

Filter Summary Report: TIA,some,parasitic,Z1,Z4,ZL

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10.41INVALID-ORDER-41	$Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	102
10.42INVALID-ORDER-42	$Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	103
10.43INVALID-ORDER-43	$Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	103
10.44INVALID-ORDER-44	$Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	103

10.45INVALID-ORDER-45	$Z(s) = \left(R_1, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	103
10.46INVALID-ORDER-46	$Z(s) = \left(R_1, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	103
10.47INVALID-ORDER-47	$Z(s) = \left(R_1, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	104
10.48INVALID-ORDER-48	$Z(s) = \left(R_1, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	104
10.49INVALID-ORDER-49	$Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, R_L + \frac{1}{C_Ls} \right)$	104
10.50INVALID-ORDER-50	$Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, L_Ls + \frac{1}{C_Ls} \right)$	104
10.51INVALID-ORDER-51	$Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	104
10.52INVALID-ORDER-52	$Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	105
10.53INVALID-ORDER-53	$Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	105
10.54INVALID-ORDER-54	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{1}{C_Ls} \right)$	105
10.55INVALID-ORDER-55	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	105
10.56INVALID-ORDER-56	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, R_L + \frac{1}{C_Ls} \right)$	105
10.57INVALID-ORDER-57	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, L_Ls + \frac{1}{C_Ls} \right)$	106
10.58INVALID-ORDER-58	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	106
10.59INVALID-ORDER-59	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	106
10.60INVALID-ORDER-60	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	106
10.61INVALID-ORDER-61	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	106
10.62INVALID-ORDER-62	$Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	107
10.63INVALID-ORDER-63	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{1}{C_Ls} \right)$	107
10.64INVALID-ORDER-64	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	107

10.65INVALID-ORDER-65	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, R_L + \frac{1}{C_Ls} \right)$	107
10.66INVALID-ORDER-66	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, L_Ls + \frac{1}{C_Ls} \right)$	107
10.67INVALID-ORDER-67	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{L_Ls}{C_L L_Ls^2 + 1} \right)$	108
10.68INVALID-ORDER-68	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	108
10.69INVALID-ORDER-69	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	108
10.70INVALID-ORDER-70	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{L_Ls}{C_L L_Ls^2 + 1} + R_L \right)$	108
10.71INVALID-ORDER-71	$Z(s) = \left(R_1, \infty, \infty, \frac{R_4(L_4s + \frac{1}{C_4s})}{L_4s + R_4 + \frac{1}{C_4s}}, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	108
10.72INVALID-ORDER-72	$Z(s) = (L_1s, \infty, \infty, R_4, \infty, R_L)$	109
10.73INVALID-ORDER-73	$Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, L_Ls + \frac{1}{C_Ls} \right)$	109
10.74INVALID-ORDER-74	$Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{L_Ls}{C_L L_Ls^2 + 1} \right)$	109
10.75INVALID-ORDER-75	$Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	109
10.76INVALID-ORDER-76	$Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	109
10.77INVALID-ORDER-77	$Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{L_Ls}{C_L L_Ls^2 + 1} + R_L \right)$	109
10.78INVALID-ORDER-78	$Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	110
10.79INVALID-ORDER-79	$Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, R_L + \frac{1}{C_Ls} \right)$	110
10.80INVALID-ORDER-80	$Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls} \right)$	110
10.81INVALID-ORDER-81	$Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_L L_Ls^2 + 1} \right)$	110
10.82INVALID-ORDER-82	$Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	110
10.83INVALID-ORDER-83	$Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	111
10.84INVALID-ORDER-84	$Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_L L_Ls^2 + 1} + R_L \right)$	111

10.85INVALID-ORDER-85	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	111
10.86INVALID-ORDER-86	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	111
10.87INVALID-ORDER-87	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	111
10.88INVALID-ORDER-88	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	112
10.89INVALID-ORDER-89	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	112
10.90INVALID-ORDER-90	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	112
10.91INVALID-ORDER-91	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	112
10.92INVALID-ORDER-92	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	112
10.93INVALID-ORDER-93	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	113
10.94INVALID-ORDER-94	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	113
10.95INVALID-ORDER-95	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	113
10.96INVALID-ORDER-96	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	113
10.97INVALID-ORDER-97	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	113
10.98INVALID-ORDER-98	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	113
10.99INVALID-ORDER-99	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	114
10.100INVALID-ORDER-100	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	114
10.101INVALID-ORDER-101	$Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	114
10.102INVALID-ORDER-102	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	114
10.103INVALID-ORDER-103	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	114
10.104INVALID-ORDER-104	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	115
10.105INVALID-ORDER-105	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	115
10.106INVALID-ORDER-106	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	115

10.10 7 INVALID-ORDER-107	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	115
10.10 8 INVALID-ORDER-108	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	115
10.10 9 INVALID-ORDER-109	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	116
10.11 0 INVALID-ORDER-110	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	116
10.11INVALID-ORDER-111	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	116
10.11 2 INVALID-ORDER-112	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	116
10.11 3 INVALID-ORDER-113	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	116
10.11 4 INVALID-ORDER-114	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	117
10.11 5 INVALID-ORDER-115	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	117
10.11 6 INVALID-ORDER-116	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	117
10.11 7 INVALID-ORDER-117	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	117
10.11 8 INVALID-ORDER-118	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	117
10.11 9 INVALID-ORDER-119	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	117
10.12 0 INVALID-ORDER-120	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	118
10.12INVALID-ORDER-121	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	118
10.12 2 INVALID-ORDER-122	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	118
10.12 3 INVALID-ORDER-123	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	118
10.12 4 INVALID-ORDER-124	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	118
10.12 5 INVALID-ORDER-125	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	119
10.12 6 INVALID-ORDER-126	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	119
10.12 7 INVALID-ORDER-127	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	119
10.12 8 INVALID-ORDER-128	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	119

10.12 9 INVALID-ORDER-129	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	119
10.13 0 INVALID-ORDER-130	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	120
10.13 1 INVALID-ORDER-131	$Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	120
10.13 2 INVALID-ORDER-132	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	120
10.13 3 INVALID-ORDER-133	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	120
10.13 4 INVALID-ORDER-134	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	120
10.13 5 INVALID-ORDER-135	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	121
10.13 6 INVALID-ORDER-136	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	121
10.13 7 INVALID-ORDER-137	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	121
10.13 8 INVALID-ORDER-138	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	121
10.13 9 INVALID-ORDER-139	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	121
10.14 0 INVALID-ORDER-140	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	122
10.14 1 INVALID-ORDER-141	$Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	122
10.14 2 INVALID-ORDER-142	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	122
10.14 3 INVALID-ORDER-143	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	122
10.14 4 INVALID-ORDER-144	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	122
10.14 5 INVALID-ORDER-145	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	123
10.14 6 INVALID-ORDER-146	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	123
10.14 7 INVALID-ORDER-147	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	123
10.14 8 INVALID-ORDER-148	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	123

10.14	INVALID-ORDER-149	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	123
10.15	INVALID-ORDER-150	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	124
10.15	INVALID-ORDER-151	$Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	124
10.15	INVALID-ORDER-152	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	124
10.15	INVALID-ORDER-153	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	124
10.15	INVALID-ORDER-154	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	124
10.15	INVALID-ORDER-155	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	125
10.15	INVALID-ORDER-156	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	125
10.15	INVALID-ORDER-157	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	125
10.15	INVALID-ORDER-158	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	125
10.15	INVALID-ORDER-159	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	125
10.16	INVALID-ORDER-160	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	126
10.16	INVALID-ORDER-161	$Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	126
10.16	INVALID-ORDER-162	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L \right)$	126
10.16	INVALID-ORDER-163	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	126
10.16	INVALID-ORDER-164	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	126
10.16	INVALID-ORDER-165	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	127
10.16	INVALID-ORDER-166	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	127
10.16	INVALID-ORDER-167	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	127

10.16 1 INVALID-ORDER-168	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	127
10.16 2 INVALID-ORDER-169	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	127
10.17 0 INVALID-ORDER-170	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	128
10.17 1 INVALID-ORDER-171	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	128
10.17 2 INVALID-ORDER-172	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	128
10.17 3 INVALID-ORDER-173	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	128
10.17 4 INVALID-ORDER-174	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	128
10.17 5 INVALID-ORDER-175	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	128
10.17 6 INVALID-ORDER-176	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	129
10.17 7 INVALID-ORDER-177	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	129
10.17 8 INVALID-ORDER-178	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	129
10.17 9 INVALID-ORDER-179	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	129
10.18 0 INVALID-ORDER-180	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	129
10.18 1 INVALID-ORDER-181	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	130
10.18 2 INVALID-ORDER-182	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	130
10.18 3 INVALID-ORDER-183	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	130
10.18 4 INVALID-ORDER-184	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	130
10.18 5 INVALID-ORDER-185	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	130
10.18 6 INVALID-ORDER-186	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	131
10.18 7 INVALID-ORDER-187	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	131
10.18 8 INVALID-ORDER-188	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	131
10.18 9 INVALID-ORDER-189	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	131

10.190INVALID-ORDER-190	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	131
10.191INVALID-ORDER-191	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	131
10.192INVALID-ORDER-192	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	132
10.193INVALID-ORDER-193	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	132
10.194INVALID-ORDER-194	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	132
10.195INVALID-ORDER-195	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	132
10.196INVALID-ORDER-196	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	132
10.197INVALID-ORDER-197	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	133
10.198INVALID-ORDER-198	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	133
10.199INVALID-ORDER-199	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	133
10.200INVALID-ORDER-200	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	133
10.201INVALID-ORDER-201	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	133
10.202INVALID-ORDER-202	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	134
10.203INVALID-ORDER-203	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	134
10.204INVALID-ORDER-204	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	134
10.205INVALID-ORDER-205	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	134
10.206INVALID-ORDER-206	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	134
10.207INVALID-ORDER-207	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	134
10.208INVALID-ORDER-208	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	135
10.209INVALID-ORDER-209	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	135
10.210INVALID-ORDER-210	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	135
10.211INVALID-ORDER-211	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	135

10.21 INVALID-ORDER-212	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	135
10.21 INVALID-ORDER-213	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	136
10.21 INVALID-ORDER-214	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	136
10.21 INVALID-ORDER-215	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	136
10.21 INVALID-ORDER-216	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	136
10.21 INVALID-ORDER-217	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	136
10.21 INVALID-ORDER-218	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	136
10.21 INVALID-ORDER-219	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	137
10.22 INVALID-ORDER-220	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	137
10.22 INVALID-ORDER-221	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	137
10.22 INVALID-ORDER-222	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	137
10.22 INVALID-ORDER-223	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	137
10.22 INVALID-ORDER-224	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	138
10.22 INVALID-ORDER-225	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	138
10.22 INVALID-ORDER-226	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	138
10.22 INVALID-ORDER-227	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	138
10.22 INVALID-ORDER-228	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	138
10.22 INVALID-ORDER-229	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	139
10.23 INVALID-ORDER-230	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	139
10.23 INVALID-ORDER-231	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	139

10.232INVALID-ORDER-232	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + R_4 + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	139
10.233INVALID-ORDER-233	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	139
10.234INVALID-ORDER-234	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	140
10.235INVALID-ORDER-235	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	140
10.236INVALID-ORDER-236	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	140
10.237INVALID-ORDER-237	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	140
10.238INVALID-ORDER-238	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	140
10.239INVALID-ORDER-239	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	140
10.240INVALID-ORDER-240	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	141
10.241INVALID-ORDER-241	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	141
10.242INVALID-ORDER-242	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	141
10.243INVALID-ORDER-243	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	141
10.244INVALID-ORDER-244	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	141
10.245INVALID-ORDER-245	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	142
10.246INVALID-ORDER-246	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	142
10.247INVALID-ORDER-247	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	142
10.248INVALID-ORDER-248	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	142
10.249INVALID-ORDER-249	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	142
10.250INVALID-ORDER-250	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	143

10.25	INVALID-ORDER-251	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	143
10.25	INVALID-ORDER-252	$Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	143
10.25	INVALID-ORDER-253	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, R_L \right)$	143
10.25	INVALID-ORDER-254	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	143
10.25	INVALID-ORDER-255	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	144
10.25	INVALID-ORDER-256	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	144
10.25	INVALID-ORDER-257	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	144
10.25	INVALID-ORDER-258	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	144
10.25	INVALID-ORDER-259	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	144
10.26	INVALID-ORDER-260	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	145
10.26	INVALID-ORDER-261	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	145
10.26	INVALID-ORDER-262	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	145
10.26	INVALID-ORDER-263	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	145
10.26	INVALID-ORDER-264	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	145
10.26	INVALID-ORDER-265	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	145
10.26	INVALID-ORDER-266	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	146
10.26	INVALID-ORDER-267	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	146
10.26	INVALID-ORDER-268	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	146
10.26	INVALID-ORDER-269	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	146
10.27	INVALID-ORDER-270	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	146
10.27	INVALID-ORDER-271	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	147

10.272INVALID-ORDER-272	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	147
10.273INVALID-ORDER-273	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	147
10.274INVALID-ORDER-274	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	147
10.275INVALID-ORDER-275	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	147
10.276INVALID-ORDER-276	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	148
10.277INVALID-ORDER-277	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	148
10.278INVALID-ORDER-278	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	148
10.279INVALID-ORDER-279	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	148
10.280INVALID-ORDER-280	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	148
10.281INVALID-ORDER-281	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	148
10.282INVALID-ORDER-282	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	149
10.283INVALID-ORDER-283	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	149
10.284INVALID-ORDER-284	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	149
10.285INVALID-ORDER-285	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	149
10.286INVALID-ORDER-286	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	149
10.287INVALID-ORDER-287	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	150
10.288INVALID-ORDER-288	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	150
10.289INVALID-ORDER-289	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	150
10.290INVALID-ORDER-290	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	150
10.291INVALID-ORDER-291	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	150
10.292INVALID-ORDER-292	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	151
10.293INVALID-ORDER-293	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	151

10.29	INVALID-ORDER-294	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	151
10.29	INVALID-ORDER-295	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	151
10.29	INVALID-ORDER-296	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	151
10.29	INVALID-ORDER-297	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	151
10.29	INVALID-ORDER-298	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	152
10.29	INVALID-ORDER-299	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	152
10.30	INVALID-ORDER-300	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	152
10.30	INVALID-ORDER-301	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	152
10.30	INVALID-ORDER-302	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	152
10.30	INVALID-ORDER-303	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	153
10.30	INVALID-ORDER-304	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	153
10.30	INVALID-ORDER-305	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	153
10.30	INVALID-ORDER-306	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	153
10.30	INVALID-ORDER-307	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	153
10.30	INVALID-ORDER-308	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	153
10.30	INVALID-ORDER-309	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	154
10.31	INVALID-ORDER-310	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	154
10.31	INVALID-ORDER-311	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	154
10.31	INVALID-ORDER-312	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	154
10.31	INVALID-ORDER-313	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	154
10.31	INVALID-ORDER-314	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	155

10.31 5 INVALID-ORDER-315	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	155
10.31 6 INVALID-ORDER-316	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	155
10.31 7 INVALID-ORDER-317	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	155
10.31 8 INVALID-ORDER-318	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	155
10.31 9 INVALID-ORDER-319	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	156
10.32 0 INVALID-ORDER-320	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	156
10.32INVALID-ORDER-321	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	156
10.32 2 INVALID-ORDER-322	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	156
10.32 3 INVALID-ORDER-323	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	156
10.32 4 INVALID-ORDER-324	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	157
10.32 5 INVALID-ORDER-325	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	157
10.32 6 INVALID-ORDER-326	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	157
10.32 7 INVALID-ORDER-327	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	157
10.32 8 INVALID-ORDER-328	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	157
10.32 9 INVALID-ORDER-329	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	157
10.33 0 INVALID-ORDER-330	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	158
10.33INVALID-ORDER-331	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	158
10.33 2 INVALID-ORDER-332	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	158
10.33 3 INVALID-ORDER-333	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	158
10.33 4 INVALID-ORDER-334	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	158

10.335INVALID-ORDER-335	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	159
10.336INVALID-ORDER-336	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	159
10.337INVALID-ORDER-337	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	159
10.338INVALID-ORDER-338	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	159
10.339INVALID-ORDER-339	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	159
10.340INVALID-ORDER-340	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	160
10.341INVALID-ORDER-341	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	160
10.342INVALID-ORDER-342	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	160
10.343INVALID-ORDER-343	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L \right)$	160
10.344INVALID-ORDER-344	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	160
10.345INVALID-ORDER-345	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	161
10.346INVALID-ORDER-346	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	161
10.347INVALID-ORDER-347	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	161
10.348INVALID-ORDER-348	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	161
10.349INVALID-ORDER-349	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	161
10.350INVALID-ORDER-350	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	162
10.351INVALID-ORDER-351	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	162
10.352INVALID-ORDER-352	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	162
10.353INVALID-ORDER-353	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	162
10.354INVALID-ORDER-354	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	162

10.355INVALID-ORDER-355	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	162
10.356INVALID-ORDER-356	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	163
10.357INVALID-ORDER-357	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	163
10.358INVALID-ORDER-358	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	163
10.359INVALID-ORDER-359	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	163
10.360INVALID-ORDER-360	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	163
10.361INVALID-ORDER-361	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	164
10.362INVALID-ORDER-362	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	164
10.363INVALID-ORDER-363	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	164
10.364INVALID-ORDER-364	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	164
10.365INVALID-ORDER-365	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	164
10.366INVALID-ORDER-366	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	165
10.367INVALID-ORDER-367	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	165
10.368INVALID-ORDER-368	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	165
10.369INVALID-ORDER-369	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	165
10.370INVALID-ORDER-370	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	165
10.371INVALID-ORDER-371	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	165
10.372INVALID-ORDER-372	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	166
10.373INVALID-ORDER-373	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	166
10.374INVALID-ORDER-374	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	166
10.375INVALID-ORDER-375	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	166
10.376INVALID-ORDER-376	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	166

10.37	INVALID-ORDER-377	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	167
10.37	INVALID-ORDER-378	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	167
10.37	INVALID-ORDER-379	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	167
10.38	INVALID-ORDER-380	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	167
10.38	INVALID-ORDER-381	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$	167
10.38	INVALID-ORDER-382	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	168
10.38	INVALID-ORDER-383	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	168
10.38	INVALID-ORDER-384	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	168
10.38	INVALID-ORDER-385	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	168
10.38	INVALID-ORDER-386	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	168
10.38	INVALID-ORDER-387	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	168
10.38	INVALID-ORDER-388	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	169
10.38	INVALID-ORDER-389	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	169
10.39	INVALID-ORDER-390	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	169
10.39	INVALID-ORDER-391	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$	169
10.39	INVALID-ORDER-392	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	169
10.39	INVALID-ORDER-393	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	170
10.39	INVALID-ORDER-394	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	170
10.39	INVALID-ORDER-395	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	170
10.39	INVALID-ORDER-396	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	170
10.39	INVALID-ORDER-397	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	170
10.39	INVALID-ORDER-398	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	171

10.39	INVALID-ORDER-399	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	171
10.40	INVALID-ORDER-400	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	171
10.40	INVALID-ORDER-401	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	171
10.40	INVALID-ORDER-402	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	171
10.40	INVALID-ORDER-403	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	172
10.40	INVALID-ORDER-404	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	172
10.40	INVALID-ORDER-405	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	172
10.40	INVALID-ORDER-406	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	172
10.40	INVALID-ORDER-407	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	172
10.40	INVALID-ORDER-408	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	173
10.40	INVALID-ORDER-409	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	173
10.41	INVALID-ORDER-410	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	173
10.41	INVALID-ORDER-411	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	173
10.41	INVALID-ORDER-412	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	173
10.41	INVALID-ORDER-413	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	174
10.41	INVALID-ORDER-414	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	174
10.41	INVALID-ORDER-415	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	174
10.41	INVALID-ORDER-416	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	174
10.41	INVALID-ORDER-417	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	174
10.41	INVALID-ORDER-418	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	175

10.41 1 INVALID-ORDER-419	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	175
10.42 0 INVALID-ORDER-420	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	175
10.42INVALID-ORDER-421	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	175
10.42 2 INVALID-ORDER-422	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	175
10.42 3 INVALID-ORDER-423	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	176
10.42 4 INVALID-ORDER-424	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	176
10.42 5 INVALID-ORDER-425	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	176
10.42 6 INVALID-ORDER-426	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	176
10.42 7 INVALID-ORDER-427	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	176
10.42 8 INVALID-ORDER-428	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	177
10.42 9 INVALID-ORDER-429	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	177
10.43 0 INVALID-ORDER-430	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	177
10.43INVALID-ORDER-431	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	177
10.43 2 INVALID-ORDER-432	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	177
10.43 3 INVALID-ORDER-433	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	178
10.43 4 INVALID-ORDER-434	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	178
10.43 5 INVALID-ORDER-435	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	178
10.43 6 INVALID-ORDER-436	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	178
10.43 7 INVALID-ORDER-437	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	178

10.43 8 INVALID-ORDER-438	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	179
10.43 9 INVALID-ORDER-439	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	179
10.44 0 INVALID-ORDER-440	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	179
10.44 1 INVALID-ORDER-441	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	179
10.44 2 INVALID-ORDER-442	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	179
10.44 3 INVALID-ORDER-443	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	180
10.44 4 INVALID-ORDER-444	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	180
10.44 5 INVALID-ORDER-445	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	180
10.44 6 INVALID-ORDER-446	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	180
10.44 7 INVALID-ORDER-447	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	180
10.44 8 INVALID-ORDER-448	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	180
10.44 9 INVALID-ORDER-449	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	181
10.45 0 INVALID-ORDER-450	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	181
10.45 1 INVALID-ORDER-451	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	181
10.45 2 INVALID-ORDER-452	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	181
10.45 3 INVALID-ORDER-453	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$	181
10.45 4 INVALID-ORDER-454	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	182
10.45 5 INVALID-ORDER-455	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	182
10.45 6 INVALID-ORDER-456	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	182
10.45 7 INVALID-ORDER-457	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	182
10.45 8 INVALID-ORDER-458	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	182
10.45 9 INVALID-ORDER-459	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	182

10.460INVALID-ORDER-460	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	183
10.461INVALID-ORDER-461	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	183
10.462INVALID-ORDER-462	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	183
10.463INVALID-ORDER-463	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	183
10.464INVALID-ORDER-464	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	183
10.465INVALID-ORDER-465	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	184
10.466INVALID-ORDER-466	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	184
10.467INVALID-ORDER-467	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	184
10.468INVALID-ORDER-468	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	184
10.469INVALID-ORDER-469	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	184
10.470INVALID-ORDER-470	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	185
10.471INVALID-ORDER-471	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	185
10.472INVALID-ORDER-472	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	185
10.473INVALID-ORDER-473	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	185
10.474INVALID-ORDER-474	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	185
10.475INVALID-ORDER-475	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	186
10.476INVALID-ORDER-476	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	186
10.477INVALID-ORDER-477	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	186
10.478INVALID-ORDER-478	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	186
10.479INVALID-ORDER-479	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	186
10.480INVALID-ORDER-480	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	187
10.481INVALID-ORDER-481	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	187

10.482	INVALID-ORDER-482	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	187
10.483	INVALID-ORDER-483	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	187
10.484	INVALID-ORDER-484	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	187
10.485	INVALID-ORDER-485	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	188
10.486	INVALID-ORDER-486	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	188
10.487	INVALID-ORDER-487	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	188
10.488	INVALID-ORDER-488	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	188
10.489	INVALID-ORDER-489	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	188
10.490	INVALID-ORDER-490	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	189
10.491	INVALID-ORDER-491	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	189
10.492	INVALID-ORDER-492	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	189
10.493	INVALID-ORDER-493	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	189
10.494	INVALID-ORDER-494	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	189
10.495	INVALID-ORDER-495	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	190
10.496	INVALID-ORDER-496	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	190
10.497	INVALID-ORDER-497	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	190
10.498	INVALID-ORDER-498	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	190
10.499	INVALID-ORDER-499	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	190
10.500	INVALID-ORDER-500	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	191
10.501	INVALID-ORDER-501	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	191
10.502	INVALID-ORDER-502	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	191
10.503	INVALID-ORDER-503	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	191

10.501INVALID-ORDER-504	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	191
10.505INVALID-ORDER-505	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	192
10.506INVALID-ORDER-506	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	192
10.507INVALID-ORDER-507	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	192
10.508INVALID-ORDER-508	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	192
10.509INVALID-ORDER-509	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	192
10.510INVALID-ORDER-510	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	193
10.511INVALID-ORDER-511	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	193
10.512INVALID-ORDER-512	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	193
10.513INVALID-ORDER-513	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	193
10.514INVALID-ORDER-514	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	193
10.515INVALID-ORDER-515	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	194
10.516INVALID-ORDER-516	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	194
10.517INVALID-ORDER-517	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	194
10.518INVALID-ORDER-518	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	194
10.519INVALID-ORDER-519	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	194
10.520INVALID-ORDER-520	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	195
10.521INVALID-ORDER-521	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	195
10.522INVALID-ORDER-522	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	195
10.523INVALID-ORDER-523	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	195

10.521INVALID-ORDER-524	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	195
10.525INVALID-ORDER-525	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	196
10.526INVALID-ORDER-526	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	196
10.527INVALID-ORDER-527	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	196
10.528INVALID-ORDER-528	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	196
10.529INVALID-ORDER-529	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	196
10.530INVALID-ORDER-530	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	197
10.531INVALID-ORDER-531	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	197
10.532INVALID-ORDER-532	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	197
10.533INVALID-ORDER-533	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	197
10.534INVALID-ORDER-534	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	197
10.535INVALID-ORDER-535	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	198
10.536INVALID-ORDER-536	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	198
10.537INVALID-ORDER-537	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	198
10.538INVALID-ORDER-538	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	198
10.539INVALID-ORDER-539	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	198
10.540INVALID-ORDER-540	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	198
10.541INVALID-ORDER-541	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	199
10.542INVALID-ORDER-542	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	199
10.543INVALID-ORDER-543	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	199

10.541INVALID-ORDER-544	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	199
10.545INVALID-ORDER-545	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	199
10.546INVALID-ORDER-546	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	199
10.547INVALID-ORDER-547	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	200
10.548INVALID-ORDER-548	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	200
10.549INVALID-ORDER-549	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	200
10.550INVALID-ORDER-550	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	200
10.551INVALID-ORDER-551	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	200
10.552INVALID-ORDER-552	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$	201
10.553INVALID-ORDER-553	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	201
10.554INVALID-ORDER-554	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	201
10.555INVALID-ORDER-555	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	201
10.556INVALID-ORDER-556	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	201
10.557INVALID-ORDER-557	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	201
10.558INVALID-ORDER-558	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	202
10.559INVALID-ORDER-559	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	202
10.560INVALID-ORDER-560	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	202
10.561INVALID-ORDER-561	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	202
10.562INVALID-ORDER-562	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	202
10.563INVALID-ORDER-563	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	203
10.564INVALID-ORDER-564	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	203
10.565INVALID-ORDER-565	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	203

10.566INVALID-ORDER-566	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	203
10.567INVALID-ORDER-567	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	203
10.568INVALID-ORDER-568	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	203
10.569INVALID-ORDER-569	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	204
10.570INVALID-ORDER-570	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	204
10.571INVALID-ORDER-571	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	204
10.572INVALID-ORDER-572	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	204
10.573INVALID-ORDER-573	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	204
10.574INVALID-ORDER-574	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	205
10.575INVALID-ORDER-575	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	205
10.576INVALID-ORDER-576	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	205
10.577INVALID-ORDER-577	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	205
10.578INVALID-ORDER-578	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	205
10.579INVALID-ORDER-579	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	206
10.580INVALID-ORDER-580	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	206
10.581INVALID-ORDER-581	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	206
10.582INVALID-ORDER-582	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	206
10.583INVALID-ORDER-583	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	206
10.584INVALID-ORDER-584	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	207
10.585INVALID-ORDER-585	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	207
10.586INVALID-ORDER-586	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	207
10.587INVALID-ORDER-587	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	207

10.58	INVALID-ORDER-588	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	207
10.58	INVALID-ORDER-589	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	207
10.59	INVALID-ORDER-590	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	208
10.59	INVALID-ORDER-591	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	208
10.59	INVALID-ORDER-592	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	208
10.59	INVALID-ORDER-593	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	208
10.59	INVALID-ORDER-594	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	208
10.59	INVALID-ORDER-595	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	209
10.59	INVALID-ORDER-596	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	209
10.59	INVALID-ORDER-597	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	209
10.59	INVALID-ORDER-598	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	209
10.59	INVALID-ORDER-599	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	209
10.60	INVALID-ORDER-600	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	210
10.60	INVALID-ORDER-601	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	210
10.60	INVALID-ORDER-602	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	210
10.60	INVALID-ORDER-603	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	210
10.60	INVALID-ORDER-604	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	210
10.60	INVALID-ORDER-605	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	211
10.60	INVALID-ORDER-606	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	211
10.60	INVALID-ORDER-607	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	211

10.608	INVALID-ORDER-608	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	211
10.609	INVALID-ORDER-609	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	211
10.610	INVALID-ORDER-610	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	212
10.611	INVALID-ORDER-611	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	212
10.612	INVALID-ORDER-612	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	212
10.613	INVALID-ORDER-613	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	212
10.614	INVALID-ORDER-614	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	212
10.615	INVALID-ORDER-615	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	213
10.616	INVALID-ORDER-616	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	213
10.617	INVALID-ORDER-617	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	213
10.618	INVALID-ORDER-618	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	213
10.619	INVALID-ORDER-619	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	213
10.620	INVALID-ORDER-620	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	214
10.621	INVALID-ORDER-621	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	214
10.622	INVALID-ORDER-622	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	214
10.623	INVALID-ORDER-623	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	214
10.624	INVALID-ORDER-624	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	214
10.625	INVALID-ORDER-625	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	215
10.626	INVALID-ORDER-626	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	215

10.62	INVALID-ORDER-627	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	215
10.62	INVALID-ORDER-628	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	215
10.62	INVALID-ORDER-629	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	215
10.63	INVALID-ORDER-630	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	216
10.63	INVALID-ORDER-631	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	216
10.63	INVALID-ORDER-632	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	216
10.63	INVALID-ORDER-633	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	216
10.63	INVALID-ORDER-634	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	216
10.63	INVALID-ORDER-635	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	217
10.63	INVALID-ORDER-636	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	217
10.63	INVALID-ORDER-637	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	217
10.63	INVALID-ORDER-638	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	217
10.63	INVALID-ORDER-639	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	217
10.64	INVALID-ORDER-640	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	218
10.64	INVALID-ORDER-641	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	218
10.64	INVALID-ORDER-642	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	218
10.64	INVALID-ORDER-643	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	218
10.64	INVALID-ORDER-644	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	218
10.64	INVALID-ORDER-645	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	219
10.64	INVALID-ORDER-646	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	219
10.64	INVALID-ORDER-647	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	219

10.648INVALID-ORDER-648	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	219
10.649INVALID-ORDER-649	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	219
10.650INVALID-ORDER-650	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	220
10.651INVALID-ORDER-651	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$	220
10.652INVALID-ORDER-652	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	220
10.653INVALID-ORDER-653	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	220
10.654INVALID-ORDER-654	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	220
10.655INVALID-ORDER-655	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	221
10.656INVALID-ORDER-656	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	221
10.657INVALID-ORDER-657	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	221
10.658INVALID-ORDER-658	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	221
10.659INVALID-ORDER-659	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	221
10.660INVALID-ORDER-660	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	222
10.661INVALID-ORDER-661	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	222
10.662INVALID-ORDER-662	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	222
10.663INVALID-ORDER-663	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	222
10.664INVALID-ORDER-664	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	222
10.665INVALID-ORDER-665	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	223
10.666INVALID-ORDER-666	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	223
10.667INVALID-ORDER-667	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	223
10.668INVALID-ORDER-668	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	223
10.669INVALID-ORDER-669	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	223

10.670INVALID-ORDER-670	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	224
10.671INVALID-ORDER-671	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	224
10.672INVALID-ORDER-672	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	224
10.673INVALID-ORDER-673	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	224
10.674INVALID-ORDER-674	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	224
10.675INVALID-ORDER-675	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	225
10.676INVALID-ORDER-676	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	225
10.677INVALID-ORDER-677	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	225
10.678INVALID-ORDER-678	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	225
10.679INVALID-ORDER-679	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	225
10.680INVALID-ORDER-680	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	226
10.681INVALID-ORDER-681	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	226
10.682INVALID-ORDER-682	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	226
10.683INVALID-ORDER-683	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	226
10.684INVALID-ORDER-684	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	226
10.685INVALID-ORDER-685	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	227
10.686INVALID-ORDER-686	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	227
10.687INVALID-ORDER-687	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	227
10.688INVALID-ORDER-688	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	227
10.689INVALID-ORDER-689	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	227
10.690INVALID-ORDER-690	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	228
10.691INVALID-ORDER-691	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	228

10.692INVALID-ORDER-692	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	228
10.693INVALID-ORDER-693	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	228
10.694INVALID-ORDER-694	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	228
10.695INVALID-ORDER-695	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	229
10.696INVALID-ORDER-696	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	229
10.697INVALID-ORDER-697	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	229
10.698INVALID-ORDER-698	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	229
10.699INVALID-ORDER-699	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	229
10.700INVALID-ORDER-700	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	230
10.701INVALID-ORDER-701	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	230
10.702INVALID-ORDER-702	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	230
10.703INVALID-ORDER-703	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	230
10.704INVALID-ORDER-704	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	230
10.705INVALID-ORDER-705	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	231
10.706INVALID-ORDER-706	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	231
10.707INVALID-ORDER-707	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	231
10.708INVALID-ORDER-708	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	231
10.709INVALID-ORDER-709	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	231
10.710INVALID-ORDER-710	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	232
10.711INVALID-ORDER-711	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	232

10.712	INVALID-ORDER-712	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	232
10.713	INVALID-ORDER-713	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	232
10.714	INVALID-ORDER-714	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	232
10.715	INVALID-ORDER-715	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	233
10.716	INVALID-ORDER-716	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	233
10.717	INVALID-ORDER-717	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	233
10.718	INVALID-ORDER-718	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	233
10.719	INVALID-ORDER-719	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	233
10.720	INVALID-ORDER-720	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	234
10.721	INVALID-ORDER-721	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	234
10.722	INVALID-ORDER-722	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	234
10.723	INVALID-ORDER-723	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	234
10.724	INVALID-ORDER-724	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	234
10.725	INVALID-ORDER-725	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	235
10.726	INVALID-ORDER-726	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	235
10.727	INVALID-ORDER-727	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	235
10.728	INVALID-ORDER-728	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	235
10.729	INVALID-ORDER-729	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	235
10.730	INVALID-ORDER-730	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	236

10.731	INVALID-ORDER-731	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	236
10.732	INVALID-ORDER-732	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	236
10.733	INVALID-ORDER-733	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	236
10.734	INVALID-ORDER-734	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	236
10.735	INVALID-ORDER-735	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	237
10.736	INVALID-ORDER-736	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	237
10.737	INVALID-ORDER-737	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	237
10.738	INVALID-ORDER-738	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	237
10.739	INVALID-ORDER-739	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	237
10.740	INVALID-ORDER-740	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	238
10.741	INVALID-ORDER-741	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	238
10.742	INVALID-ORDER-742	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	238
10.743	INVALID-ORDER-743	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	238
10.744	INVALID-ORDER-744	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	238
10.745	INVALID-ORDER-745	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	239
10.746	INVALID-ORDER-746	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	239
10.747	INVALID-ORDER-747	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	239
10.748	INVALID-ORDER-748	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	239

10.749	INVALID-ORDER-749	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	239
10.750	INVALID-ORDER-750	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$	240
10.751	INVALID-ORDER-751	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	240
10.752	INVALID-ORDER-752	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	240
10.753	INVALID-ORDER-753	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	240
10.754	INVALID-ORDER-754	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	240
10.755	INVALID-ORDER-755	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	241
10.756	INVALID-ORDER-756	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	241
10.757	INVALID-ORDER-757	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	241
10.758	INVALID-ORDER-758	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	241
10.759	INVALID-ORDER-759	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	241
10.760	INVALID-ORDER-760	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	242
10.761	INVALID-ORDER-761	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	242
10.762	INVALID-ORDER-762	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	242
10.763	INVALID-ORDER-763	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	242
10.764	INVALID-ORDER-764	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	242
10.765	INVALID-ORDER-765	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	243
10.766	INVALID-ORDER-766	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	243

10.767	INVALID-ORDER-767	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	243
10.768	INVALID-ORDER-768	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	243
10.769	INVALID-ORDER-769	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	243
10.770	INVALID-ORDER-770	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	244
10.771	INVALID-ORDER-771	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	244
10.772	INVALID-ORDER-772	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	244
10.773	INVALID-ORDER-773	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	244
10.774	INVALID-ORDER-774	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	244
10.775	INVALID-ORDER-775	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	245
10.776	INVALID-ORDER-776	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	245
10.777	INVALID-ORDER-777	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	245
10.778	INVALID-ORDER-778	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	245
10.779	INVALID-ORDER-779	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	245
10.780	INVALID-ORDER-780	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	246
10.781	INVALID-ORDER-781	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	246
10.782	INVALID-ORDER-782	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	246
10.783	INVALID-ORDER-783	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	246
10.784	INVALID-ORDER-784	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	246

10.785	INVALID-ORDER-785	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	247
10.786	INVALID-ORDER-786	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	247
10.787	INVALID-ORDER-787	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	247
10.788	INVALID-ORDER-788	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	247
10.789	INVALID-ORDER-789	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	247
10.790	INVALID-ORDER-790	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	248
10.791	INVALID-ORDER-791	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	248
10.792	INVALID-ORDER-792	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	248
10.793	INVALID-ORDER-793	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	248
10.794	INVALID-ORDER-794	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	248
10.795	INVALID-ORDER-795	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	249
10.796	INVALID-ORDER-796	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	249
10.797	INVALID-ORDER-797	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	249
10.798	INVALID-ORDER-798	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	249
10.799	INVALID-ORDER-799	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	249
10.800	INVALID-ORDER-800	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	250
10.801	INVALID-ORDER-801	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	250
10.802	INVALID-ORDER-802	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	250

10.803	INVALID-ORDER-803	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	250
10.804	INVALID-ORDER-804	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	250
10.805	INVALID-ORDER-805	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	251
10.806	INVALID-ORDER-806	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	251
10.807	INVALID-ORDER-807	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	251
10.808	INVALID-ORDER-808	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	251
10.809	INVALID-ORDER-809	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	251
10.810	INVALID-ORDER-810	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	252
10.811	INVALID-ORDER-811	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	252
10.812	INVALID-ORDER-812	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	252
10.813	INVALID-ORDER-813	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	252
10.814	INVALID-ORDER-814	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	252
10.815	INVALID-ORDER-815	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	253
10.816	INVALID-ORDER-816	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	253
10.817	INVALID-ORDER-817	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	253
10.818	INVALID-ORDER-818	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	253
10.819	INVALID-ORDER-819	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	253
10.820	INVALID-ORDER-820	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	254

10.82	INVALID-ORDER-821	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	254
10.82	INVALID-ORDER-822	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	254
10.82	INVALID-ORDER-823	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	254
10.82	INVALID-ORDER-824	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	254
10.82	INVALID-ORDER-825	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	255
10.82	INVALID-ORDER-826	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	255
10.82	INVALID-ORDER-827	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	255
10.82	INVALID-ORDER-828	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	255
10.82	INVALID-ORDER-829	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	255
10.83	INVALID-ORDER-830	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	256
10.83	INVALID-ORDER-831	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	256
10.83	INVALID-ORDER-832	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	256
10.83	INVALID-ORDER-833	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	256
10.83	INVALID-ORDER-834	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	256
10.83	INVALID-ORDER-835	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	256
10.83	INVALID-ORDER-836	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	257
10.83	INVALID-ORDER-837	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	257
10.83	INVALID-ORDER-838	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	257
10.83	INVALID-ORDER-839	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	257
10.84	INVALID-ORDER-840	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	257

10.84	INVALID-ORDER-841	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	258
10.84	INVALID-ORDER-842	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	258
10.84	INVALID-ORDER-843	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	258
10.84	INVALID-ORDER-844	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	258
10.84	INVALID-ORDER-845	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	258
10.84	INVALID-ORDER-846	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	259
10.84	INVALID-ORDER-847	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	259
10.84	INVALID-ORDER-848	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	259
10.84	INVALID-ORDER-849	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$	259
10.85	INVALID-ORDER-850	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	259
10.85	INVALID-ORDER-851	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	260
10.85	INVALID-ORDER-852	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	260
10.85	INVALID-ORDER-853	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	260
10.85	INVALID-ORDER-854	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	260
10.85	INVALID-ORDER-855	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	260
10.85	INVALID-ORDER-856	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	261
10.85	INVALID-ORDER-857	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	261
10.85	INVALID-ORDER-858	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	261
10.85	INVALID-ORDER-859	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	261
10.86	INVALID-ORDER-860	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	261
10.86	INVALID-ORDER-861	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	262
10.86	INVALID-ORDER-862	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	262

10.863INVALID-ORDER-863	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	262
10.864INVALID-ORDER-864	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	262
10.865INVALID-ORDER-865	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	262
10.866INVALID-ORDER-866	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	263
10.867INVALID-ORDER-867	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	263
10.868INVALID-ORDER-868	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	263
10.869INVALID-ORDER-869	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	263
10.870INVALID-ORDER-870	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	263
10.871INVALID-ORDER-871	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	264
10.872INVALID-ORDER-872	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	264
10.873INVALID-ORDER-873	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	264
10.874INVALID-ORDER-874	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	264
10.875INVALID-ORDER-875	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	264
10.876INVALID-ORDER-876	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	265
10.877INVALID-ORDER-877	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	265
10.878INVALID-ORDER-878	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	265
10.879INVALID-ORDER-879	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	265
10.880INVALID-ORDER-880	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	265
10.881INVALID-ORDER-881	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	266
10.882INVALID-ORDER-882	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	266
10.883INVALID-ORDER-883	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	266
10.884INVALID-ORDER-884	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	266

10.885INVALID-ORDER-885	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	266
10.886INVALID-ORDER-886	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	267
10.887INVALID-ORDER-887	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	267
10.888INVALID-ORDER-888	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	267
10.889INVALID-ORDER-889	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	267
10.890INVALID-ORDER-890	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	267
10.891INVALID-ORDER-891	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	268
10.892INVALID-ORDER-892	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	268
10.893INVALID-ORDER-893	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	268
10.894INVALID-ORDER-894	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	268
10.895INVALID-ORDER-895	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	268
10.896INVALID-ORDER-896	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	269
10.897INVALID-ORDER-897	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	269
10.898INVALID-ORDER-898	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	269
10.899INVALID-ORDER-899	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	269
10.900INVALID-ORDER-900	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	269
10.901INVALID-ORDER-901	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	270
10.902INVALID-ORDER-902	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	270
10.903INVALID-ORDER-903	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	270
10.904INVALID-ORDER-904	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	270

10.905	INVALID-ORDER-905	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	270
10.906	INVALID-ORDER-906	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	271
10.907	INVALID-ORDER-907	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	271
10.908	INVALID-ORDER-908	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	271
10.909	INVALID-ORDER-909	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	271
10.910	INVALID-ORDER-910	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	271
10.911	INVALID-ORDER-911	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	272
10.912	INVALID-ORDER-912	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	272
10.913	INVALID-ORDER-913	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	272
10.914	INVALID-ORDER-914	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	272
10.915	INVALID-ORDER-915	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	272
10.916	INVALID-ORDER-916	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	273
10.917	INVALID-ORDER-917	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	273
10.918	INVALID-ORDER-918	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	273
10.919	INVALID-ORDER-919	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	273
10.920	INVALID-ORDER-920	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	273
10.921	INVALID-ORDER-921	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	274
10.922	INVALID-ORDER-922	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	274
10.923	INVALID-ORDER-923	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	274

10.924	INVALID-ORDER-924	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	274
10.925	INVALID-ORDER-925	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	274
10.926	INVALID-ORDER-926	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	275
10.927	INVALID-ORDER-927	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	275
10.928	INVALID-ORDER-928	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	275
10.929	INVALID-ORDER-929	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	275
10.930	INVALID-ORDER-930	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	275
10.931	INVALID-ORDER-931	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	276
10.932	INVALID-ORDER-932	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	276
10.933	INVALID-ORDER-933	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	276
10.934	INVALID-ORDER-934	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	276
10.935	INVALID-ORDER-935	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	276
10.936	INVALID-ORDER-936	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	277
10.937	INVALID-ORDER-937	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	277
10.938	INVALID-ORDER-938	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	277
10.939	INVALID-ORDER-939	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	277
10.940	INVALID-ORDER-940	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	277

10.94	INVALID-ORDER-941	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	278
10.94	INVALID-ORDER-942	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	278
10.94	INVALID-ORDER-943	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	278
10.94	INVALID-ORDER-944	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	278
10.94	INVALID-ORDER-945	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	278
10.94	INVALID-ORDER-946	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	279
10.94	INVALID-ORDER-947	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	279
10.94	INVALID-ORDER-948	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$	279
10.94	INVALID-ORDER-949	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	279
10.95	INVALID-ORDER-950	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	279
10.95	INVALID-ORDER-951	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	280
10.95	INVALID-ORDER-952	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	280
10.95	INVALID-ORDER-953	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	280
10.95	INVALID-ORDER-954	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	280
10.95	INVALID-ORDER-955	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	280
10.95	INVALID-ORDER-956	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	281
10.95	INVALID-ORDER-957	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	281

