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{g_m (C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.871 INVALID-ORDER-871 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L g_m (C_3 R_3 s + 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.872 INVALID-ORDER-872 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 s^2 + C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.873 INVALID-ORDER-873 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.874 INVALID-ORDER-874 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

10.875 INVALID-ORDER-875 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.876 INVALID-ORDER-876 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.877 INVALID-ORDER-877 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

10.878 INVALID-ORDER-878 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$10.879 \quad \text{INVALID-ORDER-879} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L g_m s (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

$$10.880 \quad \text{INVALID-ORDER-880} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.881 \quad \text{INVALID-ORDER-881} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.882 \quad \text{INVALID-ORDER-882} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 R_L s^2 + L_3 s + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$10.883 \quad \text{INVALID-ORDER-883} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 s^2 + C_L L_3 s^2 + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.884 INVALID-ORDER-884 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.885 INVALID-ORDER-885 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

10.886 INVALID-ORDER-886 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

10.887 INVALID-ORDER-887 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_3 L_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.888 INVALID-ORDER-888 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 g_m s (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.889 \quad \text{INVALID-ORDER-889} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_3 L_L R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

$$10.890 \quad \text{INVALID-ORDER-890} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

$$10.891 \quad \text{INVALID-ORDER-891} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_L g_m s (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

$$10.892 \quad \text{INVALID-ORDER-892} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$10.893 \quad \text{INVALID-ORDER-893} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.894 INVALID-ORDER-894 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.895 INVALID-ORDER-895 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.896 INVALID-ORDER-896 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.897 INVALID-ORDER-897 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.898 INVALID-ORDER-898 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

$$10.899 \quad \text{INVALID-ORDER-899} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L g_m s (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s^2 + L_L)}$$

$$10.900 \quad \text{INVALID-ORDER-900} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{g_m (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.901 \quad \text{INVALID-ORDER-901} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.902 \quad \text{INVALID-ORDER-902} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$10.903 \quad \text{INVALID-ORDER-903} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$10.904 \quad \text{INVALID-ORDER-904} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.905 \quad \text{INVALID-ORDER-905} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.906 \quad \text{INVALID-ORDER-906} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.907 \quad \text{INVALID-ORDER-907} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.908 \quad \text{INVALID-ORDER-908} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 g_m s (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s)}$$

10.909 INVALID-ORDER-909 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_3 L_L R_3 R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

10.910 INVALID-ORDER-910 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_3 R_3 g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s)}$$

10.911 INVALID-ORDER-911 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_3 R_3 R_L g_m s (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s)}$$

10.912 INVALID-ORDER-912 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

10.913 INVALID-ORDER-913 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

10.914 INVALID-ORDER-914 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

10.915 INVALID-ORDER-915 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

10.916 INVALID-ORDER-916 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

10.917 INVALID-ORDER-917 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

10.918 INVALID-ORDER-918 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$\mathbf{10.919 \quad INVALID-ORDER-919} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L g_m s (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s}$$

$$\mathbf{10.920 \quad INVALID-ORDER-920} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{g_m (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3}$$

$$\mathbf{10.921 \quad INVALID-ORDER-921} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L g_m (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_3 s^2}$$

$$\mathbf{10.922 \quad INVALID-ORDER-922} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$$

$$\mathbf{10.923 \quad INVALID-ORDER-923} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$10.924 \quad \text{INVALID-ORDER-924} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.925 \quad \text{INVALID-ORDER-925} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.926 \quad \text{INVALID-ORDER-926} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.927 \quad \text{INVALID-ORDER-927} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_3 g_m s (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.928 \quad \text{INVALID-ORDER-928} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$\mathbf{10.929 \quad INVALID-ORDER-929} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_3 R_L g_m s (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s)}$$

$$\mathbf{10.930 \quad INVALID-ORDER-930} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_3 g_m (C_3 L_3 s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s)}$$

$$\mathbf{10.931 \quad INVALID-ORDER-931} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_3 R_L g_m (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L)}$$

$$\mathbf{10.932 \quad INVALID-ORDER-932} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1)}{(C_L R_3 s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$\mathbf{10.933 \quad INVALID-ORDER-933} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad R_3, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.934 INVALID-ORDER-934 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_L R_3 s + C_L R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.935 INVALID-ORDER-935 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_L L_L s^2 + C_L R_3 s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.936 INVALID-ORDER-936 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_L L_L R_3 s^2 + L_L s + R_3) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.937 INVALID-ORDER-937 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.938 INVALID-ORDER-938 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.939 INVALID-ORDER-939 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.940 INVALID-ORDER-940 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.941 INVALID-ORDER-941 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1)}{(C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.942 INVALID-ORDER-942 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1)}{s (C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.943 INVALID-ORDER-943 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1)}{(C_3 R_L s + C_L R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.944 INVALID-ORDER-944 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{s (C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.945 INVALID-ORDER-945 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_3 C_L L_L s^2 + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.946 INVALID-ORDER-946 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_L s^2 + C_L L_L s^2 + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.947 INVALID-ORDER-947 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.948 INVALID-ORDER-948 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.949 INVALID-ORDER-949 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.950 INVALID-ORDER-950 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_L s^3 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.951 INVALID-ORDER-951 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(C_3 R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.952 INVALID-ORDER-952 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1)}{(C_3 R_3 s + C_L R_3 s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.953 INVALID-ORDER-953 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1)}{(C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.954 \quad \text{INVALID-ORDER-954} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.955 \quad \text{INVALID-ORDER-955} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.956 \quad \text{INVALID-ORDER-956} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.957 \quad \text{INVALID-ORDER-957} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.958 \quad \text{INVALID-ORDER-958} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + R_3 R_L)}$$