10.958INVALID-ORDER-958	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	281
10.959INVALID-ORDER-959	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	281
10.960INVALID-ORDER-960	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	281
10.961INVALID-ORDER-961	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	282
10.962INVALID-ORDER-962	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	282
10.963INVALID-ORDER-963	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	282
10.964INVALID-ORDER-964	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	282
10.965INVALID-ORDER-965	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$	282
10.966INVALID-ORDER-966	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	283
10.967INVALID-ORDER-967	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	283
10.968INVALID-ORDER-968	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$	283
10.969INVALID-ORDER-969	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	283
10.970INVALID-ORDER-970	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	283
10.971INVALID-ORDER-971	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	284
10.972INVALID-ORDER-972	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	284
10.973INVALID-ORDER-973	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	284
10.974INVALID-ORDER-974	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	284

10.975INVALID-ORDER-975	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	284
10.976INVALID-ORDER-976	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	285
10.977INVALID-ORDER-977	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	285
10.978INVALID-ORDER-978	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$	285
10.979INVALID-ORDER-979	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$	285
10.980INVALID-ORDER-980	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	285
10.981INVALID-ORDER-981	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	286
10.982INVALID-ORDER-982	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	286
10.983INVALID-ORDER-983	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	286
10.984INVALID-ORDER-984	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	286
10.985INVALID-ORDER-985	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	286
10.986INVALID-ORDER-986	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	287
10.987INVALID-ORDER-987	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	287
10.988INVALID-ORDER-988	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$	287
10.989INVALID-ORDER-989	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	287
10.990INVALID-ORDER-990	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	287
10.991INVALID-ORDER-991	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	288

10.992INVALID-ORDER-992	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	288
10.993INVALID-ORDER-993	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	288
10.994INVALID-ORDER-994	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	288
10.995INVALID-ORDER-995	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	288
10.996INVALID-ORDER-996	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	289
10.997INVALID-ORDER-997	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	289
10.998INVALID-ORDER-998	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$	289
10.999INVALID-ORDER-999	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$	289
10.1000INVALID-ORDER-1000	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	289
10.1001INVALID-ORDER-1001	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	290
10.1002INVALID-ORDER-1002	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	290
10.1003INVALID-ORDER-1003	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	290
10.1004INVALID-ORDER-1004	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	290
10.1005INVALID-ORDER-1005	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	290
10.1006INVALID-ORDER-1006	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	291
10.1007INVALID-ORDER-1007	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	291
10.1008INVALID-ORDER-1008	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$	291

10.100 9 INVALID-ORDER-1009	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$	291
10.101 0 INVALID-ORDER-1010	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	291
10.102 1 INVALID-ORDER-1011	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$	292
10.103 2 INVALID-ORDER-1012	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	292
10.104 3 INVALID-ORDER-1013	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	292
10.105 4 INVALID-ORDER-1014	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	292
10.106 5 INVALID-ORDER-1015	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	292
10.107 6 INVALID-ORDER-1016	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	293
10.108 7 INVALID-ORDER-1017	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	293
10.109 8 INVALID-ORDER-1018	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	293
10.110 9 INVALID-ORDER-1019	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	293
10.111 0 INVALID-ORDER-1020	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	293
10.112 1 INVALID-ORDER-1021	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	294
10.113 2 INVALID-ORDER-1022	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	294
10.114 3 INVALID-ORDER-1023	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	294
10.115 4 INVALID-ORDER-1024	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	294
10.116 5 INVALID-ORDER-1025	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	294

10.1026	INVALID-ORDER-1026	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	295
10.1027	INVALID-ORDER-1027	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	295

1 Examined $H(z)$ for TIA some parasitic Z1 Z4 ZL: $\frac{Z_1 Z_4 Z_L (g_m r_o + 1)}{Z_1 Z_4 g_m r_o + Z_1 Z_4 + 2Z_1 Z_L g_m r_o + 2Z_1 Z_L + Z_4 Z_L + Z_4 r_o + 2Z_L r_o}$

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

2 HP

3 BP

3.1 BP-1 $Z(s) = \left(R_1, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 R_4 s (g_m r_o + 1)}{C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + C_L L_L R_4 r_o s^2 + 2L_L R_1 g_m r_o s + 2L_L R_1 s + L_L R_4 s + 2L_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + R_4 r_o}$$

Parameters:

Q: $\frac{C_L R_4 \sqrt{\frac{1}{C_L L_L}} (R_1 g_m r_o + R_1 + r_o)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$

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

bandwidth: $\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_L R_4 (R_1 g_m r_o + R_1 + r_o)}$

K-LP: 0

K-HP: 0

K-BP: $\frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$

QZ: 0

WZ: None

3.2 BP-2 $Z(s) = \left(R_1, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_4 R_L s (g_m r_o + 1)}{C_L L_L R_1 R_4 R_L g_m r_o s^2 + C_L L_L R_1 R_4 R_L s^2 + C_L L_L R_4 R_L r_o s^2 + L_L R_1 R_4 g_m r_o s + L_L R_1 R_4 s + 2L_L R_1 R_L g_m r_o s + 2L_L R_1 R_L s + L_L R_4 R_L s + L_L R_4 r_o s + 2L_L R_L r_o s + R_1 R_4 R_L}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_L R_4 R_L \sqrt{\frac{1}{C_L L_L}} (R_1 g_m r_o + R_1 + r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_L L_L}} \\
\text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

$$\mathbf{3.3 \quad BP-3} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 s (g_m r_o + 1)}{2C_4 L_L R_1 g_m r_o s^2 + 2C_4 L_L R_1 s^2 + 2C_4 L_L r_o s^2 + C_L L_L R_1 g_m r_o s^2 + C_L L_L R_1 s^2 + C_L L_L r_o s^2 + L_L s + R_1 g_m r_o + R_1 + r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \sqrt{\frac{1}{L_L (2C_4 + C_L)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o) \\
\text{wo: } & \sqrt{\frac{1}{L_L (2C_4 + C_L)}} \\
\text{bandwidth: } & \frac{1}{2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & R_1 (g_m r_o + 1) \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

$$\mathbf{3.4 \quad BP-4} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L s (g_m r_o + 1)}{2C_4 L_L R_1 R_L g_m r_o s^2 + 2C_4 L_L R_1 R_L s^2 + 2C_4 L_L R_L r_o s^2 + C_L L_L R_1 R_L g_m r_o s^2 + C_L L_L R_1 R_L s^2 + C_L L_L R_L r_o s^2 + L_L R_1 g_m r_o s + L_L R_1 s + L_L R_L s + L_L r_o s + R_1 R_L g_m r_o + R_1 R_L s + R_1 R_L}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{R_L \sqrt{\frac{1}{L_L(2C_4+C_L)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{wo: } & \sqrt{\frac{1}{L_L(2C_4+C_L)}} \\ \text{bandwidth: } & \frac{R_1 g_m r_o + R_1 + R_L + r_o}{R_L(2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.5 \quad BP-5} \quad Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_4 s (g_m r_o + 1)}{2C_4 L_L R_1 R_4 g_m r_o s^2 + 2C_4 L_L R_1 R_4 s^2 + 2C_4 L_L R_4 r_o s^2 + C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + C_L L_L R_4 r_o s^2 + 2L_L R_1 g_m r_o s + 2L_L R_1 s + L_L R_4 s + 2L_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 s + R_1 R_4 r_o + R_1 R_4}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{R_4 \sqrt{\frac{1}{L_L(2C_4+C_L)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\ \text{wo: } & \sqrt{\frac{1}{L_L(2C_4+C_L)}} \\ \text{bandwidth: } & \frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{R_4(2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.6 \quad BP-6} \quad Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_4 R_L s (g_m r_o + 1)}{2C_4 L_L R_1 R_4 R_L g_m r_o s^2 + 2C_4 L_L R_1 R_4 R_L s^2 + 2C_4 L_L R_4 R_L r_o s^2 + C_L L_L R_1 R_4 R_L g_m r_o s^2 + C_L L_L R_1 R_4 R_L s^2 + C_L L_L R_4 R_L r_o s^2 + L_L R_1 R_4 g_m r_o s + L_L R_1 R_4 s + 2L_L R_1 R_L g_m r_o + 2L_L R_1 R_L s + 2L_L R_1 R_L r_o + R_1 R_4 R_L g_m r_o + R_1 R_4 R_L s + R_1 R_4 R_L r_o + R_1 R_4 R_L}$$

Parameters:

$$\begin{aligned} Q: & \frac{R_4 R_L \sqrt{\frac{1}{L_L(2C_4+C_L)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{wo:} & \sqrt{\frac{1}{L_L(2C_4+C_L)}} \\ \text{bandwidth:} & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{R_4 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{QZ:} & 0 \\ \text{Wz:} & \text{None} \end{aligned}$$

$$\mathbf{3.7 \quad BP-7} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$$

$$H(s) = \frac{L_4 R_1 R_L s (g_m r_o + 1)}{2C_4 L_4 R_1 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_L s^2 + 2C_4 L_4 R_L r_o s^2 + L_4 R_1 g_m r_o s + L_4 R_1 s + L_4 R_L s + L_4 r_o s + 2R_1 R_L g_m r_o + 2R_1 R_L + 2R_L r_o}$$

Parameters:

$$\begin{aligned} Q: & \frac{2C_4 R_L \sqrt{\frac{1}{C_4 L_4}} (R_1 g_m r_o + R_1 + r_o)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{wo:} & \sqrt{\frac{1}{C_4 L_4}} \\ \text{bandwidth:} & \frac{R_1 g_m r_o + R_1 + R_L + r_o}{2C_4 R_L (R_1 g_m r_o + R_1 + r_o)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{QZ:} & 0 \\ \text{Wz:} & \text{None} \end{aligned}$$

$$\mathbf{3.8 \quad BP-8} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_1 s (g_m r_o + 1)}{2C_4 L_4 R_1 g_m r_o s^2 + 2C_4 L_4 R_1 s^2 + 2C_4 L_4 r_o s^2 + C_L L_4 R_1 g_m r_o s^2 + C_L L_4 R_1 s^2 + C_L L_4 r_o s^2 + L_4 s + 2R_1 g_m r_o + 2R_1 + 2r_o}$$

Q: $\sqrt{2}\sqrt{\frac{1}{L_4(2C_4+C_L)}}(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)$
 wo: $\sqrt{2}\sqrt{\frac{1}{L_4(2C_4+C_L)}}$
 bandwidth: $\frac{1}{2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o}$
 K-LP: 0
 K-HP: 0
 K-BP: $R_1(g_mr_o+1)$
 QZ: 0
 Wz: None

$$H(s) = \frac{L_4 R_1 R_L s (g_m r_o + 1)}{2C_4 L_4 R_1 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_L s^2 + 2C_4 L_4 R_L r_o s^2 + C_L L_4 R_1 R_L g_m r_o s^2 + C_L L_4 R_1 R_L s^2 + C_L L_4 R_L r_o s^2 + L_4 R_1 g_m r_o s + L_4 R_1 s + L_4 R_L s + L_4 r_o s + 2R_1 R_L g_m r_o + 2R_1}$$

Q: $\frac{\sqrt{2}R_L\sqrt{\frac{1}{L_4(2C_4+C_L)}}(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)}{R_1g_mr_o+R_1+R_L+r_o}$
 wo: $\sqrt{2}\sqrt{\frac{1}{L_4(2C_4+C_L)}}$
 bandwidth: $\frac{R_1g_mr_o+R_1+R_L+r_o}{R_L(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)}$
 K-LP: 0
 K-HP: 0
 K-BP: $\frac{R_1R_L(g_mr_o+1)}{R_1g_mr_o+R_1+R_L+r_o}$
 Qz: 0
 Wz: None

$$H(s) = \frac{L_4 L_L R_1 s (g_m r_o + 1)}{2C_4 L_4 L_L R_1 g_m r_o s^2 + 2C_4 L_4 L_L R_1 s^2 + 2C_4 L_4 L_L r_o s^2 + C_L L_4 L_L R_1 g_m r_o s^2 + C_L L_4 L_L R_1 s^2 + C_L L_4 L_L r_o s^2 + L_4 L_L s + L_4 R_1 g_m r_o + L_4 R_1 + L_4 r_o + 2L_L R_1 g_m r_o + 2L_L R_1 +$$

Parameters:

$$\begin{aligned} \text{Q: } & \sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}} (2C_4R_1g_mr_o + 2C_4R_1 + 2C_4r_o + C_LR_1g_mr_o + C_LR_1 + C_Lr_o) \\ \text{wo: } & \sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}} \\ \text{bandwidth: } & \frac{1}{2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & R_1(g_mr_o + 1) \\ \text{QZ: } & 0 \\ \text{WZ: } & \text{None} \end{aligned}$$

$$\mathbf{3.11 \quad BP-11} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{L_4L_LR_1R_Ls(g_mr_o + 1)}{2C_4L_4L_LR_1R_Lg_mr_oss^2 + 2C_4L_4L_LR_1R_Ls^2 + 2C_4L_4L_LR_Lr_oss^2 + C_LL_4L_LR_1R_Lg_mr_oss^2 + C_LL_4L_LR_1R_Ls^2 + C_LL_4L_LR_Lr_oss^2 + L_4L_LR_1g_mr_oss + L_4L_LR_1s + L_4L_LR_Ls + L_4L_LR_Lr_oss}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{R_L \sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}} (2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)}{R_1g_mr_o+R_1+R_L+r_o} \\ \text{wo: } & \sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}} \\ \text{bandwidth: } & \frac{R_1g_mr_o+R_1+R_L+r_o}{R_L(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{R_1R_L(g_mr_o+1)}{R_1g_mr_o+R_1+R_L+r_o} \\ \text{QZ: } & 0 \\ \text{WZ: } & \text{None} \end{aligned}$$

$$\mathbf{3.12 \quad BP-12} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s+\frac{1}{R_4}+\frac{1}{L_4s}}, \infty, R_L \right)$$

$$H(s) = \frac{L_4R_1R_4R_Ls(g_mr_o + 1)}{2C_4L_4R_1R_4R_Lg_mr_oss^2 + 2C_4L_4R_1R_4R_Ls^2 + 2C_4L_4R_4R_Lr_oss^2 + L_4R_1R_4g_mr_oss + L_4R_1R_4s + 2L_4R_1R_Lg_mr_oss + 2L_4R_1R_Ls + L_4R_4R_Ls + L_4R_4r_oss + 2L_4R_Lr_oss + 2R_1R_4r_oss}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{2C_4 R_4 R_L \sqrt{\frac{1}{C_4 L_4}} (R_1 g_m r_o + R_1 + r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_4 L_4}} \\
\text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{2C_4 R_4 R_L (R_1 g_m r_o + R_1 + r_o)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

3.13 BP-13 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 R_1 R_4 s (g_m r_o + 1)}{2C_4 L_4 R_1 R_4 g_m r_o s^2 + 2C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_4 r_o s^2 + C_L L_4 R_1 R_4 g_m r_o s^2 + C_L L_4 R_1 R_4 s^2 + C_L L_4 R_4 r_o s^2 + 2L_4 R_1 g_m r_o s + 2L_4 R_1 s + L_4 R_4 s + 2L_4 r_o s + 2R_1 R_4 g_m r_o + 2R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{\sqrt{2} R_4 \sqrt{\frac{1}{L_4 (2C_4 + C_L)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\
\text{wo: } & \sqrt{2} \sqrt{\frac{1}{L_4 (2C_4 + C_L)}} \\
\text{bandwidth: } & \frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{R_4 (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

3.14 BP-14 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_4 R_1 R_4 R_L s (g_m r_o + 1)}{2C_4 L_4 R_1 R_4 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_4 R_L s^2 + 2C_4 L_4 R_4 R_L r_o s^2 + C_L L_4 R_1 R_4 R_L g_m r_o s^2 + C_L L_4 R_1 R_4 R_L s^2 + C_L L_4 R_4 R_L r_o s^2 + L_4 R_1 R_4 g_m r_o s + L_4 R_1 R_4 s + 2L_4 R_1 R_L g_m r_o + 2L_4 R_1 R_L s + L_4 R_4 s + 2L_4 r_o s + 2R_1 R_4 g_m r_o + 2R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{\sqrt{2}R_4R_L\sqrt{\frac{1}{L_4(2C_4+C_L)}}(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)}{R_1R_4g_mr_o+R_1R_4+2R_1R_Lg_mr_o+2R_1R_L+R_4R_L+R_4r_o+2R_Lr_o} \\ \text{wo: } & \sqrt{2}\sqrt{\frac{1}{L_4(2C_4+C_L)}} \\ \text{bandwidth: } & \frac{R_1R_4g_mr_o+R_1R_4+2R_1R_Lg_mr_o+2R_1R_L+R_4R_L+R_4r_o+2R_Lr_o}{R_4R_L(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{R_1R_4R_L(g_mr_o+1)}{R_1R_4g_mr_o+R_1R_4+2R_1R_Lg_mr_o+2R_1R_L+R_4R_L+R_4r_o+2R_Lr_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.15 \quad BP-15} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$$

$$H(s) = \frac{L_4L_LR_1R_4s(g_mr_o+1)}{2C_4L_4L_LR_1R_4g_mr_oss^2 + 2C_4L_4L_LR_1R_4s^2 + 2C_4L_4L_LR_4r_oss^2 + C_LL_4L_LR_1R_4g_mr_oss^2 + C_LL_4L_LR_1R_4s^2 + C_LL_4L_LR_4r_oss^2 + 2L_4L_LR_1g_mr_oss + 2L_4L_LR_1s + L_4L_LR_4s + 2L_4L_LR_4r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{R_4\sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}}(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)}{2R_1g_mr_o+2R_1+R_4+2r_o} \\ \text{wo: } & \sqrt{\frac{L_4+2L_L}{L_4L_L(2C_4+C_L)}} \\ \text{bandwidth: } & \frac{2R_1g_mr_o+2R_1+R_4+2r_o}{R_4(2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_Lr_o)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{R_1R_4(g_mr_o+1)}{2R_1g_mr_o+2R_1+R_4+2r_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.16 \quad BP-16} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{L_4L_LR_1R_4R_LR_Ls^2}{2C_4L_4L_LR_1R_4R_Lg_mr_oss^2 + 2C_4L_4L_LR_1R_4R_Ls^2 + 2C_4L_4L_LR_4R_Lr_oss^2 + C_LL_4L_LR_1R_4R_Lg_mr_oss^2 + C_LL_4L_LR_1R_4R_Ls^2 + C_LL_4L_LR_4R_Lr_oss^2 + L_4L_LR_1R_4g_mr_oss + L_4L_LR_1s + L_4L_LR_4s + 2L_4L_LR_4r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{R_4 R_L \sqrt{\frac{L_4 + 2L_L}{L_4 L_L (2C_4 + C_L)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{wo: } & \sqrt{\frac{L_4 + 2L_L}{L_4 L_L (2C_4 + C_L)}} \\ \text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{R_4 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.17 \quad BP-17} \quad Z(s) = \left(L_1 s, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1)}{C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L R_4 r_o s + 2L_1 g_m r_o s + 2L_1 s + R_4 + 2r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_L L_1 R_4 \sqrt{\frac{R_4 + 2r_o}{C_L L_1 R_4 (g_m r_o + 1)}} (g_m r_o + 1)}{C_L R_4 r_o + 2L_1 g_m r_o + 2L_1} \\ \text{wo: } & \sqrt{\frac{R_4 + 2r_o}{C_L L_1 R_4 (g_m r_o + 1)}} \\ \text{bandwidth: } & \frac{C_L R_4 r_o + 2L_1 g_m r_o + 2L_1}{C_L L_1 R_4 (g_m r_o + 1)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{L_1 R_4 (g_m r_o + 1)}{C_L R_4 r_o + 2L_1 g_m r_o + 2L_1} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.18 \quad BP-18} \quad Z(s) = \left(L_1 s, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1)}{C_L L_1 R_4 R_L g_m r_o s^2 + C_L L_1 R_4 R_L s^2 + C_L R_4 R_L r_o s + L_1 R_4 g_m r_o s + L_1 R_4 s + 2L_1 R_L g_m r_o s + 2L_1 R_L s + R_4 R_L + R_4 r_o + 2R_L r_o}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_L L_1 R_4 R_L \sqrt{\frac{R_4 R_L + R_4 r_o + 2 R_L r_o}{C_L L_1 R_4 R_L (g_m r_o + 1)}} (g_m r_o + 1)}{C_L R_4 R_L r_o + L_1 R_4 g_m r_o + L_1 R_4 + 2 L_1 R_L g_m r_o + 2 L_1 R_L} \\
wo: & \sqrt{\frac{R_4 R_L + R_4 r_o + 2 R_L r_o}{C_L L_1 R_4 R_L (g_m r_o + 1)}} \\
bandwidth: & \frac{C_L R_4 R_L r_o + L_1 R_4 g_m r_o + L_1 R_4 + 2 L_1 R_L g_m r_o + 2 L_1 R_L}{C_L L_1 R_4 R_L (g_m r_o + 1)} \\
K-LP: & 0 \\
K-HP: & 0 \\
K-BP: & \frac{L_1 R_4 R_L (g_m r_o + 1)}{C_L R_4 R_L r_o + L_1 R_4 g_m r_o + L_1 R_4 + 2 L_1 R_L g_m r_o + 2 L_1 R_L} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

3.19 BP-19 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1)}{2 C_4 L_1 R_L g_m r_o s^2 + 2 C_4 L_1 R_L s^2 + 2 C_4 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o}$$

Parameters:

$$\begin{aligned}
Q: & \frac{\sqrt{2} C_4 L_1 R_L \sqrt{\frac{R_L + r_o}{C_4 L_1 R_L (g_m r_o + 1)}} (g_m r_o + 1)}{2 C_4 R_L r_o + L_1 g_m r_o + L_1} \\
wo: & \frac{\sqrt{2} \sqrt{\frac{R_L + r_o}{C_4 L_1 R_L (g_m r_o + 1)}}}{2} \\
bandwidth: & \frac{2 C_4 R_L r_o + L_1 g_m r_o + L_1}{2 C_4 L_1 R_L (g_m r_o + 1)} \\
K-LP: & 0 \\
K-HP: & 0 \\
K-BP: & \frac{L_1 R_L (g_m r_o + 1)}{2 C_4 R_L r_o + L_1 g_m r_o + L_1} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

3.20 BP-20 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{2 C_4 L_1 g_m r_o s^2 + 2 C_4 L_1 s^2 + 2 C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L r_o s + 1}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{L_1 \sqrt{\frac{1}{L_1(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}}(g_mr_o+1)}{r_o} \\ \text{wo: } & \sqrt{\frac{1}{L_1(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}} \\ \text{bandwidth: } & \frac{r_o}{L_1(g_mr_o+1)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{L_1(g_mr_o+1)}{r_o(2C_4+C_L)} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.21 \quad BP-21} \quad Z(s) = \left(L_1s, \infty, \infty, \frac{1}{C_4s}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$$

$$H(s) = \frac{L_1R_Ls(g_mr_o+1)}{2C_4L_1R_Lg_mr_oss^2 + 2C_4L_1R_Ls^2 + 2C_4R_Lr_oss + C_LL_1R_Lg_mr_oss^2 + C_LL_1R_Ls^2 + C_LR_Lr_oss + L_1g_mr_oss + L_1s + R_L + r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{L_1R_L \sqrt{\frac{R_L+r_o}{L_1R_L(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}}(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}{2C_4R_Lr_o+C_LR_Lr_o+L_1g_mr_o+L_1} \\ \text{wo: } & \sqrt{\frac{R_L+r_o}{L_1R_L(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}} \\ \text{bandwidth: } & \frac{2C_4R_Lr_o+C_LR_Lr_o+L_1g_mr_o+L_1}{L_1R_L(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)} \\ \text{K-LP: } & 0 \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{L_1R_L(g_mr_o+1)}{2C_4R_Lr_o+C_LR_Lr_o+L_1g_mr_o+L_1} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

$$\mathbf{3.22 \quad BP-22} \quad Z(s) = \left(L_1s, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, R_L \right)$$

$$H(s) = \frac{L_1R_4R_Ls(g_mr_o+1)}{2C_4L_1R_4R_Lg_mr_oss^2 + 2C_4L_1R_4R_Ls^2 + 2C_4R_4R_Lr_oss + L_1R_4g_mr_oss + L_1R_4s + 2L_1R_Lg_mr_oss + 2L_1R_Ls + R_4R_L + R_4r_o + 2R_Lr_o}$$

Parameters:

$$\begin{aligned}
Q: & \frac{\sqrt{2}C_4L_1R_4R_L\sqrt{\frac{R_4R_L+R_4r_o+2R_LR_o}{C_4L_1R_4R_L(g_mr_o+1)}}(g_mr_o+1)}{2C_4R_4R_LR_o+L_1R_4g_mr_o+L_1R_4+2L_1R_LR_Lg_mr_o+2L_1R_L} \\
wo: & \frac{\sqrt{2}\sqrt{\frac{R_4R_L+R_4r_o+2R_LR_o}{C_4L_1R_4R_L(g_mr_o+1)}}}{2} \\
bandwidth: & \frac{2C_4R_4R_LR_o+L_1R_4g_mr_o+L_1R_4+2L_1R_LR_Lg_mr_o+2L_1R_L}{2C_4L_1R_4R_L(g_mr_o+1)} \\
K-LP: & 0 \\
K-HP: & 0 \\
K-BP: & \frac{L_1R_4R_L(g_mr_o+1)}{2C_4R_4R_LR_o+L_1R_4g_mr_o+L_1R_4+2L_1R_LR_Lg_mr_o+2L_1R_L} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

3.23 BP-23 $Z(s) = \left(L_1s, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_1R_4s(g_mr_o+1)}{2C_4L_1R_4g_mr_oss^2 + 2C_4L_1R_4s^2 + 2C_4R_4r_oss + C_LL_1R_4g_mr_oss^2 + C_LL_1R_4s^2 + C_LR_4r_oss + 2L_1g_mr_oss + 2L_1s + R_4 + 2r_o}$$

Parameters:

$$\begin{aligned}
Q: & \frac{L_1R_4\sqrt{\frac{R_4+2r_o}{L_1R_4(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}}(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}{2C_4R_4r_o+C_LR_4r_o+2L_1g_mr_o+2L_1} \\
wo: & \sqrt{\frac{R_4+2r_o}{L_1R_4(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)}} \\
bandwidth: & \frac{2C_4R_4r_o+C_LR_4r_o+2L_1g_mr_o+2L_1}{L_1R_4(2C_4g_mr_o+2C_4+C_Lg_mr_o+C_L)} \\
K-LP: & 0 \\
K-HP: & 0 \\
K-BP: & \frac{L_1R_4(g_mr_o+1)}{2C_4R_4r_o+C_LR_4r_o+2L_1g_mr_o+2L_1} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

3.24 BP-24 $Z(s) = \left(L_1s, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{L_1R_4R_Ls(g_mr_o+1)}{2C_4L_1R_4R_Lg_mr_oss^2 + 2C_4L_1R_4R_Ls^2 + 2C_4R_4R_Lr_oss + C_LL_1R_4R_Lg_mr_oss^2 + C_LL_1R_4R_Ls^2 + C_LR_4R_Lr_oss + L_1R_4g_mr_oss + L_1R_4s + 2L_1R_Lg_mr_oss + 2L_1R_Ls + R_4R_L + R_4}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_1 R_4 R_L \sqrt{\frac{R_4 R_L + R_4 r_o + 2 R_L r_o}{L_1 R_4 R_L (2 C_4 g_m r_o + 2 C_4 + C_L g_m r_o + C_L)}} (2 C_4 g_m r_o + 2 C_4 + C_L g_m r_o + C_L)}{2 C_4 R_4 R_L r_o + C_L R_4 R_L r_o + L_1 R_4 g_m r_o + L_1 R_4 + 2 L_1 R_L g_m r_o + 2 L_1 R_L} \\
\text{wo: } & \sqrt{\frac{R_4 R_L + R_4 r_o + 2 R_L r_o}{L_1 R_4 R_L (2 C_4 g_m r_o + 2 C_4 + C_L g_m r_o + C_L)}} \\
\text{bandwidth: } & \frac{2 C_4 R_4 R_L r_o + C_L R_4 R_L r_o + L_1 R_4 g_m r_o + L_1 R_4 + 2 L_1 R_L g_m r_o + 2 L_1 R_L}{L_1 R_4 R_L (2 C_4 g_m r_o + 2 C_4 + C_L g_m r_o + C_L)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{L_1 R_4 R_L (g_m r_o + 1)}{2 C_4 R_4 R_L r_o + C_L R_4 R_L r_o + L_1 R_4 g_m r_o + L_1 R_4 + 2 L_1 R_L g_m r_o + 2 L_1 R_L} \\
\text{QZ: } & 0 \\
\text{WZ: } & \text{None}
\end{aligned}$$

3.25 BP-25 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1)}{C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2 C_1 L_1 R_L r_o s^2 + L_1 R_4 g_m r_o s + L_1 R_4 s + 2 L_1 R_L g_m r_o s + 2 L_1 R_L s + R_4 R_L + R_4 r_o + 2 R_L r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_1 \sqrt{\frac{1}{C_1 L_1}} (R_4 R_L + R_4 r_o + 2 R_L r_o)}{R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L} \\
\text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\
\text{bandwidth: } & \frac{R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L}{C_1 (R_4 R_L + R_4 r_o + 2 R_L r_o)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_4 R_L}{R_4 + 2 R_L} \\
\text{QZ: } & 0 \\
\text{WZ: } & \text{None}
\end{aligned}$$

3.26 BP-26 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_4 R_L s (g_m r_o + 1)}{C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + L_1 R_1 R_4 g_m r_o s + L_1 R_1 R_4 s + 2 L_1 R_1 R_L g_m r_o s + 2 L_1 R_1 R_L s + L_1 R_4 R_L s + L_1 R_4 r_o s + 2 L_1 R_L r_o s + R_1 R_4 R_L + R_1 R_4 r_o + 2 R_1 R_L r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}} (R_4 R_L + R_4 r_o + 2 R_L r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\
\text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o}{C_1 R_1 (R_4 R_L + R_4 r_o + 2 R_L r_o)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & 0 \\
\text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o} \\
\text{QZ: } & 0 \\
\text{Wz: } & \text{None}
\end{aligned}$$

4 LP

$$4.1 \quad \text{LP-1 } Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_4 (g_m r_o + 1)}{C_1 C_L R_4 r_o s^2 + C_1 R_4 s + 2 C_1 r_o s + C_L R_4 g_m r_o s + C_L R_4 s + 2 g_m r_o + 2}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{\sqrt{2} C_1 C_L R_4 r_o \sqrt{\frac{g_m r_o + 1}{C_1 C_L R_4 r_o}}}{C_1 R_4 + 2 C_1 r_o + C_L R_4 g_m r_o + C_L R_4} \\
\text{wo: } & \sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 C_L R_4 r_o}} \\
\text{bandwidth: } & \frac{C_1 R_4 + 2 C_1 r_o + C_L R_4 g_m r_o + C_L R_4}{C_1 C_L R_4 r_o} \\
\text{K-LP: } & \frac{R_4}{2} \\
\text{K-HP: } & 0 \\
\text{K-BP: } & 0 \\
\text{QZ: } & \text{None} \\
\text{Wz: } & \text{None}
\end{aligned}$$

4.2 LP-2 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1)}{C_1 C_L R_4 R_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + C_L R_4 R_L g_m r_o s + C_L R_4 R_L s + R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}$$

Parameters:

Q: $\frac{C_1 C_L R_4 R_L r_o \sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 C_L R_4 R_L r_o}}}{C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + C_L R_4 R_L g_m r_o + C_L R_4 R_L}$
 wo: $\sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 C_L R_4 R_L r_o}}$
 bandwidth: $\frac{C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + C_L R_4 R_L g_m r_o + C_L R_4 R_L}{C_1 C_L R_4 R_L r_o}$
 K-LP: $\frac{R_4 R_L}{R_4 + 2R_L}$
 K-HP: 0
 K-BP: 0
 Qz: None
 Wz: None

4.3 LP-3 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1)}{2C_1 C_4 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + g_m r_o + 1}$$

Parameters:

Q: $\frac{\sqrt{2} C_1 C_4 R_L r_o \sqrt{\frac{g_m r_o + 1}{C_1 C_4 R_L r_o}}}{C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L}$
 wo: $\frac{\sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 C_4 R_L r_o}}}{2}$
 bandwidth: $\frac{C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L}{2C_1 C_4 R_L r_o}$
 K-LP: R_L
 K-HP: 0
 K-BP: 0
 Qz: None
 Wz: None

4.4 LP-4 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L (g_m r_o + 1)}{2C_1 C_4 R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 R_L s + C_1 r_o s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + C_L R_L g_m r_o s + C_L R_L s + g_m r_o + 1}$$

Parameters:

Q: $\frac{C_1 R_L r_o \sqrt{\frac{g_m r_o + 1}{C_1 R_L r_o (2C_4 + C_L)}} (2C_4 + C_L)}{C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L + C_L R_L g_m r_o + C_L R_L}$
 wo: $\sqrt{\frac{g_m r_o + 1}{C_1 R_L r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L + C_L R_L g_m r_o + C_L R_L}{C_1 R_L r_o (2C_4 + C_L)}$
 K-LP: R_L
 K-HP: 0
 K-BP: 0
 QZ: None
 Wz: None

4.5 LP-5 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1)}{2C_1 C_4 R_4 R_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + 2C_4 R_4 R_L g_m r_o s + 2C_4 R_4 R_L s + R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}$$

Parameters:

Q: $\frac{\sqrt{2} C_1 C_4 R_4 R_L r_o \sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 C_4 R_4 R_L r_o}}}{C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L}$
 wo: $\sqrt{\frac{\frac{R_4 g_m r_o}{2} + \frac{R_4}{2} + R_L g_m r_o + R_L}{C_1 C_4 R_4 R_L r_o}}$
 bandwidth: $\frac{\sqrt{2} \sqrt{\frac{R_4 g_m r_o}{2} + \frac{R_4}{2} + R_L g_m r_o + R_L}}{C_1 C_4 R_4 R_L r_o} (C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L)$
 K-LP: $\frac{R_4 R_L}{R_4 + 2R_L}$
 K-HP: 0
 K-BP: 0
 QZ: None
 Wz: None

4.6 LP-6 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1)}{2C_1 C_4 R_4 r_o s^2 + C_1 C_L R_4 r_o s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s + C_L R_4 g_m r_o s + C_L R_4 s + 2g_m r_o + 2}$$

Parameters:

Q: $\frac{\sqrt{2} C_1 R_4 r_o \sqrt{\frac{g_m r_o + 1}{C_1 R_4 r_o (2C_4 + C_L)}} (2C_4 + C_L)}{C_1 R_4 + 2C_1 r_o + 2C_4 R_4 g_m r_o + 2C_4 R_4 + C_L R_4 g_m r_o + C_L R_4}$
 wo: $\sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 R_4 r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_4 + 2C_1 r_o + 2C_4 R_4 g_m r_o + 2C_4 R_4 + C_L R_4 g_m r_o + C_L R_4}{C_1 R_4 r_o (2C_4 + C_L)}$
 K-LP: $\frac{R_4}{2}$
 K-HP: 0
 K-BP: 0
 QZ: None
 Wz: None

4.7 LP-7 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1)}{2C_1 C_4 R_4 R_L r_o s^2 + C_1 C_L R_4 R_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + 2C_4 R_4 R_L g_m r_o s + 2C_4 R_4 R_L s + C_L R_4 R_L g_m r_o s + C_L R_4 R_L s + R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}$$

Parameters:

Q: $\frac{C_1 R_4 R_L r_o \sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 R_4 R_L r_o (2C_4 + C_L)}} (2C_4 + C_L)}{C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L + C_L R_4 R_L g_m r_o + C_L R_4 R_L}$
 wo: $\sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 R_4 R_L r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L + C_L R_4 R_L g_m r_o + C_L R_4 R_L}{C_1 R_4 R_L r_o (2C_4 + C_L)}$
 K-LP: $\frac{R_4 R_L}{R_4 + 2R_L}$
 K-HP: 0
 K-BP: 0
 QZ: None
 Wz: None

4.8 LP-8 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1)}{C_1 C_L R_1 R_4 r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + C_L R_4 r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

Parameters:

Q: $\frac{C_1 C_L R_1 R_4 r_o \sqrt{\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_1 C_L R_1 R_4 r_o}}}{C_1 R_1 R_4 + 2C_1 R_1 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + C_L R_4 r_o}$

wo: $\sqrt{\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_1 C_L R_1 R_4 r_o}}$

bandwidth: $\frac{C_1 R_1 R_4 + 2C_1 R_1 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + C_L R_4 r_o}{C_1 C_L R_1 R_4 r_o}$

K-LP: $\frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$

K-HP: 0

K-BP: 0

QZ: None

Wz: None

4.9 LP-9 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + C_L R_1 R_4 R_L g_m r_o s + C_L R_1 R_4 R_L s + C_L R_4 R_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L}$$

Parameters:

Q: $\frac{C_1 C_L R_1 R_4 R_L r_o \sqrt{\frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_1 C_L R_1 R_4 R_L r_o}}}{C_1 R_1 R_4 R_L + C_1 R_1 R_4 r_o + 2C_1 R_1 R_L r_o + C_L R_1 R_4 R_L g_m r_o + C_L R_1 R_4 R_L + C_L R_4 R_L r_o}$

wo: $\sqrt{\frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_1 C_L R_1 R_4 R_L r_o}}$

bandwidth: $\frac{C_1 R_1 R_4 R_L + C_1 R_1 R_4 r_o + 2C_1 R_1 R_L r_o + C_L R_1 R_4 R_L g_m r_o + C_L R_1 R_4 R_L + C_L R_4 R_L r_o}{C_1 C_L R_1 R_4 R_L r_o}$

K-LP: $\frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$

K-HP: 0

K-BP: 0

QZ: None

Wz: None

4.10 LP-10 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1)}{2C_1 C_4 R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + R_1 g_m r_o + R_1 + R_L + r_o}$$

Parameters:

Q: $\frac{\sqrt{2} C_1 C_4 R_1 R_L r_o \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_1 C_4 R_1 R_L r_o}}}{C_1 R_1 R_L + C_1 R_1 r_o + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + 2C_4 R_L r_o}$
 wo: $\frac{\sqrt{2} \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_1 C_4 R_1 R_L r_o}}}{2}$
 bandwidth: $\frac{C_1 R_1 R_L + C_1 R_1 r_o + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + 2C_4 R_L r_o}{2C_1 C_4 R_1 R_L r_o}$
 K-LP: $\frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o}$
 K-HP: 0
 K-BP: 0
 QZ: None
 WZ: None

4.11 LP-11 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1)}{2C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

Parameters:

Q: $\frac{C_1 R_1 r_o \sqrt{\frac{1}{C_1 R_1 r_o (2C_4 + C_L)}} (2C_4 + C_L)}{C_1 R_1 + 2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o}$
 wo: $\sqrt{\frac{1}{C_1 R_1 r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_1 + 2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o}{C_1 R_1 r_o (2C_4 + C_L)}$
 K-LP: $R_1 (g_m r_o + 1)$
 K-HP: 0
 K-BP: 0
 QZ: None
 WZ: None

4.12 LP-12 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1)}{2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + C_L R_1 R_L g_m r_o s + C_L R_1 R_L s + C_L R_L r_o s + R_1 g_m r_o + R_1 + R_L}$$

Parameters:

Q: $\frac{C_1 R_1 R_L r_o \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_1 R_1 R_L r_o (2C_4 + C_L)}} (2C_4 + C_L)}{C_1 R_1 R_L + C_1 R_1 r_o + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + 2C_4 R_L r_o + C_L R_1 R_L g_m r_o + C_L R_1 R_L + C_L R_L r_o}$
 wo: $\sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_1 R_1 R_L r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_1 R_L + C_1 R_1 r_o + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + 2C_4 R_L r_o + C_L R_1 R_L g_m r_o + C_L R_1 R_L + C_L R_L r_o}{C_1 R_1 R_L r_o (2C_4 + C_L)}$
 K-LP: $\frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o}$
 K-HP: 0
 K-BP: 0
 QZ: None
 Wz: None

4.13 LP-13 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{2C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + 2C_4 R_1 R_4 R_L g_m r_o s + 2C_4 R_1 R_4 R_L s + 2C_4 R_4 R_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4}$$

Parameters:

Q: $\frac{\sqrt{2} C_1 C_4 R_1 R_4 R_L r_o \sqrt{\frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_1 C_4 R_1 R_4 R_L r_o}}}{C_1 R_1 R_4 R_L + C_1 R_1 R_4 r_o + 2C_1 R_1 R_L r_o + 2C_4 R_1 R_4 R_L g_m r_o + 2C_4 R_1 R_4 R_L + 2C_4 R_4 R_L r_o}$
 wo: $\frac{\sqrt{2} \sqrt{\frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_1 C_4 R_1 R_4 R_L r_o}}}{2}$
 bandwidth: $\frac{C_1 R_1 R_4 R_L + C_1 R_1 R_4 r_o + 2C_1 R_1 R_L r_o + 2C_4 R_1 R_4 R_L g_m r_o + 2C_4 R_1 R_4 R_L + 2C_4 R_4 R_L r_o}{2C_1 C_4 R_1 R_4 R_L r_o}$
 K-LP: $\frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$
 K-HP: 0
 K-BP: 0
 QZ: None
 Wz: None

4.14 LP-14 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1)}{2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L R_1 R_4 r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + 2C_4 R_1 R_4 g_m r_o s + 2C_4 R_1 R_4 s + 2C_4 R_4 r_o s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + C_L R_4 r_o s + 2R_1 g_m r_o + 2R_1 + R_4}$$

Parameters:

Q: $\frac{C_1 R_1 R_4 r_o \sqrt{\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_1 R_1 R_4 r_o (2C_4 + C_L)} (2C_4 + C_L)}}{C_1 R_1 R_4 + 2C_1 R_1 r_o + 2C_4 R_1 R_4 g_m r_o + 2C_4 R_1 R_4 + 2C_4 R_4 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + C_L R_4 r_o}$
 wo: $\sqrt{\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_1 R_1 R_4 r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_1 R_4 + 2C_1 R_1 r_o + 2C_4 R_1 R_4 g_m r_o + 2C_4 R_1 R_4 + 2C_4 R_4 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + C_L R_4 r_o}{C_1 R_1 R_4 r_o (2C_4 + C_L)}$
 K-LP: $\frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$
 K-HP: 0
 K-BP: 0
 Qz: None
 Wz: None

4.15 LP-15 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{2C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + 2C_4 R_1 R_4 R_L g_m r_o s + 2C_4 R_1 R_4 R_L s + 2C_4 R_4 R_L r_o s + C_L R_1 R_4 R_L g_m r_o s + C_L R_1 R_4 R_L s + C_L R_4 R_L r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + R_L}$$

Parameters:

Q: $\frac{C_1 R_1 R_4 R_L r_o \sqrt{\frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_1 R_1 R_4 R_L r_o (2C_4 + C_L)} (2C_4 + C_L)}}{C_1 R_1 R_4 R_L + C_1 R_1 R_4 r_o + 2C_1 R_1 R_L r_o + 2C_4 R_1 R_4 R_L g_m r_o + 2C_4 R_1 R_4 R_L + 2C_4 R_4 R_L r_o + C_L R_1 R_4 R_L g_m r_o + C_L R_1 R_4 R_L + C_L R_4 R_L r_o}$
 wo: $\sqrt{\frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{C_1 R_1 R_4 R_L r_o (2C_4 + C_L)}}$
 bandwidth: $\frac{C_1 R_1 R_4 R_L + C_1 R_1 R_4 r_o + 2C_1 R_1 R_L r_o + 2C_4 R_1 R_4 R_L g_m r_o + 2C_4 R_1 R_4 R_L + 2C_4 R_4 R_L r_o + C_L R_1 R_4 R_L g_m r_o + C_L R_1 R_4 R_L + C_L R_4 R_L r_o}{C_1 R_1 R_4 R_L r_o (2C_4 + C_L)}$
 K-LP: $\frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$
 K-HP: 0
 K-BP: 0
 Qz: None
 Wz: None

5 BS

5.1 BS-1 $Z(s) = \left(R_1, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_L L_L R_1 g_m r_o s^2 + 2C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + 2C_L L_L r_o s^2 + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + C_L R_4 r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

Parameters:

$$Q: \frac{L_L \sqrt{\frac{1}{C_L L_L}} (2R_1 g_m r_o + 2R_1 + R_4 + 2r_o)}{R_4 (R_1 g_m r_o + R_1 + r_o)}$$

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

$$bandwidth: \frac{R_4 (R_1 g_m r_o + R_1 + r_o)}{L_L (2R_1 g_m r_o + 2R_1 + R_4 + 2r_o)}$$

$$K-LP: \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

$$K-HP: \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

$$K-BP: 0$$

$$Q_Z: \text{None}$$

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

5.2 BS-2 $Z(s) = \left(R_1, \infty, \infty, R_4, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1) (C_L L_L s^2 + 1)}{C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + 2C_L L_L R_1 R_L g_m r_o s^2 + 2C_L L_L R_1 R_L s^2 + C_L L_L R_4 R_L s^2 + C_L L_L R_4 r_o s^2 + 2C_L L_L R_L r_o s^2 + C_L R_1 R_4 R_L g_m r_o s + C_L R_1 R_4 R_L s + C_L R_4 R_L r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

Parameters:

$$Q: \frac{L_L \sqrt{\frac{1}{C_L L_L}} (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}{R_4 R_L (R_1 g_m r_o + R_1 + r_o)}$$

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

$$bandwidth: \frac{R_4 R_L (R_1 g_m r_o + R_1 + r_o)}{L_L (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}$$

$$K-LP: \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

$$K-HP: \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

$$K-BP: 0$$

$$\begin{aligned} \text{QZ: } & \text{None} \\ \text{WZ: } & \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

$$\mathbf{5.3 \quad BS-3} \quad Z(s) = \left(R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + R_1 g_m r_o + R_1 + R_L + r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{L_4 \sqrt{\frac{1}{C_4 L_4}} (R_1 g_m r_o + R_1 + R_L + r_o)}{2R_L (R_1 g_m r_o + R_1 + r_o)} \\ \text{wo: } & \sqrt{\frac{1}{C_4 L_4}} \\ \text{bandwidth: } & \frac{2R_L (R_1 g_m r_o + R_1 + r_o)}{L_4 (R_1 g_m r_o + R_1 + R_L + r_o)} \\ \text{K-LP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{K-HP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{K-BP: } & 0 \\ \text{QZ: } & \text{None} \\ \text{WZ: } & \sqrt{\frac{1}{C_4 L_4}} \end{aligned}$$

$$\mathbf{5.4 \quad BS-4} \quad Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_1 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2C_4 L_4 R_L r_o s^2 + 2C_4 R_1 R_4 R_L g_m r_o s + 2C_4 R_1 R_4 R_L s + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L s + R_1 g_m r_o + R_1 + R_4 + R_L + r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{L_4 \sqrt{\frac{1}{C_4 L_4}} (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}{2R_4 R_L (R_1 g_m r_o + R_1 + r_o)} \\ \text{wo: } & \sqrt{\frac{1}{C_4 L_4}} \\ \text{bandwidth: } & \frac{2R_4 R_L (R_1 g_m r_o + R_1 + r_o)}{L_4 (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)} \\ \text{K-LP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \end{aligned}$$

$$\begin{aligned}
\text{K-HP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o} \\
\text{K-BP: } & 0 \\
\text{QZ: } & \text{None} \\
\text{WZ: } & \sqrt{\frac{1}{C_4 L_4}}
\end{aligned}$$

$$\mathbf{5.5 \quad BS-5} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad R_4, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2 C_1 L_1 R_L g_m r_o s^2 + 2 C_1 L_1 R_L s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2 C_1 R_L r_o s + R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_1 \sqrt{\frac{1}{C_1 L_1}} (R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L)}{R_4 R_L + R_4 r_o + 2 R_L r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\
\text{bandwidth: } & \frac{R_4 R_L + R_4 r_o + 2 R_L r_o}{L_1 (R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L)} \\
\text{K-LP: } & \frac{R_4 R_L}{R_4 + 2 R_L} \\
\text{K-HP: } & \frac{R_4 R_L}{R_4 + 2 R_L} \\
\text{K-BP: } & 0 \\
\text{QZ: } & \text{None} \\
\text{WZ: } & \sqrt{\frac{1}{C_1 L_1}}
\end{aligned}$$

$$\mathbf{5.6 \quad BS-6} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad R_4, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2 C_1 L_1 R_1 R_L g_m r_o s^2 + 2 C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2 C_1 L_1 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2 C_1 R_1 R_L r_o s + R_1 g_m r_o + R_1 + 2 R_L g_m r_o + 2 R_L}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_1 \sqrt{\frac{1}{C_1 L_1}} (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}{R_1 (R_4 R_L + R_4 r_o + 2 R_L r_o)} \\
\text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\
\text{bandwidth: } & \frac{R_1 (R_4 R_L + R_4 r_o + 2 R_L r_o)}{L_1 (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}
\end{aligned}$$

$$\begin{aligned}
\text{K-LP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{K-HP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{K-BP: } & 0 \\
\text{QZ: } & \text{None} \\
\text{Wz: } & \sqrt{\frac{1}{C_1 L_1}}
\end{aligned}$$

6 GE

$$6.1 \quad \text{GE-1 } Z(s) = \left(R_1, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_L L_L R_1 g_m r_o s^2 + 2C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + 2C_L L_L r_o s^2 + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + 2C_L R_1 R_L g_m r_o s + 2C_L R_1 R_L s + C_L R_4 R_L s + C_L R_4 r_o s + 2C_L R_L r_o s + 2R_1 g_m r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_L \sqrt{\frac{1}{C_L L_L}} (2R_1 g_m r_o + 2R_1 + R_4 + 2r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_L L_L}} \\
\text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{L_L (2R_1 g_m r_o + 2R_1 + R_4 + 2r_o)} \\
\text{K-LP: } & \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\
\text{K-HP: } & \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\
\text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{QZ: } & \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L} \\
\text{Wz: } & \sqrt{\frac{1}{C_L L_L}}
\end{aligned}$$

$$6.2 \quad \text{GE-2 } Z(s) = \left(R_1, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + 2C_L L_L R_1 R_L g_m r_o s^2 + 2C_L L_L R_1 R_L s^2 + C_L L_L R_4 R_L s^2 + C_L L_L R_4 r_o s^2 + 2C_L L_L R_L r_o s^2 + 2L_L R_1 g_m r_o s + 2L_L R_1 s + L_L R_4 s + 2L_L r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_L \sqrt{\frac{1}{C_L L_L}} (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_L L_L}} \\
\text{bandwidth: } & \frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)} \\
\text{K-LP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{K-HP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{K-BP: } & \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\
\text{QZ: } & C_L R_L \sqrt{\frac{1}{C_L L_L}} \\
\text{Wz: } & \sqrt{\frac{1}{C_L L_L}}
\end{aligned}$$

6.3 GE-3 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + C_4 R_1 R_4 g_m r_o s + C_4 R_1 R_4 s + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o s + R_1 g_m r_o + R_1 + R_4 + R_L}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{L_4 \sqrt{\frac{1}{C_4 L_4}} (R_1 g_m r_o + R_1 + R_L + r_o)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{wo: } & \sqrt{\frac{1}{C_4 L_4}} \\
\text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{L_4 (R_1 g_m r_o + R_1 + R_L + r_o)} \\
\text{K-LP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\
\text{K-HP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\
\text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{QZ: } & \frac{L_4 \sqrt{\frac{1}{C_4 L_4}}}{R_4} \\
\text{Wz: } & \sqrt{\frac{1}{C_4 L_4}}
\end{aligned}$$

6.4 GE-4 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_1 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2C_4 L_4 R_L r_o s^2 + L_4 R_1 g_m r_o s + L_4 R_1 s + L_4 R_L s + L_4 r_o s + R_1 R_L}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_4 \sqrt{\frac{1}{C_4 L_4}} (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{wo: } & \sqrt{\frac{1}{C_4 L_4}} \\ \text{bandwidth: } & \frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_4 (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)} \\ \text{K-LP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{K-HP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{K-BP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{Qz: } & C_4 R_4 \sqrt{\frac{1}{C_4 L_4}} \\ \text{Wz: } & \sqrt{\frac{1}{C_4 L_4}} \end{aligned}$$

6.5 GE-5 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2C_1 L_1 R_L g_m r_o s^2 + 2C_1 L_1 R_L s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + 2C_1 R_1 R_L g_m r_o s + 2C_1 R_1 R_L s + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + R_4 g_m r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{L_1 \sqrt{\frac{1}{C_1 L_1}} (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{wo: } & \sqrt{\frac{1}{C_1 L_1}} \\ \text{bandwidth: } & \frac{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}{L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)} \\ \text{K-LP: } & \frac{R_4 R_L}{R_4 + 2R_L} \\ \text{K-HP: } & \frac{R_4 R_L}{R_4 + 2R_L} \\ \text{K-BP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\ \text{Qz: } & \frac{L_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1} \end{aligned}$$

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

$$\mathbf{6.6 \quad GE-6} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, R_L \right)$$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 R_L g_m r_o s^2 + 2C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + L_1 R_4 g_m r_o s + L_1 R_4 s + 2L_1 R_L g_m r_o s + 2L_1 R_L}$$

Parameters:

$$\text{Q: } \frac{C_1 \sqrt{\frac{1}{C_1 L_1}} (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}$$

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

$$\text{bandwidth: } \frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}$$

$$\text{K-LP: } \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

$$\text{K-HP: } \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

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

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

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

7 AP

8 INVALID-NUMER

$$\mathbf{8.1 \quad INVALID-NUMER-1} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L R_L s + 1)}{2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + 2C_4 C_L R_L r_o s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L R_L s + C_L r_o s + 1}$$

Parameters:

Q: $\frac{\sqrt{2}C_4C_LR_L\sqrt{\frac{1}{C_4C_LR_L(R_1g_mr_o+R_1+r_o)}}(R_1g_mr_o+R_1+r_o)}{2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o}$
 wo: $\frac{\sqrt{2}\sqrt{\frac{1}{C_4C_LR_L(R_1g_mr_o+R_1+r_o)}}}{2}$
 bandwidth: $\frac{2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o}{2C_4C_LR_L(R_1g_mr_o+R_1+r_o)}$
 K-LP: $R_1(g_mr_o+1)$
 K-HP: 0
 K-BP: $\frac{C_LR_1R_L(g_mr_o+1)}{2C_4R_1g_mr_o+2C_4R_1+2C_4r_o+C_LR_1g_mr_o+C_LR_1+C_LR_L+C_Lr_o}$
 QZ: 0
 Wz: None

8.2 INVALID-NUMER-2 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4R_4s+1}, \infty, R_L + \frac{1}{C_Ls}\right)$

$$H(s) = \frac{R_1R_4(g_mr_o+1)(C_LR_Ls+1)}{2C_4C_LR_1R_4R_Lg_mr_oss^2 + 2C_4C_LR_1R_4R_Ls^2 + 2C_4C_LR_4R_Lr_oss^2 + 2C_4R_1R_4g_mr_oss + 2C_4R_1R_4s + 2C_4R_4r_oss + C_LR_1R_4g_mr_oss + C_LR_1R_4s + 2C_LR_1R_Lg_mr_oss + 2C_LR_1R_Ls}$$

Parameters:

Q: $\frac{\sqrt{2}C_4C_LR_4R_L\sqrt{\frac{2R_1g_mr_o+2R_1+R_4+2r_o}{C_4C_LR_4R_L(R_1g_mr_o+R_1+r_o)}}(R_1g_mr_o+R_1+r_o)}{2C_4R_1R_4g_mr_o+2C_4R_1R_4+2C_4R_4r_o+C_LR_1R_4g_mr_o+C_LR_1R_4+2C_LR_1R_Lg_mr_o+2C_LR_1R_L+C_LR_4R_L+C_LR_4r_o+2C_LR_Lr_o}$
 wo: $\sqrt{\frac{R_1g_mr_o+R_1+\frac{R_4}{2}+r_o}{C_4C_LR_4R_L(R_1g_mr_o+R_1+r_o)}}$
 bandwidth: $\frac{\sqrt{2}\sqrt{\frac{R_1g_mr_o+R_1+\frac{R_4}{2}+r_o}{C_4C_LR_4R_L(R_1g_mr_o+R_1+r_o)}}(2C_4R_1R_4g_mr_o+2C_4R_1R_4+2C_4R_4r_o+C_LR_1R_4g_mr_o+C_LR_1R_4+2C_LR_1R_Lg_mr_o+2C_LR_1R_L+C_LR_4R_L+C_LR_4r_o+2C_LR_Lr_o)}{2C_4C_LR_4R_L\sqrt{\frac{2R_1g_mr_o+2R_1+R_4+2r_o}{C_4C_LR_4R_L(R_1g_mr_o+R_1+r_o)}}(R_1g_mr_o+R_1+r_o)}$
 K-LP: $\frac{R_1R_4(g_mr_o+1)}{2R_1g_mr_o+2R_1+R_4+2r_o}$
 K-HP: 0
 K-BP: $\frac{C_LR_1R_4R_L(g_mr_o+1)}{2C_4R_1R_4g_mr_o+2C_4R_1R_4+2C_4R_4r_o+C_LR_1R_4g_mr_o+C_LR_1R_4+2C_LR_1R_Lg_mr_o+2C_LR_1R_L+C_LR_4R_L+C_LR_4r_o+2C_LR_Lr_o}$
 QZ: 0
 Wz: None

8.3 INVALID-NUMER-3 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls}\right)$

$$H(s) = \frac{R_1(g_mr_o+1)(C_4R_4s+1)}{C_4C_LR_1R_4g_mr_oss^2 + C_4C_LR_1R_4s^2 + C_4C_LR_4r_oss^2 + 2C_4R_1g_mr_oss + 2C_4R_1s + C_4R_4s + 2C_4r_oss + C_LR_1g_mr_oss + C_LR_1s + C_Lr_oss + 1}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_4 C_L R_4 \sqrt{\frac{1}{C_4 C_L R_4 (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)}{2C_4 R_1 g_m r_o + 2C_4 R_1 + C_4 R_4 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o} \\
wo: & \sqrt{\frac{1}{C_4 C_L R_4 (R_1 g_m r_o + R_1 + r_o)}} \\
bandwidth: & \frac{2C_4 R_1 g_m r_o + 2C_4 R_1 + C_4 R_4 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o}{C_4 C_L R_4 (R_1 g_m r_o + R_1 + r_o)} \\
K-LP: & R_1 (g_m r_o + 1) \\
K-HP: & 0 \\
K-BP: & \frac{C_4 R_1 R_4 (g_m r_o + 1)}{2C_4 R_1 g_m r_o + 2C_4 R_1 + C_4 R_4 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

8.4 INVALID-NUMER-4 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 C_L R_1 R_4 R_L g_m r_o s^2 + C_4 C_L R_1 R_4 R_L s^2 + C_4 C_L R_4 R_L r_o s^2 + C_4 R_1 R_4 g_m r_o s + C_4 R_1 R_4 s + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o s + C_L R_1 R_L}$$

Parameters:

$$\begin{aligned}
Q: & \frac{C_4 C_L R_4 R_L \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_4 C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)}{C_4 R_1 R_4 g_m r_o + C_4 R_1 R_4 + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o + C_L R_1 R_L g_m r_o + C_L R_1 R_L + C_L R_L r_o} \\
wo: & \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_4 C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)}} \\
bandwidth: & \frac{C_4 R_1 R_4 g_m r_o + C_4 R_1 R_4 + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o + C_L R_1 R_L g_m r_o + C_L R_1 R_L + C_L R_L r_o}{C_4 C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)} \\
K-LP: & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\
K-HP: & 0 \\
K-BP: & \frac{C_4 R_1 R_4 R_L (g_m r_o + 1)}{C_4 R_1 R_4 g_m r_o + C_4 R_1 R_4 + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o + C_L R_1 R_L g_m r_o + C_L R_1 R_L + C_L R_L r_o} \\
QZ: & 0 \\
Wz: & \text{None}
\end{aligned}$$

8.5 INVALID-NUMER-5 $Z(s) = \left(L_1 s, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_L R_L s + 1)}{C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + 2C_L L_1 R_L g_m r_o s^2 + 2C_L L_1 R_L s^2 + C_L R_4 R_L s + C_L R_4 r_o s + 2C_L R_L r_o s + 2L_1 g_m r_o s + 2L_1 s + R_4 + 2r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_L L_1 \sqrt{\frac{R_4+2r_o}{C_L L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}} (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}{C_L R_4 R_L + C_L R_4 r_o + 2C_L R_L r_o + 2L_1 g_m r_o + 2L_1} \\
\text{wo: } & \sqrt{\frac{R_4+2r_o}{C_L L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}} \\
\text{bandwidth: } & \frac{C_L R_4 R_L + C_L R_4 r_o + 2C_L R_L r_o + 2L_1 g_m r_o + 2L_1}{C_L L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & \frac{R_4 R_L}{R_4 + 2R_L} \\
\text{K-BP: } & \frac{L_1 R_4 (g_m r_o + 1)}{C_L R_4 R_L + C_L R_4 r_o + 2C_L R_L r_o + 2L_1 g_m r_o + 2L_1} \\
\text{Qz: } & C_L R_L \sqrt{\frac{R_4+2r_o}{C_L L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}} \\
\text{Wz: } & \text{None}
\end{aligned}$$

8.6 INVALID-NUMER-6 $Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 L_1 R_4 g_m r_o s^2 + C_4 L_1 R_4 s^2 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o}$$

Parameters:

$$\begin{aligned}
\text{Q: } & \frac{C_4 L_1 \sqrt{\frac{R_L+r_o}{C_4 L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}} (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}{C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o + L_1 g_m r_o + L_1} \\
\text{wo: } & \sqrt{\frac{R_L+r_o}{C_4 L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}} \\
\text{bandwidth: } & \frac{C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o + L_1 g_m r_o + L_1}{C_4 L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)} \\
\text{K-LP: } & 0 \\
\text{K-HP: } & \frac{R_4 R_L}{R_4 + 2R_L} \\
\text{K-BP: } & \frac{L_1 R_L (g_m r_o + 1)}{C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o + L_1 g_m r_o + L_1} \\
\text{Qz: } & C_4 R_4 \sqrt{\frac{R_L+r_o}{C_4 L_1 (R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L)}} \\
\text{Wz: } & \text{None}
\end{aligned}$$

8.7 INVALID-NUMER-7 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L R_L s + 1)}{C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 C_L R_L r_o s^2 + C_1 R_4 s + 2C_1 r_o s + C_L R_4 g_m r_o s + C_L R_4 s + 2C_L R_L g_m r_o s + 2C_L R_L s + 2g_m r_o + 2}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{\sqrt{2} C_1 C_L \sqrt{\frac{g_m r_o + 1}{C_1 C_L (R_4 R_L + R_4 r_o + 2R_L r_o)}} (R_4 R_L + R_4 r_o + 2R_L r_o)}{C_1 R_4 + 2C_1 r_o + C_L R_4 g_m r_o + C_L R_4 + 2C_L R_L g_m r_o + 2C_L R_L} \\ \text{wo: } & \sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 C_L (R_4 R_L + R_4 r_o + 2R_L r_o)}} \\ \text{bandwidth: } & \frac{C_1 R_4 + 2C_1 r_o + C_L R_4 g_m r_o + C_L R_4 + 2C_L R_L g_m r_o + 2C_L R_L}{C_1 C_L (R_4 R_L + R_4 r_o + 2R_L r_o)} \\ \text{K-LP: } & \frac{R_4}{2} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_L R_4 R_L (g_m r_o + 1)}{C_1 R_4 + 2C_1 r_o + C_L R_4 g_m r_o + C_L R_4 + 2C_L R_L g_m r_o + 2C_L R_L} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.8 INVALID-NUMER-8 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 R_4 s + 1)}{C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_4 R_4 g_m r_o s + C_4 R_4 s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + g_m r_o + 1}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_4 \sqrt{\frac{g_m r_o + 1}{C_1 C_4 (R_4 R_L + R_4 r_o + 2R_L r_o)}} (R_4 R_L + R_4 r_o + 2R_L r_o)}{C_1 R_L + C_1 r_o + C_4 R_4 g_m r_o + C_4 R_4 + 2C_4 R_L g_m r_o + 2C_4 R_L} \\ \text{wo: } & \sqrt{\frac{g_m r_o + 1}{C_1 C_4 (R_4 R_L + R_4 r_o + 2R_L r_o)}} \\ \text{bandwidth: } & \frac{C_1 R_L + C_1 r_o + C_4 R_4 g_m r_o + C_4 R_4 + 2C_4 R_L g_m r_o + 2C_4 R_L}{C_1 C_4 (R_4 R_L + R_4 r_o + 2R_L r_o)} \\ \text{K-LP: } & R_L \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_4 R_4 R_L (g_m r_o + 1)}{C_1 R_L + C_1 r_o + C_4 R_4 g_m r_o + C_4 R_4 + 2C_4 R_L g_m r_o + 2C_4 R_L} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.9 INVALID-NUMER-9 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L R_L s + 1)}{C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L R_1 R_4 r_o s^2 + 2C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + 2C_L R_1 R_L g_m r_o s + 2C_L R_1 R_L s + C_L R_4 R_L s + C_L R_4 r_o s + 2C_L R_L r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_L R_1 \sqrt{\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_1 C_L R_1 (R_4 R_L + R_4 r_o + 2R_L r_o)}} (R_4 R_L + R_4 r_o + 2R_L r_o)}{C_1 R_1 R_4 + 2C_1 R_1 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + 2C_L R_1 R_L g_m r_o + 2C_L R_1 R_L + C_L R_4 R_L + C_L R_4 r_o + 2C_L R_L r_o} \\ \text{wo: } & \sqrt{\frac{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}{C_1 C_L R_1 (R_4 R_L + R_4 r_o + 2R_L r_o)}} \\ \text{bandwidth: } & \frac{C_1 R_1 R_4 + 2C_1 R_1 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + 2C_L R_1 R_L g_m r_o + 2C_L R_1 R_L + C_L R_4 R_L + C_L R_4 r_o + 2C_L R_L r_o}{C_1 C_L R_1 (R_4 R_L + R_4 r_o + 2R_L r_o)} \\ \text{K-LP: } & \frac{R_1 R_4 (g_m r_o + 1)}{2R_1 g_m r_o + 2R_1 + R_4 + 2r_o} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_L R_1 R_4 R_L (g_m r_o + 1)}{C_1 R_1 R_4 + 2C_1 R_1 r_o + C_L R_1 R_4 g_m r_o + C_L R_1 R_4 + 2C_L R_1 R_L g_m r_o + 2C_L R_1 R_L + C_L R_4 R_L + C_L R_4 r_o + 2C_L R_L r_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.10 INVALID-NUMER-10 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 R_4 s + 1)}{C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + C_4 R_1 R_4 g_m r_o s + C_4 R_1 R_4 s + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_4 R_1 \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_1 C_4 R_1 (R_4 R_L + R_4 r_o + 2R_L r_o)}} (R_4 R_L + R_4 r_o + 2R_L r_o)}{C_1 R_1 R_L + C_1 R_1 r_o + C_4 R_1 R_4 g_m r_o + C_4 R_1 R_4 + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o} \\ \text{wo: } & \sqrt{\frac{R_1 g_m r_o + R_1 + R_L + r_o}{C_1 C_4 R_1 (R_4 R_L + R_4 r_o + 2R_L r_o)}} \\ \text{bandwidth: } & \frac{C_1 R_1 R_L + C_1 R_1 r_o + C_4 R_1 R_4 g_m r_o + C_4 R_1 R_4 + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o}{C_1 C_4 R_1 (R_4 R_L + R_4 r_o + 2R_L r_o)} \\ \text{K-LP: } & \frac{R_1 R_L (g_m r_o + 1)}{R_1 g_m r_o + R_1 + R_L + r_o} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_4 R_1 R_4 R_L (g_m r_o + 1)}{C_1 R_1 R_L + C_1 R_1 r_o + C_4 R_1 R_4 g_m r_o + C_4 R_1 R_4 + 2C_4 R_1 R_L g_m r_o + 2C_4 R_1 R_L + C_4 R_4 R_L + C_4 R_4 r_o + 2C_4 R_L r_o} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.11 INVALID-NUMER-11 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 R_1 s + 1)}{C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 R_1 g_m r_o s + 2C_1 R_1 s + C_1 R_4 s + 2C_1 r_o s + C_L R_4 g_m r_o s + C_L R_4 s + 2g_m r_o + 2}$$

Parameters:

Q: $\frac{\sqrt{2C_1 C_L R_4} \sqrt{\frac{g_m r_o + 1}{C_1 C_L R_4 (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)}{2C_1 R_1 g_m r_o + 2C_1 R_1 + C_1 R_4 + 2C_1 r_o + C_L R_4 g_m r_o + C_L R_4}$
 wo: $\sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 C_L R_4 (R_1 g_m r_o + R_1 + r_o)}}$
 bandwidth: $\frac{2C_1 R_1 g_m r_o + 2C_1 R_1 + C_1 R_4 + 2C_1 r_o + C_L R_4 g_m r_o + C_L R_4}{C_1 C_L R_4 (R_1 g_m r_o + R_1 + r_o)}$
 K-LP: $\frac{R_4}{2}$
 K-HP: 0
 K-BP: $\frac{C_1 R_1 R_4 (g_m r_o + 1)}{2C_1 R_1 g_m r_o + 2C_1 R_1 + C_1 R_4 + 2C_1 r_o + C_L R_4 g_m r_o + C_L R_4}$
 QZ: 0
 Wz: None

8.12 INVALID-NUMER-12 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 R_1 s + 1)}{C_1 C_L R_1 R_4 R_L g_m r_o s^2 + C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L R_4 R_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + 2C_1 R_1 R_L g_m r_o s + 2C_1 R_1 R_L s + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + C_L R_4 R_L}$$

Parameters:

Q: $\frac{C_1 C_L R_4 R_L \sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)}{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + C_L R_4 R_L g_m r_o + C_L R_4 R_L}$
 wo: $\sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)}}$
 bandwidth: $\frac{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + C_L R_4 R_L g_m r_o + C_L R_4 R_L}{C_1 C_L R_4 R_L (R_1 g_m r_o + R_1 + r_o)}$
 K-LP: $\frac{R_4 R_L}{R_4 + 2R_L}$
 K-HP: 0
 K-BP: $\frac{C_1 R_1 R_4 R_L (g_m r_o + 1)}{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + C_L R_4 R_L g_m r_o + C_L R_4 R_L}$
 QZ: 0
 Wz: None

8.13 INVALID-NUMER-13 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + g_m r_o + 1}$$

Parameters:

$$Q: \frac{\sqrt{2} C_1 C_4 R_L \sqrt{\frac{g_m r_o + 1}{C_1 C_4 R_L (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L}$$

$$wo: \frac{\sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 C_4 R_L (R_1 g_m r_o + R_1 + r_o)}}}{2}$$

$$bandwidth: \frac{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L}{2C_1 C_4 R_L (R_1 g_m r_o + R_1 + r_o)}$$

K-LP: R_L

K-HP: 0

$$K-BP: \frac{C_1 R_1 R_L (g_m r_o + 1)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L}$$

QZ: 0

Wz: None

8.14 INVALID-NUMER-14 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L R_1 R_L g_m r_o s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_L r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + g_m r_o + 1}$$

Parameters:

$$Q: \frac{C_1 R_L \sqrt{\frac{g_m r_o + 1}{C_1 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L + C_L R_L g_m r_o + C_L R_L}$$

$$wo: \sqrt{\frac{g_m r_o + 1}{C_1 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}}$$

$$bandwidth: \frac{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L + C_L R_L g_m r_o + C_L R_L}{C_1 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}$$

K-LP: R_L

K-HP: 0

$$K-BP: \frac{C_1 R_1 R_L (g_m r_o + 1)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + 2C_4 R_L g_m r_o + 2C_4 R_L + C_L R_L g_m r_o + C_L R_L}$$

QZ: 0

Wz: None

8.15 INVALID-NUMER-15 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 R_1 R_4 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_4 R_L s^2 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + 2C_1 R_1 R_L g_m r_o s + 2C_1 R_1 R_L s + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + 2C_4 R_4}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{\sqrt{2} C_1 C_4 R_4 R_L \sqrt{\frac{R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L}{C_1 C_4 R_4 R_L (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)}{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L} \\ \text{wo: } & \sqrt{\frac{\frac{R_4 g_m r_o}{2} + \frac{R_4}{2} + R_L g_m r_o + R_L}{C_1 C_4 R_4 R_L (R_1 g_m r_o + R_1 + r_o)}} \\ \text{bandwidth: } & \frac{\sqrt{2} \sqrt{\frac{R_4 g_m r_o}{2} + \frac{R_4}{2} + R_L g_m r_o + R_L}}{C_1 C_4 R_4 R_L \sqrt{\frac{R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L}{C_1 C_4 R_4 R_L (R_1 g_m r_o + R_1 + r_o)}} (R_1 g_m r_o + R_1 + r_o)} \\ \text{K-LP: } & \frac{R_4 R_L}{R_4 + 2 R_L} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_1 R_1 R_4 R_L (g_m r_o + 1)}{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.16 INVALID-NUMER-16 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 R_1 R_4 g_m r_o s^2 + 2C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 R_1 g_m r_o s + 2C_1 R_1 s + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{\sqrt{2} C_1 R_4 \sqrt{\frac{g_m r_o + 1}{C_1 R_4 (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{2C_1 R_1 g_m r_o + 2C_1 R_1 + C_1 R_4 + 2C_1 r_o + 2C_4 R_4 g_m r_o + 2C_4 R_4 + C_L R_4 g_m r_o + C_L R_4} \\ \text{wo: } & \sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 R_4 (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}} \\ \text{bandwidth: } & \frac{2C_1 R_1 g_m r_o + 2C_1 R_1 + C_1 R_4 + 2C_1 r_o + 2C_4 R_4 g_m r_o + 2C_4 R_4 + C_L R_4 g_m r_o + C_L R_4}{C_1 R_4 (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)} \\ \text{K-LP: } & \frac{R_4}{2} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & \frac{C_1 R_1 R_4 (g_m r_o + 1)}{2C_1 R_1 g_m r_o + 2C_1 R_1 + C_1 R_4 + 2C_1 r_o + 2C_4 R_4 g_m r_o + 2C_4 R_4 + C_L R_4 g_m r_o + C_L R_4} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.17 INVALID-NUMER-17 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 R_1 R_4 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_4 R_L s^2 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 C_L R_1 R_4 R_L g_m r_o s^2 + C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L R_4 R_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + 2C_1 R_1 R_L g_m r_o}$$

Parameters:

Q: $\frac{C_1 R_4 R_L \sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 R_4 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}} (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L + C_L R_4 R_L g_m r_o + C_L R_4 R_L}$

wo: $\sqrt{\frac{R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}{C_1 R_4 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}}$

bandwidth: $\frac{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L + C_L R_4 R_L g_m r_o + C_L R_4 R_L}{C_1 R_4 R_L (2C_4 R_1 g_m r_o + 2C_4 R_1 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L r_o)}$

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

K-HP: 0

K-BP: $\frac{C_1 R_1 R_4 R_L (g_m r_o + 1)}{C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + 2C_1 R_1 R_L g_m r_o + 2C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_4 r_o + 2C_1 R_L r_o + 2C_4 R_4 R_L g_m r_o + 2C_4 R_4 R_L + C_L R_4 R_L g_m r_o + C_L R_4 R_L}$

QZ: 0

Wz: None

9 INVALID-WZ

9.1 INVALID-WZ-1 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 R_4 s + 1) (C_L R_L s + 1)}{C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + C_4 C_L R_4 R_L s^2 + C_4 C_L R_4 r_o s^2 + 2C_4 C_L R_L r_o s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + C_4 R_4 s + 2C_4 r_o s}$$

Parameters:

Q: $\frac{C_4 C_L \sqrt{\frac{1}{C_4 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}} (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}{2C_4 R_1 g_m r_o + 2C_4 R_1 + C_4 R_4 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L R_L + C_L r_o}$

wo: $\sqrt{\frac{1}{C_4 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}}$

bandwidth: $\frac{2C_4 R_1 g_m r_o + 2C_4 R_1 + C_4 R_4 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L R_L + C_L r_o}{C_4 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}$

K-LP: $R_1 (g_m r_o + 1)$

K-HP: $\frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$

K-BP: $\frac{R_1 (C_4 R_4 g_m r_o + C_4 R_4 + C_L R_L g_m r_o + C_L R_L)}{2C_4 R_1 g_m r_o + 2C_4 R_1 + C_4 R_4 + 2C_4 r_o + C_L R_1 g_m r_o + C_L R_1 + C_L R_L + C_L r_o}$

$$\begin{aligned} \text{QZ: } & \frac{C_4 C_L R_4 R_L \sqrt{\frac{1}{C_4 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}}}{C_4 R_4 + C_L R_L} \\ \text{WZ: } & \sqrt{\frac{1}{C_4 C_L R_4 R_L}} \end{aligned}$$

9.2 INVALID-WZ-2 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 R_1 s + 1) (C_L R_L s + 1)}{C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + 2 C_1 C_L R_1 R_L g_m r_o s^2 + 2 C_1 C_L R_1 R_L s^2 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2 C_1 C_L R_L r_o s^2 + 2 C_1 R_1 g_m r_o s + 2 C_1 R_1 s + C_1 R_4 s + 2 C_1 r_o s}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{\sqrt{2} C_1 C_L \sqrt{\frac{g_m r_o + 1}{C_1 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}} (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}{2 C_1 R_1 g_m r_o + 2 C_1 R_1 + C_1 R_4 + 2 C_1 r_o + C_L R_4 g_m r_o + C_L R_4 + 2 C_L R_L g_m r_o + 2 C_L R_L} \\ \text{wo: } & \sqrt{2} \sqrt{\frac{g_m r_o + 1}{C_1 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}} \\ \text{bandwidth: } & \frac{2 C_1 R_1 g_m r_o + 2 C_1 R_1 + C_1 R_4 + 2 C_1 r_o + C_L R_4 g_m r_o + C_L R_4 + 2 C_L R_L g_m r_o + 2 C_L R_L}{C_1 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)} \\ \text{K-LP: } & \frac{R_4}{2} \\ \text{K-HP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o} \\ \text{K-BP: } & \frac{R_4 (C_1 R_1 g_m r_o + C_1 R_1 + C_L R_L g_m r_o + C_L R_L)}{2 C_1 R_1 g_m r_o + 2 C_1 R_1 + C_1 R_4 + 2 C_1 r_o + C_L R_4 g_m r_o + C_L R_4 + 2 C_L R_L g_m r_o + 2 C_L R_L} \\ \text{QZ: } & \frac{\sqrt{2} C_1 C_L R_1 R_L \sqrt{\frac{g_m r_o + 1}{C_1 C_L (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}}}{C_1 R_1 + C_L R_L} \\ \text{WZ: } & \sqrt{\frac{1}{C_1 C_L R_1 R_L}} \end{aligned}$$

9.3 INVALID-WZ-3 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 R_1 s + 1) (C_4 R_4 s + 1)}{C_1 C_4 R_1 R_4 g_m r_o s^2 + C_1 C_4 R_1 R_4 s^2 + 2 C_1 C_4 R_1 R_L g_m r_o s^2 + 2 C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2 C_1 C_4 R_L r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + C_4 R_4 s}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_1 C_4 \sqrt{\frac{g_m r_o + 1}{C_1 C_4 (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}} (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + C_4 R_4 g_m r_o + C_4 R_4 + 2 C_4 R_L g_m r_o + 2 C_4 R_L} \\ \text{wo: } & \sqrt{\frac{g_m r_o + 1}{C_1 C_4 (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)}} \\ \text{bandwidth: } & \frac{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + C_4 R_4 g_m r_o + C_4 R_4 + 2 C_4 R_L g_m r_o + 2 C_4 R_L}{C_1 C_4 (R_1 R_4 g_m r_o + R_1 R_4 + 2 R_1 R_L g_m r_o + 2 R_1 R_L + R_4 R_L + R_4 r_o + 2 R_L r_o)} \end{aligned}$$

$$\begin{aligned}
\text{K-LP: } & R_L \\
\text{K-HP: } & \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o} \\
\text{K-BP: } & \frac{R_L (C_1 R_1 g_m r_o + C_1 R_1 + C_4 R_4 g_m r_o + C_4 R_4)}{C_1 R_1 g_m r_o + C_1 R_1 + C_1 R_L + C_1 r_o + C_4 R_4 g_m r_o + C_4 R_4 + 2C_4 R_L g_m r_o + 2C_4 R_L} \\
\text{QZ: } & \frac{C_1 C_4 R_1 R_4 \sqrt{\frac{g_m r_o + 1}{C_1 C_4 (R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o)}}}{C_1 R_1 + C_4 R_4} \\
\text{WZ: } & \sqrt{\frac{1}{C_1 C_4 R_1 R_4}}
\end{aligned}$$

10 INVALID-ORDER

10.1 INVALID-ORDER-1 $Z(s) = (R_1, \infty, \infty, R_4, \infty, R_L)$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

10.2 INVALID-ORDER-2 $Z(s) = \left(R_1, \infty, \infty, R_4, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1)}{C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + C_L R_4 r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

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

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{C_L R_1 R_4 R_L g_m r_o s + C_L R_1 R_4 R_L s + C_L R_4 R_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

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

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L R_L s + 1)}{C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + 2C_L R_1 R_L g_m r_o s + 2C_L R_1 R_L s + C_L R_4 R_L s + C_L R_4 r_o s + 2C_L R_L r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

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

$$H(s) = \frac{R_1 R_L (g_m r_o + 1)}{2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + R_1 g_m r_o + R_1 + R_L + r_o}$$

10.6 INVALID-ORDER-6 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1)}{2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

10.7 INVALID-ORDER-7 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1)}{2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + C_L R_1 R_L g_m r_o s + C_L R_1 R_L s + C_L R_L r_o s + R_1 g_m r_o + R_1 + R_L + r_o}$$

10.8 INVALID-ORDER-8 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

10.9 INVALID-ORDER-9 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + 2C_4 C_L R_L r_o s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + C_L L_L s^2 + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

10.10 INVALID-ORDER-10 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{2C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2C_4 C_L L_L R_1 R_L s^3 + 2C_4 C_L L_L R_L r_o s^3 + 2C_4 L_L R_1 g_m r_o s^2 + 2C_4 L_L R_1 s^2 + 2C_4 L_L r_o s^2 + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + C_L L_L R_1 g_m r_o s + C_L L_L R_1 s + C_L R_L r_o s + 1}$$

$$10.11 \quad \text{INVALID-ORDER-11} \quad Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2C_4 C_L L_L R_1 R_L s^3 + 2C_4 C_L L_L R_L r_o s^3 + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + C_L L_L R_1 g_m r_o s^2 + C_L L_L R_1 s^2 + C_L L_L R_L s^2 + C_L L_L r_o s^2 +}$$

$$10.12 \quad \text{INVALID-ORDER-12} \quad Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{2C_4 R_1 R_4 R_L g_m r_o s + 2C_4 R_1 R_4 R_L s + 2C_4 R_4 R_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

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

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1)}{2C_4 R_1 R_4 g_m r_o s + 2C_4 R_1 R_4 s + 2C_4 R_4 r_o s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s + C_L R_4 r_o s + 2R_1 g_m r_o + 2R_1 + R_4 + 2r_o}$$

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

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{2C_4 R_1 R_4 R_L g_m r_o s + 2C_4 R_1 R_4 R_L s + 2C_4 R_4 R_L r_o s + C_L R_1 R_4 R_L g_m r_o s + C_L R_1 R_4 R_L s + C_L R_4 R_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o +}$$

$$10.15 \quad \text{INVALID-ORDER-15} \quad Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_L R_1 R_4 g_m r_o s^3 + 2C_4 C_L L_L R_1 R_4 s^3 + 2C_4 C_L L_L R_4 r_o s^3 + 2C_4 R_1 R_4 g_m r_o s + 2C_4 R_1 R_4 s + 2C_4 R_4 r_o s + 2C_L L_L R_1 g_m r_o s^2 + 2C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + 2C_L L_L r_o s^2 +}$$

$$10.16 \quad \text{INVALID-ORDER-16} \quad Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_L R_1 R_4 g_m r_o s^3 + 2C_4 C_L L_L R_1 R_4 s^3 + 2C_4 C_L L_L R_4 r_o s^3 + 2C_4 C_L R_1 R_4 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_4 R_L s^2 + 2C_4 C_L R_4 R_L r_o s^2 + 2C_4 R_1 R_4 g_m r_o s + 2C_4 R_1 R_4 s + 2C_4 R_4 r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o +}$$

10.17 INVALID-ORDER-17 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_4C_LL_LR_1R_4R_Lg_mr_0s^3 + 2C_4C_LL_LR_1R_4R_Ls^3 + 2C_4C_LL_LR_4R_Lr_0s^3 + 2C_4L_LR_1R_4g_mr_0s^2 + 2C_4L_LR_1R_4s^2 + 2C_4L_LR_4r_0s^2 + 2C_4R_1R_4R_Lg_mr_0s + 2C_4R_1R_4R_Ls + 2C_4R_1R_4r_0s}{2C_4C_LL_LR_1R_4R_Lg_mr_0s^3 + 2C_4C_LL_LR_1R_4R_Ls^3 + 2C_4C_LL_LR_4R_Lr_0s^3 + 2C_4L_LR_1R_4g_mr_0s^2 + 2C_4L_LR_1R_4s^2 + 2C_4L_LR_4r_0s^2 + 2C_4R_1R_4R_Lg_mr_0s + 2C_4R_1R_4R_Ls + 2C_4R_1R_4r_0s}.$$

10.18 INVALID-ORDER-18 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_4C_LL_LR_1R_4R_Lg_mr_0s^3 + 2C_4C_LL_LR_1R_4R_Ls^3 + 2C_4C_LL_LR_4R_Lr_0s^3 + 2C_4R_1R_4R_Lg_mr_0s + 2C_4R_1R_4R_Ls + 2C_4R_4R_Lr_0s + C_LL_LR_1R_4g_mr_0s^2 + C_LL_LR_1R_4s^2 + 2C_L$$

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

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 R_1 R_4 g_m r_o s + C_4 R_1 R_4 s + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o s + R_1 g_m r_o + R_1 + R_L + r_o}$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 R_4 s + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 C_L L_L r_o s^3 + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_4 r_o s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + C_4 R_4 s + 2C_4 r_o s + 1}$$

10.21 INVALID-ORDER-21 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_4 r_o s^3 + 2C_4 L_L R_1 g_m r_o s^2 + 2C_4 L_L R_1 s^2 + C_4 L_L R_4 s^2 + 2C_4 L_L r_o s^2 + C_4 R_1 R_4 g_m r_o s + C_4 R_1 R_4 s + C_4 R_4 r_o s + C_L L_L}$$

10.22 INVALID-ORDER-22 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 R_4 s + 1) (C_L L_L s^2 + C_L R_L)}{2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 C_L L_L r_o s^3 + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + C_4 C_L R_4 R_L s^2 + C_4}$$

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

$$H(s) = \frac{C_4 C_{LL} R_1 R_4 R_L g_m r_o s^3 + C_4 C_{LL} R_1 R_4 R_L s^3 + C_4 C_{LL} R_4 R_L r_o s^3 + C_4 L_L R_1 R_4 g_m r_o s^2 + C_4 L_L R_1 R_4 s^2 + 2 C_4 L_L R_1 R_L g_m r_o s^2 + 2 C_4 L_L R_1 R_L s^2 + C_4 L_L R_4 R_L s^2 + C_4 L_L}{\dots}$$

10.24 INVALID-ORDER-24 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 L_L R_1 g_m r_o s^2 + 2 C_4 L_L R_1 g_m r_o s + 2 C_4 L_L R_1 r_o}{C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 L_L R_1 g_m r_o s^2 + 2 C_4 L_L R_1 g_m r_o s + 2 C_4 L_L R_1 r_o}$$

10.25 INVALID-ORDER-25 $Z(s) = \left(R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + C_4 C_L R_1 R_4 R_L g_m r_o s^2}{C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + C_4 C_L R_1 R_4 R_L g_m r_o s^2}.$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + C_4 L_4 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + C_L R_1 g_m r_o s + C_L R_1 s + C_L r_o s + 1}$$

10.27 INVALID-ORDER-27 $Z(s) = \left(R_1, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_L r_o s + C_L R_1 s + 1}$$

10.28 INVALID-ORDER-28 $Z(s) = \left(R_1, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L R_L s + 1)}{C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + 2C_4 C_L R_L r_o s^2 + C_4 L_4 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + 1}$$

10.29 INVALID-ORDER-29 $Z(s) = \left(R_1, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L L_L s^2 + 1)}{C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + 2C_4 C_L L_L r_o s^3 + C_4 L_4 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s + 1}$$

10.30 INVALID-ORDER-30 $Z(s) = \left(R_1, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 L_4 L_L s^3 + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 r_o s^2 + 2C_4 L_L R_1 g_m r_o s^2 + 2C_4 L_L R_1 s^2 + 2C_4 L_L r_o s^2 + C_L L s + 1}$$

10.31 INVALID-ORDER-31 $Z(s) = \left(R_1, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + 2C_4 C_L R_L r_o s^2 + C_L L s + 1}$$

10.32 INVALID-ORDER-32 $Z(s) = \left(R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 L_4 L_L R_1 g_m r_o s^3 + C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_L s^3 + C_4 L_4 L_L r_o s^3 + C_4 L_4 R_1 R_L g_m r_o s^2 + C_4 L_4 R_1 R_L s^2}{C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 L_4 L_L R_1 g_m r_o s^3 + C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_L s^3 + C_4 L_4 L_L r_o s^3 + C_4 L_4 R_1 R_L g_m r_o s^2 + C_4 L_4 R_1 R_L s^2}.$$

10.33 INVALID-ORDER-33 $Z(s) = \left(R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + 2C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2C_4 C_L L_L R_1 R_L s^3 + 2C_4 C_L L_L R_L r_o s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_1 g_m}{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + 2C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2C_4 C_L L_L R_1 R_L s^3 + 2C_4 C_L L_L R_L r_o s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_1 g_m}$$

10.34 INVALID-ORDER-34 $Z(s) = \left(R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 C_L L_L R_1 r_o s^3 + 2 C_4 C_L L_L R_1 s^3 + 2 C_4 C_L L_L R_L s^3 + 2 C_4 C_L L_L r_o s^3 + 2 C_4 C_L L_L s^3 + 2 C_4 C_L R_1 R_L g_m r_o s^2 + 2 C_4 C_L R_1 R_L s^2 + 2 C_4 C_L R_L r_o s^2 + 2 C_4 C_L R_1 r_o s^2 + 2 C_4 C_L R_1 s^2 + 2 C_4 C_L R_L s^2 + 2 C_4 C_L r_o s^2 + 2 C_4 C_L s^2 + 2 C_4 R_1 R_L g_m r_o s + 2 C_4 R_1 R_L s + 2 C_4 R_L r_o s + 2 C_4 R_1 r_o s + 2 C_4 R_1 + 2 C_4 R_L + 2 C_4 r_o + 2 C_4}{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 C_L L_L R_1 r_o s^3 + 2 C_4 C_L L_L R_1 s^3 + 2 C_4 C_L L_L R_L s^3 + 2 C_4 C_L L_L r_o s^3 + 2 C_4 C_L L_L s^3 + 2 C_4 C_L R_1 R_L g_m r_o s^2 + 2 C_4 C_L R_1 R_L s^2 + 2 C_4 C_L R_L r_o s^2 + 2 C_4 C_L R_1 r_o s^2 + 2 C_4 C_L R_1 s^2 + 2 C_4 C_L R_L s^2 + 2 C_4 C_L r_o s^2 + 2 C_4 C_L s^2 + 2 C_4 R_1 R_L g_m r_o s + 2 C_4 R_1 R_L s + 2 C_4 R_L r_o s + 2 C_4 R_1 r_o s + 2 C_4 R_1 + 2 C_4 R_L + 2 C_4 r_o + 2 C_4}.$$