$$10.959 \quad \text{INVALID-ORDER-959} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_L s + R_3 + R_L)}$$

$$10.960 \quad \text{INVALID-ORDER-960} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3}{C_3 R_3 s + 1}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 R_3 R_L s + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.961 \quad \text{INVALID-ORDER-961} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad R_3 + \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.962 \quad \text{INVALID-ORDER-962} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad R_3 + \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{s (C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.963 \quad \text{INVALID-ORDER-963} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad R_3 + \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

$$10.964 \quad \text{INVALID-ORDER-964} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L R_L s + 1)}{s (C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.965 \quad \text{INVALID-ORDER-965} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{s (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.966 \quad \text{INVALID-ORDER-966} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 g_m s (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

$$10.967 \quad \text{INVALID-ORDER-967} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.968 \quad \text{INVALID-ORDER-968} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 R_L s^3 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.969 INVALID-ORDER-969 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.970 INVALID-ORDER-970 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 R_3 s + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.971 INVALID-ORDER-971 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_3 L_3 s^2 + C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.972 INVALID-ORDER-972 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{s (C_3 C_L L_3 s^2 + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.973 INVALID-ORDER-973 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L R_L s + 1)}$$

$$10.974 \quad \text{INVALID-ORDER-974} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{s (C_3 C_L L_3 s^2 + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.975 \quad \text{INVALID-ORDER-975} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{s (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.976 \quad \text{INVALID-ORDER-976} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_3 L_L s^2 + C_L L_L s^2 + 1)}$$

$$10.977 \quad \text{INVALID-ORDER-977} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.978 \quad \text{INVALID-ORDER-978} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_L s^2 + C_L L_L R_L s^2 + L_L s + R_L)}$$

10.979 INVALID-ORDER-979 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_L s + C_L L_L s^2 + 1)}$$

10.980 INVALID-ORDER-980 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 R_L s + C_L L_L s^2 + C_L R_L s + 1)}$$

10.981 INVALID-ORDER-981 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_3 R_1 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_3 R_L s^2 + L_3 s + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.982 INVALID-ORDER-982 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_3 R_1 g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_3 s^2 + C_L L_3 s^2 + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.983 INVALID-ORDER-983 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_3 R_1 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + L_3 s + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.984 \quad \text{INVALID-ORDER-984} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 g_m s (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_L s + 1)}$$

$$10.985 \quad \text{INVALID-ORDER-985} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + 1)}$$

$$10.986 \quad \text{INVALID-ORDER-986} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_1 g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_3 L_L s^2 + C_L L_3 L_L s^2 + L_3 + L_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.987 \quad \text{INVALID-ORDER-987} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_L s + 1)}$$

$$10.988 \quad \text{INVALID-ORDER-988} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_3 L_L R_1 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 L_L R_L s^2 + C_L L_3 L_L R_L s^2 + L_3 L_L s + L_3 R_L + L_L R_L)}$$

$$10.989 \quad \text{INVALID-ORDER-989} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 R_1 g_m s (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_L s^2 + L_3 s + L_L s + R_L)}$$

$$10.990 \quad \text{INVALID-ORDER-990} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_1 R_L g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_L s^2 + L_3 s + R_L)}$$

$$10.991 \quad \text{INVALID-ORDER-991} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad L_3 s + R_3 + \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + 1) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.992 \quad \text{INVALID-ORDER-992} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad L_3 s + R_3 + \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.993 \quad \text{INVALID-ORDER-993} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad L_3 s + R_3 + \frac{1}{C_3 s}, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L R_L s + 1)}$$

10.994 INVALID-ORDER-994 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_3 C_L L_3 s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.995 INVALID-ORDER-995 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{s (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 + C_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

10.996 INVALID-ORDER-996 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_L L_L s^2 + 1)}$$

10.997 INVALID-ORDER-997 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 s^2 + C_3 C_L L_L s^2 + C_3 C_L R_3 s + C_3 C_L R_L s + C_3 + C_L)}$$