10.35 INVALID-ORDER-35 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 R_1 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_1 R_L s^3 + 2C_4 C_L L_4 R_L r_o s^3 + 2C_4 L_4 R_1 g_m r_o s^2 + 2C_4 L_4 R_1 s^2 + 2C_4 L_4 r_o s^2 + C_L L_4 R_1 g_m r_o s^2 + C_L L_4 R_1 s^2 + C_L L_4 R_L s^2 + C_L L_4 r_o s^2 +}$$

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

$$H(s) = \frac{L_4 R_1 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + 2C_4 L_4 R_1 g_m r_o s^2 + 2C_4 L_4 R_1 s^2 + 2C_4 L_4 r_o s^2 + C_L L_4 L_L s^3 + C_L L_4 R_1 g_m r_o s^2 + C_L L_4 R_1 s^2 + C_L L_4 r_o s^2 + 2}$$

10.37 INVALID-ORDER-37 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 R_1}{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + 2C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_1 R_L s^3 + 2C_4 C_L L_4 R_L r_o s^3 + 2C_4 L_4 R_1 g_m r_o s^2 + 2C_4 L_4 R_1 s^2 + 2C_4 L_4 R_L r_o s^2 + 2C_4 L_4 R_L s^2 + C_L L_4 L_L R_1 g_m r_o s^3 + C_L L_4 L_L R_1 s^3 + C_L L_4 L_L R_L r_o s^3 + C_L L_4 L_L R_L s^3 + C_L L_4 L_L R_L r_o s^2 + C_L L_4 L_L R_L s^2 + C_L L_4 L_L R_L r_o s + C_L L_4 L_L R_L s + C_L L_4 L_L R_L r_o + C_L L_4 L_L R_L}$$

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

$$H(s) = \frac{L_4 R_1}{2C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_L s^4 + 2C_4 C_L L_4 L_L R_L r_o s^4 + 2C_4 L_4 L_L R_1 g_m r_o s^3 + 2C_4 L_4 L_L R_1 s^3 + 2C_4 L_4 L_L r_o s^3 + 2C_4 L_4 R_1 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_L s^2 + C_L L_4 L_L R_1 g_m r_o s^3 + C_L L_4 L_L R_1 s^3 + C_L L_4 L_L R_L r_o s^3 + C_L L_4 L_L R_L s^3 + C_L L_4 L_L R_L r_o s^2 + C_L L_4 L_L R_L s^2 + C_L L_4 L_L R_L r_o s + C_L L_4 L_L R_L s + C_L L_4 L_L R_L r_o + C_L L_4 L_L R_L}$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_4 r_o s^2 + C_4 L_4 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + C_4 R_4 s + 2C_4 r_o s + C_L R_1 g_m r_o s^3 + C_L R_1 s^3 + C_L R_L r_o s^3 + C_L R_L s^3 + C_L R_L r_o s^2 + C_L R_L s^2 + C_L R_L r_o s + C_L R_L s + C_L R_L r_o + C_L R_L}$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_4 r_o s^2 + C_4 L_4 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + C_4 R_4 s + 2C_4 r_o s + C_L R_1 g_m r_o s^3 + C_L R_1 s^3 + C_L R_L r_o s^3 + C_L R_L s^3 + C_L R_L r_o s^2 + C_L R_L s^2 + C_L R_L r_o s + C_L R_L s + C_L R_L r_o + C_L R_L}$$

10.41 INVALID-ORDER-41 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1)}{C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + C_4 C_L R_1 R_4 R_L g_m r_o s^2 + C_4 C_L R_1 R_4 R_L s^2 + C_4 C_L R_4 R_L r_o s^2 + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_L R_1 g_m r_o s^3 + C_L R_1 s^3 + C_L R_L r_o s^3 + C_L R_L s^3 + C_L R_L r_o s^2 + C_L R_L s^2 + C_L R_L r_o s + C_L R_L s + C_L R_L r_o + C_L R_L}$$

10.42 INVALID-ORDER-42 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1(g_m r_o + 1)(C_L R_L s + 1)(C_4 L_4 s^2 + C_4 R_4 s + C_4 L_4 R_4)}{C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + C_4 C_L R_4 R_L s^2 + C_4 C_L R_4 s^2}$$

10.43 INVALID-ORDER-43 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 + C_4 R_4 s + C_4 L_4 R_4)}{C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + 2 C_4 C_L L_L R_1 g_m r_o s^3 + 2 C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_4 s^3 + 2 C_4 C_L L_L r_o s^3 + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_1 R_4}$$

10.44 INVALID-ORDER-44 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (g_m r_o + C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_4 r_o s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4}{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_4 r_o s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4}$$

10.45 INVALID-ORDER-45 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1}{C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + 2 C_4 C_L L_L R_1 g_m r_o s^3 + 2 C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_4 s^3 + 2 C_4 C_L L_L r_o s^3 + C_4 C_L R_1 R_4}$$

10.46 INVALID-ORDER-46 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 C_L L_L R_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_L R_1 R_4 R_L s^3 + C_4 C_L L_L R_4 R_L r_o s^3 + C_4 L_4 L_L R_1 g_m r_o s^3 + C_4 L_4 L_L R_1 r_o s^3 + C_4 L_4 L_L R_4 g_m r_o s^3 + C_4 L_4 L_L R_4 r_o s^3 + C_4 L_4 L_L s^3}{C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 C_L L_L R_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_L R_1 R_4 R_L s^3 + C_4 C_L L_L R_4 R_L r_o s^3 + C_4 L_4 L_L R_1 g_m r_o s^3 + C_4 L_4 L_L R_1 r_o s^3 + C_4 L_4 L_L R_4 g_m r_o s^3 + C_4 L_4 L_L R_4 r_o s^3 + C_4 L_4 L_L s^3}$$

10.47 INVALID-ORDER-47 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_{4s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + 2 C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_L R_1 R_L s^3 +$$

10.48 INVALID-ORDER-48 $Z(s) = \left(R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_1 R_4 r_o s^3 + C_4 C_L L_L R_1 R_4 s^3}{C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_1 R_4 r_o s^3 + C_4 C_L L_L R_1 R_4 s^3}$$

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

$$H(s) = \frac{2C_4C_L L_4 R_1 R_4 R_L g_m r_o s^3 + 2C_4C_L L_4 R_1 R_4 R_L s^3 + 2C_4C_L L_4 R_4 R_L r_o s^3 + 2C_4L_4 R_1 R_4 g_m r_o s^2 + 2C_4L_4 R_1 R_4 s^2 + 2C_4L_4 R_4 r_o s^2 + C_L L_4 R_1 R_4 g_m r_o s^2 + C_L L_4 R_1 R_4 s^2 + 2C_L$$

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

$$H(s) = \frac{2C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 L_4 R_1 R_4 g_m r_o s^2 + 2C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_4 r_o s^2 + 2C_L L_4 L_L R_1 g_m r_o s^3 + 2C_L L_4 L_L R_1 s^3 + C}{2C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 L_4 R_1 R_4 g_m r_o s^2 + 2C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_4 r_o s^2 + 2C_L L_4 L_L R_1 g_m r_o s^3 + 2C_L L_4 L_L R_1 s^3 + C}$$

10.51 INVALID-ORDER-51 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_1 R_4 R_L s^3 + 2C_4 C_L L_4 R_4 R_L r_o s^3 + 2C_4 L_4 R_1 R_4 g_m r_o s^2 + 2C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_4 R_L r_o s^2 + 2C_4 L_4 R_4 s^2 + 2C_4 R_1 R_4 g_m r_o s + 2C_4 R_1 R_4 s + 2C_4 R_4 R_L r_o s + 2C_4 R_4 s + 2R_1 R_4 g_m r_o + 2R_1 R_4 + 2R_4 R_L r_o + 2R_4}{2C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_1 R_4 R_L s^3 + 2C_4 C_L L_4 R_4 R_L r_o s^3 + 2C_4 L_4 R_1 R_4 g_m r_o s^2 + 2C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_4 R_L r_o s^2 + 2C_4 L_4 R_4 s^2 + 2C_4 R_1 R_4 g_m r_o s + 2C_4 R_1 R_4 s + 2C_4 R_4 R_L r_o s + 2C_4 R_4 s + 2R_1 R_4 g_m r_o + 2R_1 R_4 + 2R_4 R_L r_o + 2R_4}.$$

10.52 INVALID-ORDER-52 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_4C_LL_4L_LR_1R_4R_Lg_mr_0s^4 + 2C_4C_LL_4L_LR_1R_4R_Ls^4 + 2C_4C_LL_4L_LR_4R_Lr_0s^4 + 2C_4L_4L_LR_1R_4g_mr_0s^3 + 2C_4L_4L_LR_1R_4s^3 + 2C_4L_4L_LR_4r_0s^3 + 2C_4L_4R_1R_4R_Lg_mr_0s^2 + 2C_4L_4R_1R_4R_Ls^2 + 2C_4L_4R_4R_Lr_0s^2 + 2C_4L_4R_1R_4s^2 + 2C_4L_4R_4R_Lr_0s + 2C_4L_4R_1R_4s + 2C_4L_4R_4R_Lr_0}{2C_4C_LL_4L_LR_1R_4R_Lg_mr_0s^4 + 2C_4C_LL_4L_LR_1R_4R_Ls^4 + 2C_4C_LL_4L_LR_4R_Lr_0s^4 + 2C_4L_4L_LR_1R_4g_mr_0s^3 + 2C_4L_4L_LR_1R_4s^3 + 2C_4L_4L_LR_4r_0s^3 + 2C_4L_4R_1R_4R_Lg_mr_0s^2 + 2C_4L_4R_1R_4R_Ls^2 + 2C_4L_4R_4R_Lr_0s^2 + 2C_4L_4R_1R_4s^2 + 2C_4L_4R_4R_Lr_0s + 2C_4L_4R_1R_4s + 2C_4L_4R_4R_Lr_0}.$$

10.53 INVALID-ORDER-53 $Z(s) = \left(R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_4C_LL_4L_LR_1R_4R_Lg_mr_os^4 + 2C_4C_LL_4L_LR_1R_4R_Ls^4 + 2C_4C_LL_4L_LR_4R_Lr_os^4 + 2C_4L_4R_1R_4R_Lg_mr_os^2 + 2C_4L_4R_1R_4R_Ls^2 + 2C_4L_4R_4R_Lr_os^2 + C_LL_4L_LR_1R_4g_mr_os^3 +$$

10.54 INVALID-ORDER-54 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 L_4 R_1 g_m r_o s^2 + 2 C_4 L_4 R_1 s^2 + C_4 L_4 R_4 s^2 + 2 C_4 L_4 r_o s^2 + C_L L_4 R_1 g_m r_o s^2 + C_L L_4 R_1 s^2 + C_L L_4 r_o s^2 + C_L R_1}$$

10.55 INVALID-ORDER-55 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 R_L s^3 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2 C_4 L_4 R_1 R_L g_m r_o s^2 + 2 C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4}{C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 R_L s^3 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2 C_4 L_4 R_1 R_L g_m r_o s^2 + 2 C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4}$$

10.56 INVALID-ORDER-56 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + 2 C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_4 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 C_L L_4 R_L r_o s^3 + 2 C_4 L_4 R_1 g_m r_o s^2 + 2 C_4 L_4 R_1 g_m s^2 + 2 C_4 L_4 R_1 s^2 + C_4 L_4 R_1 s^2}{C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + 2 C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_4 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 C_L L_4 R_L r_o s^3 + 2 C_4 L_4 R_1 g_m r_o s^2 + 2 C_4 L_4 R_1 g_m s^2 + 2 C_4 L_4 R_1 s^2 + C_4 L_4 R_1 s^2}$$

$$10.57 \quad \text{INVALID-ORDER-57} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2C_4 L_4 R_1 g_m r_o s^2 + 2C_4 L_4 R_1 s^2 + C_4 L_4 R_4 r_o s^2 + C_4 L_4 R_4 s^2 + C_4 L_4 R_4}{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2C_4 L_4 R_1 g_m r_o s^2 + 2C_4 L_4 R_1 s^2 + C_4 L_4 R_4 r_o s^2 + C_4 L_4 R_4 s^2 + C_4 L_4 R_4}$$

$$10.58 \quad \text{INVALID-ORDER-58} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 L_4 L_L R_1 g_m r_o s^3 + 2C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_4 s^3 + 2C_4 L_4 L_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + C_4 L_4 R_4 r_o s^2 + C_4 L_4 R_4 s^2 + C_4 L_4 R_4}{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 L_4 L_L R_1 g_m r_o s^3 + 2C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_4 s^3 + 2C_4 L_4 L_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + C_4 L_4 R_4 r_o s^2 + C_4 L_4 R_4 s^2 + C_4 L_4 R_4}$$

$$10.59 \quad \text{INVALID-ORDER-59} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + 2C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + C_4 C_L L_4 R_4 s^3 + C_4 C_L L_4 R_4}{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + 2C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + C_4 C_L L_4 R_4 s^3 + C_4 C_L L_4 R_4}$$

$$10.60 \quad \text{INVALID-ORDER-60} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_4 L_L R_1 R_4 g_m r_o s^3 + C_4 L_4 L_L R_1 R_4 s^3 + 2C_4 L_4 L_L R_1 R_L g_m r_o s^3 + 2C_4 L_4 L_L R_1 R_L s^3 + C_4 L_4 L_L R_4 R_L r_o s^3 + C_4 L_4 L_L R_4 R_L s^3 + C_4 L_4 L_L R_4 R_L}{C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_4 L_L R_1 R_4 g_m r_o s^3 + C_4 L_4 L_L R_1 R_4 s^3 + 2C_4 L_4 L_L R_1 R_L g_m r_o s^3 + 2C_4 L_4 L_L R_1 R_L s^3 + C_4 L_4 L_L R_4 R_L r_o s^3 + C_4 L_4 L_L R_4 R_L s^3 + C_4 L_4 L_L R_4 R_L}$$

$$10.61 \quad \text{INVALID-ORDER-61} \quad Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 C_L L_4 L_L R_L r_o s^4 + 2C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L R_4 R_L}{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 C_L L_4 L_L R_L r_o s^4 + 2C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L R_4 R_L}$$

10.62 INVALID-ORDER-62 $Z(s) = \left(R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + C_4 C$$

10.63 INVALID-ORDER-63 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 L_4 R_1 g_m r_o s^2 + 2 C_4 L_4 R_1 s^2 + C_4 L_4 R_4 s^2 + 2 C_4 L_4 r_o s^2 + 2 C_4 R_1 R_4 g_m r_o s + 2 C_4 R_1 R_4 s + 2 C_4 R_4 r_o s + C_L R_1}$$

10.64 INVALID-ORDER-64 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1}{C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 R_L s^3 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2 C_4 L_4 R_1 R_L g_m r_o s^2 + 2 C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4}$$

10.65 INVALID-ORDER-65 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + 2 C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_4 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 C_L L_4 R_L r_o s^3 + 2 C_4 C_L R_1 R_4 R_L g_m r_o s^2 +$$

10.66 INVALID-ORDER-66 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2C_4 C_L L_L R_1 R_4 g_m r_o s^3 + 2C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_4 r_o s^3}{\dots}$$

10.67 INVALID-ORDER-67 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 L_4 L_L R_1 g_m r_o s^3 + 2 C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_4 s^3 + 2 C_4 L_4 L_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + C_4 L_4 R_1 R_4 r_o s^2 + C_4 L_4 R_1 R_4 s^2}{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 L_4 L_L R_1 g_m r_o s^3 + 2 C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_4 s^3 + 2 C_4 L_4 L_L r_o s^3 + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + C_4 L_4 R_1 R_4 r_o s^2 + C_4 L_4 R_1 R_4 s^2}$$

10.68 INVALID-ORDER-68 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4C_LL_4L_LR_1g_mr_0s^4 + 2C_4C_LL_4L_LR_1s^4 + C_4C_LL_4L_LR_4s^4 + 2C_4C_LL_4L_LR_0s^4 + C_4C_LL_4R_1R_4g_mr_0s^3 + C_4C_LL_4R_1R_4s^3 + 2C_4C_LL_4R_1R_LR_0g_mr_0s^3 + 2C_4C_LL_4R_1R_Ls^3}{2C_4C_LL_4L_LR_1g_mr_0s^4 + 2C_4C_LL_4L_LR_1s^4 + C_4C_LL_4L_LR_4s^4 + 2C_4C_LL_4L_LR_0s^4 + C_4C_LL_4R_1R_4g_mr_0s^3 + C_4C_LL_4R_1R_4s^3 + 2C_4C_LL_4R_1R_LR_0g_mr_0s^3 + 2C_4C_LL_4R_1R_Ls^3}.$$

10.69 INVALID-ORDER-69 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_4 L_L R_1 R_4 g_m r_o s^3 + C_4 L_4 L_L R_1 R_4 s^3 + 2 C_4 L_4 L_L R_1 R_L g_m r_o s^3 + 2 C_4 L_4 L_L R_1 R_L s^3 + C_4 L_4 L_L R_1 R_L g_m r_o}{C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_4 L_L R_1 R_4 g_m r_o s^3 + C_4 L_4 L_L R_1 R_4 s^3 + 2 C_4 L_4 L_L R_1 R_L g_m r_o s^3 + 2 C_4 L_4 L_L R_1 R_L s^3 + C_4 L_4 L_L R_1 R_L g_m r_o}.$$

10.70 INVALID-ORDER-70 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + 2 C_4 C_L L_4 L_L R_L s^4}{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + 2 C_4 C_L L_4 L_L R_L s^4}$$

10.71 INVALID-ORDER-71 $Z(s) = \left(R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + C_4 C$$

10.72 INVALID-ORDER-72 $Z(s) = (L_1s, \infty, \infty, R_4, \infty, R_L)$

$$H(s) = \frac{L_1R_4R_Ls(g_mr_o + 1)}{L_1R_4g_mr_oss + L_1R_4s + 2L_1R_Lg_mr_oss + 2L_1R_Ls + R_4R_L + R_4r_o + 2R_Lr_o}$$

10.73 INVALID-ORDER-73 $Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_1R_4s(g_mr_o + 1)(C_LL_Ls^2 + 1)}{2C_LL_1L_Lg_mr_oss^3 + 2C_LL_1L_Ls^3 + C_LL_1R_4g_mr_oss^2 + C_LL_1R_4s^2 + C_LL_LR_4s^2 + 2C_LL_Lr_oss^2 + C_LR_4r_oss + 2L_1g_mr_oss + 2L_1s + R_4 + 2r_o}$$

10.74 INVALID-ORDER-74 $Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$

$$H(s) = \frac{L_1L_LR_4s^2(g_mr_o + 1)}{C_LL_1L_LR_4g_mr_oss^3 + C_LL_1L_LR_4s^3 + C_LL_LR_4r_oss^2 + 2L_1L_Lg_mr_oss^2 + 2L_1L_Ls^2 + L_1R_4g_mr_oss + L_1R_4s + L_LR_4s + 2L_Lr_oss + R_4r_o}$$

10.75 INVALID-ORDER-75 $Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{L_1R_4s(g_mr_o + 1)(C_LL_Ls^2 + C_LR_Ls + 1)}{2C_LL_1L_Lg_mr_oss^3 + 2C_LL_1L_Ls^3 + C_LL_1R_4g_mr_oss^2 + C_LL_1R_4s^2 + 2C_LL_1R_Lg_mr_oss^2 + 2C_LL_1R_Ls^2 + C_LL_LR_4s^2 + 2C_LL_Lr_oss^2 + C_LR_4R_Ls + C_LR_4r_oss + 2C_LR_Lr_oss + 2L_1}$$

10.76 INVALID-ORDER-76 $Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_1L_LR_4R_Ls^2(g_mr_o + 1)}{C_LL_1L_LR_4R_Lg_mr_oss^3 + C_LL_1L_LR_4R_Ls^3 + C_LL_LR_4R_Lr_oss^2 + L_1L_LR_4g_mr_oss^2 + L_1L_LR_4s^2 + 2L_1L_LR_Lg_mr_oss^2 + 2L_1L_LR_Ls^2 + L_1R_4R_Lg_mr_oss + L_1R_4R_Ls + L_LR_4R_Ls +}$$

10.77 INVALID-ORDER-77 $Z(s) = \left(L_1s, \infty, \infty, R_4, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1R_4s(g_mr_o + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)}{C_LL_1L_LR_4g_mr_oss^3 + C_LL_1L_LR_4s^3 + 2C_LL_1L_LR_Lg_mr_oss^3 + 2C_LL_1L_LR_Ls^3 + C_LL_LR_4R_Ls^2 + C_LL_LR_4r_oss^2 + 2C_LL_LR_Lr_oss^2 + 2L_1L_Lg_mr_oss^2 + 2L_1L_Ls^2 + L_1R_4g_mr_oss +}$$

$$10.78 \quad \text{INVALID-ORDER-78} \quad Z(s) = \left(L_1 s, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1) (C_L L_L s^2 + 1)}{C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3 + 2C_L L_1 L_L R_L g_m r_o s^3 + 2C_L L_1 L_L R_L s^3 + C_L L_1 R_4 R_L g_m r_o s^2 + C_L L_1 R_4 R_L s^2 + C_L L_L R_4 R_L s^2 + C_L L_L R_4 r_o s^2 + 2C_L L_L R_L r_o s^2 + C_L L_L R_L r_o s + 1}$$

$$10.79 \quad \text{INVALID-ORDER-79} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + 2C_4 C_L R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L R_L s + C_L r_o s + 1}$$

$$10.80 \quad \text{INVALID-ORDER-80} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + 2C_4 C_L L_L r_o s^3 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L L_L s^2 + C_L r_o s + 1}$$

$$10.81 \quad \text{INVALID-ORDER-81} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s^2 (g_m r_o + 1)}{2C_4 L_1 L_L g_m r_o s^3 + 2C_4 L_1 L_L s^3 + 2C_4 L_L r_o s^2 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L s^3 + C_L L_L r_o s^2 + L_1 g_m r_o s + L_1 s + L_L s + r_o}$$

$$10.82 \quad \text{INVALID-ORDER-82} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + 2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 C_L R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L R_L s + C_L r_o s + 1}$$

$$10.83 \quad \text{INVALID-ORDER-83} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 (g_m r_o + 1)}{2C_4 L_1 L_L R_L g_m r_o s^3 + 2C_4 L_1 L_L R_L s^3 + 2C_4 L_L R_L r_o s^2 + C_L L_1 L_L R_L g_m r_o s^3 + C_L L_1 L_L R_L s^3 + C_L L_L R_L r_o s^2 + L_1 L_L g_m r_o s^2 + L_1 L_L s^2 + L_1 R_L g_m r_o s + L_1 R_L s + L_L R_L s + L_L s}$$

$$10.84 \quad \text{INVALID-ORDER-84} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{2C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_L s^4 + 2C_4 C_L L_L R_L r_o s^3 + 2C_4 L_1 L_L g_m r_o s^3 + 2C_4 L_1 L_L s^3 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + 2C_4 L_L r_o s^2 + 2C_4 R_L r_o s + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L s^3 + C_L L_1 R_L g_m r_o s^2 + C_L L_1 R_L s^2 + C_L L_L R_L r_o s^2 + C_L L_L s^2 + C_L R_L r_o s + C_L s}$$

$$10.85 \quad \text{INVALID-ORDER-85} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_L s^4 + 2C_4 C_L L_L R_L r_o s^3 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + 2C_4 R_L r_o s + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L s^3 + C_L L_1 R_L g_m r_o s^2 + C_L L_1 R_L s^2 + C_L L_L R_L r_o s^2 + C_L L_L s^2 + C_L R_L r_o s + C_L s}$$

$$10.86 \quad \text{INVALID-ORDER-86} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_4 C_L L_1 R_4 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_4 R_L s^3 + 2C_4 C_L R_4 R_L r_o s^2 + 2C_4 L_1 R_4 g_m r_o s^2 + 2C_4 L_1 R_4 s^2 + 2C_4 R_4 r_o s + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + 2C_L L_1 R_L g_m r_o s^2 + 2C_L L_1 R_L s^2 + C_L R_4 r_o s + C_L s}$$

$$10.87 \quad \text{INVALID-ORDER-87} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_1 L_L R_4 g_m r_o s^4 + 2C_4 C_L L_1 L_L R_4 s^4 + 2C_4 C_L L_L R_4 r_o s^3 + 2C_4 L_1 R_4 g_m r_o s^2 + 2C_4 L_1 R_4 s^2 + 2C_4 R_4 r_o s + 2C_L L_1 L_L g_m r_o s^3 + 2C_L L_1 L_L s^3 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L L_L R_4 r_o s^2 + C_L L_L s^2 + C_L R_4 r_o s + C_L s}$$

10.88 INVALID-ORDER-88 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_4 s^2 (g_m r_o + 1)}{2C_4 L_1 L_L R_4 g_m r_o s^3 + 2C_4 L_1 L_L R_4 s^3 + 2C_4 L_L R_4 r_o s^2 + C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3 + C_L L_L R_4 r_o s^2 + 2L_1 L_L g_m r_o s^2 + 2L_1 L_L s^2 + L_1 R_4 g_m r_o s + L_1 R_4 s + L_L R_4 s +}$$

10.89 INVALID-ORDER-89 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4}{2C_4 C_L L_1 L_L R_4 g_m r_o s^4 + 2C_4 C_L L_1 L_L R_4 s^4 + 2C_4 C_L L_1 R_4 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_4 R_L s^3 + 2C_4 C_L L_L R_4 r_o s^3 + 2C_4 C_L R_4 R_L r_o s^2 + 2C_4 L_1 R_4 g_m r_o s^2 + 2C_4 L_1 R_4 s^2 + 2C_4 R_4}$$

10.90 INVALID-ORDER-90 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_4 R_L s^2 (g_m r_o + 1)}{2C_4 L_1 L_L R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_L R_4 R_L s^3 + 2C_4 L_L R_4 R_L r_o s^2 + C_L L_1 L_L R_4 R_L g_m r_o s^3 + C_L L_1 L_L R_4 R_L s^3 + C_L L_L R_4 R_L r_o s^2 + L_1 L_L R_4 g_m r_o s^2 + L_1 L_L R_4 s^2 + 2L_1 L_L R_L g}$$

10.91 INVALID-ORDER-91 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 R_4}{2C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_4 R_L s^4 + 2C_4 C_L L_L R_4 R_L r_o s^3 + 2C_4 L_1 L_L R_4 g_m r_o s^3 + 2C_4 L_1 L_L R_4 s^3 + 2C_4 L_1 R_4 R_L g_m r_o s^2 + 2C_4 L_1 R_4 R_L s^2 + 2C_4 L_L R_4 r_o s^2 + 2C_4 R_4}$$

10.92 INVALID-ORDER-92 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_4}{2C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_4 R_L s^4 + 2C_4 C_L L_L R_4 R_L r_o s^3 + 2C_4 L_1 R_4 R_L g_m r_o s^2 + 2C_4 L_1 R_4 R_L s^2 + 2C_4 R_4 R_L r_o s + C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3 + 2C_4}$$

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

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L R_4 r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 R_4 s + 2C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L r_o s + 1}$$

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

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 C_L L_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L R_4 R_L r_o s^2 + C_4 L_1 R_4 g_m r_o s^2 + C_4 L_1 R_4 s^2 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o s + C_L L_1 R_4 s^2 + C_L R_L s + 1}$$

10.95 INVALID-ORDER-95 $Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 R_4 s + 1) (C_L R_L s + 1)}{C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + 2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + C_4 C_L R_4 R_L s^2 + C_4 C_L R_4 r_o s^2 + 2C_4 C_L R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 R_4 s + 2C_4 r_o s + C_L R_L s + 1}$$

10.96 INVALID-ORDER-96 $Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 R_4 s + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 C_L L_L r_o s^3 + C_4 C_L R_4 r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 R_4 s + 2C_4 r_o s + C_L L_L s^2 + 1}$$

10.97 INVALID-ORDER-97 $Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (g_m r_o + 1) (C_4 R_4 s + 1)}{C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_L R_4 r_o s^3 + 2C_4 L_1 L_L g_m r_o s^3 + 2C_4 L_1 L_L s^3 + C_4 L_1 R_4 g_m r_o s^2 + C_4 L_1 R_4 s^2 + C_4 L_L R_4 s^2 + 2C_4 L_L r_o s^2 + C_4 R_4 r_o s + C_L L_L s^2 + 1}$$

10.98 INVALID-ORDER-98 $Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 R_4 s + 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + 2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 C_L L_L r_o s^3 + C_4 C_L R_4 R_L s^2 + C_4 C_L R_4 r_o s + C_L L_L s^2 + C_L R_L s + 1}$$

$$\mathbf{10.99 \quad INVALID-ORDER-99} \quad Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_L R_4 R_L r_o s^3 + C_4 L_1 L_L R_4 g_m r_o s^3 + C_4 L_1 L_L R_4 s^3 + 2 C_4 L_1 L_L R_L g_m r_o s^3 + 2 C_4 L_1 L_L R_L s^3 + C_4 L_1 R_4 R_L g_m r_o s^2 + C_4 L_1 R_4 R_L s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_4 + C_4 L_1 + C_4 R_4 + C_4 + C_L + L_L + g_m + r_o}{C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_L R_4 R_L r_o s^3 + C_4 L_1 L_L R_4 g_m r_o s^3 + C_4 L_1 L_L R_4 s^3 + 2 C_4 L_1 L_L R_L g_m r_o s^3 + 2 C_4 L_1 L_L R_L s^3 + C_4 L_1 R_4 R_L g_m r_o s^2 + C_4 L_1 R_4 R_L s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_4 + C_4 L_1 + C_4 R_4 + C_4 + C_L + L_L + g_m + r_o}$$

$$\mathbf{10.100 \quad INVALID-ORDER-100} \quad Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 L_1 L_L g_m r_o s^3 + 2 C_4 L_1 L_L s^3 + C_4 L_1 R_4 R_L g_m r_o s^2 + C_4 L_1 R_4 R_L s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_4 + C_4 L_1 + C_4 R_4 + C_4 + C_L + L_L + g_m + r_o}{C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 L_1 L_L g_m r_o s^3 + 2 C_4 L_1 L_L s^3 + C_4 L_1 R_4 R_L g_m r_o s^2 + C_4 L_1 R_4 R_L s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_4 + C_4 L_1 + C_4 R_4 + C_4 + C_L + L_L + g_m + r_o}$$

$$\mathbf{10.101 \quad INVALID-ORDER-101} \quad Z(s) = \left(L_1 s, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 L_1 L_L g_m r_o s^3 + 2 C_4 L_1 L_L s^3 + C_4 L_1 R_4 R_L g_m r_o s^2 + C_4 L_1 R_4 R_L s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_4 + C_4 L_1 + C_4 R_4 + C_4 + C_L + L_L + g_m + r_o}{C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + C_4 C_L L_L R_4 r_o s^3 + 2 C_4 C_L L_L R_L r_o s^3 + 2 C_4 L_1 L_L g_m r_o s^3 + 2 C_4 L_1 L_L s^3 + C_4 L_1 R_4 R_L g_m r_o s^2 + C_4 L_1 R_4 R_L s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_4 + C_4 L_1 + C_4 R_4 + C_4 + C_L + L_L + g_m + r_o}$$

$$\mathbf{10.102 \quad INVALID-ORDER-102} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + 2 C_4 L_1 R_L g_m r_o s^2 + 2 C_4 L_1 R_L s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + 2 C_4 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o}$$

$$\mathbf{10.103 \quad INVALID-ORDER-103} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 r_o s^3 + 2 C_4 L_1 g_m r_o s^2 + 2 C_4 L_1 s^2 + C_4 L_4 s^2 + 2 C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L r_o s + 1}$$

$$10.104 \quad \text{INVALID-ORDER-104} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_L r_o s^3 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + 2C_4 R_L r_o s + C_L L_1}$$

$$10.105 \quad \text{INVALID-ORDER-105} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L R_L s + 1)}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + 2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 L_4 s^2 + 2C_4 r_o s}$$

$$10.106 \quad \text{INVALID-ORDER-106} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L L_L s^2 + 1)}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + 2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 L_4 s^2 + 2C_4 r_o s}$$

$$10.107 \quad \text{INVALID-ORDER-107} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s^2 (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_4 L_L r_o s^4 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + 2C_4 L_1 L_L g_m r_o s^3 + 2C_4 L_1 L_L s^3 + C_4 L_4 L_L s^3 + C_4 L_4 r_o s^2 + 2C_4 L_L r_o s^2 + C_L L_1}$$

$$10.108 \quad \text{INVALID-ORDER-108} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + 2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + 2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 L_4 s^2 + 2C_4 r_o s}$$

10.109 INVALID-ORDER-109 $Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 L_1 L_4 L_L g_m r_o s^4 + C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_L g_m r_o s^3 + C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 L_L R_L g_m r_o s^3 + 2 C_4 L_1 L_L R_L s^3 + C_4 L_1 L_L R_L r_o s^2 + C_4 L_1 L_L R_L s^2 + C_4 L_1 L_L R_L r_o s + C_4 L_1 L_L R_L s + C_4 L_1 L_L R_L r_o + C_4 L_1 L_L R_L}{C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 L_1 L_4 L_L g_m r_o s^4 + C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_L g_m r_o s^3 + C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 L_L R_L g_m r_o s^3 + 2 C_4 L_1 L_L R_L s^3 + C_4 L_1 L_L R_L r_o s^2 + C_4 L_1 L_L R_L s^2 + C_4 L_1 L_L R_L r_o s + C_4 L_1 L_L R_L s + C_4 L_1 L_L R_L r_o + C_4 L_1 L_L R_L}$$

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

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + 2 C_4 C_L L_L R_L r_o s^3 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_1 L_4 R_L r_o s^2 + C_4 L_1 L_4 R_L s^2 + C_4 L_1 L_4 R_L r_o s + C_4 L_1 L_4 R_L s + C_4 L_1 L_4 R_L r_o + C_4 L_1 L_4 R_L}{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + 2 C_4 C_L L_L R_L r_o s^3 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_1 L_4 R_L r_o s^2 + C_4 L_1 L_4 R_L s^2 + C_4 L_1 L_4 R_L r_o s + C_4 L_1 L_4 R_L s + C_4 L_1 L_4 R_L r_o + C_4 L_1 L_4 R_L}$$

10.111 INVALID-ORDER-111 $Z(s) = \left(L_1 s, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_L R_L r_o s^3 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_1 L_4 R_L r_o s^2 + C_4 L_1 L_4 R_L s^2 + C_4 L_1 L_4 R_L r_o s + C_4 L_1 L_4 R_L s + C_4 L_1 L_4 R_L r_o + C_4 L_1 L_4 R_L}{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_L R_L r_o s^3 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_1 L_4 R_L r_o s^2 + C_4 L_1 L_4 R_L s^2 + C_4 L_1 L_4 R_L r_o s + C_4 L_1 L_4 R_L s + C_4 L_1 L_4 R_L r_o + C_4 L_1 L_4 R_L}$$

10.112 INVALID-ORDER-112 $Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_4 R_L r_o s^2 + L_1 L_4 g_m r_o s^2 + L_1 L_4 s^2 + 2 L_1 R_L g_m r_o s + 2 L_1 R_L s + L_4 R_L s + L_4 r_o s + 2 R_L r_o}$$

10.113 INVALID-ORDER-113 $Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_4 s^2 (g_m r_o + 1)}{2 C_4 L_1 L_4 g_m r_o s^3 + 2 C_4 L_1 L_4 s^3 + 2 C_4 L_4 r_o s^2 + C_L L_1 L_4 g_m r_o s^3 + C_L L_1 L_4 s^3 + C_L L_4 r_o s^2 + 2 L_1 g_m r_o s + 2 L_1 s + L_4 s + 2 r_o}$$

$$10.114 \quad \text{INVALID-ORDER-114} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + 2C_4 L_4 R_L r_o s^2 + C_L L_1 L_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_L s^3 + C_L L_4 R_L r_o s^2 + L_1 L_4 g_m r_o s^2 + L_1 L_4 s^2 + 2L_1 R_L g_m r_o s + 2L_1 R_L s + L_4 R_L s + L_4 s}$$

$$10.115 \quad \text{INVALID-ORDER-115} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 s^2 (g_m r_o + 1) (C_L R_L s + 1)}{2C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_4 R_L s^4 + 2C_4 C_L L_4 R_L r_o s^3 + 2C_4 L_1 L_4 g_m r_o s^3 + 2C_4 L_1 L_4 s^3 + 2C_4 L_4 r_o s^2 + C_L L_1 L_4 g_m r_o s^3 + C_L L_1 L_4 s^3 + 2C_L L_1 R_L g_m r_o s^2 + 2C_L L_1 R_L s + L_4 R_L s + L_4 s}$$

$$10.116 \quad \text{INVALID-ORDER-116} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 s^2 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_4 C_L L_1 L_4 L_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L s^5 + 2C_4 C_L L_4 L_L r_o s^4 + 2C_4 L_1 L_4 g_m r_o s^3 + 2C_4 L_1 L_4 s^3 + 2C_4 L_4 r_o s^2 + C_L L_1 L_4 g_m r_o s^3 + C_L L_1 L_4 s^3 + 2C_L L_1 L_L g_m r_o s^3 + 2C_L L_1 L_L s + L_4 R_L s + L_4 s}$$

$$10.117 \quad \text{INVALID-ORDER-117} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_4 L_L s^2 (g_m r_o + 1)}{2C_4 L_1 L_4 L_L g_m r_o s^3 + 2C_4 L_1 L_4 L_L s^3 + 2C_4 L_4 L_L r_o s^2 + C_L L_1 L_4 L_L g_m r_o s^3 + C_L L_1 L_4 L_L s^3 + C_L L_4 L_L r_o s^2 + L_1 L_4 g_m r_o s + L_1 L_4 s + 2L_1 L_L g_m r_o s + 2L_1 L_L s + L_4 L_L s + L_4 s}$$

$$10.118 \quad \text{INVALID-ORDER-118} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 s^2 (g_m r_o + 1)}{2C_4 C_L L_1 L_4 L_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L s^5 + 2C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_4 R_L s^4 + 2C_4 C_L L_4 L_L r_o s^4 + 2C_4 C_L L_4 R_L r_o s^3 + 2C_4 L_1 L_4 g_m r_o s^3 + 2C_4 L_1 L_4 s^3 + 2C_4 L_4 r_o s^2 + C_L L_1 L_4 g_m r_o s^3 + C_L L_1 L_4 s^3 + 2C_L L_1 L_L g_m r_o s^3 + 2C_L L_1 L_L s + L_4 R_L s + L_4 s}$$

$$10.119 \quad \text{INVALID-ORDER-119} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_4 L_L R_L s^2 (g_m r_o + 1)}{2C_4 L_1 L_4 L_L R_L g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_L s^3 + 2C_4 L_4 L_L R_L r_o s^2 + C_L L_1 L_4 L_L R_L g_m r_o s^3 + C_L L_1 L_4 L_L R_L s^3 + C_L L_4 L_L R_L r_o s^2 + L_1 L_4 L_L g_m r_o s^2 + L_1 L_4 L_L s^2 + L_1 L_4 R_L g_m r_o s + L_1 L_4 R_L s + L_4 R_L s + L_4 s}$$

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

$$H(s) = \frac{2C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_L s^5 + 2C_4 C_L L_4 L_L R_L r_o s^4 + 2C_4 L_1 L_4 L_L g_m r_o s^4 + 2C_4 L_1 L_4 L_L s^4 + 2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + 2C_4 L_4 L_L r_o s^3 + 2C_4 L_4 L_L s^3}{\dots}$$

10.121 INVALID-ORDER-121 $Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_4C_L L_1 L_4 L_L R_L q_m r_o s^5 + 2C_4C_L L_1 L_4 L_L R_L s^5 + 2C_4C_L L_4 L_L R_L r_o s^4 + 2C_4L_1 L_4 R_L q_m r_o s^3 + 2C_4L_1 L_4 R_L s^3 + 2C_4L_4 R_L r_o s^2 + C_L L_1 L_4 L_L q_m r_o s^4 + C_L L_1 L_4 L_L s^4 + C_L L_4 L_L r_o s^2 + C_L L_4 L_L s^2}{2C_4C_L L_1 L_4 L_L R_L q_m r_o s^5 + 2C_4C_L L_1 L_4 L_L R_L s^5 + 2C_4C_L L_4 L_L R_L r_o s^4 + 2C_4L_1 L_4 R_L q_m r_o s^3 + 2C_4L_1 L_4 R_L s^3 + 2C_4L_4 R_L r_o s^2 + C_L L_1 L_4 L_L q_m r_o s^4 + C_L L_1 L_4 L_L s^4 + C_L L_4 L_L r_o s^2 + C_L L_4 L_L s^2}.$$

10.122 INVALID-ORDER-122 $Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + C_4 L_1 R_4 g_m r_o s^2 + C_4 L_1 R_4 s^2 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + C_4 R_4 R_L s + C_4 R_4 r_o s + 2C_4 R_L r_o s + L_1 g_m r_o s + L_1}$$

10.123 INVALID-ORDER-123 $Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_4 r_o s^3 + C_4 C_L R_4 r_o s^2 + 2 C_4 L_1 g_m r_o s^2 + 2 C_4 L_1 s^2 + C_4 L_4 s^2 + C_4 R_4 s + 2 C_4 r_o s + C_L L_1 g_m}$$

10.124 INVALID-ORDER-124 $Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1)}{C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_4 R_L r_o s^3 + C_4 C_L R_4 R_L r_o s^2 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + C_4 L_1 R_4 g_m r_o s^2}$$

$$10.125 \quad \text{INVALID-ORDER-125} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L R_L s + 1) (C_4 L_4 s^2 + C_4 R_4 s}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + 2 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_4 C_L L_1 R_L s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + C_4 C_L R_4 R_L s^2 + C_4 C_L R_4 s^2}$$

$$10.126 \quad \text{INVALID-ORDER-126} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 + C_4 R_4 s}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + 2 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 r_o s^3 + C_4 C_L L_L R_4 s^3 + 2 C_4 C_L L_L s^3}$$

$$10.127 \quad \text{INVALID-ORDER-127} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s^2 (g_m r_o}{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_L R_4 r_o s^3 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + 2 C_4 L_1 L_L g_m r_o s^3 + 2 C_4 L_1 L_L s^3}$$

$$10.128 \quad \text{INVALID-ORDER-128} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1}{C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + 2 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + 2 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_4 C_L L_1 R_L s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 s^4}$$

$$10.129 \quad \text{INVALID-ORDER-129} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1}{C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_L r_o s^4 + C_4 C_L L_L R_4 R_L r_o s^3 + C_4 L_1 L_4 L_L g_m r_o s^4 + C_4 L_1 L_4 s^4}$$

$$10.130 \quad \text{INVALID-ORDER-130} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 L_L s^4}{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 L_L s^4}$$

$$10.131 \quad \text{INVALID-ORDER-131} \quad Z(s) = \left(L_1 s, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 L_L s^4}{C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_4 L_L r_o s^4 + C_4 C_L L_4 L_L s^4}$$

$$10.132 \quad \text{INVALID-ORDER-132} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 L_4 R_4 R_L s^2 (g_m r_o + 1)}{2 C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_4 R_L s^3 + 2 C_4 L_4 R_4 R_L r_o s^2 + L_1 L_4 R_4 g_m r_o s^2 + L_1 L_4 R_4 s^2 + 2 L_1 L_4 R_L g_m r_o s^2 + 2 L_1 L_4 R_L s^2 + 2 L_1 R_4 R_L g_m r_o s + 2 L_1 R_4 R_L s + L_4 R_4 R_L s + L_4 R_4 s + L_4 R_4}$$

$$10.133 \quad \text{INVALID-ORDER-133} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 R_4 s^2 (g_m r_o + 1)}{2 C_4 L_1 L_4 R_4 g_m r_o s^3 + 2 C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_4 R_4 r_o s^2 + C_L L_1 L_4 R_4 g_m r_o s^3 + C_L L_1 L_4 R_4 s^3 + C_L L_4 R_4 r_o s^2 + 2 L_1 L_4 g_m r_o s^2 + 2 L_1 L_4 s^2 + 2 L_1 R_4 g_m r_o s + 2 L_1 R_4 s + L_4 R_4 s + L_4 R_4}$$

$$10.134 \quad \text{INVALID-ORDER-134} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 L_4 R_4 R_L s^2 (g_m r_o + 1)}{2 C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_4 R_L s^3 + 2 C_4 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 R_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_4 R_L s^3 + C_L L_4 R_4 R_L r_o s^2 + L_1 L_4 R_4 g_m r_o s^2 + L_1 L_4 R_4 s^2 + 2 L_1 L_4 R_L g_m r_o s + 2 L_1 L_4 R_L s + L_4 R_4 s + L_4 R_4}$$

10.135 INVALID-ORDER-135 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4C_L L_1 L_4 R_4 R_L g_m r_o s^4 + 2C_4C_L L_1 L_4 R_4 R_L s^4 + 2C_4C_L L_4 R_4 R_L r_o s^3 + 2C_4L_1 L_4 R_4 g_m r_o s^3 + 2C_4L_1 L_4 R_4 s^3 + 2C_4L_4 R_4 r_o s^2 + C_L L_1 L_4 R_4 g_m r_o s^3 + C_L L_1 L_4 R_4 s^3 + 2C_L L_4 R_4 r_o s^2 + C_L L_4 R_4 s^2}{2C_4C_L L_1 L_4 R_4 R_L g_m r_o s^4 + 2C_4C_L L_1 L_4 R_4 R_L s^4 + 2C_4C_L L_4 R_4 R_L r_o s^3 + 2C_4L_1 L_4 R_4 g_m r_o s^3 + 2C_4L_1 L_4 R_4 s^3 + 2C_4L_4 R_4 r_o s^2 + C_L L_1 L_4 R_4 g_m r_o s^3 + C_L L_1 L_4 R_4 s^3 + 2C_L L_4 R_4 r_o s^2 + C_L L_4 R_4 s^2}$$

10.136 INVALID-ORDER-136 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4C_L L_1 L_4 L_L R_4 g_m r_o s^5 + 2C_4C_L L_1 L_4 L_L R_4 s^5 + 2C_4C_L L_4 L_L R_4 r_o s^4 + 2C_4L_1 L_4 R_4 g_m r_o s^3 + 2C_4L_1 L_4 R_4 s^3 + 2C_4L_4 R_4 r_o s^2 + 2C_L L_1 L_4 L_L g_m r_o s^4 + 2C_L L_1 L_4 L_L s^4 + C_L}{2C_4C_L L_1 L_4 L_L R_4 g_m r_o s^5 + 2C_4C_L L_1 L_4 L_L R_4 s^5 + 2C_4C_L L_4 L_L R_4 r_o s^4 + 2C_4L_1 L_4 R_4 g_m r_o s^3 + 2C_4L_1 L_4 R_4 s^3 + 2C_4L_4 R_4 r_o s^2 + 2C_L L_1 L_4 L_L g_m r_o s^4 + 2C_L L_1 L_4 L_L s^4 + C_L}$$

10.137 INVALID-ORDER-137 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_4 L_L R_4 s^2 (g_m r_o + 1)}{2C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_4 s^3 + 2C_4 L_4 L_L R_4 r_o s^2 + C_L L_1 L_4 L_L R_4 g_m r_o s^3 + C_L L_1 L_4 L_L R_4 s^3 + C_L L_4 L_L R_4 r_o s^2 + 2L_1 L_4 L_L g_m r_o s^2 + 2L_1 L_4 L_L s^2 + L_1 L_4 R_4 g_m r_o}$$

10.138 INVALID-ORDER-138 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_4 s^5 + 2C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_4 R_4 R_L s^4 + 2C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 C_L L_4 R_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_4 g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_4 s^3}{2C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_4 s^5 + 2C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_4 R_4 R_L s^4 + 2C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 C_L L_4 R_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_4 g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_4 s^3}.$$

10.139 INVALID-ORDER-139 $Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L}{2C_4 L_1 L_4 L_L R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_4 R_L s^3 + 2C_4 L_4 L_L R_4 R_L r_o s^2 + C_L L_1 L_4 L_L R_4 R_L g_m r_o s^3 + C_L L_1 L_4 L_L R_4 R_L s^3 + C_L L_4 L_L R_4 R_L r_o s^2 + L_1 L_4 L_L R_4 g_m r_o s^2 + L_1 L_4 L_L R_4 R_L s^2}$$

$$10.140 \quad \text{INVALID-ORDER-140} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{2C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + 2C_4 C_L L_4 L_L R_4 R_L r_o s^4 + 2C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + 2C_4 L_1 L_4 L_L R_4 s^4 + 2C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L s^3 + 2C_4 L_1 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 L_L R_4 g_m r_o s^4 + C_L L_1 L_4 L_L R_4 s^4 + C_L L_1 L_4 R_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_4 R_L s^3 + C_L L_1 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 R_4 R_L s^2 + C_L L_1 L_4 R_4 R_L r_o s + C_L L_1 L_4 R_4 R_L s + C_L L_1 L_4 R_4 R_L r_o}{2C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + 2C_4 C_L L_4 L_L R_4 R_L r_o s^4 + 2C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + 2C_4 L_1 L_4 L_L R_4 s^4 + 2C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L s^3 + 2C_4 L_1 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 L_L R_4 g_m r_o s^4 + C_L L_1 L_4 L_L R_4 s^4 + C_L L_1 L_4 R_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_4 R_L s^3 + C_L L_1 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 R_4 R_L s^2 + C_L L_1 L_4 R_4 R_L r_o s + C_L L_1 L_4 R_4 R_L s + C_L L_1 L_4 R_4 R_L r_o}$$

$$10.141 \quad \text{INVALID-ORDER-141} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{2C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + 2C_4 C_L L_4 L_L R_4 R_L r_o s^4 + 2C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L s^3 + 2C_4 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 L_L R_4 g_m r_o s^4 + C_L L_1 L_4 L_L R_4 s^4 + C_L L_1 L_4 R_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_4 R_L s^3 + C_L L_1 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 R_4 R_L s^2 + C_L L_1 L_4 R_4 R_L r_o s + C_L L_1 L_4 R_4 R_L s + C_L L_1 L_4 R_4 R_L r_o}{2C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + 2C_4 C_L L_4 L_L R_4 R_L r_o s^4 + 2C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L s^3 + 2C_4 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 L_L R_4 g_m r_o s^4 + C_L L_1 L_4 L_L R_4 s^4 + C_L L_1 L_4 R_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_4 R_L s^3 + C_L L_1 L_4 R_4 R_L r_o s^2 + C_L L_1 L_4 R_4 R_L s^2 + C_L L_1 L_4 R_4 R_L r_o s + C_L L_1 L_4 R_4 R_L s + C_L L_1 L_4 R_4 R_L r_o}$$

$$10.142 \quad \text{INVALID-ORDER-142} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2C_4 L_4 R_L r_o s^2 + L_1 L_4 g_m r_o s^2 + L_1 L_4 s^2 + L_1 R_4 g_m r_o s + L_1 R_4 s + L_1 R_4 r_o}{L_1 R_L s (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}$$

$$10.143 \quad \text{INVALID-ORDER-143} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_4 r_o s^3 + 2C_4 L_1 L_4 g_m r_o s^3 + 2C_4 L_1 L_4 s^3 + C_4 L_4 R_4 s^2 + 2C_4 L_4 r_o s^2 + C_L L_1 L_4 g_m r_o s^3 + C_L L_1 L_4 s^3 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L L_1 R_4 r_o s + C_L L_1 R_4 s + C_L L_1 R_4 r_o}{L_1 s (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}$$

$$10.144 \quad \text{INVALID-ORDER-144} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 R_L r_o s + C_4 L_4 R_4 R_L s + C_4 L_4 R_4 R_L r_o}{C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 R_L r_o s + C_4 L_4 R_4 R_L s + C_4 L_4 R_4 R_L r_o}$$

10.145 INVALID-ORDER-145 $Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + 2 C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_4 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 C_L L_4 R_L r_o s^3 + 2 C_4 L_1 L_4 g_m r_o s^3 + 2 C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 L_4 g_m r_o s^2 + 2 C_4 L_1 L_4 R_4 s^2 + 2 C_4 L_1 L_4 R_L s^2 + C_4 L_1 L_4 g_m r_o s + C_4 L_1 L_4 R_4 s + C_4 L_1 L_4 R_L s}{C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + 2 C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_4 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 C_L L_4 R_L r_o s^3 + 2 C_4 L_1 L_4 g_m r_o s^3 + 2 C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 L_4 g_m r_o s^2 + 2 C_4 L_1 L_4 R_4 s^2 + 2 C_4 L_1 L_4 R_L s^2 + C_4 L_1 L_4 g_m r_o s + C_4 L_1 L_4 R_4 s + C_4 L_1 L_4 R_L s}.$$

10.146 INVALID-ORDER-146 $Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4C_LL_1L_4L_Lg_mr_0s^5 + 2C_4C_LL_1L_4L_Ls^5 + C_4C_LL_1L_4R_4g_mr_0s^4 + C_4C_LL_1L_4R_4s^4 + C_4C_LL_4L_LR_4s^4 + 2C_4C_LL_4L_Lr_0s^4 + C_4C_LL_4R_4r_0s^3 + 2C_4L_1L_4g_mr_0s^3 + 2C_4L_1L_4R_4r_0s^3 + 2C_4L_1L_4L_Lr_0s^3 + 2C_4L_1L_4L_Ls^3 + C_4C_LL_1L_4L_LR_4s^3 + C_4C_LL_1L_4L_LR_4r_0s^2 + C_4C_LL_1L_4L_LR_4s^2 + C_4C_LL_1L_4L_LR_4r_0s + C_4C_LL_1L_4L_LR_4s + C_4C_LL_1L_4L_LR_4r_0 + C_4C_LL_1L_4L_LR_4}{2C_4C_LL_1L_4L_Lg_mr_0s^5 + 2C_4C_LL_1L_4L_Ls^5 + C_4C_LL_1L_4R_4g_mr_0s^4 + C_4C_LL_1L_4R_4s^4 + C_4C_LL_4L_LR_4s^4 + 2C_4C_LL_4L_Lr_0s^4 + C_4C_LL_4R_4r_0s^3 + 2C_4L_1L_4g_mr_0s^3 + 2C_4L_1L_4R_4r_0s^3 + 2C_4L_1L_4L_Lr_0s^3 + 2C_4L_1L_4L_Ls^3 + C_4C_LL_1L_4L_LR_4s^3 + C_4C_LL_1L_4L_LR_4r_0s^2 + C_4C_LL_1L_4L_LR_4s^2 + C_4C_LL_1L_4L_LR_4r_0s + C_4C_LL_1L_4L_LR_4s + C_4C_LL_1L_4L_LR_4r_0 + C_4C_LL_1L_4L_LR_4}.$$

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

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 L_1 L_4 L_L g_m r_o s^4 + 2C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_4 L_L R_4 s^3 + 2C_4 L_4 L_L r_o s^2 + 2C_4 L_4 L_L s^2 + C_4 L_4 R_4 g_m r_o s + C_4 L_4 R_4 s + C_4 R_4 g_m r_o + C_4 R_4}{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2C_4 L_1 L_4 L_L g_m r_o s^4 + 2C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_4 L_L R_4 s^3 + 2C_4 L_4 L_L r_o s^2 + 2C_4 L_4 L_L s^2 + C_4 L_4 R_4 g_m r_o s + C_4 L_4 R_4 s + C_4 R_4 g_m r_o + C_4 R_4}$$

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

$$H(s) = \frac{2C_4C_LL_1L_4L_Lg_mr_0s^5 + 2C_4C_LL_1L_4L_Ls^5 + C_4C_LL_1L_4R_4g_mr_0s^4 + C_4C_LL_1L_4R_4s^4 + 2C_4C_LL_1L_4R_Lg_mr_0s^4 + 2C_4C_LL_1L_4R_Ls^4 + C_4C_LL_4L_LR_4s^4 + 2C_4C_LL_4L_LR_0s^4 +$$

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

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + C_4 L_1 L_4 L_L R_4 s^4 + 2 C_4 L_1 L_4 L_L R_L g_m r_o s^4 + 2 C_4 L_1 L_4 L_L R_L s^4 + C_4 L_1 L_4 L_L R_L g_m r_o s^3 + C_4 L_1 L_4 L_L R_L s^3 + C_4 L_1 L_4 L_L R_L g_m r_o s^2 + C_4 L_1 L_4 L_L R_L s^2 + C_4 L_1 L_4 L_L R_L g_m r_o s + C_4 L_1 L_4 L_L R_L s}{C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + C_4 L_1 L_4 L_L R_4 s^4 + 2 C_4 L_1 L_4 L_L R_L g_m r_o s^4 + 2 C_4 L_1 L_4 L_L R_L s^4 + C_4 L_1 L_4 L_L R_L g_m r_o s^3 + C_4 L_1 L_4 L_L R_L s^3 + C_4 L_1 L_4 L_L R_L g_m r_o s^2 + C_4 L_1 L_4 L_L R_L s^2 + C_4 L_1 L_4 L_L R_L g_m r_o s + C_4 L_1 L_4 L_L R_L s}$$

$$10.150 \quad \text{INVALID-ORDER-150} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + 2 C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + C_4 L_1 L_4 L_L R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + 2 C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + C_4 L_1 L_4 L_L R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}$$

$$10.151 \quad \text{INVALID-ORDER-151} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + 2 C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + C_4 L_1 L_4 L_L R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 C_L L_4 L_L R_L r_o s^4 + 2 C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + C_4 L_1 L_4 L_L R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}$$

$$10.152 \quad \text{INVALID-ORDER-152} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}$$

$$10.153 \quad \text{INVALID-ORDER-153} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_4 r_o s^3 + 2 C_4 L_1 L_4 g_m r_o s^3 + 2 C_4 L_1 L_4 s^3 + 2 C_4 L_1 R_4 g_m r_o s^2 + 2 C_4 L_1 R_4 s^2 + C_4 L_4 R_4 s^2 + 2 C_4 L_4 r_o s^2 + 2 C_4 R_4 r_o s + C_L L_1 g_m r_o s + C_L L_1 s + C_L R_4}$$

$$10.154 \quad \text{INVALID-ORDER-154} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}{C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_4 R_4 R_L r_o s^3 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_1 L_4 R_L g_m r_o s^3 + 2 C_4 L_1 L_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m r_o s^2 + 2 C_4 L_1 R_4 R_L s^2 + C_4 L_4 R_4 R_L s^2 + C_4 L_4 R_4 r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 R_4 L_1 g_m r_o s + C_4 R_4 L_1 s + C_4 R_4}$$

10.155 INVALID-ORDER-155 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + 2 C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_4 R_L s^4 + 2 C_4 C_L L_1 R_4 R_L g_m r_o s^3 + 2 C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_4 R_4 R_L s^3 + C_4 C_L L_4 R_4 r_o s^3 +$$

$$\textbf{10.156 INVALID-ORDER-156 } Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_4C_LL_1L_4L_Lg_mr_os^5 + 2C_4C_LL_1L_4L_Ls^5 + C_4C_LL_1L_4R_4g_mr_os^4 + C_4C_LL_1L_4R_4s^4 + 2C_4C_LL_1L_LR_4g_mr_os^4 + 2C_4C_LL_1L_LR_4s^4 + C_4C_LL_4L_LR_4s^4 + 2C_4C_LL_4L_Lr_os^4 +$$

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

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_4 L_L R_4 r_o s^4 + 2 C_4 L_1 L_4 L_L g_m r_o s^4 + 2 C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + 2 C_4 L_1 L_L R_4 g_m r_o s^3 + 2 C_4$$

10.158 INVALID-ORDER-158 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_4 C_L L_1 L_4 L_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + 2C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_4 R_L s^4 + 2C_4 C_L L_1 L_L R_4 g_m r_o s^4 + 2C_4 C_L L_1 L_L$$

10.159 INVALID-ORDER-159 $Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + C_4 L_1 L_4 L_L R_4 s^4 + 2 C_4 L_1 L_4 L_L R_L g_m r_o s^4 + 2 C_4 L_1 L_4 L_L R_L s^4 + C_4 L_1 L_4 L_L R_L g_m r_o s^3 + C_4 L_1 L_4 L_L R_L s^3 + C_4 L_1 L_4 L_L R_L g_m r_o s^2 + C_4 L_1 L_4 L_L R_L s^2 + C_4 L_1 L_4 L_L R_L g_m r_o s + C_4 L_1 L_4 L_L R_L s}{C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 R_L s^5 + C_4 C_L L_4 L_L R_4 R_L r_o s^4 + C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + C_4 L_1 L_4 L_L R_4 s^4 + 2 C_4 L_1 L_4 L_L R_L g_m r_o s^4 + 2 C_4 L_1 L_4 L_L R_L s^4 + C_4 L_1 L_4 L_L R_L g_m r_o s^3 + C_4 L_1 L_4 L_L R_L s^3 + C_4 L_1 L_4 L_L R_L g_m r_o s^2 + C_4 L_1 L_4 L_L R_L s^2 + C_4 L_1 L_4 L_L R_L g_m r_o s + C_4 L_1 L_4 L_L R_L s}$$

$$10.160 \quad \text{INVALID-ORDER-160} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + 2 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4}{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + 2 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4}$$

$$10.161 \quad \text{INVALID-ORDER-161} \quad Z(s) = \left(L_1 s, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + 2 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4}{C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + 2 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4 + 2 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^4 + 2 C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4}$$

$$10.162 \quad \text{INVALID-ORDER-162} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L \right)$$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1)}{C_1 R_4 R_L s + C_1 R_4 r_o s + 2 C_1 R_L r_o s + R_4 g_m r_o + R_4 + 2 R_L g_m r_o + 2 R_L}$$

$$10.163 \quad \text{INVALID-ORDER-163} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L L_L s^2 + 1)}{C_1 C_L L_L R_4 s^3 + 2 C_1 C_L L_L r_o s^3 + C_1 C_L R_4 r_o s^2 + C_1 R_4 s + 2 C_1 r_o s + 2 C_L L_L g_m r_o s^2 + 2 C_L L_L s^2 + C_L R_4 g_m r_o s + C_L R_4 s + 2 g_m r_o + 2}$$

$$10.164 \quad \text{INVALID-ORDER-164} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1)}{C_1 C_L L_L R_4 r_o s^3 + C_1 L_L R_4 s^2 + 2 C_1 L_L r_o s^2 + C_1 R_4 r_o s + C_L L_L R_4 g_m r_o s^2 + C_L L_L R_4 s^2 + 2 L_L g_m r_o s + 2 L_L s + R_4 g_m r_o + R_4}$$

10.165 INVALID-ORDER-165 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 C_L R_L r_o s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_L L_L g_m r_o s^2 + 2C_L L_L s^2 + C_L R_4 g_m r_o s + C_L R_4 s + 2C_L R_L g_m r_o s + 2C_L R_L s}$$

10.166 INVALID-ORDER-166 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_4 R_L s (g_m r_o + 1)}{C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_L R_4 R_L s^2 + C_1 L_L R_4 r_o s^2 + 2C_1 L_L R_L r_o s^2 + C_1 R_4 R_L r_o s + C_L L_L R_4 R_L g_m r_o s^2 + C_L L_L R_4 R_L s^2 + L_L R_4 g_m r_o s + L_L R_4 s + 2L_L R_L g_m r_o s + 2L_L R_L s}$$

10.167 INVALID-ORDER-167 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_L L_L R_4 R_L s^3 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_4 s^2 + 2C_1 L_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + C_L L_L R_4 g_m r_o s^2 + C_L L_L R_4 s^2 + 2C_L L_L R_L g_m r_o s + 2C_L L_L s}$$

10.168 INVALID-ORDER-168 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_L L_L s^2 + 1)}{C_1 C_L L_L R_4 R_L s^3 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 C_L L_L R_L r_o s^3 + C_1 C_L R_4 R_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + C_L L_L R_4 g_m r_o s^2 + C_L L_L R_4 s^2 + 2C_L L_L R_L g_m r_o s^2 + 2C_L L_L s}$$

10.169 INVALID-ORDER-169 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{g_m r_o + 1}{s (2C_1 C_4 r_o s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.170 INVALID-ORDER-170 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_L R_L s + 1)}{s(2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 r_o s + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + 2C_4 C_L R_L g_m r_o s + 2C_4 C_L R_L s + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.171 INVALID-ORDER-171 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_L L_L s^2 + 1)}{s(2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1 + 2C_4 C_L L_L g_m r_o s^2 + 2C_4 C_L L_L s^2 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.172 INVALID-ORDER-172 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s(g_m r_o + 1)}{2C_1 C_4 L_L r_o s^3 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + 2C_4 L_L g_m r_o s^2 + 2C_4 L_L s^2 + C_L L_L g_m r_o s^2 + C_L L_L s^2 + g_m r_o + 1}$$

10.173 INVALID-ORDER-173 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_L L_L s^2 + C_L R_L s + 1)}{s(2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + 2C_4 C_L L_L g_m r_o s^2 + 2C_4 C_L L_L s^2 + 2C_4 C_L R_L g_m r_o s + 2C_4 C_L R_L s + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.174 INVALID-ORDER-174 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L s(g_m r_o + 1)}{2C_1 C_4 L_L R_L r_o s^3 + C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_L s^2 + C_1 L_L r_o s^2 + C_1 R_L r_o s + 2C_4 L_L R_L g_m r_o s^2 + 2C_4 L_L R_L s^2 + C_L L_L R_L g_m r_o s^2 + C_L L_L R_L s^2 + L_L g_m r_o s + L_L s + R_L g_m r_o + R_L}$$

10.175 INVALID-ORDER-175 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_L L_L R_L s^2 + L_L s + R_L)}{2C_1 C_4 C_L L_L R_L r_o s^4 + 2C_1 C_4 L_L r_o s^3 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 R_L s + C_1 r_o s + 2C_4 C_L L_L R_L g_m r_o s^3 + 2C_4 C_L L_L R_L s^3 + 2C_4 L_L g_m r_o s^2 + 2C_4 L_L s^2 + 2C_4 R_L g_m r_o s + 2C_4 R_L s + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L}$$

$$10.176 \quad \text{INVALID-ORDER-176} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_1 C_4 C_L L_L R_L r_o s^4 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^3 + C_1 C_L R_L r_o s^2 + C_1 R_L s + C_1 r_o s + 2C_4 C_L L_L R_L g_m r_o s^3 + 2C_4 C_L L_L R_L s^3 + 2C_4 R_L g_m r_o s + 2C_4 R_L s}$$

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

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L R_L s + 1)}{2C_1 C_4 C_L R_4 R_L r_o s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 C_L R_L r_o s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 C_L R_4 R_L g_m r_o s^2 + 2C_4 C_L R_4 R_L s^2 + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

$$10.178 \quad \text{INVALID-ORDER-178} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 r_o s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 C_L L_L R_4 g_m r_o s^3 + 2C_4 C_L L_L R_4 s^3 + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

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

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1)}{2C_1 C_4 L_L R_4 r_o s^3 + C_1 C_L L_L R_4 r_o s^3 + C_1 L_L R_4 s^2 + 2C_1 L_L r_o s^2 + C_1 R_4 r_o s + 2C_4 L_L R_4 g_m r_o s^2 + 2C_4 L_L R_4 s^2 + C_L L_L R_4 g_m r_o s^2 + C_L L_L R_4 s^2 + 2L_L g_m r_o s + 2L_L s + R_4 g_m r_o}$$

$$10.180 \quad \text{INVALID-ORDER-180} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_4 (g_m r_o)}{2C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 C_L R_4 R_L r_o s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 C_L R_L r_o s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 C_L R_4 s}$$

10.181 INVALID-ORDER-181 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_L R_4 R_L r_o s^3 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_L R_4 R_L s^2 + C_1 L_L R_4 r_o s^2 + 2C_1 L_L R_L r_o s^2 + C_1 R_4 R_L r_o s + 2C_4 L_L R_4 R_L g_m r_o s^2 + 2C_4 L_L R_4 R_L s^2 + C_L L_L R_4 R_L g_m r_o s^2 + C_L L_L R_4 R_L s^2}$$

10.182 INVALID-ORDER-182 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_RR_4R_Lr_0s^4 + 2C_1C_4L_LR_4r_0s^3 + 2C_1C_4R_4R_Lr_0s^2 + C_1C_LL_LR_4R_Ls^3 + C_1C_LL_LR_4r_0s^3 + 2C_1C_LL_RLr_0s^3 + C_1L_LR_4s^2 + 2C_1L_Lr_0s^2 + C_1R_4R_Ls + C_1R_4r_0s}{2C_1C_4C_LL_RR_4R_Lr_0s^4 + 2C_1C_4L_LR_4r_0s^3 + 2C_1C_4R_4R_Lr_0s^2 + C_1C_LL_LR_4R_Ls^3 + C_1C_LL_LR_4r_0s^3 + 2C_1C_LL_RLr_0s^3 + C_1L_LR_4s^2 + 2C_1L_Lr_0s^2 + C_1R_4R_Ls + C_1R_4r_0s}$$

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

$$H(s) = \frac{2C_1C_4C_LL_LR_4R_Lr_os^4 + 2C_1C_4R_4R_Lr_os^2 + C_1C_LL_LR_4R_Ls^3 + C_1C_LL_LR_4r_os^3 + 2C_1C_LL_LR_Lr_os^3 + C_1C_LR_4R_Lr_os^2 + C_1R_4R_Ls + C_1R_4r_os + 2C_1R_Lr_os + 2C_4C_LL_LR}{R}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_4 R_4 s + 1)}{s(C_1 C_4 C_L R_4 r_o s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L r_o s + C_1 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.185 INVALID-ORDER-185 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 R_4 s + 1)}{C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2 C_1 C_4 R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_4 C_L R_4 R_L g_m r_o s^2 + C_4 C_L R_4 R_L s^2 + C_4 R_4 g_m r_o s + C_4 R_4 s + 2 C_4 R_L s}$$

$$10.186 \quad \text{INVALID-ORDER-186} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1)(C_4 R_4 s + 1)(C_L R_L s + 1)}{s(C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s + 2C_4 C_L R_L g_m r_o s + 2C_4 C_L R_L s)}$$

$$10.187 \quad \text{INVALID-ORDER-187} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1)(C_4 R_4 s + 1)(C_L L_L s^2 + 1)}{s(C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L R_4 r_o s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1 + 2C_4 C_L L_L g_m r_o s^2 + 2C_4 C_L L_L s^2 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s)}$$

$$10.188 \quad \text{INVALID-ORDER-188} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L s (g_m r_o + 1)(C_4 R_4 s + 1)}{C_1 C_4 C_L L_L R_4 r_o s^4 + C_1 C_4 L_L R_4 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_4 R_4 r_o s^2 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + C_4 C_L L_L R_4 g_m r_o s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 L_L g_m r_o s^2 + 2C_4 L_L s^2 + C_4 R_4 s}$$

$$10.189 \quad \text{INVALID-ORDER-189} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1)(C_4 R_4 s + 1)(C_L L_L s^2 + C_L R_L s + C_L R_L)}{s(C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + 2C_4 C_L L_L g_m r_o s^2 + 2C_4 C_L L_L s^2 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s)}$$

$$10.190 \quad \text{INVALID-ORDER-190} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L}{C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_L R_4 R_L s^3 + C_1 C_4 L_L R_4 r_o s^3 + 2C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 R_4 R_L r_o s^2 + C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_L s^2 + C_1 L_L r_o s^2 + C_1 R_L r_o s + C_4 C_L L_L R_4 g_m r_o s^2 + C_4 C_L L_L R_4 s^2 + 2C_4 L_L g_m r_o s + 2C_4 L_L s + C_4 R_4 s}$$

$$10.191 \quad \text{INVALID-ORDER-191} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_L R_L}{C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 L_L R_4 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^3 + C_1 C_L R_L s^2 + C_1 C_L r_o s^2 + C_1 R_L r_o s + C_4 C_L L_L R_4 g_m r_o s^2 + C_4 C_L L_L R_4 s^2 + 2C_4 L_L g_m r_o s + 2C_4 L_L s + C_4 R_4 s}$$

10.192 INVALID-ORDER-192 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2 C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^3 + C_1$$

10.193 INVALID-ORDER-193 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_4 L_4 g_m r_o s^2 + C_4 L_4 s^2 + 2 C_4 R_L g_m r_o s + 2 C_4 R_L s + g_m r_o + 1}$$

10.194 INVALID-ORDER-194 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 s^2 + 1)}{s(C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 L_4 s^2 + 2C_1 C_4 r_o s + C_1 C_L r_o s + C_1 + C_4 C_L L_4 g_m r_o s^2 + C_4 C_L L_4 s^2 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

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

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_4 C_L L_4 R_L g_m r_o s^3 + C_4 C_L L_4 R_L s^3 + C_4 L_4 g_m r_o s^2 + C_4 L_4 s^2 + 2C_4}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 s^2 + 1)(C_L R_L s + 1)}{s(C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 L_4 s^2 + 2C_1 C_4 r_o s + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + C_4 C_L L_4 g_m r_o s^2 + C_4 C_L L_4 s^2 + 2C_4 C_L R_L g_m r_o s + 2C_4 C_L r_o s + C_4 C_L R_L s + C_4 C_L r_o s + C_4 + C_L R_L s + C_L r_o s + C_L + r_o s + 1)}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 s^2 + 1)(C_L L_L s^2 + 1)}{s(C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 L_4 s^2 + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1 + C_4 C_L L_4 g_m r_o s^2 + C_4 C_L L_4 s^2 + 2C_4 C_L L_L g_m r_o s^2 + 2C_4$$

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

$$H(s) = \frac{L_L s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 L_L r_o s^3 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + C_4 C_L L_4 L_L g_m r_o s^4 + C_4 C_L L_4 L_L s^4 + C_4 L_4 g_m r_o s^2 + C_4 L_4 s^2 + 2 C_4}$$

10.199 INVALID-ORDER-199 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_L L_L s^2 + C_L R_L s + C_L r_o)}{s (C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2 C_1 C_4 C_L L_L r_o s^3 + 2 C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 L_4 s^2 + 2 C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + C_4 C_L)}$$

10.200 INVALID-ORDER-200 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R}{C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_L r_o s^3 + 2C_1 C_4 L_L R_L r_o s^3 + C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_L s^2 + C_1 L_L r_o s^2 + C_1 R_L r_o s + C_4 C_L L_4 L_L R_L}$$

10.201 INVALID-ORDER-201 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 L_L r_o s^3 + 2 C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^2}{C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 L_L r_o s^3 + 2 C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^2}$$

10.202 INVALID-ORDER-202 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L r_o s^3 + C_1$$

10.203 INVALID-ORDER-203 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 R_L r_o s^3 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + 2C_1 R_L r_o s + 2C_4 L_4 R_L g_m r_o s^2 + 2C_4 L_4 R_L s^2 + L_4 g_m r_o s + L_4 s + 2R_L g_m r_o + 2R_L}$$

10.204 INVALID-ORDER-204 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 s (g_m r_o + 1)}{2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 r_o s^3 + C_1 L_4 s^2 + 2C_1 r_o s + 2C_4 L_4 g_m r_o s^2 + 2C_4 L_4 s^2 + C_L L_4 g_m r_o s^2 + C_L L_4 s^2 + 2g_m r_o + 2}$$

10.205 INVALID-ORDER-205 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 R_L r_o s^3 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + 2C_1 R_L r_o s + 2C_4 L_4 R_L g_m r_o s^2 + 2C_4 L_4 R_L s^2 + C_L L_4 R_L g_m r_o s^2 + C_L L_4 R_L s^2 + L_4 g_m r_o s + L_4 s + 2R_L g_m r_o}$$

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

$$H(s) = \frac{L_4 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 R_L s^3 + C_1 C_L L_4 r_o s^3 + 2C_1 C_L R_L r_o s^2 + C_1 L_4 s^2 + 2C_1 r_o s + 2C_4 C_L L_4 R_L g_m r_o s^3 + 2C_4 C_L L_4 R_L s^3 + 2C_4 L_4 g_m r_o s^2 + 2C_4 L_4}$$

10.207 INVALID-ORDER-207 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_1 C_4 C_L L_4 L_L r_o s^5 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 L_L s^4 + C_1 C_L L_4 r_o s^3 + 2C_1 C_L L_L r_o s^3 + C_1 L_4 s^2 + 2C_1 r_o s + 2C_4 C_L L_4 L_L g_m r_o s^4 + 2C_4 C_L L_4 L_L s^4 + 2C_4 L_4 g_m r_o s^2 + 2C_4 L_4 s}$$

$$10.208 \quad \text{INVALID-ORDER-208} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_4 L_L s (g_m r_o + 1)}{2C_1 C_4 L_4 L_L r_o s^3 + C_1 C_L L_4 L_L r_o s^3 + C_1 L_4 L_L s^2 + C_1 L_4 r_o s + 2C_1 L_L r_o s + 2C_4 L_4 L_L g_m r_o s^2 + 2C_4 L_4 L_L s^2 + C_L L_4 L_L g_m r_o s^2 + C_L L_4 L_L s^2 + L_4 g_m r_o + L_4 + 2L_L g_m r_o + 2L_L}$$

$$10.209 \quad \text{INVALID-ORDER-209} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 s (g_m r_o + 1)}{2C_1 C_4 C_L L_4 L_L r_o s^5 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 L_L s^4 + C_1 C_L L_4 R_L s^3 + C_1 C_L L_4 r_o s^3 + 2C_1 C_L L_L r_o s^3 + 2C_1 C_L R_L r_o s^2 + C_1 L_4 s^2 + 2C_1 r_o s + 2C_4 C_L L_4 L_L r_o s^2 + 2C_4 C_L L_4 L_L s^2 + C_L L_4 L_L R_L r_o s^2 + C_L L_4 L_L s^2 + L_4 g_m r_o + L_4 + 2L_L g_m r_o + 2L_L}$$

$$10.210 \quad \text{INVALID-ORDER-210} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_4 L_L R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 L_L R_L r_o s^3 + C_1 C_L L_4 L_L R_L r_o s^3 + C_1 L_4 L_L R_L s^2 + C_1 L_4 L_L r_o s^2 + C_1 L_4 R_L r_o s + 2C_1 L_L R_L r_o s + 2C_4 L_4 L_L R_L g_m r_o s^2 + 2C_4 L_4 L_L R_L s^2 + C_L L_4 L_L R_L g_m r_o s^2 + C_L L_4 L_L R_L s^2 + L_4 g_m r_o + L_4 + 2L_L g_m r_o + 2L_L}$$

$$10.211 \quad \text{INVALID-ORDER-211} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_4 s (g_m r_o + 1)}{2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 L_4 L_L r_o s^4 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_L s^4 + C_1 C_L L_4 L_L r_o s^4 + 2C_1 C_L L_L R_L r_o s^3 + C_1 L_4 L_L s^3 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + 2C_1 L_L r_o s + 2C_4 C_L L_4 L_L r_o s^2 + 2C_4 C_L L_4 L_L s^2 + C_L L_4 L_L R_L r_o s^2 + C_L L_4 L_L s^2 + L_4 g_m r_o + L_4 + 2L_L g_m r_o + 2L_L}$$

$$10.212 \quad \text{INVALID-ORDER-212} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L \left(L_L s + \frac{1}{C_L s} \right) (g_m r_o + 1)}{2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_L s^4 + C_1 C_L L_4 L_L r_o s^4 + C_1 C_L L_4 R_L r_o s^3 + 2C_1 C_L L_L R_L r_o s^3 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + 2C_1 R_L r_o s + 2C_4 C_L L_4 L_L r_o s^2 + 2C_4 C_L L_4 L_L s^2 + C_L L_4 L_L R_L r_o s^2 + C_L L_4 L_L s^2 + L_4 g_m r_o + L_4 + 2L_L g_m r_o + 2L_L}$$

$$10.213 \quad \text{INVALID-ORDER-213} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_4 L_4 g_m r_o s^2 + C_4 L_4 s^2 + C_4 R_4 g_m r_o s + C_4 R_4 s + 2C_4 R_L g_m r_o s + 2C_4 R_L s}$$

$$10.214 \quad \text{INVALID-ORDER-214} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{s (C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L R_4 r_o s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L r_o s + C_1 + C_4 C_L L_4 g_m r_o s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s + 2C_4 g_m r_o + 2C_4)}$$

$$10.215 \quad \text{INVALID-ORDER-215} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L R_L r_o s^2 + C_1 R_L s + C_1 r_o s + C_4 C_L L_4 R_L g_m r_o s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s + 2C_4 g_m r_o + 2C_4}$$

$$10.216 \quad \text{INVALID-ORDER-216} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1) (C_L R_L s + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{s (C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + C_4 C_L)}$$

$$10.217 \quad \text{INVALID-ORDER-217} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{s (C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L R_4 r_o s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1 + C_4 C_L)}$$

$$10.218 \quad \text{INVALID-ORDER-218} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L s (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_L R_4 r_o s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 L_L R_4 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_4 R_4 r_o s^2 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 r_o s + C_4 C_L L_4 L_L g_m r_o s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 g_m r_o s + C_4 C_L R_4 s + 2C_4 g_m r_o + 2C_4}$$

$$\mathbf{10.219 \quad INVALID-ORDER-219} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{1}{s(C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 L_4 R_4 s + C_1 C_4 L_4 r_o s + C_1 C_4 L_L R_4 s + C_1 C_4 L_L R_4 r_o s + C_1 C_4 L_L R_L s + C_1 C_4 L_L R_L r_o s + C_1 C_4 L_L R_L r_o s^2 + C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 L_L R_L r_o s^4 + C_1 C_4 L_L R_L r_o s^5)}$$

$$\mathbf{10.220 \quad INVALID-ORDER-220} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_L r_o s^3 + C_1 C_4 L_L R_4 R_L s^3 + C_1 C_4 L_L R_4 r_o s^3 + 2C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + C_1 C_4 L_L R_L s^2 + C_1 C_4 L_L R_L r_o s^2 + C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 L_L R_L r_o s^4 + C_1 C_4 L_L R_L r_o s^5)}$$

$$\mathbf{10.221 \quad INVALID-ORDER-221} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 L_L R_4 r_o s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 L_L R_L r_o s^4 + C_1 C_4 L_L R_L r_o s^5)}$$

$$\mathbf{10.222 \quad INVALID-ORDER-222} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 L_L R_4 r_o s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 L_L R_L r_o s^4 + C_1 C_4 L_L R_L r_o s^5)}$$

$$\mathbf{10.223 \quad INVALID-ORDER-223} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$$

$$H(s) = \frac{L_4 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 L_4 R_4 R_L s^2 + C_1 L_4 R_4 r_o s^2 + 2C_1 L_4 R_L r_o s^2 + 2C_1 R_4 R_L r_o s + 2C_4 L_4 R_4 R_L g_m r_o s^2 + 2C_4 L_4 R_4 R_L s^2 + L_4 R_4 g_m r_o s + L_4 R_4 s + 2L_4 R_L g_m r_o s + 2L_4 R_L s + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 R_L r_o s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 L_L R_4 r_o s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_4 L_L R_L r_o s^3 + C_1 C_4 L_L R_L r_o s^4 + C_1 C_4 L_L R_L r_o s^5)}$$

$$\mathbf{10.224 \quad INVALID-ORDER-224} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_4 s (g_m r_o + 1)}{2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_4 R_4 r_o s^3 + C_1 L_4 R_4 s^2 + 2C_1 L_4 r_o s^2 + 2C_1 R_4 r_o s + 2C_4 L_4 R_4 g_m r_o s^2 + 2C_4 L_4 R_4 s^2 + C_L L_4 R_4 g_m r_o s^2 + C_L L_4 R_4 s^2 + 2L_4 g_m r_o s + 2L_4 s + 2R_4 g_m r_o}$$

$$\mathbf{10.225 \quad INVALID-ORDER-225} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_4 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_4 R_4 R_L r_o s^3 + C_1 L_4 R_4 R_L s^2 + C_1 L_4 R_4 r_o s^2 + 2C_1 L_4 R_L r_o s^2 + 2C_1 R_4 R_L r_o s + 2C_4 L_4 R_4 R_L g_m r_o s^2 + 2C_4 L_4 R_4 R_L s^2 + C_L L_4 R_4 R_L g_m r_o s^2 + C_L L_4 R_4 R_L s^2}$$

$$\mathbf{10.226 \quad INVALID-ORDER-226} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + 2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_4 R_4 R_L s^3 + C_1 C_L L_4 R_4 r_o s^3 + 2C_1 C_L L_4 R_L r_o s^3 + 2C_1 C_L R_4 R_L r_o s^2 + C_1 L_4 R_4 s^2 + 2C_1 L_4 r_o s^2 + 2C_1 R_4 r_o s + 2C_4 C_L L_4 R_4 r_o s^2}$$

$$\mathbf{10.227 \quad INVALID-ORDER-227} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_4 L_L R_4 s^4 + 2C_1 C_L L_4 L_L r_o s^4 + C_1 C_L L_4 R_4 r_o s^3 + 2C_1 C_L L_L R_4 r_o s^3 + C_1 L_4 R_4 s^2 + 2C_1 L_4 r_o s^2 + 2C_1 R_4 r_o s + 2C_4 C_L L_4 L_L R_4 r_o s^2}$$

$$\mathbf{10.228 \quad INVALID-ORDER-228} \quad Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_4 L_L R_4 s (g_m r_o + 1)}{2C_1 C_4 L_4 L_L R_4 r_o s^3 + C_1 C_L L_4 L_L R_4 r_o s^3 + C_1 L_4 L_L R_4 s^2 + 2C_1 L_4 L_L r_o s^2 + C_1 L_4 R_4 r_o s + 2C_1 L_L R_4 r_o s + 2C_4 L_4 L_L R_4 g_m r_o s^2 + 2C_4 L_4 L_L R_4 s^2 + C_L L_4 L_L R_4 g_m r_o s^2 + C_L L_4 L_L R_4 s^2}$$

10.229 INVALID-ORDER-229 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + 2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_4 L_L R_4 s^4 + 2C_1 C_L L_4 L_L r_o s^4 + C_1 C_L L_4 R_4 R_L s^3 + C_1 C_L L_4 R_4 r_o s^3 + 2C_1 C_L L_4 R_L r_o s^3 + 2C_1 C$$

10.230 INVALID-ORDER-230 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L L_L R_s}{2C_1 C_4 L_L L_L R_4 R_L r_o s^3 + C_1 C_L L_L L_L R_4 R_L r_o s^3 + C_1 L_4 L_L R_4 R_L s^2 + C_1 L_4 L_L R_4 r_o s^2 + 2C_1 L_4 L_L R_L r_o s^2 + C_1 L_4 R_4 R_L r_o s + 2C_1 L_L R_4 R_L r_o s + 2C_4 L_4 L_L R_4 R_L q_m r_o s^2 + 2C_1}$$

10.231 INVALID-ORDER-231 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1 C_4 L_4 L_L R_4 r_o s^4 + 2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_4 R_L s^4 + C_1 C_L L_4 L_L R_4 r_o s^4 + 2C_1 C_L L_4 L_L R_L r_o s^4 + 2C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_4 L_L R_4 R_L}{...}$$

10.232 INVALID-ORDER-232 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_4R_LR_0s^5 + 2C_1C_4L_4R_4R_LR_0s^3 + C_1C_LL_4L_LR_4R_Ls^4 + C_1C_LL_4L_LR_4R_0s^4 + 2C_1C_LL_4L_LR_LR_0s^4 + C_1C_LL_4R_4R_LR_0s^3 + 2C_1C_LL_LR_4R_LR_0s^3 + C_1L_4R_4R_0s^2}{2C_1C_4C_LL_4L_LR_4R_LR_0s^5 + 2C_1C_4L_4R_4R_LR_0s^3 + C_1C_LL_4L_LR_4R_Ls^4 + C_1C_LL_4L_LR_4R_0s^4 + 2C_1C_LL_4L_LR_LR_0s^4 + C_1C_LL_4R_4R_LR_0s^3 + 2C_1C_LL_LR_4R_LR_0s^3 + C_1L_4R_4R_0s^2}.$$

10.233 INVALID-ORDER-233 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2 C_1 R_L r_o s + C_4 L_4 R_4 g_m r_o s^2 + C_4 L_4 R_4 s^2 + 2 C_4 L_4 R_L g_m r_o s^2 + 2 C_4 L_4 R_L r_o s^2 + 2 C_4 L_4 R_L s + 2 C_4 L_4 r_o s + 2 C_4 R_L r_o}$$

10.234 INVALID-ORDER-234 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 C_L L_4 R_4 r_o s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 r_o s^3 + C_1 C_L R_4 r_o s^2 + C_1 L_4 s^2 + C_1 R_4 s + 2C_1 r_o s + C_4 C_L L_4 R_4 g_m r_o s^3 + C_4 C_L L_4 R_4 s^3 + 2C_4 L_4 g_m r_o s^2 + 2C_4 R_4 s}$$

10.235 INVALID-ORDER-235 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 R_L r_o s^3 + C_1 C_L R_4 R_L r_o s^2 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 r_o s}$$

10.236 INVALID-ORDER-236 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 R_L s^3 + C_1 C_L L_4 r_o s^3 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 C_L R_4 s}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_4 r_o s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 L_L s^4 + C_1 C_L L_4 r_o s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 s}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_4 L_L r_o s^4 + C_1 C_L L_L R_4 r_o s^3 + C_1 L_4 L_L s^3 + C_1 L_4 r_o s^2 + C_1 L_L R_4 s^2 + 2C_1 L_L r_o s^2 + C_1 R_4 s}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 R_4 s^2 + L_4 s + R_4)}{C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 L_L s^4 + C_1 C_L L_4 R_L s^3}$$

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

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_4 R_L s^4 + C_1 C_4 L_4 L_L R_4 r_o s^4 + 2C_1 C_4 L_4 L_L R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_L r_o s^4 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_4 L_L R_L s^3}{C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_4 R_L s^4 + C_1 C_4 L_4 L_L R_4 r_o s^4 + 2C_1 C_4 L_4 L_L R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_L r_o s^4 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_4 L_L R_L s^3}$$

10.241 INVALID-ORDER-241 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 L_4 L_L R_4 s^4 + 2 C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + C_1$$

10.242 INVALID-ORDER-242 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_L s^4}{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_L s^4}$$

10.243 INVALID-ORDER-243 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + C_4 L_4 R_4 g_m r_o s^2 + C_4 L_4 R_4 s^2 + 2C_4 L_4 R_L g_m r_o s^2 + 2C_4 L_4 R_L r_o s + C_4 L_4 R_L s}$$