10.998 INVALID-ORDER-998 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 L_L R_L s^2 + C_3 R_3 R_L s + C_L L_L R_L s^2 + L_L)}$$

$$10.999 \quad \text{INVALID-ORDER-999} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 L_3 s^2 + C_3 L_L s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.1000 \quad \text{INVALID-ORDER-1000} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 s^2 + C_3 R_3 s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_3 R_L s + C_L L_L s^2 + 1)}$$

$$10.1001 \quad \text{INVALID-ORDER-1001} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.1002 \quad \text{INVALID-ORDER-1002} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + L_3 s + R_3) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$10.1003 \quad \text{INVALID-ORDER-1003} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 R_3 R_L s^2 + C_L L_3 R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s + R_3 R_L)}$$

$$10.1004 \quad \text{INVALID-ORDER-1004} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3)}$$

$$10.1005 \quad \text{INVALID-ORDER-1005} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_L R_3 s^2 + L_3 s + R_3)}$$

$$10.1006 \quad \text{INVALID-ORDER-1006} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_3 L_L R_1 R_3 g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 s^2 + L_3 L_L s + L_3 R_3 + L_L R_3)}$$

$$10.1007 \quad \text{INVALID-ORDER-1007} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_3 R_3 s^2 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L R_3 R_L s + L_3 s)}$$

$$10.1008 \quad \text{INVALID-ORDER-1008} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_3 L_L R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 L_3 L_L R_3 R_L s^2 + C_L L_3 L_L R_3 R_L s^2 + L_3 L_L R_3 s + L_3 L_L R_L s + L_3 R_3 R_L + L_L R_3 R_L)}$$

$$\mathbf{10.1009 \quad INVALID-ORDER-1009} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_3 R_1 R_3 g_m s (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_3 s + L_3 R_L s)}$$

$$\mathbf{10.1010 \quad INVALID-ORDER-1010} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_3 R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 s^3 + C_L L_3 L_L R_L s^3 + C_L L_3 R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_3 R_3 s + L_3 R_L s)}$$

$$\mathbf{10.1011 \quad INVALID-ORDER-1011} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + L_3 s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$\mathbf{10.1012 \quad INVALID-ORDER-1012} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + 1)}$$

$$\mathbf{10.1013 \quad INVALID-ORDER-1013} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_L s^2 + C_L R_3 R_L s + L_3 s + R_3 + R_L)}$$

$$10.1014 \quad \text{INVALID-ORDER-1014} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.1015 \quad \text{INVALID-ORDER-1015} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.1016 \quad \text{INVALID-ORDER-1016} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + L_3 s + L_L s + R_3)}$$

$$10.1017 \quad \text{INVALID-ORDER-1017} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 L_3 s^2 + C_L L_3 s^2 + C_L L_L s^2 + C_L R_3 s + C_L R_L s + 1)}$$

$$10.1018 \quad \text{INVALID-ORDER-1018} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_L s^3 + C_L L_L R_3 R_L s^2 + L_3 L_L s^2 + L_3 R_L s)}$$

$$\mathbf{10.1019 \quad INVALID-ORDER-1019} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_L R_3 s^2 + C_L L_L R_L s^2 + L_3 s + R_3)}$$

$$\mathbf{10.1020 \quad INVALID-ORDER-1020} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L g_m (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_3 L_3 R_3 s^2 + L_3 s + R_3)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_L L_3 L_L s^3 + C_L L_3 R_L s^2 + C_L L_L R_3 s^2 + C_L L_L R_3 s^2)}$$

$$\mathbf{10.1021 \quad INVALID-ORDER-1021} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + R_3 + R_L) (C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$$

$$\mathbf{10.1022 \quad INVALID-ORDER-1022} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + 1)}$$

$$\mathbf{10.1023 \quad INVALID-ORDER-1023} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L R_3 R_L s + R_3 + R_L)}$$

$$10.1024 \quad \text{INVALID-ORDER-1024} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L R_3 s + C_L R_L s + 1)}$$

$$10.1025 \quad \text{INVALID-ORDER-1025} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_L R_3 s^3 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.1026 \quad \text{INVALID-ORDER-1026} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_3 g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_L R_3 s^2 + C_L L_L R_3 s^2 + L_L s + R_3)}$$

$$10.1027 \quad \text{INVALID-ORDER-1027} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L R_3 R_L s^2 + C_3 L_3 s^2 + C_3 R_3 s + C_L L_L s^2 + C_L R_3 s + 1)}$$

$$10.1028 \quad \text{INVALID-ORDER-1028} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_3 R_L g_m s (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_L s^3 + C_3 L_3 R_3 R_L s^2 + C_3 L_L R_3 R_L s^2 + C_L L_L R_3 R_L s^2 + L_L R_3 s + L_L R_L s + 1)}$$

$$10.1029 \quad \text{INVALID-ORDER-1029} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 R_3 g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_L R_3 s^2 + C_3 R_3 R_L s + C_L L_L)}$$

$$10.1030 \quad \text{INVALID-ORDER-1030} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_3 R_L g_m (C_1 L_1 s^2 + 1) (C_3 L_3 s^2 + 1) (C_L L_L s^2 + 1)}{(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1) (C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_3 R_3 R_L s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 R_3 R_L s + C_L L_L)}$$