10.244 INVALID-ORDER-244 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 C_L L_4 R_4 r_o s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L R_4 r_o s^2 + C_1 R_4 s + 2C_1 r_o s + C_4 C_L L_4 R_4 g_m r_o s^3 + C_4 C_L L_4 R_4 s^3 + 2C_4 L_4 g_m r_o s^2 + 2C_4 L_4 s^2 + 2C_4 r_o s + 2C_4}$$

$$10.245 \quad \text{INVALID-ORDER-245} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_4 R_L}{C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 C_L R_4 R_L r_o s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + C_4 C_L L_4 R_4 R_L s^4}$$

$$10.246 \quad \text{INVALID-ORDER-246} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_4 R_L}{C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 R_L r_o s + C_4 C_L L_4 R_4 R_L s^4}$$

$$10.247 \quad \text{INVALID-ORDER-247} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_L R_L}{C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_4 r_o s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 s^2 + C_1 C_L R_4 r_o s^2 + C_1 R_4 r_o s + C_4 C_L L_4 L_L R_4 s^5}$$

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

$$H(s) = \frac{L_L R_L}{C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_L R_4 r_o s^3 + C_1 C_L L_L R_4 r_o s^3 + C_1 L_L R_4 s^2 + 2C_1 L_L r_o s^2 + C_1 R_4 r_o s + C_4 C_L L_4 L_L R_4 s^5}$$

$$10.249 \quad \text{INVALID-ORDER-249} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_L R_L}{C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 s^2 + C_1 C_L R_4 r_o s^2 + C_1 R_4 r_o s + C_4 C_L L_4 L_L R_4 s^5}$$

$$10.250 \quad \text{INVALID-ORDER-250} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_4 R_L s^4 + C_1 C_4 L_4 L_L R_4 r_o s^4 + 2C_1 C_4 L_4 L_L R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L r_o s^3 + 2C_1 C_4 L_L R_4 R_L r_o s^3 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_L R_4 R_L s^2}{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_4 r_o s^2 + C_1 C_4 L_4 R_4 s + C_1 C_4 L_4 R_4 r_o + C_1 C_4 L_4 R_4}$$

$$10.251 \quad \text{INVALID-ORDER-251} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_4 r_o s^2 + C_1 C_4 L_4 R_4 s + C_1 C_4 L_4 R_4 r_o + C_1 C_4 L_4 R_4}{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_4 r_o s^2 + C_1 C_4 L_4 R_4 s + C_1 C_4 L_4 R_4 r_o + C_1 C_4 L_4 R_4}$$

$$10.252 \quad \text{INVALID-ORDER-252} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_4 r_o s^2 + C_1 C_4 L_4 R_4 s + C_1 C_4 L_4 R_4 r_o + C_1 C_4 L_4 R_4}{C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_4 r_o s^2 + C_1 C_4 L_4 R_4 s + C_1 C_4 L_4 R_4 r_o + C_1 C_4 L_4 R_4}$$

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

$$H(s) = \frac{R_1 R_4 R_L (g_m r_o + 1)}{C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + R_1 R_4 g_m r_o + R_1 R_4 + 2R_1 R_L g_m r_o + 2R_1 R_L + R_4 R_L + R_4 r_o + 2R_L r_o}$$

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

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L s^2 + 1)}{C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 R_4 r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + 2C_L L_L R_1 g_m r_o s^2 + 2C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + 2C_L L_L r_o s^2 + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4}$$

10.255 INVALID-ORDER-255 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 R_4 s (g_m r_o + 1)}{C_1 C_L L_L R_1 R_4 r_o s^3 + C_1 L_L R_1 R_4 s^2 + 2C_1 L_L R_1 r_o s^2 + C_1 R_1 R_4 r_o s + C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + C_L L_L R_4 r_o s^2 + 2L_L R_1 g_m r_o s + 2L_L R_1 s + L_L R_4 s + 2L_L r_o s + R_1}$$

10.256 INVALID-ORDER-256 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L R_1 R_4 r_o s^2 + 2C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + 2C_L L_L R_1 g_m r_o s^2 + 2C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + 2C_L R_L s + 1}$$

10.257 INVALID-ORDER-257 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_4 R_L s (g_m r_o + 1)}{C_1 C_L L_L R_1 R_4 R_L r_o s^3 + C_1 L_L R_1 R_4 R_L s^2 + C_1 L_L R_1 R_4 r_o s^2 + 2C_1 L_L R_1 R_L r_o s^2 + C_1 R_1 R_4 R_L r_o s + C_L L_L R_1 R_4 R_L g_m r_o s^2 + C_L L_L R_1 R_4 R_L s^2 + C_L L_L R_4 R_L r_o s^2 + L_L R_1 R_4 s + 1}$$

10.258 INVALID-ORDER-258 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_L R_1 R_4 R_L s (g_m r_o + 1)}{C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 r_o s^3 + 2C_1 C_L L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_4 s^2 + 2C_1 L_L R_1 r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + C_L L_L R_4 R_L r_o s^2 + L_L R_1 R_4 s + 1}$$

10.259 INVALID-ORDER-259 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L (L_L s + \frac{1}{C_L s}) (g_m r_o + 1)}{C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 r_o s^3 + 2C_1 C_L L_L R_1 R_L r_o s^3 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 + C_L L_L R_4 R_L r_o s^2 + L_L R_1 R_4 s + 1}$$

$$10.260 \quad \text{INVALID-ORDER-260} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

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

$$10.261 \quad \text{INVALID-ORDER-261} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + 2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s}$$

$$10.262 \quad \text{INVALID-ORDER-262} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 s (g_m r_o + 1)}{2C_1 C_4 L_L R_1 r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 L_L R_1 s^2 + C_1 R_1 r_o s + 2C_4 L_L R_1 g_m r_o s^2 + 2C_4 L_L R_1 s^2 + 2C_4 L_L r_o s^2 + C_L L_L R_1 g_m r_o s^2 + C_L L_L R_1 s^2 + C_L L_L r_o s^2 + L_L s + R_1 g_m r_o s}$$

$$10.263 \quad \text{INVALID-ORDER-263} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + 2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s}$$

$$10.264 \quad \text{INVALID-ORDER-264} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L s (g_m r_o + 1)}{2C_1 C_4 L_L R_1 R_L r_o s^3 + C_1 C_L L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_L s^2 + C_1 L_L R_1 r_o s^2 + C_1 R_1 R_L r_o s + 2C_4 L_L R_1 R_L g_m r_o s^2 + 2C_4 L_L R_1 R_L s^2 + 2C_4 L_L R_L r_o s^2 + C_L L_L R_1 R_L g_m r_o s^2 + C_L L_L R_1 R_L s^2 + C_L L_L r_o s^2 + L_L s + R_L s + R_1 g_m r_o s}$$

$$10.265 \quad \text{INVALID-ORDER-265} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_L R_1 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_L R_1 R_L r_o s^4 + 2C_1 C_4 L_L R_1 r_o s^3 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + 2C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2C_4 C_L L_L R_1 R_L s^3 + 2C_4 C_L L_L r_o s^3 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4 r_o s}$$

$$10.266 \quad \text{INVALID-ORDER-266} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L}{2C_1 C_4 C_L L_L R_1 R_L r_o s^4 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + 2C_4 C_L L_L R_1 R_L g_m r_o s^3 + 2C_4 C_L L_L R_1 R_L s^3 -}$$

$$10.267 \quad \text{INVALID-ORDER-267} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1}{2C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L R_1 R_4 r_o s^2 + 2C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + 2C_4 C_L R_1 R_4 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_4 R_L s^2 -}$$

$$10.268 \quad \text{INVALID-ORDER-268} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1}{2C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 R_4 r_o s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + 2C_4 C_L L_L R_1 R_4 g_m r_o s^3 + 2C_4 C_L L_L R_1 R_4 s^3 -}$$

$$10.269 \quad \text{INVALID-ORDER-269} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 R_4 s (g_m r_o + 1)}{2C_1 C_4 L_L R_1 R_4 r_o s^3 + C_1 C_L L_L R_1 R_4 r_o s^3 + C_1 L_L R_1 R_4 s^2 + 2C_1 L_L R_1 r_o s^2 + C_1 R_1 R_4 r_o s + 2C_4 L_L R_1 R_4 g_m r_o s^2 + 2C_4 L_L R_1 R_4 s^2 + 2C_4 L_L R_4 r_o s^2 + C_L L_L R_1 R_4 g_m r_o s^2 + C_L L_L R_1 R_4 s^2 -}$$

$$10.270 \quad \text{INVALID-ORDER-270} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 R_L}{2C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 r_o s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L R_1 R_4 r_o s^2 + 2C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + 2C_4 C_L L_L R_1 R_4 g_m r_o s^3 + 2C_4 C_L L_L R_1 R_4 s^3 -}$$

10.271 INVALID-ORDER-271 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L s}} \right)$

$$H(s) = \frac{2C_1C_4L_LR_1R_4R_Lr_0s^3 + C_1C_LL_LR_1R_4R_Lr_0s^3 + C_1L_LR_1R_4R_Ls^2 + C_1L_LR_1R_4r_0s^2 + 2C_1L_LR_1R_Lr_0s^2 + C_1R_1R_4R_Lr_0s + 2C_4L_LR_1R_4R_Lq_m r_0s^2 + 2C_4L_LR_1R_4R_Ls^2 +$$

10.272 INVALID-ORDER-272 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_L L_L R_1 R_4 R_L r_o s^4 + 2C_1C_4L_L R_1 R_4 r_o s^3 + 2C_1C_4R_1 R_4 R_L r_o s^2 + C_1C_L L_L R_1 R_4 R_L s^3 + C_1C_L L_L R_1 R_4 r_o s^3 + 2C_1C_L L_L R_1 R_L r_o s^3 + C_1L_L R_1 R_4 s^2 + 2C_1L_L R_1 r_o s^2 -$$

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

$$H(s) = \frac{2C_1C_4C_LL_RR_1R_4R_Lr_0s^4 + 2C_1C_4R_1R_4R_Lr_0s^2 + C_1C_LL_RR_1R_4R_Ls^3 + C_1C_LL_RR_1R_4r_0s^3 + 2C_1C_LL_RR_1R_Lr_0s^3 + C_1C_LR_1R_4R_Lr_0s^2 + C_1R_1R_4R_Ls + C_1R_1R_4r_0s + 2C_1C_4C_LL_RR_1R_4R_Lr_0}{2C_1C_4C_LL_RR_1R_4R_Lr_0s^4 + 2C_1C_4R_1R_4R_Lr_0s^2 + C_1C_LL_RR_1R_4R_Ls^3 + C_1C_LL_RR_1R_4r_0s^3 + 2C_1C_LL_RR_1R_Lr_0s^3 + C_1C_LR_1R_4R_Lr_0s^2 + C_1R_1R_4R_Ls + C_1R_1R_4r_0s + 2C_1C_4C_LL_RR_1R_4R_Lr_0}$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 R_4 s + 1)}{C_1 C_4 C_L R_1 R_4 r_o s^3 + C_1 C_4 R_1 R_4 s^2 + 2 C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_4 r_o s^2 + 2 C_4 R_1 g_m r_o s + 2 C_4 R_1 s + C_4 R_4 s + 2 C_4}$$

10.275 INVALID-ORDER-275 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (g_m}{C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2 C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + C_4 C_L R_1 R_4 R_L g_m r_o s^2 + C_4 C_L R_1 R_4 R_L s^2 + C_4$$

10.276 INVALID-ORDER-276 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1)}{C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_4 C_L R_1 R_4 g_m r_o s^2 + C_4 C_L R_1 R_4 s^2}$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1)}{C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 r_o s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + 2C_4 C_L L_L R_1 g_m r_o s^3 + 2C_4 C_L L_L R_1 R_4 s^3}$$

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

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + C_1 C_4 L_L R_1 R_4 s^3 + 2C_1 C_4 L_L R_1 r_o s^3 + C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 r_o s^3 + C_1 L_L R_1 s^2 + C_1 R_1 r_o s + C_4 C_L L_L R_1 R_4 g_m r_o s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_1 R_4 s^3}$$

10.279 INVALID-ORDER-279 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^3}$$

10.280 INVALID-ORDER-280 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 r_o s^3 + 2C_1 C_4 L_L R_1 R_L r_o s^3 + C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 C_L L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_L s^2 + C_1 L_L R_1 r_o s^2 + C_1 R_1 s}$$

10.281 INVALID-ORDER-281 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 L_L R_1 R_4 s^3 + 2C_1 C_4 L_L R_1 r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^3}$$

10.282 INVALID-ORDER-282 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2 C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s}{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2 C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s}$$

10.283 INVALID-ORDER-283 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 + 2C_4 R_1 R_L g_m r_o s + 2C_4 R_1 R_L s + 2C_4 R_1 r_o s + 2C_4 R_L r_o s + 2C_4 r_o s}$$

10.284 INVALID-ORDER-284 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + C_4 L_4 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s + 2C_4}$$

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

$$H(s) = \frac{R_1 R_L (g_r + g_m)}{C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + 2 C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + C_4 C_L L_4 R_1 R_L g_m r_o s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L R_1 R_L r_o s^2 + C_4 C_L R_1 r_o s + C_4 R_1}.$$

10.286 INVALID-ORDER-286 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1(g_m r_o + 1)}{C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 r_o s^4 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1}$$

$$10.287 \quad \text{INVALID-ORDER-287} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (g_m r_o + 1)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 r_o s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 g_m r_o}$$

$$10.288 \quad \text{INVALID-ORDER-288} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 L_L R_1 r_o s^3 + C_1 C_L L_L R_1 r_o s^3 + C_1 L_L R_1 s^2 + C_1 R_1 r_o s + C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 R_1 g_m r_o}$$

$$10.289 \quad \text{INVALID-ORDER-289} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 r_o s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 R_1 r_o s + C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 R_1 g_m r_o}$$

$$10.290 \quad \text{INVALID-ORDER-290} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_L r_o s^3 + 2C_1 C_4 L_L R_1 R_L r_o s^3 + C_1 C_L L_L R_1 R_L r_o s^3 + C_1 L_L R_1 R_L s^2 + C_1 L_L R_1 r_o s^2 + C_1 R_1 r_o s + C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 R_1 g_m r_o}$$

$$10.291 \quad \text{INVALID-ORDER-291} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_L R_1 s}{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 L_L R_1 r_o s^3 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^2 + C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 r_o s + C_4 C_L L_4 L_L R_1 g_m r_o s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 R_1 g_m r_o}$$

$$\mathbf{10.292 \quad INVALID-ORDER-292} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + 2 C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^2 + C_1 C_L L_L R_1 r_o s^2 + C_1 C_L L_L R_1 s^2 + C_1 C_L L_L r_o s^2 + C_1 C_L R_1 s^2 + C_1 C_L r_o s^2 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 r_o s^2 + C_1 L_4 s^2 + C_1 R_1 s^2 + C_1 r_o s^2 + C_1 s^2 + C_1}{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + 2 C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_L R_1 R_L s^2 + C_1 C_L L_L R_1 r_o s^2 + C_1 C_L L_L R_1 s^2 + C_1 C_L L_L r_o s^2 + C_1 C_L R_1 s^2 + C_1 C_L r_o s^2 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 r_o s^2 + C_1 L_4 s^2 + C_1 R_1 s^2 + C_1 r_o s^2 + C_1 s^2 + C_1}$$

$$\mathbf{10.293 \quad INVALID-ORDER-293} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$$

$$H(s) = \frac{L_4 R_1 R_L s (g_m r_o + 1)}{2 C_1 C_4 L_4 R_1 R_L r_o s^3 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + 2 C_1 R_1 R_L r_o s + 2 C_4 L_4 R_1 R_L g_m r_o s^2 + 2 C_4 L_4 R_1 R_L s^2 + 2 C_4 L_4 R_L r_o s^2 + L_4 R_1 g_m r_o s + L_4 R_1 s + L_4 R_L s + L_4 r_o s + 2 R_1 s + 2 R_L s + 2 r_o s + 2 s}$$

$$\mathbf{10.294 \quad INVALID-ORDER-294} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_1 s (g_m r_o + 1)}{2 C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 R_1 r_o s^3 + C_1 L_4 R_1 s^2 + 2 C_1 R_1 r_o s + 2 C_4 L_4 R_1 g_m r_o s^2 + 2 C_4 L_4 R_1 s^2 + 2 C_4 L_4 r_o s^2 + C_L L_4 R_1 g_m r_o s^2 + C_L L_4 R_1 s^2 + C_L L_4 r_o s^2 + L_4 s + 2 R_1 g_m r_o s + 2 R_1 s + 2 R_L s + 2 r_o s + 2 s}$$

$$\mathbf{10.295 \quad INVALID-ORDER-295} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_4 R_1 R_L s (g_m r_o + 1)}{2 C_1 C_4 L_4 R_1 R_L r_o s^3 + C_1 C_L L_4 R_1 R_L r_o s^3 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + 2 C_1 R_1 R_L r_o s + 2 C_4 L_4 R_1 R_L g_m r_o s^2 + 2 C_4 L_4 R_1 R_L s^2 + 2 C_4 L_4 R_L r_o s^2 + C_L L_4 R_1 R_L g_m r_o s^2 + C_L L_4 R_1 R_L s^2 + C_L L_4 R_L r_o s^2 + L_4 s + 2 R_1 g_m r_o s + 2 R_1 s + 2 R_L s + 2 r_o s + 2 s}$$

$$\mathbf{10.296 \quad INVALID-ORDER-296} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_4 R_1 r_o s^3 + 2 C_1 C_L R_1 R_L r_o s^2 + C_1 L_4 R_1 s^2 + 2 C_1 R_1 r_o s + 2 C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_4 R_1 R_L s^3 + 2 C_4 C_L L_4 R_1 r_o s^3 + 2 C_4 C_L R_1 R_L r_o s^2 + 2 C_4 C_L R_1 s^2 + 2 C_4 C_L r_o s^2 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 r_o s^2 + C_1 L_4 s^2 + C_1 R_1 s^2 + C_1 r_o s^2 + C_1 s^2 + C_1}{C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_4 R_1 r_o s^3 + 2 C_1 C_L R_1 R_L r_o s^2 + C_1 L_4 R_1 s^2 + 2 C_1 R_1 r_o s + 2 C_4 C_L L_4 R_1 R_L g_m r_o s^3 + 2 C_4 C_L L_4 R_1 R_L s^3 + 2 C_4 C_L L_4 R_1 r_o s^3 + 2 C_4 C_L R_1 R_L r_o s^2 + 2 C_4 C_L R_1 s^2 + 2 C_4 C_L r_o s^2 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 r_o s^2 + C_1 L_4 s^2 + C_1 R_1 s^2 + C_1 r_o s^2 + C_1 s^2 + C_1}$$

$$\mathbf{10.297 \quad INVALID-ORDER-297} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2 C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + 2 C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 r_o s^3 + 2 C_1 C_L L_L R_1 r_o s^3 + C_1 L_4 R_1 s^2 + 2 C_1 R_1 r_o s + 2 C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2 C_4 C_L L_4 L_L R_1 s^4 + 2 C_4 C_L L_4 L_L r_o s^4 + 2 C_4 C_L R_1 R_L r_o s^3 + 2 C_4 C_L R_1 s^3 + 2 C_4 C_L r_o s^3 + C_1 L_4 R_1 R_L s^3 + C_1 L_4 R_1 r_o s^3 + C_1 L_4 R_1 s^3 + C_1 L_4 r_o s^3 + C_1 L_4 s^3 + C_1 R_1 s^3 + C_1 r_o s^3 + C_1 s^3 + C_1}{2 C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + 2 C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 r_o s^3 + 2 C_1 C_L L_L R_1 r_o s^3 + C_1 L_4 R_1 s^2 + 2 C_1 R_1 r_o s + 2 C_4 C_L L_4 L_L R_1 g_m r_o s^4 + 2 C_4 C_L L_4 L_L R_1 s^4 + 2 C_4 C_L L_4 L_L r_o s^4 + 2 C_4 C_L R_1 R_L r_o s^3 + 2 C_4 C_L R_1 s^3 + 2 C_4 C_L r_o s^3 + C_1 L_4 R_1 R_L s^3 + C_1 L_4 R_1 r_o s^3 + C_1 L_4 R_1 s^3 + C_1 L_4 r_o s^3 + C_1 L_4 s^3 + C_1 R_1 s^3 + C_1 r_o s^3 + C_1 s^3 + C_1}$$

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

$$H(s) = \frac{L_4 L_L R_1 s (g_m r_o + 1)}{2C_1 C_4 L_4 L_L R_1 r_o s^3 + C_1 C_L L_4 L_L R_1 r_o s^3 + C_1 L_4 L_L R_1 s^2 + C_1 L_4 R_1 r_o s + 2C_1 L_L R_1 r_o s + 2C_4 L_4 L_L R_1 g_m r_o s^2 + 2C_4 L_4 L_L R_1 s^2 + 2C_4 L_4 L_L r_o s^2 + C_L L_4 L_L R_1 g_m r_o s^2 + C_L L_4 L_L R_1 s^2 + C_L L_4 R_1 r_o s + C_L R_1 s}$$

10.299 INVALID-ORDER-299 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1r_os^5 + 2C_1C_4C_LL_4R_1R_Lr_os^4 + 2C_1C_4L_4R_1r_os^3 + C_1C_LL_4L_LR_1s^4 + C_1C_LL_4R_1R_Ls^3 + C_1C_LL_4R_1r_os^3 + 2C_1C_LL_R_1r_os^3 + 2C_1C_LR_1R_Lr_os^2 + C_1L_4$$

10.300 INVALID-ORDER-300 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_4L_LR_1R_Lr_os^3 + C_1C_LL_4L_LR_1R_Lr_os^3 + C_1L_4L_LR_1R_Ls^2 + C_1L_4L_LR_1r_os^2 + C_1L_4R_1R_Lr_os + 2C_1L_LR_1R_Lr_os + 2C_4L_4L_LR_1R_Lg_mr_os^2 + 2C_4L_4L_LR_1R_Ls^2 + 2C_4L_4L_LR_1R_Lr_os}{2C_1C_4L_4L_LR_1R_Lr_os^3 + C_1C_LL_4L_LR_1R_Lr_os^3 + C_1L_4L_LR_1R_Ls^2 + C_1L_4L_LR_1r_os^2 + C_1L_4R_1R_Lr_os + 2C_1L_LR_1R_Lr_os + 2C_4L_4L_LR_1R_Lg_mr_os^2 + 2C_4L_4L_LR_1R_Ls^2 + 2C_4L_4L_LR_1R_Lr_os}$$

10.301 INVALID-ORDER-301 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1R_LR_0s^5 + 2C_1C_4L_4L_LR_1r_0s^4 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1C_LL_4L_LR_1R_Ls^4 + C_1C_LL_4L_LR_1r_0s^4 + 2C_1C_LL_LR_1R_LR_0s^3 + C_1L_4L_LR_1s^3 + C_1L_4R_1R_Ls^2 +$$

10.302 INVALID-ORDER-302 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1R_LR_0s^5 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1C_LL_4L_LR_1R_Ls^4 + C_1C_LL_4L_LR_1r_0s^4 + C_1C_LL_4R_1R_LR_0s^3 + 2C_1C_LL_LR_1R_LR_0s^3 + C_1L_4R_1R_Ls^2 + C_1L_4R_1r_0s^2 + 2C_1L_4R_1r_0s}{2C_1C_4C_LL_4L_LR_1R_LR_0s^5 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1C_LL_4L_LR_1R_Ls^4 + C_1C_LL_4L_LR_1r_0s^4 + C_1C_LL_4R_1R_LR_0s^3 + 2C_1C_LL_LR_1R_LR_0s^3 + C_1L_4R_1R_Ls^2 + C_1L_4R_1r_0s^2 + 2C_1L_4R_1r_0s}$$

10.303 INVALID-ORDER-303 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + C_4 L_4 R_1 g_m r_o s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2}$$

10.304 INVALID-ORDER-304 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 r_o s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 r_o s^3 + C_4 C_L R_1 s^2}$$

10.305 INVALID-ORDER-305 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L R_1 R_L r_o s^2 + C_1 R_1 R_L s}$$

10.306 INVALID-ORDER-306 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L R_1 R_L s^2}$$

10.307 INVALID-ORDER-307 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_L R_1 s^2}$$

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

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s + 1)}{C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_4 L_L R_1 R_4 s^3 + 2C_1 C_4 L_L R_1 r_o s^3 + C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 r_o s^3 + C_1 L_L R_1 s^2}$$

10.309 INVALID-ORDER-309 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_L R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2 C_1 C_4 C_L R_1 R_L r_o s^3}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_L R_1 r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2 C_1 C_4 C_L R_1 R_L r_o s^3}$$

10.310 INVALID-ORDER-310 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_L r_o s^3 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 r_o s^3 + 2 C_1 C_4 L_L R_1 R_4 s^3}{C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_L r_o s^3 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 r_o s^3 + 2 C_1 C_4 L_L R_1 R_4 s^3}.$$

10.311 INVALID-ORDER-311 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 R_L s^2 + C_1 C_4 L_4 R_1 R_L s + C_1 C_4 L_4 R_1 R_L}{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_1 R_L s^2 + C_1 C_4 L_4 R_1 R_L s + C_1 C_4 L_4 R_1 R_L}$$

10.312 INVALID-ORDER-312 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L r_o s^3 +$$

10.313 INVALID-ORDER-313 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{L_4 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 r_o s^2 + 2C_1 L_4 R_1 R_L r_o s^2 + 2C_1 R_1 R_4 R_L r_o s + 2C_4 L_4 R_1 R_4 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_4 R_L s^2 + 2C_4 L_4 R_4 R_L r_o s^2 + L_4 R_1 R_4 R_L}$$

$$10.314 \quad \text{INVALID-ORDER-314} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_1 R_4 s (g_m r_o + 1)}{2C_1 C_4 L_4 R_1 R_4 r_o s^3 + C_1 C_L L_4 R_1 R_4 r_o s^3 + C_1 L_4 R_1 R_4 s^2 + 2C_1 L_4 R_1 r_o s^2 + 2C_1 R_1 R_4 r_o s + 2C_4 L_4 R_1 R_4 g_m r_o s^2 + 2C_4 L_4 R_1 R_4 s^2 + 2C_4 L_4 R_4 r_o s^2 + C_L L_4 R_1 R_4 g_m r_o s^2 + C_L L_4 R_1 R_4 s^2 + 2C_L R_1 R_4 r_o s^2 + 2C_L R_1 R_4 s^2 + 2C_L R_1 r_o s^2 + 2C_L R_1 s^2 + 2C_L r_o s^2 + 2C_L s^2 + 2}$$

$$10.315 \quad \text{INVALID-ORDER-315} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_4 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 R_1 R_4 R_L r_o s^3 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 r_o s^2 + 2C_1 L_4 R_1 R_L r_o s^2 + 2C_1 R_1 R_4 R_L r_o s + 2C_4 L_4 R_1 R_4 R_L g_m r_o s^2 + 2C_4 L_4 R_1 R_4 R_L s^2 + 2C_4 L_4 R_1 R_4 r_o s^2 + 2C_4 L_4 R_1 R_L r_o s^2 + 2C_4 L_4 R_1 R_L s^2 + 2C_4 L_4 R_1 r_o s^2 + 2C_4 L_4 R_1 s^2 + 2C_4 L_4 r_o s^2 + 2C_4 s^2 + 2}$$

$$10.316 \quad \text{INVALID-ORDER-316} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_4 R_1 R_4 r_o s^3 + C_1 C_L L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 R_1 R_4 r_o s^3 + 2C_1 C_L L_4 R_1 R_L r_o s^3 + 2C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 L_4 R_1 R_4 s^2 + 2C_1 L_4 R_1 r_o s^2 + 2C_1 L_4 R_1 s^2 + 2C_1 L_4 r_o s^2 + 2C_1 s^2 + 2}$$

$$10.317 \quad \text{INVALID-ORDER-317} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 L_4 R_1 R_4 r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 s^4 + 2C_1 C_L L_4 L_L R_1 r_o s^4 + C_1 C_L L_4 R_1 R_4 r_o s^3 + 2C_1 C_L L_L R_1 R_4 r_o s^3 + C_1 L_4 R_1 R_4 s^2 + 2C_1 L_4 R_1 r_o s^2 + 2C_1 L_4 R_1 s^2 + 2C_1 L_4 r_o s^2 + 2C_1 s^2 + 2}$$

$$10.318 \quad \text{INVALID-ORDER-318} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_4 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_4 L_L R_1 R_4 r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 r_o s^3 + C_1 L_4 L_L R_1 R_4 s^2 + 2C_1 L_4 L_L R_1 r_o s^2 + C_1 L_4 R_1 R_4 r_o s + 2C_1 L_L R_1 R_4 r_o s + 2C_4 L_4 L_L R_1 R_4 g_m r_o s^2 + 2C_4 L_4 L_L R_1 R_4 s^2 + 2C_4 L_4 L_L R_1 r_o s^2 + 2C_4 L_4 L_L R_1 s^2 + 2C_4 L_4 L_L r_o s^2 + 2C_4 L_4 L_L s^2 + 2C_4 s^2 + 2}$$

10.319 INVALID-ORDER-319 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1R_4r_0s^5 + 2C_1C_4C_LL_4R_1R_4R_Lr_0s^4 + 2C_1C_4L_4R_1R_4r_0s^3 + C_1C_LL_4L_LR_1R_4s^4 + 2C_1C_LL_4L_LR_1r_0s^4 + C_1C_LL_4R_1R_4R_Ls^3 + C_1C_LL_4R_1R_4r_0s^3 + 2C_1C}$$

10.320 INVALID-ORDER-320 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 L_4 L_L R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 R_L r_o s^3 + C_1 L_4 L_L R_1 R_4 R_L s^2 + C_1 L_4 L_L R_1 R_4 r_o s^2 + 2C_1 L_4 L_L R_1 R_L r_o s^2 + C_1 L_4 R_1 R_4 R_L r_o s + 2C_1 L_L R_1 R_4 R_L r_o s + 2C_4 L_4 L_L R_1 R_4 R_L r_o}{2C_1 C_4 L_4 L_L R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 R_L r_o s^3 + C_1 L_4 L_L R_1 R_4 R_L s^2 + C_1 L_4 L_L R_1 R_4 r_o s^2 + 2C_1 L_4 L_L R_1 R_L r_o s^2 + C_1 L_4 R_1 R_4 R_L r_o s + 2C_1 L_L R_1 R_4 R_L r_o s + 2C_4 L_4 L_L R_1 R_4 R_L r_o}$$

10.321 INVALID-ORDER-321 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1R_4R_Lr_os^5 + 2C_1C_4L_4L_LR_1R_4r_os^4 + 2C_1C_4L_4R_1R_4R_Lr_os^3 + C_1C_LL_4L_LR_1R_4R_Ls^4 + C_1C_LL_4L_LR_1R_4r_os^4 + 2C_1C_LL_4L_LR_1R_Lr_os^4 + 2C_1C_LL_LR_1R_4}{2C_1C_4C_LL_4L_LR_1R_4R_Lr_os^5 + 2C_1C_4L_4L_LR_1R_4r_os^4 + 2C_1C_4L_4R_1R_4R_Lr_os^3 + C_1C_LL_4L_LR_1R_4R_Ls^4 + C_1C_LL_4L_LR_1R_4r_os^4 + 2C_1C_LL_4L_LR_1R_Lr_os^4 + 2C_1C_LL_LR_1R_4}$$

10.322 INVALID-ORDER-322 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + 2C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_4 L_L R_1 R_4 r_o s^4 + 2C_1 C_L L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_4 R_1 R_4 R_L r_o s^3 + 2C_1 C_L L_L R_1 R_4 L_4}{2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + 2C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_4 L_L R_1 R_4 r_o s^4 + 2C_1 C_L L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_4 R_1 R_4 R_L r_o s^3 + 2C_1 C_L L_L R_1 R_4 L_4}$$

10.323 INVALID-ORDER-323 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{R_1}{C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2C_1 C_4 L_4 R_1 R_L r_o s^3 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_L r_o s + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 g_m r_o s + C_4 L_4 R_1 R_4 g_m r_o}$$

10.324 INVALID-ORDER-324 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1}{C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 R_1 r_o s^3 + C_1 C_L R_1 R_4 r_o s^2 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + 2C_1 R_1 r_o s + C_4 C_L L_4 R_1 R_4 g_m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^2 + C_4 C_L L_4 R_1 R_4 s + C_4 C_L L_4 R_1 R_4}$$

10.325 INVALID-ORDER-325 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1}{C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2C_1 C_4 L_4 R_1 R_L r_o s^3 + C_1 C_L L_4 R_1 R_L r_o s^3 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 R_1 R_4 s^2 + C_1 R_1 R_4 s + C_1 R_1 R_4}$$

10.326 INVALID-ORDER-326 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1}{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_4 R_1 r_o s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 r_o s^2 + C_1 R_1 R_4 s^2 + C_1 R_1 R_4 s + C_1 R_1 R_4}$$

10.327 INVALID-ORDER-327 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 R_4 s^2 + C_1 C_L L_L R_1 R_4 s + C_1 C_L L_L R_1 R_4}$$

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

$$H(s) = \frac{R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + C_1 C_L L_4 L_L R_1 r_o s^4 + C_1 C_L L_L R_1 R_4 r_o s^3 + C_1 L_4 L_L R_1 s^3 + C_1 L_4 R_1 r_o s^2 + C_1 L_L R_1 R_4 s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 R_4}$$

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

$$H(s) = \frac{R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 R_4 s^2 + C_1 C_L L_L R_1 R_4 s + C_1 C_L L_L R_1 R_4}$$

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

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_L R_1 R_4 R_L r_o}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + C_1 C_L L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_L R_1 R_4 R_L r_o}$$

10.331 INVALID-ORDER-331 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

[illegible]

10.332 INVALID-ORDER-332 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L r_o s^3}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L r_o s^3}$$

10.333 INVALID-ORDER-333 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L r_o s^3 + 2 C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2 C_1 R_1 R_L r_o s + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2 C_4 L_4 R_1 R_4 r_o s}{C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L r_o s^3 + 2 C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2 C_1 R_1 R_L r_o s + C_4 L_4 R_1 R_4 g_m r_o s^2 + C_4 L_4 R_1 R_4 s^2 + 2 C_4 L_4 R_1 R_4 r_o s}$$

10.334 INVALID-ORDER-334 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2 C_1 C_4 L_4 R_1 r_o s^3 + 2 C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L R_1 R_4 r_o s^2 + C_1 R_1 R_4 s + 2 C_1 R_1 r_o s + C_4 C_L L_4 R_1 R_4 q m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_1 R_4 r_o s^2 + C_4 C_L L_4 R_1 R_4 s^2 + C_4 C_L L_4 R_1 R_4 r_o s + C_4 C_L L_4 R_1 R_4)}{C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2 C_1 C_4 L_4 R_1 r_o s^3 + 2 C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L R_1 R_4 r_o s^2 + C_1 R_1 R_4 s + 2 C_1 R_1 r_o s + C_4 C_L L_4 R_1 R_4 q m r_o s^3 + C_4 C_L L_4 R_1 R_4 s^3 + C_4 C_L L_4 R_1 R_4 r_o s^2 + C_4 C_L L_4 R_1 R_4 s^2 + C_4 C_L L_4 R_1 R_4 r_o s + C_4 C_L L_4 R_1 R_4}$$

$$\mathbf{10.335 \quad INVALID-ORDER-335} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2C_1 C_4 L_4 R_1 R_L r_o s^3 + 2C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_4}{C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2C_1 C_4 L_4 R_1 R_L r_o s^3 + 2C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_4}$$

$$\mathbf{10.336 \quad INVALID-ORDER-336} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L R_1 R_4 R_L s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_4}{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L R_1 R_4 R_L s^2 + C_1 R_1 R_4 R_L s + C_1 R_1 R_4 r_o s + 2C_1 R_1 R_4}$$

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

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 R_4 s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 r_o s + 2C_1 L_L R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 R_4 s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 r_o s + 2C_1 L_L R_1}$$

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

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2C_1 C_4 L_L R_1 R_4 r_o s^3 + C_1 C_L L_L R_1 R_4 r_o s^3 + C_1 L_L R_1 R_4 s^2 + 2C_1 L_L R_1 r_o s^2 + C_1 L_L R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 r_o s^3 + 2C_1 C_4 L_L R_1 R_4 r_o s^3 + C_1 C_L L_L R_1 R_4 r_o s^3 + C_1 L_L R_1 R_4 s^2 + 2C_1 L_L R_1 r_o s^2 + C_1 L_L R_1}$$

$$\mathbf{10.339 \quad INVALID-ORDER-339} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 R_4 s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 r_o s + 2C_1 L_L R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_L R_1 R_4 s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 r_o s + 2C_1 L_L R_1}$$

$$10.340 \quad \text{INVALID-ORDER-340} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 r_o s^4 + 2C_1 C_4 L_4 L_L R_1 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L r_o s^3 + 2C_1 C_4 L_L R_1 R_4 R_L r_o s^3 + C_1 C_L L_L R_1 R_4 R_L r_o s^2 + C_1 C_L L_L R_1 R_4 R_L r_o s + C_1 C_L L_L R_1 R_4 R_L r_o}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 R_L s^2 + C_1 C_4 L_4 R_1 R_4 R_L s + C_1 C_4 L_4 R_1 R_4 R_L}$$

$$10.341 \quad \text{INVALID-ORDER-341} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 R_L s^2 + C_1 C_4 L_4 R_1 R_4 R_L s + C_1 C_4 L_4 R_1 R_4 R_L}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 R_L s^2 + C_1 C_4 L_4 R_1 R_4 R_L s + C_1 C_4 L_4 R_1 R_4 R_L}$$

$$10.342 \quad \text{INVALID-ORDER-342} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 R_L s^2 + C_1 C_4 L_4 R_1 R_4 R_L s + C_1 C_4 L_4 R_1 R_4 R_L}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 r_o s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 R_L s^2 + C_1 C_4 L_4 R_1 R_4 R_L s + C_1 C_4 L_4 R_1 R_4 R_L}$$

$$10.343 \quad \text{INVALID-ORDER-343} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L \right)$$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 R_1 s + 1)}{C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + 2C_1 R_1 R_L g_m r_o s + 2C_1 R_1 R_L s + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + R_4 g_m r_o + R_4 + 2R_L g_m r_o + 2R_L}$$

$$10.344 \quad \text{INVALID-ORDER-344} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 R_1 s + 1) (C_L L_L s^2 + 1)}{2C_1 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 R_1 g_m r_o s + 2C_1 R_1 s + C_1 R_4 s + 2C_1 r_o s + C_1 R_4 + 2C_1 r_o + C_1 R_4 + 2C_1 r_o}$$

10.345 INVALID-ORDER-345 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1) (C_1 R_1 s + 1)}{C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 L_L R_1 g_m r_o s^2 + 2C_1 L_L R_1 s^2 + C_1 L_L R_4 s^2 + 2C_1 L_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + C_1 R_4 r_o s + C_L L_L}$$

10.346 INVALID-ORDER-346 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + 2C_1 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_L R_1 R_L s^2 + C_1 C_L R_4 R_L s^2 + C_1 L_L R_1 R_4 g_m r_o s^2 + C_1 L_L R_1 R_4 s^2 + C_1 L_L R_4 R_L s^2 + C_1 L_L R_4 r_o s^2 + C_1 L_L R_4 s^2 + C_1 L_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + C_1 R_4 r_o s + C_L L_L}$$

10.347 INVALID-ORDER-347 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_4 R_L}{C_1 C_L L_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_L R_1 R_4 g_m r_o s^2 + C_1 L_L R_1 R_4 s^2 + 2C_1 L_L R_1 R_L g_m r_o s^2 + 2C_1 L_L R_1 R_L s^2 + C_1 L_L R_4 R_L s^2 + C_1 L_L R_4 r_o s^2 + C_1 L_L R_4 s^2 + C_1 L_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + C_1 R_4 r_o s + C_L L_L}$$

10.348 INVALID-ORDER-348 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_L R_4 R_L}{C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 R_L g_m r_o s^3 + 2C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_4 R_L s^3 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 C_L L_L R_L r_o s^3 + 2C_1 L_L R_1 g_m r_o s^2 + 2C_1 L_L R_1 s^2 + C_1 L_L R_4 g_m r_o s^2 + C_1 L_L R_4 s^2 + C_1 L_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + C_1 R_4 r_o s + C_L L_L}$$

10.349 INVALID-ORDER-349 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L L_L R_1 R_L g_m r_o s^3 + 2C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_4 R_L s^3 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_1 g_m r_o s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_4 g_m r_o s^2 + C_1 L_L R_4 s^2 + C_1 L_L r_o s^2 + C_1 R_1 R_4 g_m r_o s + C_1 R_1 R_4 s + C_1 R_4 r_o s + C_L L_L}$$

10.350 INVALID-ORDER-350 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)}{s(2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 r_o s + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.351 INVALID-ORDER-351 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)(C_L R_L s + 1)}{s(2C_1 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_4 C_L R_1 R_L s^2 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 r_o s + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)(C_L L_L s^2 + 1)}{s(2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 r_o s + C_1 C_L L_L s^2 + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.353 INVALID-ORDER-353 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (g_m r_o + 1)(C_1 R_1 s + 1)}{2C_1 C_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_L R_1 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_L L_L R_1 g_m r_o s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L r_o s^3 + C_1 L_L s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 r_o s + 2C_4 L_L g_m r_o s^2 + 2C_4 L_L s^2 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L}$$

10.354 INVALID-ORDER-354 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)(C_L R_L s + 1)}{s(2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_4 C_L R_1 R_L s^2 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 r_o s + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L R_L s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

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

$$H(s) = \frac{L_L R_L s (g_m r_o + 1)(C_1 R_1 s + 1)(C_L R_L s + 1)}{2C_1 C_4 L_L R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_L R_1 R_L s^3 + 2C_1 C_4 L_L R_L r_o s^3 + C_1 C_L L_L R_1 R_L g_m r_o s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_L r_o s^3 + C_1 L_L R_1 g_m r_o s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_L s^2 + C_1 L_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L}$$

10.356 INVALID-ORDER-356 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_RR_1R_Lg_mr_0s^4 + 2C_1C_4C_LL_RR_1R_Ls^4 + 2C_1C_4C_LL_RR_Lr_0s^4 + 2C_1C_4L_LR_1g_mr_0s^3 + 2C_1C_4L_LR_1s^3 + 2C_1C_4L_Lr_0s^3 + 2C_1C_4R_1R_Lg_mr_0s^2 + 2C_1C_4R_1R_Ls^2 + \dots}{\dots}$$

10.357 INVALID-ORDER-357 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + 2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_1 g_m r_o s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_L r_o s^3 + C_1 C_L L_L R_L s^3}{2C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + 2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_L R_1 g_m r_o s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_L r_o s^3 + C_1 C_L L_L R_L s^3}$$

10.358 INVALID-ORDER-358 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4C_LR_1R_4R_Ls^3 + 2C_1C_4C_LR_4R_Lr_0s^3 + 2C_1C_4R_1R_4g_mr_0s^2 + 2C_1C_4R_1R_4s^2 + 2C_1C_4R_4r_0s^2 + C_1C_LR_1R_4g_mr_0s^2 + C_1C_LR_1R_4s^2 + 2C_1C_LR_4r_0s^2 + 2C_1C_LR_4s^2 + 2C_1C_LR_1R_4r_0s^2 + 2C_1C_LR_1R_4s^2 + 2C_1C_LR_4r_0s^2 + 2C_1C_LR_4s^2}{2C_1C_4C_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4C_LR_1R_4R_Ls^3 + 2C_1C_4C_LR_4R_Lr_0s^3 + 2C_1C_4R_1R_4g_mr_0s^2 + 2C_1C_4R_1R_4s^2 + 2C_1C_4R_4r_0s^2 + C_1C_LR_1R_4g_mr_0s^2 + C_1C_LR_1R_4s^2 + 2C_1C_LR_4r_0s^2 + 2C_1C_LR_4s^2 + 2C_1C_LR_1R_4r_0s^2 + 2C_1C_LR_1R_4s^2 + 2C_1C_LR_4r_0s^2 + 2C_1C_LR_4s^2}$$

10.359 INVALID-ORDER-359 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L R_1 R_4 g_m r_o s^4 + 2C_1 C_4 C_L L R_1 R_4 s^4 + 2C_1 C_4 C_L L R_4 r_o s^4 + 2C_1 C_4 R_1 R_4 g_m r_o s^2 + 2C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_4 r_o s^2 + 2C_1 C_L L R_1 g_m r_o s^3 + 2C_1 C_L L R_1 s^3 + C}{\dots}$$

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

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1) (C_1 + C_2)}{2C_1 C_4 L_L R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_L R_1 R_4 s^3 + 2C_1 C_4 L_L R_4 r_o s^3 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 L_L R_1 g_m r_o s^2 + 2C_1 L_L R_1 s^2 + C_1 L_L R_4 s^2}$$

10.361 INVALID-ORDER-361 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

10.362 INVALID-ORDER-362 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{2C_1C_4L_LR_1R_4R_Lq_mr_0s^3 + 2C_1C_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_LR_4R_Lr_0s^3 + C_1C_LL_LR_1R_4R_Lq_mr_0s^3 + C_1C_LL_LR_1R_4R_Ls^3 + C_1C_LL_LR_4R_Lr_0s^3 + C_1LLR_1R_4q_mr_0s^2 + C_1L$$

10.363 INVALID-ORDER-363 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL R_1R_4R_Lg_mr_0s^4 + 2C_1C_4C_LL R_1R_4R_Ls^4 + 2C_1C_4C_LL R_4R_Lr_0s^4 + 2C_1C_4L_L R_1R_4g_mr_0s^3 + 2C_1C_4L_L R_1R_4s^3 + 2C_1C_4L_L R_4r_0s^3 + 2C_1C_4R_1R_4R_Lg_mr_0s^2}{2C_1C_4C_LL R_1R_4R_Lg_mr_0s^4 + 2C_1C_4C_LL R_1R_4R_Ls^4 + 2C_1C_4C_LL R_4R_Lr_0s^4 + 2C_1C_4L_L R_1R_4g_mr_0s^3 + 2C_1C_4L_L R_1R_4s^3 + 2C_1C_4L_L R_4r_0s^3 + 2C_1C_4R_1R_4R_Lg_mr_0s^2}.$$

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

$$H(s) = \frac{2C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + 2C_1 C_4 R_1 R_4 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_4 R_L s^2 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 +$$

10.365 INVALID-ORDER-365 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)(C_4 R_4 s + 1)}{s(C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L r_o s + C_1 + C_4 C_L)}$$

10.366 INVALID-ORDER-366 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 R_1 R_4 g_m r_o s^2 + C_1 C_4 R_1 R_4 s^2 + 2 C_1 C_4 R_1 R_L g_m r_o s^2 + 2 C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R$$

10.367 INVALID-ORDER-367 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \infty, \infty, R_4 + \frac{1}{C_{4s}}, \infty, R_L + \frac{1}{C_{Ls}} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 + C_L)}{s(C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + 2C_1 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_4 C_L R_1 R_L s^2 + C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 + C_1 C_4 R_4 + C_1 C_L + C_4 R_1 + C_4 R_4 + C_L R_1 + C_L R_4 + R_1 R_4)}$$

10.368 INVALID-ORDER-368 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 + C_2)}{s[2C_1 C_4 C_L L_L R_1 q_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L R_1 R_4 q_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 R_1 q_m r_o s + 2C_1 C_4] + C_2}$$

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

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_4 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_4 R_1 R_4 g_m r_o s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_4 R_1 R_4 s^2}{C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_4 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_4 R_1 R_4 g_m r_o s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_4 R_1 R_4 s^2}$$

10.370 INVALID-ORDER-370 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(2C_1C_4C_L L_L R_1 g_m r_o s^3 + 2C_1C_4C_L L_L R_1 s^3 + C_1C_4C_L L_L R_4 s^3 + 2C_1C_4C_L L_L r_o s^3 + C_1C_4C_L R_1 R_4 g_m r_o s^2 + C_1C_4C_L R_1 R_4 s^2 + 2C_1C_4C_L R_1 R_L g_m r_o s^2 + 2C_1C_4C_L R_1 R_L$$

10.371 INVALID-ORDER-371 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_L R_1 R_4 g_m r_o s^3 + C_1 C_4 L_L R_1 R_4 s^3 + 2 C_1 C_4 L_L R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_L R_1 R_L s^3 + C_1}{C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_L R_1 R_4 g_m r_o s^3 + C_1 C_4 L_L R_1 R_4 s^3 + 2 C_1 C_4 L_L R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_L R_1 R_L s^3 + C_1}$$

10.372 INVALID-ORDER-372 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \infty, \infty, R_4 + \frac{1}{C_{4s}}, \infty, \frac{L_L s}{C_{LL} s^2 + 1} + R_L \right)$

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

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 C_L L_L R_L s^4}{C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 C_L L_L R_L s^4}$$

10.374 INVALID-ORDER-374 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 R_1 s + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_4 R_1 g_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + C_4 L}$$

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

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)(C_4 L_4 s^2 + 1)}{s(C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 L_4 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 r_o s + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L r_o s + C_1 + C_4 C_L)}$$

10.376 INVALID-ORDER-376 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

$$H(s) = \frac{(g_m r_o + 1)(C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7 + C_8 + C_9 + C_{10})}{s(C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_4 C_L R_1 R_L s^2 + 2C_1 C_4 C_L R_L r_o s^2 + C_1 C_4 L_4 s^2 + 2C_1 C_4 R_1 R_L s + C_1 C_4 R_L r_o + C_1 C_4 R_1 + C_1 C_4 + C_2 C_3 C_4 C_L L_4 R_1 g_m r_o s^3 + C_2 C_3 C_4 C_L L_4 R_1 s^3 + C_2 C_3 C_4 C_L L_4 R_L s^3 + C_2 C_3 C_4 C_L L_4 r_o s^3 + 2C_2 C_3 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_2 C_3 C_4 C_L R_1 R_L s^2 + 2C_2 C_3 C_4 C_L R_L r_o s^2 + C_2 C_3 C_4 L_4 s^2 + 2C_2 C_3 C_4 R_1 R_L s + C_2 C_3 C_4 R_L r_o + C_2 C_3 C_4 R_1 + C_2 C_3 C_4 + C_3 C_4 C_L L_4 R_1 g_m r_o s^3 + C_3 C_4 C_L L_4 R_1 s^3 + C_3 C_4 C_L L_4 R_L s^3 + C_3 C_4 C_L L_4 r_o s^3 + 2C_3 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_3 C_4 C_L R_1 R_L s^2 + 2C_3 C_4 C_L R_L r_o s^2 + C_3 C_4 L_4 s^2 + 2C_3 C_4 R_1 R_L s + C_3 C_4 R_L r_o + C_3 C_4 R_1 + C_3 C_4 + C_4 C_L L_4 R_1 g_m r_o s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^3 + C_4 C_L L_4 r_o s^3 + 2C_4 C_L R_1 R_L g_m r_o s^2 + 2C_4 C_L R_1 R_L s^2 + 2C_4 C_L R_L r_o s^2 + C_4 L_4 s^2 + 2C_4 R_1 R_L s + C_4 R_L r_o + C_4 R_1 + C_4 + C_5 C_6 C_7 C_8 C_9 C_{10} s^6 + C_5 C_6 C_7 C_8 C_9 s^5 + C_5 C_6 C_7 C_8 s^4 + C_5 C_6 C_7 s^3 + C_5 C_6 s^2 + C_5 s + C_6 C_7 C_8 C_9 C_{10} s^6 + C_6 C_7 C_8 C_9 s^5 + C_6 C_7 C_8 s^4 + C_6 C_7 s^3 + C_6 s^2 + C_6 s + C_7 C_8 C_9 C_{10} s^6 + C_7 C_8 C_9 s^5 + C_7 C_8 s^4 + C_7 s^3 + C_7 s^2 + C_7 s + C_8 C_9 C_{10} s^6 + C_8 C_9 s^5 + C_8 s^4 + C_8 s^3 + C_8 s^2 + C_8 s + C_9 C_{10} s^6 + C_9 s^5 + C_9 s^4 + C_9 s^3 + C_9 s^2 + C_9 s + C_{10} s^6 + C_{10} s^5 + C_{10} s^4 + C_{10} s^3 + C_{10} s^2 + C_{10} s)}$$

10.378 INVALID-ORDER-378 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1}{s(C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 L_4 s^2 + 2C_1 C_4 R_1 g$$

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

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 L_L R_1 g_m r_o s^3 + 2 C_1 C_4 L_L R_1 s^3}{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 L_L R_1 g_m r_o s^3 + 2 C_1 C_4 L_L R_1 s^3}$$

10.380 INVALID-ORDER-380 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2 C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2 C_1 C_4 C_L L_L R_1 s^3 + 2 C_1 C_4 C_L L_L r_o s^3 + 2 C_1 C_4 C_L L_L s^2 + C_1 C_4 C_L L_L R_1 s^2 + C_1 C_4 C_L L_L r_o s^2 + C_1 C_4 C_L L_L s}{s^4 + C_1 C_4 C_L L_4 L_L s^3 + C_1 C_4 C_L L_4 R_1 g_m r_o s^2 + C_1 C_4 C_L L_4 R_1 s^2 + C_1 C_4 C_L L_4 R_L s^2 + C_1 C_4 C_L L_4 r_o s^2 + 2 C_1 C_4 C_L L_L R_1 g_m r_o s^2 + 2 C_1 C_4 C_L L_L R_1 s^2 + 2 C_1 C_4 C_L L_L r_o s^2 + 2 C_1 C_4 C_L L_L s + C_1 C_4 C_L L_L R_1 + C_1 C_4 C_L L_L r_o + C_1 C_4 C_L L_L}$$

10.381 INVALID-ORDER-381 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 g_m r_o s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_1 R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 g_m r_o s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_1 R_L s^4}$$

10.382 INVALID-ORDER-382 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 C_L L_L R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4 C_L L_L R_L s^4}.$$

10.383 INVALID-ORDER-383 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + 2 C_1 C_4 C_L$$

10.384 INVALID-ORDER-384 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 L_4 R_1 g_m r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + 2C_1 R_1 R_L g_m r_o s + 2C_1 R_1 R_L s + 2C_1 R_L r_o s + 2C_4}$$

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

$$H(s) = \frac{L_4 s (g_m r_o + 1) (C_1 R_1 s + 1)}{2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 R_1 g_m r_o s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_4 r_o s^3 + C_1 L_4 s^2 + 2C_1 R_1 g_m r_o s + 2C_1 R_1 s + 2C_1 r_o s + 2C_4 L_4 g_m r_o s^2 + 2C_4 L_4 s^2 + 2C_4 R_1 s + 2C_4 r_o s + 2C_4}$$

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

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1) (C_{L_1} C_{L_2} C_{L_3} C_{L_4})}{2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_4 R_1 R_L g_m r_o s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_4 R_L r_o s^3 + C_1 L_4 R_1 g_m r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 R_L s^2 +}$$

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

$$H(s) = \frac{2C_1C_4C_LL_4R_1R_Lg_mr_0s^4 + 2C_1C_4C_LL_4R_1R_Ls^4 + 2C_1C_4C_LL_4R_Lr_0s^4 + 2C_1C_4L_4R_1g_mr_0s^3 + 2C_1C_4L_4R_1s^3 + 2C_1C_4L_4r_0s^3 + C_1C_LL_4R_1g_mr_0s^3 + C_1C_LL_4R_1s^3 + C_1C_L$$

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

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1s^5 + 2C_1C_4C_LL_4L_LR_0s^5 + 2C_1C_4L_4R_1g_mr_0s^3 + 2C_1C_4L_4R_1s^3 + 2C_1C_4L_4r_0s^3 + C_1C_LL_4L_4L^4 + C_1C_LL_4L_4R_1g_mr_0s^3 + C_1C_LL_4L_4L^4}{2C_1C_4C_LL_4L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1s^5 + 2C_1C_4C_LL_4L_LR_0s^5 + 2C_1C_4L_4R_1g_mr_0s^3 + 2C_1C_4L_4R_1s^3 + 2C_1C_4L_4r_0s^3 + C_1C_LL_4L_4L^4 + C_1C_LL_4L_4R_1g_mr_0s^3 + C_1C_LL_4L_4L^4}$$

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

$$H(s) = \frac{L_4 L_L s (g_m r_o + 1) (C_1 R_1 s + C_2)}{2C_1 C_4 L_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_4 L_L R_1 s^3 + 2C_1 C_4 L_4 L_L r_o s^3 + C_1 C_L L_4 L_L R_1 g_m r_o s^3 + C_1 C_L L_4 L_L R_1 s^3 + C_1 C_L L_4 L_L r_o s^3 + C_1 L_4 L_L s^2 + C_1 L_4 R_1 g_m r_o s + C_1 L_4 R_1 s + C_1}.$$

10.390 INVALID-ORDER-390 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 L_4 R_1 s^3}{2C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 L_4 R_1 r_o s^3 + 2C_1 C_4 L_4 R_1 s^3}$$

10.391 INVALID-ORDER-391 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_4L_LR_1R_Lg_mr_0s^3 + 2C_1C_4L_4L_LR_1R_Ls^3 + 2C_1C_4L_4L_LR_Lr_0s^3 + C_1C_LL_4L_LR_1R_Lg_mr_0s^3 + C_1C_LL_4L_LR_1R_Ls^3 + C_1C_LL_4L_LR_Lr_0s^3 + C_1L_4L_LR_1g_mr_0s^2 + C_1L_4L_LR_1R_Ls^2 + C_1L_4L_LR_Lr_0s^2 + C_1L_4L_LR_Ls^2}{2C_1C_4L_4L_LR_1R_Lg_mr_0s^3 + 2C_1C_4L_4L_LR_1R_Ls^3 + 2C_1C_4L_4L_LR_Lr_0s^3 + C_1C_LL_4L_LR_1R_Lg_mr_0s^3 + C_1C_LL_4L_LR_1R_Ls^3 + C_1C_LL_4L_LR_Lr_0s^3 + C_1L_4L_LR_1g_mr_0s^2 + C_1L_4L_LR_1R_Ls^2 + C_1L_4L_LR_Lr_0s^2 + C_1L_4L_LR_Ls^2}.$$

10.392 INVALID-ORDER-392 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_L L_4 L_L R_1 R_L g_m r_o s^5 + 2C_1C_4C_L L_4 L_L R_1 R_L s^5 + 2C_1C_4C_L L_4 L_L R_L r_o s^5 + 2C_1C_4L_4 L_L R_1 g_m r_o s^4 + 2C_1C_4L_4 L_L R_1 s^4 + 2C_1C_4L_4 L_L r_o s^4 + 2C_1C_4L_4 R_1 R_L g_m r_o s^3 +$$

10.393 INVALID-ORDER-393 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_L L_4 L_L R_1 R_L g_m r_o s^5 + 2C_1C_4C_L L_4 L_L R_1 R_L s^5 + 2C_1C_4C_L L_4 L_L R_L r_o s^5 + 2C_1C_4L_4R_1R_L g_m r_o s^3 + 2C_1C_4L_4R_1R_L s^3 + 2C_1C_4L_4R_L r_o s^3 + C_1C_L L_4 L_L R_1 g_m r_o s^4 +$$

10.394 INVALID-ORDER-394 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 R_1 s + 1) (C_4 L_4 s^2}{C_1 C_4 L_4 R_1 g_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 R_1 R_4 g_m r_o s^2 + C_1 C_4 R_1 R_4 s^2 + 2 C_1 C_4 R_1 R_L g_m r_o s^2 + 2 C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o$$

10.395 INVALID-ORDER-395 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 R_1 s + 1)(C_2 R_2 s + 1)}{s(C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + C_1 C_4 L_4 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + C_1 C_4)}.$$

10.396 INVALID-ORDER-396 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 g_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_1 R_L g_m r_o s^2 + C_1 C_4 L_4 R_1 R_L s^2 + C_1 C_4 L_4 R_L r_o s^2 + C_1 C_4 L_4 R_L s^2 + C_1 C_4 L_4 R_L r_o s + C_1 C_4 L_4 R_L s + C_1 C_4 L_4 R_L r_o}{C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_4 R_1 g_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_1 R_L g_m r_o s^2 + C_1 C_4 L_4 R_1 R_L s^2 + C_1 C_4 L_4 R_L r_o s^2 + C_1 C_4 L_4 R_L s^2 + C_1 C_4 L_4 R_L r_o s + C_1 C_4 L_4 R_L s + C_1 C_4 L_4 R_L r_o}$$

10.397 INVALID-ORDER-397 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + 2 C_1 C_4 C_L R_1 R_L g_m r_o s^2 + 2 C_1 C_4 C_L R_1 R_L s^2 +$$

10.398 INVALID-ORDER-398 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L L_L s^3)}$$

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

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 r_o s^4 + C_1 C_4 L_4 s^4}$$

10.400 INVALID-ORDER-400 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L L_L s^3)}$$

10.401 INVALID-ORDER-401 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 r_o s^4 + C_1 C_4 L_4 s^4}$$

10.402 INVALID-ORDER-402 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 r_o s^4 + C_1 C_4 L_4 s^4}$$

10.403 INVALID-ORDER-403 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_L s^4}$$

10.404 INVALID-ORDER-404 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, R_L \right)$

$$H(s) = \frac{L_4 R_4}{2C_1 C_4 L_4 R_1 R_4 R_L q_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_4 R_L s^3 + 2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 L_4 R_1 R_4 q_m r_o s^2 + C_1 L_4 R_1 R_4 s^2 + 2C_1 L_4 R_1 R_L q_m r_o s^2 + 2C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_4 R_L s^2 + C_1 L_4 R_1 R_4 r_o s}.$$

10.405 INVALID-ORDER-405 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 R_4 s (g_m r_o + 1) (C_1 + C_2)}{2C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_4 R_1 R_4 g_m r_o s^3 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 C_L L_4 R_4 r_o s^3 + 2C_1 L_4 R_1 g_m r_o s^2 + 2C_1 L_4 R_1 s^2 + C_1 L_4 R_4 s^2 +}$$

10.406 INVALID-ORDER-406 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_4R_1R_4R_Lq_mr_0s^3 + 2C_1C_4L_4R_1R_4R_Ls^3 + 2C_1C_4L_4R_4R_LR_0s^3 + C_1C_LL_4R_1R_4R_Lq_mr_0s^3 + C_1C_LL_4R_1R_4R_Ls^3 + C_1C_LL_4R_4R_LR_0s^3 + C_1L_4R_1R_4q_mr_0s^2 + C_1L_4R_1R_4R_Ls^2 + C_1L_4R_1R_4R_LR_0s^2 + C_1L_4R_1R_4R_Lq_mr_0s + C_1L_4R_1R_4R_Ls + C_1L_4R_1R_4R_LR_0s + C_1L_4R_1R_4R_Lq_mr_0 + C_1L_4R_1R_4R_L + C_1L_4R_1R_4R_LR_0}{2C_1C_4L_4R_1R_4R_Lq_mr_0s^3 + 2C_1C_4L_4R_1R_4R_Ls^3 + 2C_1C_4L_4R_4R_LR_0s^3 + C_1C_LL_4R_1R_4R_Lq_mr_0s^3 + C_1C_LL_4R_1R_4R_Ls^3 + C_1C_LL_4R_4R_LR_0s^3 + C_1L_4R_1R_4q_mr_0s^2 + C_1L_4R_1R_4R_Ls^2 + C_1L_4R_1R_4R_LR_0s^2 + C_1L_4R_1R_4R_Lq_mr_0s + C_1L_4R_1R_4R_Ls + C_1L_4R_1R_4R_LR_0s + C_1L_4R_1R_4R_Lq_mr_0 + C_1L_4R_1R_4R_L + C_1L_4R_1R_4R_LR_0}.$$

10.407 INVALID-ORDER-407 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4C_LL_4R_1R_4R_Ls^4 + 2C_1C_4C_LL_4R_4R_LR_0s^4 + 2C_1C_4L_4R_1R_4g_mr_0s^3 + 2C_1C_4L_4R_1R_4s^3 + 2C_1C_4L_4R_4r_0s^3 + C_1C_LL_4R_1R_4g_mr_0s^3 + C_1C_LL_4R_1R_4s^3 + C_1C_LL_4R_4r_0s^3 + C_1C_LL_4s^3}{2C_1C_4C_LL_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4C_LL_4R_1R_4R_Ls^4 + 2C_1C_4C_LL_4R_4R_LR_0s^4 + 2C_1C_4L_4R_1R_4g_mr_0s^3 + 2C_1C_4L_4R_1R_4s^3 + 2C_1C_4L_4R_4r_0s^3 + C_1C_LL_4R_1R_4g_mr_0s^3 + C_1C_LL_4R_1R_4s^3 + C_1C_LL_4R_4r_0s^3 + C_1C_LL_4s^3}.$$

10.408 INVALID-ORDER-408 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_LR_1R_4g_mr_0s^5 + 2C_1C_4C_LL_LR_1R_4s^5 + 2C_1C_4C_LL_LR_4r_0s^5 + 2C_1C_4L_4R_1R_4g_mr_0s^3 + 2C_1C_4L_4R_1R_4s^3 + 2C_1C_4L_4R_4r_0s^3 + 2C_1C_LL_LL_LR_1g_mr_0s^4 + 2C_1C_LL_LL_LR_1s^4 + 2C_1C_LL_LL_LR_4r_0s^4 + 2C_1C_LL_LL_LR_1R_4g_mr_0s^2 + 2C_1C_LL_LL_LR_1s^2 + 2C_1C_LL_LL_LR_4r_0s^2 + 2C_1C_LL_LL_LR_1R_4s^2 + 2C_1C_LL_LL_LR_1R_4g_mr_0s + 2C_1C_LL_LL_LR_1s + 2C_1C_LL_LL_LR_4r_0s + 2C_1C_LL_LL_LR_1R_4 + 2C_1C_LL_LL_LR_1 + 2C_1C_LL_LL_LR_4r_0}{2C_1C_4C_LL_LL_LR_1R_4g_mr_0s^5 + 2C_1C_4C_LL_LL_LR_1R_4s^5 + 2C_1C_4C_LL_LL_LR_4r_0s^5 + 2C_1C_4L_4R_1R_4g_mr_0s^3 + 2C_1C_4L_4R_1R_4s^3 + 2C_1C_4L_4R_4r_0s^3 + 2C_1C_LL_LL_LL_LR_1g_mr_0s^4 + 2C_1C_LL_LL_LL_LR_1s^4 + 2C_1C_LL_LL_LL_LR_4r_0s^4 + 2C_1C_LL_LL_LL_LR_1R_4g_mr_0s^2 + 2C_1C_LL_LL_LL_LR_1s^2 + 2C_1C_LL_LL_LL_LR_4r_0s^2 + 2C_1C_LL_LL_LL_LR_1R_4s^2 + 2C_1C_LL_LL_LL_LR_1R_4g_mr_0s + 2C_1C_LL_LL_LL_LR_1s + 2C_1C_LL_LL_LL_LR_4r_0s + 2C_1C_LL_LL_LL_LR_1R_4 + 2C_1C_LL_LL_LL_LR_1 + 2C_1C_LL_LL_LL_LR_4r_0}.$$

10.409 INVALID-ORDER-409 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_4 L_L R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_4 L_L R_1 R_4 s^3 + 2C_1 C_4 L_4 L_L R_4 r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_4 L_L R_1 R_4 s^3 + C_1 C_L L_4 L_L R_4 r_o s^3 + 2C_1 L_4 L_L R_1 g_m r_o s^2 + 2C_1 L_4$$

10.410 INVALID-ORDER-410 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1R_4g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1R_4s^5 + 2C_1C_4C_LL_4L_LR_4r_0s^5 + 2C_1C_4C_LL_4R_1R_4RLg_mr_0s^4 + 2C_1C_4C_LL_4R_1R_4RLs^4 + 2C_1C_4C_LL_4R_4RLr_0s^4 + 2C_1C_4L_4L_4R_4RLr_0s^4}{2C_1C_4C_LL_4L_LR_1R_4g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1R_4s^5 + 2C_1C_4C_LL_4L_LR_4r_0s^5 + 2C_1C_4C_LL_4R_1R_4RLg_mr_0s^4 + 2C_1C_4C_LL_4R_1R_4RLs^4 + 2C_1C_4C_LL_4R_4RLr_0s^4 + 2C_1C_4L_4L_4R_4RLr_0s^4}$$

10.411 INVALID-ORDER-411 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_4L_LR_1R_4R_Lg_mr_os^3 + 2C_1C_4L_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_4L_LR_4R_Lr_os^3 + C_1C_LL_4L_LR_1R_4R_Lg_mr_os^3 + C_1C_LL_4L_LR_1R_4R_Ls^3 + C_1C_LL_4L_LR_4R_Lr_os^3 + C_1L_4L_LR_1R_4R_Lg_mr_os^3 + C_1L_4L_LR_1R_4R_Ls^3 + C_1L_4L_LR_4R_Lr_os^3 + C_1L_4L_LR_4R_Ls^3}{2C_1C_4L_4L_LR_1R_4R_Lg_mr_os^3 + 2C_1C_4L_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_4L_LR_4R_Lr_os^3 + C_1C_LL_4L_LR_1R_4R_Lg_mr_os^3 + C_1C_LL_4L_LR_1R_4R_Ls^3 + C_1C_LL_4L_LR_4R_Lr_os^3 + C_1L_4L_LR_1R_4R_Lg_mr_os^3 + C_1L_4L_LR_1R_4R_Ls^3 + C_1L_4L_LR_4R_Lr_os^3 + C_1L_4L_LR_4R_Ls^3}$$

10.412 INVALID-ORDER-412 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + 2C_1C_4C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1C_4C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1C_4L_4 L_L R_1 R_4 g_m r_o s^4 + 2C_1C_4L_4 L_L R_1 R_4 s^4 + 2C_1C_4L_4 L_L R_4 r_o s^4 + 2C_1C_4L_4 L_L R_4 s^4 + 2C_1C_4L_4 L_L R_4 R_L r_o s^4 + 2C_1C_4L_4 L_L R_4 R_L s^4 + 2C_1C_4L_4 L_L R_4 R_L s^4}{2C_1C_4C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + 2C_1C_4C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1C_4C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1C_4L_4 L_L R_1 R_4 g_m r_o s^4 + 2C_1C_4L_4 L_L R_1 R_4 s^4 + 2C_1C_4L_4 L_L R_4 r_o s^4 + 2C_1C_4L_4 L_L R_4 s^4 + 2C_1C_4L_4 L_L R_4 R_L r_o s^4 + 2C_1C_4L_4 L_L R_4 R_L s^4 + 2C_1C_4L_4 L_L R_4 R_L s^4}$$

$$10.413 \quad \text{INVALID-ORDER-413} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_4 R_L s^3 + 2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 R_4 R_L r_o s^3}{2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_4 R_L s^3 + 2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_4 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 R_4 R_L r_o s^3}$$

$$10.414 \quad \text{INVALID-ORDER-414} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 L_4 R_1 g_m r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 R_4 g_m r_o s^2 + C_1 L_4 R_4 s^2 + C_1 L_4 R_L g_m r_o s^2 + C_1 L_4 R_L s^2}{C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 L_4 R_1 g_m r_o s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 R_4 g_m r_o s^2 + C_1 L_4 R_4 s^2 + C_1 L_4 R_L g_m r_o s^2 + C_1 L_4 R_L s^2}$$

$$10.415 \quad \text{INVALID-ORDER-415} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 R_1 g_m r_o s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_4 R_4 g_m r_o s^3 + C_1 C_L L_4 R_4 s^3 + C_1 C_L L_4 R_L g_m r_o s^3 + C_1 C_L L_4 R_L s^3}{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_4 R_1 g_m r_o s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_4 R_4 g_m r_o s^3 + C_1 C_L L_4 R_4 s^3 + C_1 C_L L_4 R_L g_m r_o s^3 + C_1 C_L L_4 R_L s^3}$$

$$10.416 \quad \text{INVALID-ORDER-416} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L g_m r_o s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_L R_L g_m r_o s^3 + C_1 C_4 L_4 R_L R_L s^3}{C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L g_m r_o s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_L R_L g_m r_o s^3 + C_1 C_4 L_4 R_L R_L s^3}$$

$$10.417 \quad \text{INVALID-ORDER-417} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L g_m r_o s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_L R_L g_m r_o s^3 + C_1 C_4 L_4 R_L R_L s^3}{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L g_m r_o s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_L R_L g_m r_o s^3 + C_1 C_4 L_4 R_L R_L s^3}$$

10.418 INVALID-ORDER-418 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_4 R_4 s^4}{\dots}$$

10.419 INVALID-ORDER-419 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_4 L_L R_1 g_m r_o s^4 + 2C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_1}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_4 L_L R_1 g_m r_o s^4 + 2C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L r_o s^4 + C_1 C_4 L_4 R_1}$$

10.420 INVALID-ORDER-420 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1g_mr_os^5 + 2C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4L_LR_4s^5 + 2C_1C_4C_LL_4L_LR_os^5 + C_1C_4C_LL_4R_1R_4g_mr_os^4 + C_1C_4C_LL_4R_1R_4s^4 + 2C_1C_4C_LL_4R_1R_Lg_mr_os^4 +$$

10.421 INVALID-ORDER-421 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L s^4}$$

10.422 INVALID-ORDER-422 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L R_4 r_o s^5 + C_1 C_4 C_L L_4 L_L R_L R_4 s^5}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L R_4 r_o s^5 + C_1 C_4 C_L L_4 L_L R_L R_4 s^5}$$

10.423 INVALID-ORDER-423 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_4 s^5}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_4 s^5}$$

10.424 INVALID-ORDER-424 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + 2 C_1 C_4 R_1 R_4 R_L g_m r_o s^2 + 2 C_1 C_4 R_1 R_4 R_L s^2 + 2 C_1 C_4 R_1 R_4 s^2 + 2 C_1 C_4 R_1 R_L s^2 + 2 C_1 C_4 R_1 s^2 + 2 C_1 C_4 R_4 s^2 + 2 C_1 C_4 R_L s^2 + 2 C_1 C_4 s^2 + C_1 C_4}{C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + 2 C_1 C_4 R_1 R_4 R_L g_m r_o s^2 + 2 C_1 C_4 R_1 R_4 R_L s^2 + 2 C_1 C_4 R_1 R_4 s^2 + 2 C_1 C_4 R_1 R_L s^2 + 2 C_1 C_4 R_1 s^2 + 2 C_1 C_4 R_4 s^2 + 2 C_1 C_4 R_L s^2 + 2 C_1 C_4 s^2 + C_1 C_4}$$

$$\text{10.425} \quad \text{INVALID-ORDER-425} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_1 R_4 g_m r_o s^2 + 2C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_4 s^2}{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + 2C_1 C_4 R_1 R_4 g_m r_o s^2 + 2C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_4 s^2}$$

$$10.426 \quad \text{INVALID-ORDER-426} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4$$

10.427 INVALID-ORDER-427 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2 C_1 C_4 C_L L_4 R_L r_o s^4 + 2 C_1 C_4 C_L L_4 R_L s^4}{C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2 C_1 C_4 C_L L_4 R_L r_o s^4 + 2 C_1 C_4 C_L L_4 R_L s^4}$$

10.428 INVALID-ORDER-428 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

10.429 INVALID-ORDER-429 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

10.430 INVALID-ORDER-430 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_4L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4L_LR_4s^5 + 2C_1C_4C_LL_4L_LR_0s^5 + C_1C_4C_LL_4R_1R_4g_mr_0s^4 + C_1C_4C_LL_4R_1R_4s^4 + 2C_1C_4C_LL_4R_1R_Lg_mr_0s^4 +$$

10.431 INVALID-ORDER-431 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L s^4 + 2 C_1 C_4 L_4 L_L R_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_4 R_L s^4 + 2 C_1 C_4 L_4 L_L R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L R_L r_o s^4 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L R_L g_m r_o s^3 + C_1 C_4 L_4 L_L R_L s^3 + C_1 C_4 L_4 L_L R_L g_m r_o s^2 + C_1 C_4 L_4 L_L R_L s^2 + C_1 C_4 L_4 L_L R_L g_m r_o s + C_1 C_4 L_4 L_L R_L s + C_1 C_4 L_4 L_L R_L g_m r_o + C_1 C_4 L_4 L_L R_L}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_4 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_1 R_L s^4 + 2 C_1 C_4 L_4 L_L R_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_4 R_L s^4 + 2 C_1 C_4 L_4 L_L R_L g_m r_o s^4 + 2 C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L R_L r_o s^4 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_4 L_4 L_L R_L g_m r_o s^3 + C_1 C_4 L_4 L_L R_L s^3 + C_1 C_4 L_4 L_L R_L g_m r_o s^2 + C_1 C_4 L_4 L_L R_L s^2 + C_1 C_4 L_4 L_L R_L g_m r_o s + C_1 C_4 L_4 L_L R_L s + C_1 C_4 L_4 L_L R_L g_m r_o + C_1 C_4 L_4 L_L R_L}$$

10.432 INVALID-ORDER-432 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

10.433 INVALID-ORDER-433 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_4 s^5}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_4 L_L R_4 s^5}$$

10.434 INVALID-ORDER-434 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L R_4 r_o s^2 + 2 C_1 L_1 g_m r_o s^2 + 2 C_1 L_1 s^2 + C_1 R_4 s + 2 C_1 r_o s + C_L R_4 g_m r_o s + C_L R_4 s + 2 g_m r_o + 2}$$

10.435 INVALID-ORDER-435 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L R_4 R_L r_o s^2 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2 C_1 L_1 R_L g_m r_o s^2 + 2 C_1 L_1 R_L s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2 C_1 R_L r_o s + C_L R_4}$$

10.436 INVALID-ORDER-436 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2 C_1 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_L L_1 R_L s^3 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 r_o s^2 + 2 C_1 C_L R_L r_o s^2 + 2 C_1 L_1 g_m r_o s^2 + 2 C_1 L_1 s^2 + C_1 R_4 s + 2 C_1 r_o s}$$

10.437 INVALID-ORDER-437 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4(g_m r_o + 1)(C_1 L_1 s^2 + 1)(C_L L_L s^2 + 1)}{2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 r_o s^2 + 2C_1 L_1 g_m r_o s^2 + 2C_1 L_1 s^2 + C_1 R_4 s + 2C_1 r_o s}$$

10.438 INVALID-ORDER-438 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 L_1 L_L g_m r_o s^3 + 2C_1 L_1 L_L s^3 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + C_1 L_L R_4 s^2 + 2C_1 L_L r_o s^2 + C_1 R_4 r_o s + C_L L_L}$$

10.439 INVALID-ORDER-439 $Z(s) = \left(L_1 s + \frac{1}{C_{1s}}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_{Ls}} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_L s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + C_1 C_L s^2 + 1}$$

10.440 INVALID-ORDER-440 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_4 R_L}{C_1 C_L L_1 L_L R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_1 L_L R_4 g_m r_o s^3 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L R_L g_m r_o s^3 + 2C_1 L_1 L_L R_L s^3 + C_1 L_1 R_4 R_L g_m r_o s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 s^2 + C_1}$$

10.441 INVALID-ORDER-441 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

10.442 INVALID-ORDER-442 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2 C_1 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_L R_4 R_L s^3 + C_1 C_L L_L R_4 r_o s^3 +$$

10.443 INVALID-ORDER-443 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + 2C_1 C_4 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_L s + C_1 r_o s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + g_m r_o + 1}$$

10.444 INVALID-ORDER-444 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1) (C_1 L_1 s^2 + 1)}{s (2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 r_o s + C_1 C_L L_1 g_m r_o s^2 + C_1 C_L L_1 s^2 + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4 + C_L g_m r_o + C_L)}$$

10.445 INVALID-ORDER-445 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_L s + C_1 r_o s + 2C_4 R_L g_m r_o s + 2C_4 R_L s + g_m r_o + 1}$$

10.446 INVALID-ORDER-446 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1) (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{s (2C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_4 C_L L_1 R_L s^3 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 r_o s + C_1 C_L L_1 g_m r_o s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_L s + C_1 C_L r_o s + C_1)}$$

10.447 INVALID-ORDER-447 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{s (2C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L s^4 + 2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 r_o s + C_1 C_L L_1 g_m r_o s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_L s^2 + C_1 C_L r_o s + C_1)}$$

10.448 INVALID-ORDER-448 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + 2C_1 C_4 L_L r_o s^3 + C_1 C_L L_1 L_L g_m r_o s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L r_o s^3 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 L_L s^2 + C_1 r_o s + 2C_4 L_L g_m r_o s^2 + 2C_4 L_L s + g_m r_o + 1}$$

10.449 INVALID-ORDER-449 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 L_1 s}{s(2C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L s^4 + 2C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_4 C_L L_1 R_L s^3 + 2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 L_L s^2 + 2C_1 C_4 R_L s^2 + 2C_1 C_4 s^2 + 2C_1 C_L s^2 + 2C_1 C_L L_1 s^2 + 2C_1 C_L L_L s^2 + 2C_1 C_L R_L s^2 + 2C_1 C_L s^2 + 2C_1 L_1 s^2 + 2C_1 L_L s^2 + 2C_1 R_L s^2 + 2C_1 s^2 + 2C_L s^2 + 2C_L L_1 s^2 + 2C_L L_L s^2 + 2C_L R_L s^2 + 2C_L s^2 + 2L_1 s^2 + 2L_L s^2 + 2R_L s^2 + 2s^2 + 2)}{}$$

10.450 INVALID-ORDER-450 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{L_L R_L s (g_m r_o + 1) (C_1 + C_2)}{2C_1 C_4 L_1 L_L R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_L s^4 + 2C_1 C_4 L_L R_L r_o s^3 + C_1 C_L L_1 L_L R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_L r_o s^3 + C_1 L_1 L_L g_m r_o s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_L g_m r_o}$$

10.451 INVALID-ORDER-451 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_L s^5 + 2C_1 C_4 C_L L_L R_L r_o s^4 + 2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + 2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + 2C_1 C_4 L_L r_o s^3 + 2$$

10.452 INVALID-ORDER-452 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_LR_Ls^5 + 2C_1C_4C_LL_LR_Lr_0s^4 + 2C_1C_4L_1R_Lg_mr_0s^3 + 2C_1C_4L_1R_Ls^3 + 2C_1C_4R_Lr_0s^2 + C_1C_LL_1L_LR_Lg_mr_0s^4 + C_1C_LL_1L_Ls^4 + C_1$$

10.453 INVALID-ORDER-453 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_4 R_L s^3 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2C_1 L_1 R_L g_m r_o s^2 + 2C_1 L_1 R_L s^2 + C_1 R_4 R_L s + C_1 R_4 r_o s + 2C_1 R_L r_o s + 2C_4}$$

10.454 INVALID-ORDER-454 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L R_4 r_o s^2 + 2C_1 L_1 g_m r_o s^2 + 2C_1 L_1 s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

10.455 INVALID-ORDER-455 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_4 R_L s^3 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 C_L L_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L R_4 R_L r_o s^2 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2C_1 L_1 R_L g_m r_o s + 2C_1 L_1 R_L s + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

10.456 INVALID-ORDER-456 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_4 R_L s^4 + 2C_1 C_4 C_L R_4 R_L r_o s^3 + 2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 C_L R_4 r_o s^2 + 2C_1 L_1 g_m r_o s^2 + 2C_1 L_1 s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

10.457 INVALID-ORDER-457 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_4 r_o s^2 + 2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

10.458 INVALID-ORDER-458 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 L_L R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_4 s^4 + 2C_1 C_4 L_L R_4 r_o s^3 + C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_L R_4 r_o s^3 + 2C_1 L_1 L_L g_m r_o s^3 + 2C_1 L_1 L_L s^3 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

10.459 INVALID-ORDER-459 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 C_L R_4 R_L r_o s^3 + 2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_4 r_o s^2 + 2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_4 s + 2C_1 r_o s + 2C_4 R_4 g_m r_o s + 2C_4 R_4 s}$$

10.460 INVALID-ORDER-460 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_4R_Ls^4 + 2C_1C_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_LR_4R_Ls^4 + C_1C_LL_LR_4R_Lr_0s^3 + C_1L_1L_LR_4g_mr_0s^3 + C_1L_1L_LR_4R_Lr_0s^3 + C_1L_1L_LR_4R_Ls^3 + C_1L_1L_LR_4R_Lr_0s^2 + C_1L_1L_LR_4R_Ls^2 + C_1L_1L_LR_4R_Lr_0s + C_1L_1L_LR_4R_Ls + C_1L_1L_LR_4R_Lr_0 + C_1L_1L_LR_4R_L}{2C_1C_4L_1L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_4R_Ls^4 + 2C_1C_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_LR_4R_Ls^4 + C_1C_LL_LR_4R_Lr_0s^3 + C_1L_1L_LR_4g_mr_0s^3 + C_1L_1L_LR_4R_Lr_0s^3 + C_1L_1L_LR_4R_Ls^3 + C_1L_1L_LR_4R_Lr_0s^2 + C_1L_1L_LR_4R_Ls^2 + C_1L_1L_LR_4R_Lr_0s + C_1L_1L_LR_4R_Ls + C_1L_1L_LR_4R_Lr_0 + C_1L_1L_LR_4R_L}$$

10.461 INVALID-ORDER-461 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_LR_4R_Lg_mr_os^5 + 2C_1C_4C_LL_LR_4R_Ls^5 + 2C_1C_4C_LL_LR_4R_Lr_os^4 + 2C_1C_4L_1L_LR_4g_mr_os^4 + 2C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_1R_4R_Lg_mr_os^3 + 2C_1C_4L_1R_4R_Ls^3 -$$

10.462 INVALID-ORDER-462 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_LR_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_LR_4R_Ls^5 + 2C_1C_4C_LL_LR_4R_Lr_0s^4 + 2C_1C_4L_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_1R_4R_Ls^3 + 2C_1C_4R_4R_Lr_0s^2 + C_1C_LL_1L_LR_4g_mr_0s^4 +$$

10.463 INVALID-ORDER-463 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1) (C_4 R_4 s + 1)}{C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 2 C_1 C_4 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_L s + C_1 r_o s + C_4}$$

10.464 INVALID-ORDER-464 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 L_1 s^2 + 1)(C_4 R_4 s + 1)}{s(C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + C_1 C_4 R_4 s + 2C_1 C_4 r_o s + C_1 C_L L_1 g_m r_o s^2 + C_1 C_L L_1 s^2 + C_1 C_L r_o s + C_1 + C_4)}$$

10.465 INVALID-ORDER-465 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4}{C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4}$$

10.466 INVALID-ORDER-466 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1}{s(C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1$$

10.467 ~~INVALID-ORDER-467~~ $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 C_2 + C_1 C_3 + C_1 C_4 + C_1 C_L + C_2 C_3 + C_2 C_4 + C_2 C_L + C_3 C_4 + C_3 C_L + C_4 C_L)}{s(2C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_L R_4 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 r_o s^2 + C_1 C_4 L_1 R_4 s^2 + C_1 C_4 L_1 s^2 + C_2 C_3 C_L L_1 L_L g_m r_o s^4 + 2C_2 C_3 C_L L_1 L_L s^4 + C_2 C_3 C_L L_1 R_4 g_m r_o s^3 + C_2 C_3 C_L L_1 R_4 s^3 + C_2 C_3 C_L L_L R_4 s^3 + 2C_2 C_3 C_L L_L r_o s^3 + C_2 C_3 C_L R_4 r_o s^2 + 2C_2 C_3 L_1 g_m r_o s^2 + 2C_2 C_3 L_1 r_o s^2 + C_2 C_3 L_1 R_4 s^2 + C_2 C_3 L_1 s^2 + C_3 C_4 C_L L_1 L_L g_m r_o s^4 + 2C_3 C_4 C_L L_1 L_L s^4 + C_3 C_4 C_L L_1 R_4 g_m r_o s^3 + C_3 C_4 C_L L_1 R_4 s^3 + C_3 C_4 C_L L_L R_4 s^3 + 2C_3 C_4 C_L L_L r_o s^3 + C_3 C_4 C_L R_4 r_o s^2 + 2C_3 C_4 L_1 g_m r_o s^2 + 2C_3 C_4 L_1 r_o s^2 + C_3 C_4 L_1 R_4 s^2 + C_3 C_4 L_1 s^2 + C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 C_L L_L r_o s^3 + C_4 C_L R_4 r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 r_o s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 s^2)}$$

10.468 INVALID-ORDER-468 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_L R_4 s^3 + 2C_1 C_4 L_L$$

10.469 INVALID-ORDER-469 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(2C_1C_4C_LL_1L_Lg_mr_0s^4 + 2C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_4g_mr_0s^3 + C_1C_4C_LL_1R_4s^3 + 2C_1C_4C_LL_1R_Lg_mr_0s^3 + 2C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_R_4s^3 + 2C_1C_4C_LLr_0s}$$

10.470 INVALID-ORDER-470 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_1 L_L R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 L_L R_L g_m r_o s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L R_L g_m r_o s^2 + C_1 C_4 L_1 L_L R_L s^2 + C_1 C_4 L_1 L_L R_L g_m r_o s + C_1 C_4 L_1 L_L R_L s}{C_1 C_4 C_L L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_1 L_L R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 L_L R_L g_m r_o s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L R_L g_m r_o s^2 + C_1 C_4 L_1 L_L R_L s^2 + C_1 C_4 L_1 L_L R_L g_m r_o s + C_1 C_4 L_1 L_L R_L s}$$

10.471 INVALID-ORDER-471 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + 2 C_1 C_4 C_L L_L R_L s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4}{C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + 2 C_1 C_4 C_L L_L R_L s^4 + 2 C_1 C_4 C_L L_L R_L r_o s^4}$$

10.472 INVALID-ORDER-472 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 +$$

10.473 INVALID-ORDER-473 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_L s + C_1 r_o s + C_4 L_4 s^2 + C_4 r_o s + C_4}$$

10.474 INVALID-ORDER-474 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 L_1 s^2 + 1)(C_4 L_4 s^2 + 1)}{s(C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + C_1 C_4 L_4 s^2 + 2C_1 C_4 r_o s + C_1 C_L L_1 g_m r_o s^2 + C_1 C_L L_1 s^2 + C_1 C_L r_o s + C_1 + C_L)}$$

10.475 INVALID-ORDER-475 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{C_1C_4C_LL_1L_4R_Lg_mr_os^5 + C_1C_4C_LL_1L_4R_Ls^5 + C_1C_4C_LL_4R_Lr_os^4 + C_1C_4L_1L_4g_mr_os^4 + C_1C_4L_1L_4s^4 + 2C_1C_4L_1R_Lg_mr_os^3 + 2C_1C_4L_1R_Ls^3 + C_1C_4L_4R_Ls^3 + C_1C_4L_4r_os^2 + C_1C_4L_4s^2}{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1R_Lg_mr_os^3 + 2C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4r_os^2 + 2C_1C_4C_LL_4s^2 + 2C_1C_4L_1g_mr_os^2 + 2C_1C_4L_1s^2 + 2C_1C_4L_4g_mr_os + 2C_1C_4L_4s + 2C_1C_4R_Lg_mr_os + 2C_1C_4R_Ls + 2C_1C_4R_L)}$$

10.476 INVALID-ORDER-476 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(g_mr_o + 1)(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1R_Lg_mr_os^3 + 2C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4r_os^2 + 2C_1C_4C_LL_4s^2 + 2C_1C_4L_1g_mr_os^2 + 2C_1C_4L_1s^2 + 2C_1C_4L_4g_mr_os + 2C_1C_4L_4s + 2C_1C_4R_Lg_mr_os + 2C_1C_4R_L)}{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1R_Lg_mr_os^3 + 2C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4r_os^2 + 2C_1C_4C_LL_4s^2 + 2C_1C_4L_1g_mr_os^2 + 2C_1C_4L_1s^2 + 2C_1C_4L_4g_mr_os + 2C_1C_4L_4s + 2C_1C_4R_Lg_mr_os + 2C_1C_4R_L)}$$

10.477 INVALID-ORDER-477 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(g_mr_o + 1)(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_Lg_mr_os^3 + 2C_1C_4C_LL_1L_Ls^3 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4r_os^2 + 2C_1C_4C_LL_4s^2 + 2C_1C_4L_1g_mr_os^2 + 2C_1C_4L_1s^2 + 2C_1C_4L_4g_mr_os + 2C_1C_4L_4s + 2C_1C_4R_Lg_mr_os + 2C_1C_4R_L)}{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_Lg_mr_os^3 + 2C_1C_4C_LL_1L_Ls^3 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4r_os^2 + 2C_1C_4C_LL_4s^2 + 2C_1C_4L_1g_mr_os^2 + 2C_1C_4L_1s^2 + 2C_1C_4L_4g_mr_os + 2C_1C_4L_4s + 2C_1C_4R_Lg_mr_os + 2C_1C_4R_L)}$$

10.478 INVALID-ORDER-478 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{C_1C_4C_LL_1L_4L_Lg_mr_os^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_4L_Lr_os^5 + C_1C_4L_1L_4g_mr_os^4 + C_1C_4L_1L_4s^4 + 2C_1C_4L_1L_Lg_mr_os^3 + 2C_1C_4L_1L_Ls^3 + C_1C_4L_4L_Ls^4 + C_1C_4L_4r_os^3 + C_1C_4L_4s^3}{s(C_1C_4C_LL_1L_4L_Lg_mr_os^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_4L_Lr_os^5 + C_1C_4L_1L_4g_mr_os^4 + C_1C_4L_1L_4s^4 + 2C_1C_4L_1L_Lg_mr_os^3 + 2C_1C_4L_1L_Ls^3 + C_1C_4L_4L_Ls^4 + C_1C_4L_4r_os^3 + C_1C_4L_4s^3)}$$

10.479 INVALID-ORDER-479 $Z(s) = \left(L_1s + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_Lg_mr_os^3 + 2C_1C_4C_LL_1L_Ls^3 + 2C_1C_4C_LL_1R_Lg_mr_os^2 + 2C_1C_4C_LL_1R_Ls^2 + C_1C_4C_LL_4L_Ls^4 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4L_Lr_os^2 + C_1C_4C_LL_4L_Ls^2 + C_1C_4C_LL_4R_Ls + C_1C_4C_LL_4R_L}{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_Lg_mr_os^3 + 2C_1C_4C_LL_1L_Ls^3 + 2C_1C_4C_LL_1R_Lg_mr_os^2 + 2C_1C_4C_LL_1R_Ls^2 + C_1C_4C_LL_4L_Ls^4 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4L_Lr_os^2 + C_1C_4C_LL_4L_Ls^2 + C_1C_4C_LL_4R_Ls + C_1C_4C_LL_4R_L)}$$

10.480 INVALID-ORDER-480 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2 C_1 C_4 L_1}{\dots}$$

10.481 INVALID-ORDER-481 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + 2 C_1 C_4 C_L L_L R_L r_o s^4 + C_1 C_4$$

$$10.482 \quad \text{INVALID-ORDER-482} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad L_4 s + \frac{1}{C_4 s}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + c}{\dots}$$

10.483 INVALID-ORDER-483 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 L_1 L_4 g_m r_o s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 R_L g_m r_o s^2 + 2C_1 L_1 R_L s^2 + C_1 L_4 R_L s^2 + C_1 L_4 r_o s^2 + 2C_1 R_L r_o s + 2C_1}$$

10.484 INVALID-ORDER-484 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 s (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_1 L_4 g_m r_o s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_4 r_o s^3 + 2C_1 L_1 g_m r_o s^2 + 2C_1 L_1 s^2 + C_1 L_4 s^2 + 2C_1 r_o s + 2C_4 L_4 g_m r_o s^2 +}$$

10.485 INVALID-ORDER-485 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1) (C_1 + C_2)}{2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_1 L_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_4 R_L r_o s^3 + C_1 L_1 L_4 g_m r_o s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 R_L g_m r_o}$$

10.486 INVALID-ORDER-486 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4C_LL_4R_Lr_0s^4 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_4r_0s^3 + C_1C_LL_1L_4g_mr_0s^4 + C_1C_LL_1L_4s^4 + 2C_1C_LL_4r_0s^3 + 2C_1C_LL_4r_0s^3 + 2C_1C_LL_4s^3 + 2C_1C_Lr_0s^2 + 2C_1C_Ls^2 + 2C_1C_Lr_0s + 2C_1C_L}{2C_1C_4C_LL_1L_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4C_LL_4R_Lr_0s^4 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_4r_0s^3 + C_1C_LL_1L_4g_mr_0s^4 + C_1C_LL_1L_4s^4 + 2C_1C_LL_4r_0s^3 + 2C_1C_LL_4r_0s^3 + 2C_1C_LL_4s^3 + 2C_1C_Lr_0s^2 + 2C_1C_Ls^2 + 2C_1C_Lr_0s + 2C_1C_L}$$

10.487 INVALID-ORDER-487 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_4L_Lr_0s^5 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_4r_0s^3 + C_1C_LL_1L_4g_mr_0s^4 + C_1C_LL_1L_4s^4 + 2C_1C_LL_4r_0s^3}{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_4L_Lr_0s^5 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_4r_0s^3 + C_1C_LL_1L_4g_mr_0s^4 + C_1C_LL_1L_4s^4 + 2C_1C_LL_4r_0s^3}$$

10.488 INVALID-ORDER-488 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_4 L_L s (g_m r_o + 1) (C_1 L_1}{2C_1 C_4 L_1 L_4 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 L_L s^4 + 2C_1 C_4 L_4 L_L r_o s^3 + C_1 C_L L_1 L_4 L_L g_m r_o s^4 + C_1 C_L L_1 L_4 L_L s^4 + C_1 C_L L_4 L_L r_o s^3 + C_1 L_1 L_4 g_m r_o s^2 + C_1 L_1 L_4 s^2 + 2C_1 L_1 L_L g_m r_o s}$$

10.489 INVALID-ORDER-489 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_1L_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4C_LL_4L_Lr_0s^5 + 2C_1C_4C_LL_4R_Lr_0s^4 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4R_Lr_0s^4 + 2C_1C_4L_1L_4L_Lr_0s^4 + 2C_1C_4L_1L_4L_Ls^4 + 2C_1C_4L_1L_4L_Lg_mr_0s^3 + 2C_1C_4L_1L_4L_Ls^3 + 2C_1C_4L_1L_4R_Lg_mr_0s^2 + 2C_1C_4L_1L_4R_Ls^2 + 2C_1C_4L_1L_4L_Lr_0s^2 + 2C_1C_4L_1L_4L_Ls^2 + 2C_1C_4L_1L_4L_Lg_mr_0s + 2C_1C_4L_1L_4L_Ls + 2C_1C_4L_1L_4R_Lg_mr_0 + 2C_1C_4L_1L_4R_L + 2C_1C_4L_1L_4L_Lr_0 + 2C_1C_4L_1L_4L_L}{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_1L_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4C_LL_4L_Lr_0s^5 + 2C_1C_4C_LL_4R_Lr_0s^4 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4R_Lr_0s^4 + 2C_1C_4L_1L_4L_Lr_0s^4 + 2C_1C_4L_1L_4L_Ls^4 + 2C_1C_4L_1L_4L_Lg_mr_0s^3 + 2C_1C_4L_1L_4L_Ls^3 + 2C_1C_4L_1L_4R_Lg_mr_0s^2 + 2C_1C_4L_1L_4R_Ls^2 + 2C_1C_4L_1L_4L_Lr_0s^2 + 2C_1C_4L_1L_4L_Ls^2 + 2C_1C_4L_1L_4L_Lg_mr_0s + 2C_1C_4L_1L_4L_Ls + 2C_1C_4L_1L_4R_Lg_mr_0 + 2C_1C_4L_1L_4R_L + 2C_1C_4L_1L_4L_Lr_0 + 2C_1C_4L_1L_4L_L}.$$

10.490 INVALID-ORDER-490 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_Ls^4 + 2C_1C_4L_4L_LR_Lr_0s^3 + C_1C_LL_1L_4L_LR_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_4L_LR_Lr_0s^3 + C_1L_1L_4L_LR_Lg_mr_0s^3 + C_1L_1L_4L_LR_Ls^3 + C_1L_1L_4L_LR_Lr_0s^2 + C_1L_1L_4L_LR_Ls^2 + C_1L_1L_4L_LR_Lr_0s + C_1L_1L_4L_LR_Ls + C_1L_1L_4L_LR_L}{2C_1C_4L_1L_4L_LR_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_Ls^4 + 2C_1C_4L_4L_LR_Lr_0s^3 + C_1C_LL_1L_4L_LR_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_4L_LR_Lr_0s^3 + C_1L_1L_4L_LR_Lg_mr_0s^3 + C_1L_1L_4L_LR_Ls^3 + C_1L_1L_4L_LR_Lr_0s^2 + C_1L_1L_4L_LR_Ls^2 + C_1L_1L_4L_LR_Lr_0s + C_1L_1L_4L_LR_Ls + C_1L_1L_4L_LR_L}$$

10.491 INVALID-ORDER-491 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LL_Rg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LL_RLs^6 + 2C_1C_4C_LL_4L_LL_RLr_0s^5 + 2C_1C_4L_1L_4L_LL_Rg_mr_0s^5 + 2C_1C_4L_1L_4L_LLs^5 + 2C_1C_4L_1L_4R_LLg_mr_0s^4 + 2C_1C_4L_1L_4R_LLs^4 +$$

10.492 INVALID-ORDER-492 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LL_Rg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LL_Rs^6 + 2C_1C_4C_LL_4L_LL_Rr_0s^5 + 2C_1C_4L_1L_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_Ls^4 + 2C_1C_4L_4R_Lr_0s^3 + C_1C_LL_1L_4L_LL_Rg_mr_0s^5 + C_1C_LL_1L_4L_LL_Rs^5 + 2C_1C_LL_4L_LL_Rr_0s^4 + 2C_1C_LL_4L_LL_Rs^4 + 2C_1C_L_1L_4L_LL_Rr_0s^3 + 2C_1C_L_1L_4L_LL_Rs^3 + C_1C_L_4L_LL_Rr_0s^2 + C_1C_L_4L_LL_Rs^2 + C_1C_L_1L_4L_LL_Rr_0s + C_1C_L_1L_4L_LL_Rs + C_1C_L_4L_LL_Rr_0 + C_1C_L_4L_LL_R}{2C_1C_4C_LL_1L_4L_LL_Rg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LL_Rs^6 + 2C_1C_4C_LL_4L_LL_Rr_0s^5 + 2C_1C_4L_1L_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_Ls^4 + 2C_1C_4L_4R_Lr_0s^3 + C_1C_LL_1L_4L_LL_Rg_mr_0s^5 + C_1C_LL_1L_4L_LL_Rs^5 + 2C_1C_LL_4L_LL_Rr_0s^4 + 2C_1C_LL_4L_LL_Rs^4 + 2C_1C_L_1L_4L_LL_Rr_0s^3 + 2C_1C_L_1L_4L_LL_Rs^3 + C_1C_L_4L_LL_Rr_0s^2 + C_1C_L_4L_LL_Rs^2 + C_1C_L_1L_4L_LL_Rr_0s + C_1C_L_1L_4L_LL_Rs + C_1C_L_4L_LL_Rr_0 + C_1C_L_4L_LL_R}.$$

10.493 INVALID-ORDER-493 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 r_o s^2 + 1}$$

10.494 INVALID-ORDER-494 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 L_1 s^2 + 1)(C_2 L_2 s^2 + 1)}{s(C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 R_4 s + C_1 C_4)}$$

10.495 INVALID-ORDER-495 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4}{C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4}$$

10.496 INVALID-ORDER-496 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_L r_o s^3 + C_1 C_4 C_L R_L s^3 + C_1 C_4 C_L r_o s^3 + C_1 C_4 C_L s^3 + C_1 C_4 R_L r_o s^3 + C_1 C_4 R_L s^3 + C_1 C_4 r_o s^3 + C_1 C_4 s^3 + C_1 C_L R_L r_o s^3 + C_1 C_L R_L s^3 + C_1 C_L r_o s^3 + C_1 C_L s^3 + C_1 R_L r_o s^3 + C_1 R_L s^3 + C_1 r_o s^3 + C_1 s^3 + C_4 C_L R_L r_o s^3 + C_4 C_L R_L s^3 + C_4 C_L r_o s^3 + C_4 C_L s^3 + C_4 R_L r_o s^3 + C_4 R_L s^3 + C_4 r_o s^3 + C_4 s^3 + C_L R_L r_o s^3 + C_L R_L s^3 + C_L r_o s^3 + C_L s^3 + R_L r_o s^3 + R_L s^3 + r_o s^3 + s^3}{s^4 + C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L L_4 R_L s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_L r_o s^3 + C_1 C_4 C_L R_L s^3 + C_1 C_4 C_L r_o s^3 + C_1 C_4 C_L s^3 + C_1 C_4 R_L r_o s^3 + C_1 C_4 R_L s^3 + C_1 C_4 r_o s^3 + C_1 C_4 s^3 + C_1 C_L R_L r_o s^3 + C_1 C_L R_L s^3 + C_1 C_L r_o s^3 + C_1 C_L s^3 + C_1 R_L r_o s^3 + C_1 R_L s^3 + C_1 r_o s^3 + C_1 s^3 + C_4 C_L R_L r_o s^3 + C_4 C_L R_L s^3 + C_4 C_L r_o s^3 + C_4 C_L s^3 + C_4 R_L r_o s^3 + C_4 R_L s^3 + C_4 r_o s^3 + C_4 s^3 + C_L R_L r_o s^3 + C_L R_L s^3 + C_L r_o s^3 + C_L s^3 + R_L r_o s^3 + R_L s^3 + r_o s^3 + s^3}.$$

10.497 INVALID-ORDER-497 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L L_4 s^3}{\dots}$$

10.498 INVALID-ORDER-498 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^{2+1}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_L R_4 r_o s^4 + C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_L R_4 r_o s^4 + C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 s^4}$$

10.499 INVALID-ORDER-499 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3}{s(C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3)}$$

10.500 INVALID-ORDER-500 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 L_L R_L r_o s^4}{C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_L r_o s^5 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 L_L R_L r_o s^4}$$

10.501 INVALID-ORDER-501 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}{\dots}$$

$$\text{10.502} \quad \text{INVALID-ORDER-502} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5}$$

10.503 INVALID-ORDER-503 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{L_4 R_4 L}{2C_1 C_4 L_1 L_4 R_4 R_L q_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 L_1 L_4 R_4 q_m r_o s^3 + C_1 L_1 L_4 R_4 s^3 + 2C_1 L_1 L_4 R_L q_m r_o s^3 + 2C_1 L_1 L_4 R_L s^3 + 2C_1 L_1 R_4 R_L q_m r_o s^2 +$$

10.504 INVALID-ORDER-504 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 R_4 s (g_m r_o + 1) (C_1 + C_2)}{2C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_1 L_4 R_4 g_m r_o s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_4 R_4 r_o s^3 + 2C_1 L_1 L_4 g_m r_o s^3 + 2C_1 L_1 L_4 s^3 + 2C_1 L_1 R_4 g_m r_o}$$

10.505 INVALID-ORDER-505 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_4R_Lg_mr_os^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + 2C_1C_4L_4R_4R_Lr_os^3 + C_1C_LL_1L_4R_4R_Lg_mr_os^4 + C_1C_LL_1L_4R_4R_Ls^4 + C_1C_LL_4R_4R_Lr_os^3 + C_1L_1L_4R_4g_mr_os^3 + C_1L_1L_4R_4R_Lr_os^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Lr_os^2 + C_1L_1L_4R_4R_Ls^2 + C_1L_1L_4R_4R_Lr_os + C_1L_1L_4R_4R_Ls + C_1L_1L_4R_4R_L}{2C_1C_4L_1L_4R_4R_Lg_mr_os^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + 2C_1C_4L_4R_4R_Lr_os^3 + C_1C_LL_1L_4R_4R_Lg_mr_os^4 + C_1C_LL_1L_4R_4R_Ls^4 + C_1C_LL_4R_4R_Lr_os^3 + C_1L_1L_4R_4g_mr_os^3 + C_1L_1L_4R_4R_Lr_os^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Lr_os^2 + C_1L_1L_4R_4R_Ls^2 + C_1L_1L_4R_4R_Lr_os + C_1L_1L_4R_4R_Ls + C_1L_1L_4R_4R_L}$$

10.506 INVALID-ORDER-506 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_1 L_4 R_4 g_m r_o s^4 + C$$

10.507 INVALID-ORDER-507 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_4 R_4 r_o s^3 + 2C_1 C_L L_1 L_4 L_L g_m r_o s^5 + 2C_1 C_L L_1 L_4 L_L s^5 + 2C_1 C_L L_1 L_4 L_L R_4 g_m r_o s^4 + 2C_1 C_L L_1 L_4 L_L R_4 s^4 + 2C_1 C_L L_1 L_4 L_L R_4 r_o s^3 + 2C_1 C_L L_1 L_4 L_L R_4 s^3 + 2C_1 C_L L_1 L_4 L_L R_4 g_m r_o s^2 + 2C_1 C_L L_1 L_4 L_L R_4 s^2 + 2C_1 C_L L_1 L_4 L_L R_4 r_o s + 2C_1 C_L L_1 L_4 L_L R_4 s}{(s^2 + 2\zeta_{L_1} \omega_{nL_1} s + \omega_{nL_1}^2)(s^2 + 2\zeta_{L_4} \omega_{nL_4} s + \omega_{nL_4}^2)(s^2 + 2\zeta_{L_L} \omega_{nL_L} s + \omega_{nL_L}^2)(s^2 + 2\zeta_{R_4} \omega_{nR_4} s + \omega_{nR_4}^2)}.$$

10.508 INVALID-ORDER-508 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_4g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_4s^4 + 2C_1C_4L_4L_LR_4r_0s^3 + C_1C_LL_1L_4L_LR_4g_mr_0s^4 + C_1C_LL_1L_4L_LR_4s^4 + C_1C_LL_4L_LR_4r_0s^3 + 2C_1L_1L_4L_LR_4g_mr_0s^3 + 2C_1L_1L_4L_LR_4s^3 + 2C_1L_1L_4L_LR_4r_0s^2 + 2C_1L_1L_4L_LR_4s^2 + 2C_1L_1L_4L_LR_4r_0s + 2C_1L_1L_4L_LR_4s + 2C_1L_1L_4L_LR_4r_0 + 2C_1L_1L_4L_LR_4}{2C_1C_4L_1L_4L_LR_4g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_4s^4 + 2C_1C_4L_4L_LR_4r_0s^3 + C_1C_LL_1L_4L_LR_4g_mr_0s^4 + C_1C_LL_1L_4L_LR_4s^4 + C_1C_LL_4L_LR_4r_0s^3 + 2C_1L_1L_4L_LR_4g_mr_0s^3 + 2C_1L_1L_4L_LR_4s^3 + 2C_1L_1L_4L_LR_4r_0s^2 + 2C_1L_1L_4L_LR_4s^2 + 2C_1L_1L_4L_LR_4r_0s + 2C_1L_1L_4L_LR_4s + 2C_1L_1L_4L_LR_4r_0 + 2C_1L_1L_4L_LR_4}$$

10.509 INVALID-ORDER-509 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_4g_mr_os^6 + 2C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4R_4R_Lg_mr_os^5 + 2C_1C_4C_LL_1L_4R_4R_Ls^5 + 2C_1C_4C_LL_4L_LR_4r_os^5 + 2C_1C_4C_LL_4R_4R_Lr_os^4 + 2C_1C_4L$$

10.510 INVALID-ORDER-510 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_4R_Ls^4 + 2C_1C_4L_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_4R_Ls^4 + C_1C_LL_4L_LR_4R_Lr_0s^3 + C_1L_1L_4L_L}{2C_1C_4L_1L_4L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_4R_Ls^4 + 2C_1C_4L_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_4R_Ls^4 + C_1C_LL_4L_LR_4R_Lr_0s^3 + C_1L_1L_4L_L}$$

10.511 INVALID-ORDER-511 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4C_LL_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4g_mr_0s^5 + 2C_1C_4L_1L_4L_LR_4s^5 + 2C_1C_4L_1L_4R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_Lr_0s^3 + 2C_1C_4L_1L_4R_4R_Ls^3 + 2C_1C_4L_1L_4R_4R_Lr_0s^2 + 2C_1C_4L_1L_4R_4R_Ls^2 + 2C_1C_4L_1L_4R_4R_Lr_0s + 2C_1C_4L_1L_4R_4R_Ls + 2C_1C_4L_1L_4R_4R_Lr_0 + 2C_1C_4L_1L_4R_4R_L}{2C_1C_4C_LL_1L_4L_LR_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4C_LL_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4g_mr_0s^5 + 2C_1C_4L_1L_4L_LR_4s^5 + 2C_1C_4L_1L_4R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_Lr_0s^3 + 2C_1C_4L_1L_4R_4R_Ls^3 + 2C_1C_4L_1L_4R_4R_Lr_0s^2 + 2C_1C_4L_1L_4R_4R_Ls^2 + 2C_1C_4L_1L_4R_4R_Lr_0s + 2C_1C_4L_1L_4R_4R_Ls + 2C_1C_4L_1L_4R_4R_Lr_0 + 2C_1C_4L_1L_4R_4R_L}$$

10.512 INVALID-ORDER-512 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4C_LL_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + 2C_1C_4L_4R_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Lr_0s^2 + C_1C_LL_1L_4L_LR_4R_Ls^2 + C_1C_LL_4L_LR_4R_Lr_0s + C_1C_LL_4L_LR_4R_Ls}{2C_1C_4C_LL_1L_4L_LR_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4C_LL_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + 2C_1C_4L_4R_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Lr_0s^2 + C_1C_LL_1L_4L_LR_4R_Ls^2 + C_1C_LL_4L_LR_4R_Lr_0s + C_1C_LL_4L_LR_4R_Ls}.$$

10.513 INVALID-ORDER-513 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C_1 C_4 L_4 R_L r_o s^3 + C_1 L_1 L_4 g_m r_o s^3 + C_1 L_1 L_4 s^3}$$

10.514 INVALID-ORDER-514 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_1 L_4 g_m r_o s^4 + C_1 C_L L_1 L_4}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_1 L_4 g_m r_o s^4 + C_1 C_L L_1 L_4}$$

10.515 INVALID-ORDER-515 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 R_L}{...}$$

10.516 INVALID-ORDER-516 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2 C_1 C_4 C_L L_4 R_L r_o s^4 + 2 C_1 C_4 C_L L_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2 C_1 C_4 C_L L_4 R_L r_o s^4 + 2 C_1 C_4 C_L L_4 R_L s^4}.$$

10.517 INVALID-ORDER-517 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_4g_mr_0s^5 + C_1C_4C_LL_1L_4R_4s^5 + C_1C_4C_LL_4L_LR_4s^5 + 2C_1C_4C_LL_4L_Lr_0s^5 + C_1C_4C_LL_4R_4r_0s^4 + 2C_1C_4L$$

10.518 INVALID-ORDER-518 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L$$

10.519 INVALID-ORDER-519 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_4g_mr_0s^5 + C_1C_4C_LL_1L_4R_4s^5 + 2C_1C_4C_LL_1L_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_Ls^5 + C_1C_4C_LL_4L_LR_4s^5 +$$

10.520 INVALID-ORDER-520 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_1 C_4 L$$

10.521 INVALID-ORDER-521 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_4 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_4 s^5}.$$

10.522 INVALID-ORDER-522 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5}{\dots}$$

10.523 INVALID-ORDER-523 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4 + 2 C_1 C_4 L_1 R_4 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 r_o s^3 + 2 C$$

10.524 **INVALID-ORDER-524** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_4 L_4}$$

10.525 INVALID-ORDER-525 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 L_4 R_L s^3 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^2 + 2C_1 C_4 L_1 L_4 R_L s^2 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s + 2C_1 C_4 L_1 L_4 R_L s + 2C_1 C_4 L_1 L_4 R_L g_m r_o + 2C_1 C_4 L_1 L_4 R_L}{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 L_4 R_L s^3 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^2 + 2C_1 C_4 L_1 L_4 R_L s^2 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s + 2C_1 C_4 L_1 L_4 R_L s + 2C_1 C_4 L_1 L_4 R_L g_m r_o + 2C_1 C_4 L_1 L_4 R_L}$$

10.526 INVALID-ORDER-526 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 +$$

10.527 INVALID-ORDER-527 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_4g_mr_0s^5 + C_1C_4C_LL_1L_4R_4s^5 + 2C_1C_4C_LL_1L_LR_4g_mr_0s^5 + 2C_1C_4C_LL_1L_LR_4s^5 + C_1C_4C_LL_4L_LR_4s^5 +$$

10.528 INVALID-ORDER-528 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_{4g_m} r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 L_L g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_{4g_m} r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4}{\dots}$$

10.529 **INVALID-ORDER-529** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_L s^5}{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_L s^5}.$$

10.530 INVALID-ORDER-530 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_L g_m r_o s^5 + 2 C_1 C_4 L$$

10.531 INVALID-ORDER-531 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5}$$

10.532 INVALID-ORDER-532 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5}$$

10.533 INVALID-ORDER-533 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1)}{C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L R_4 r_o s + 2L_1 g_m r_o s + 2L_1 s + R_4 + 2r_o}$$

10.534 INVALID-ORDER-534 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1)}{C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + C_L L_1 R_4 R_L g_m r_o s^2 + C_L L_1 R_4 R_L s^2 + C_L R_4 R_L r_o s + L_1 R_4 g_m r_o s + L_1 R_4 s + 2L_1 R_L g_m r_o s + 2L_1 R_L s}$$

10.535 INVALID-ORDER-535 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_L R_L s + 1)}{C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + 2C_L L_1 R_L g_m r_o s^2 + 2C_L L_1 R_L s^2 + C_L R_4 R_L s + C_L R_4 r_o s}$$

10.536 INVALID-ORDER-536 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + 2C_L L_1 L_L g_m r_o s^3 + 2C_L L_1 L_L s^3 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L L_L R_4 s^2 + 2C_L L_L s^2}$$

10.537 INVALID-ORDER-537 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_4 s^2 (g_m r_o + 1)}{C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L r_o s^3 + C_1 L_1 R_4 r_o s^2 + C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3 + C_L L_L R_4 r_o s^2 + 2L_1 L_L g_m r_o s^2 + 2L_1 L_L s^2 + L_1 R_4 g_m r_o s + L_1 R_4 s}$$

10.538 INVALID-ORDER-538 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + 2C_L L_1 L_L g_m r_o s^3 + 2C_L L_1 L_L s^3 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L R_4 R_L s + C_L R_4 r_o s}$$

10.539 INVALID-ORDER-539 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_4 R_L s^2 (g_m r_o + 1)}{C_1 C_L L_1 L_L R_4 R_L r_o s^4 + C_1 L_1 L_L R_4 R_L s^3 + C_1 L_1 L_L R_4 r_o s^3 + 2C_1 L_1 L_L R_L r_o s^3 + C_1 L_1 R_4 R_L r_o s^2 + C_L L_1 L_L R_4 R_L g_m r_o s^3 + C_L L_1 L_L R_4 R_L s^3 + C_L L_L R_4 R_L r_o s^2 + L_1 L_L R_4 s^2}$$

10.540 INVALID-ORDER-540 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 L_L R_4 R_L s^2 (g_m r_o + 1)}{C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3 + C_L R_4 R_L s + C_L R_4 r_o s}$$

$$10.541 \quad \text{INVALID-ORDER-541} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3}{C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + C_L L_1 L_L R_4 g_m r_o s^3 + C_L L_1 L_L R_4 s^3}$$

$$10.542 \quad \text{INVALID-ORDER-542} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + 2C_4 R_L r_o s + L_1 g_m r_o s + L_1 s + R_L + r_o}$$

$$10.543 \quad \text{INVALID-ORDER-543} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 r_o s + C_L L_1 g_m r_o s^2 + C_L L_1 s^2 + C_L r_o s + 1}$$

$$10.544 \quad \text{INVALID-ORDER-544} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + 2C_4 R_L r_o s + C_L L_1 R_L g_m r_o s^2 + C_L L_1 R_L s^2 + C_L R_L r_o s + L_1 g_m r_o s + L_1 s}$$

$$10.545 \quad \text{INVALID-ORDER-545} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + 2C_4 C_L L_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_L s^3 + 2C_4 C_L R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 r_o s}$$

$$10.546 \quad \text{INVALID-ORDER-546} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + 2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + 2C_4 C_L L_L r_o s^3 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 r_o s}$$

$$10.547 \quad \text{INVALID-ORDER-547} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_L r_o s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 L_1 L_L s^3 + C_1 L_1 r_o s^2 + 2C_4 L_1 L_L g_m r_o s^3 + 2C_4 L_1 L_L s^3 + 2C_4 L_L r_o s^2 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L s^3 + C_L L_L r_o s^2 + L_1 g_m r_o s + L_1 s}$$

$$10.548 \quad \text{INVALID-ORDER-548} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_L L_L s^2 + 1)}{2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + 2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L s^4 + 2C_4 C_L L_1 R_L s^3 + 2C_4 C_L L_1 r_o s^3 + C_L L_1 L_L g_m r_o s^3 + C_L L_1 L_L s^3 + C_L L_L r_o s^2 + L_1 g_m r_o s + L_1 s}$$

$$10.549 \quad \text{INVALID-ORDER-549} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L r_o s^3 + C_1 L_1 R_L r_o s^2 + 2C_4 L_1 L_L R_L g_m r_o s^3 + 2C_4 L_1 L_L R_L s^3 + 2C_4 L_L R_L r_o s^2 + C_L L_1 L_L R_L g_m r_o s^3 + C_L L_1 L_L R_L s^3 + C_L L_L R_L r_o s^2 + L_1 g_m r_o s + L_1 s}$$

$$10.550 \quad \text{INVALID-ORDER-550} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 (g_m r_o + 1)}{2C_1 C_4 C_L L_1 L_L R_L r_o s^5 + 2C_1 C_4 L_1 L_L r_o s^4 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + 2C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_L s^4 + 2C_4 C_L L_1 L_L r_o s^3 + 2C_4 C_L L_1 R_L r_o s^3 + C_L L_1 L_L R_L g_m r_o s^3 + C_L L_1 L_L R_L s^3 + C_L L_L R_L r_o s^2 + L_1 g_m r_o s + L_1 s}$$

$$10.551 \quad \text{INVALID-ORDER-551} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_L s^2 (g_m r_o + 1)}{2C_1 C_4 C_L L_1 L_L R_L r_o s^5 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + 2C_4 C_L L_1 L_L R_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_L s^4 + 2C_4 C_L L_1 R_L r_o s^3 + C_L L_1 L_L R_L g_m r_o s^3 + C_L L_1 L_L R_L s^3 + C_L L_L R_L r_o s^2 + L_1 g_m r_o s + L_1 s}$$

10.552 INVALID-ORDER-552 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + 2C_4 L_1 R_4 R_L g_m r_o s^2 + 2C_4 L_1 R_4 R_L s^2 + 2C_4 R_4 R_L r_o s + L_1 R_4 g_m r_o s + L_1 R_4 s + 2L_1 R_L g_m r_o s + 2L_1 R_L s}$$

10.553 INVALID-ORDER-553 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_4 s (g_m r_o + 1)}{2C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + 2C_4 L_1 R_4 g_m r_o s^2 + 2C_4 L_1 R_4 s^2 + 2C_4 R_4 r_o s + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L R_4 r_o s + 2L_1 g_m r_o s + 2L_1 s}$$

10.554 INVALID-ORDER-554 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_L r_o s^2 + 2C_4 L_1 R_4 R_L g_m r_o s^2 + 2C_4 L_1 R_4 R_L s^2 + 2C_4 R_4 R_L r_o s + C_L L_1 R_4 R_L g_m r_o s^2 + C_L L_1 R_4 R_L r_o s}$$

10.555 INVALID-ORDER-555 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1R_4R_Lr_0s^4 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1R_4R_Ls^3 + C_1C_LL_1R_4r_0s^3 + 2C_1C_LL_1R_Lr_0s^3 + C_1L_1R_4s^2 + 2C_1L_1r_0s^2 + 2C_4C_LL_1R_4R_Lg_mr_0s^3 + 2C_4C_LL_1R_4R_Ls^3}{2C_1C_4C_LL_1R_4R_Lr_0s^4 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1R_4R_Ls^3 + C_1C_LL_1R_4r_0s^3 + 2C_1C_LL_1R_Lr_0s^3 + C_1L_1R_4s^2 + 2C_1L_1r_0s^2 + 2C_4C_LL_1R_4R_Lg_mr_0s^3 + 2C_4C_LL_1R_4R_Ls^3}$$

10.556 INVALID-ORDER-556 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_4r_0s^5 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1L_LR_4s^4 + 2C_1C_LL_1L_Lr_0s^4 + C_1C_LL_1R_4r_0s^3 + C_1L_1R_4s^2 + 2C_1L_1r_0s^2 + 2C_4C_LL_1L_LR_4q_m r_0s^4 + 2C_4C_LL_1L_LR_4s^4}{2C_1C_4C_LL_1L_LR_4r_0s^5 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1L_LR_4s^4 + 2C_1C_LL_1L_Lr_0s^4 + C_1C_LL_1R_4r_0s^3 + C_1L_1R_4s^2 + 2C_1L_1r_0s^2 + 2C_4C_LL_1L_LR_4q_m r_0s^4 + 2C_4C_LL_1L_LR_4s^4}$$

10.557 INVALID-ORDER-557 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L L_L R_4 s^2 (g_m r_o + 1)}{2C_1 C_A L_1 L_L R_A r_o s^4 + C_1 C_L L_1 L_L R_A r_o s^4 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L r_o s^3 + C_1 L_1 R_A r_o s^2 + 2C_A L_1 L_L R_A g_m r_o s^3 + 2C_A L_1 L_L R_4 s^3 + 2C_A L_L R_A r_o s^2 + C_L L_1 L_L R_A g_m r_o s^3 + C_L L_1 L_L R_4 s^3 + C_L L_L R_A r_o s^2}$$

10.558 INVALID-ORDER-558 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_4r_0s^5 + 2C_1C_4C_LL_1R_4R_Lr_0s^4 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1L_LR_4s^4 + 2C_1C_LL_1L_Lr_0s^4 + C_1C_LL_1R_4R_Ls^3 + C_1C_LL_1R_4r_0s^3 + 2C_1C_LL_1R_Lr_0s^3 + C_1L_1L_LR_4r_0s^2 + 2C_1C_LL_1L_LR_4r_0s^2 + 2C_1C_LL_1R_4r_0s^2 + C_1C_LL_1R_Lr_0s^2 + C_1C_LL_1L_Lr_0s^2 + C_1C_LL_1L_LR_4s^2 + C_1C_LL_1L_LR_4s^2 + C_1C_LL_1R_4s^2 + C_1C_LL_1R_Ls^2 + C_1C_LL_1L_Ls^2 + C_1C_LL_1L_LR_4s + C_1C_LL_1R_4s + C_1C_LL_1R_Ls + C_1C_LL_1L_Ls + C_1C_LL_1L_LR_4 + C_1C_LL_1R_4 + C_1C_LL_1R_L + C_1C_LL_1L_L}{2C_1C_4C_LL_1L_LR_4r_0s^5 + 2C_1C_4C_LL_1R_4R_Lr_0s^4 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1L_LR_4s^4 + 2C_1C_LL_1L_Lr_0s^4 + C_1C_LL_1R_4R_Ls^3 + C_1C_LL_1R_4r_0s^3 + 2C_1C_LL_1R_Lr_0s^3 + C_1L_1L_LR_4r_0s^2 + 2C_1C_LL_1L_LR_4r_0s^2 + 2C_1C_LL_1R_4r_0s^2 + C_1C_LL_1R_Lr_0s^2 + C_1C_LL_1L_Lr_0s^2 + C_1C_LL_1L_LR_4s^2 + C_1C_LL_1L_LR_4s^2 + C_1C_LL_1R_4s^2 + C_1C_LL_1R_Ls^2 + C_1C_LL_1L_Ls^2 + C_1C_LL_1L_LR_4s + C_1C_LL_1R_4s + C_1C_LL_1R_Ls + C_1C_LL_1L_Ls + C_1C_LL_1L_LR_4 + C_1C_LL_1R_4 + C_1C_LL_1R_L + C_1C_LL_1L_L}.$$

10.559 INVALID-ORDER-559 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_4R_Lr_0s^4 + C_1C_LL_1L_LR_4R_Lr_0s^4 + C_1L_1L_LR_4R_Ls^3 + C_1L_1L_LR_4r_0s^3 + 2C_1L_1L_LR_Lr_0s^3 + C_1L_1R_4R_Lr_0s^2 + 2C_4L_1L_LR_4R_Lg_mr_0s^3 + 2C_4L_1L_LR_4R_Ls^3 + 2C_4L_1L_LR_4R_Lr_0s^2 + 2C_4L_1L_LR_4R_Lr_0s}{2C_1C_4L_1L_LR_4R_Lr_0s^4 + C_1C_LL_1L_LR_4R_Lr_0s^4 + C_1L_1L_LR_4R_Ls^3 + C_1L_1L_LR_4r_0s^3 + 2C_1L_1L_LR_Lr_0s^3 + C_1L_1R_4R_Lr_0s^2 + 2C_4L_1L_LR_4R_Lg_mr_0s^3 + 2C_4L_1L_LR_4R_Ls^3 + 2C_4L_1L_LR_4R_Lr_0s^2 + 2C_4L_1L_LR_4R_Lr_0s}$$

10.560 INVALID-ORDER-560 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_4R_LR_0s^5 + 2C_1C_4L_1L_LR_4r_0s^4 + 2C_1C_4L_1R_4R_LR_0s^3 + C_1C_LL_1L_LR_4R_Ls^4 + C_1C_LL_1L_LR_4r_0s^4 + 2C_1C_LL_1L_LR_Lr_0s^4 + C_1L_1L_LR_4s^3 + 2C_1L_1L_LR_0s^3 +$$

10.561 INVALID-ORDER-561 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_4R_Lr_0s^5 + 2C_1C_4L_1R_4R_Lr_0s^3 + C_1C_LL_1L_LR_4R_Ls^4 + C_1C_LL_1L_LR_4r_0s^4 + 2C_1C_LL_1L_LR_Lr_0s^4 + C_1C_LL_1R_4R_Lr_0s^3 + C_1L_1R_4R_Ls^2 + C_1L_1R_4r_0s^2 + 2C_1L_1R_4r_0}{2C_1C_4C_LL_1L_LR_4R_Lr_0s^5 + 2C_1C_4L_1R_4R_Lr_0s^3 + C_1C_LL_1L_LR_4R_Ls^4 + C_1C_LL_1L_LR_4r_0s^4 + 2C_1C_LL_1L_LR_Lr_0s^4 + C_1C_LL_1R_4R_Lr_0s^3 + C_1L_1R_4R_Ls^2 + C_1L_1R_4r_0s^2 + 2C_1L_1R_4r_0}$$

10.562 INVALID-ORDER-562 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 R_4 s + 1)}{C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_4 L_1 R_4 g_m r_o s^2 + C_4 L_1 R_4 s^2 + 2 C_4 L_1 R_L g_m r_o s^2 + 2 C_4 L_1 R_L s^2 + C_4 R_4 R_L s + C_4 R_4 r_o s +}$$

$$10.563 \quad \text{INVALID-ORDER-563} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 R_4 s + 1)}{C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L R_4 r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 R_4 s + 2C_4}$$

$$10.564 \quad \text{INVALID-ORDER-564} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L s}{C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_4 C_L L_1 R_4 R_L g_m r_o s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_1 R_4 R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 R_4 s + 2C_4}$$

$$10.565 \quad \text{INVALID-ORDER-565} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + C_4 C_L L_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_1 R_4 R_L r_o s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + C_4 R_4 s + 2C_4}$$

$$10.566 \quad \text{INVALID-ORDER-566} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + 2C_4 C_L L_1 L_L g_m r_o s^4 + 2C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_1 L_L R_4 r_o s^3 + 2C_4 L_1 g_m r_o s^3 + 2C_4 L_1 s^3 + C_4 R_4 s + 2C_4}$$

$$10.567 \quad \text{INVALID-ORDER-567} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s}{C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + C_1 C_4 L_1 L_L R_4 s^4 + 2C_1 C_4 L_1 L_L r_o s^4 + C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 L_L r_o s^4 + C_1 L_1 L_L s^3 + C_1 L_1 r_o s^2 + C_4 C_L L_1 L_L R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_1 L_L R_4 r_o s^3 + 2C_4 L_1 g_m r_o s^3 + 2C_4 L_1 s^3 + C_4 R_4 s + 2C_4}$$

$$10.568 \quad \text{INVALID-ORDER-568} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_L g_m r_o s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_1 L_L R_4 r_o s^3 + 2C_4 L_1 g_m r_o s^3 + 2C_4 L_1 s^3 + C_4 R_4 s + 2C_4}$$

10.569 INVALID-ORDER-569 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_L r_o s^4 + C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L R_L r_o s^2 + C_1 L_1 L_L R_L r_o s + C_1 L_1 L_L R_L}{C_1 C_4 C_L L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_L r_o s^4 + C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L R_L r_o s^2 + C_1 L_1 L_L R_L r_o s + C_1 L_1 L_L R_L}$$

10.570 INVALID-ORDER-570 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_L r_o s^5 + C_1 C_4 L_1 L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L r_o s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1$$

10.571 INVALID-ORDER-571 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_L r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4}{C_1 C_4 C_L L_L L_L R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_L r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4}$$

10.572 INVALID-ORDER-572 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_4 L_1 L_4 g_m r_o s^3 + C_4 L_1 L_4 s^3 + 2 C_4 L_1 R_L g_m r_o s^2 + 2 C_4 L_1 R_L s^2 + C_4 L_4 R_L s^2 + C_4 L_4 r_o s^2 +}$$

10.573 INVALID-ORDER-573 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + 1)}{C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 r_o s^3 + 2 C_4 L_1 g_m r_o s^2 + 2 C_4 L_1 s^2 + C_4 L_4 s^2 + 2 C_4 L_1 r_o s + C_4 L_1}$$

$$10.574 \quad \text{INVALID-ORDER-574} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L s^5}{C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_4 C_L L_1 L_4 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 r_o s^4}$$

$$10.575 \quad \text{INVALID-ORDER-575} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 r_o s^4}$$

$$10.576 \quad \text{INVALID-ORDER-576} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (g_m r_o + 1)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 r_o s^4}$$

$$10.577 \quad \text{INVALID-ORDER-577} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s^5}{C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 L_L r_o s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 L_1 L_L s^3 + C_1 L_1 r_o s^2 + C_4 C_L L_1 L_4 L_L g_m r_o s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 r_o s^4}$$

$$10.578 \quad \text{INVALID-ORDER-578} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_L s^5}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3}$$

10.579 INVALID-ORDER-579 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L}$$

10.580 INVALID-ORDER-580 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 L_L r_o s^4 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L r_o s^3 + C_1 C_4 L_1 R_L r_o s^2 + C_1 C_4 L_1 L_L R_L s^2 + C_1 C_4 L_1 L_L r_o s^2 + C_1 C_4 L_1 R_L r_o s + C_1 C_4 L_1 L_L R_L s + C_1 C_4 L_1 L_L r_o s + C_1 C_4 L_1 R_L r_o}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 L_L r_o s^4 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L r_o s^3 + C_1 C_4 L_1 R_L r_o s^2 + C_1 C_4 L_1 L_L R_L s^2 + C_1 C_4 L_1 L_L r_o s^2 + C_1 C_4 L_1 R_L r_o s + C_1 C_4 L_1 L_L R_L s + C_1 C_4 L_1 L_L r_o s + C_1 C_4 L_1 R_L r_o}$$

$$10.581 \quad \text{INVALID-ORDER-581} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_L + \frac{1}{C_4 s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_L s^4}$$

10.582 INVALID-ORDER-582 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 r_o s^3 + 2C_1 L_1 R_L r_o s^2 + 2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + 2C_4 L_4 R_L r_o s^2 + L_1 L_4 g_m r_o s^2 + L_1 L_4 s^2 + 2L_1 R_L g_m r_o s + 2L_1}.$$

10.583 INVALID-ORDER-583 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_4 s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 r_o s^4 + C_1 L_1 L_4 s^3 + 2C_1 L_1 r_o s^2 + 2C_4 L_1 L_4 g_m r_o s^3 + 2C_4 L_1 L_4 s^3 + 2C_4 L_4 r_o s^2 + C_L L_1 L_4 g_m r_o s^3 + C_L L_1 L_4 s^3 + C_L L_4 r_o s^2 + 2L_1 g_m r_o s + 2L_1}$$

$$10.584 \quad \text{INVALID-ORDER-584} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_L L_1 L_4 R_L r_o s^4 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 r_o s^3 + 2C_1 L_1 R_L r_o s^2 + 2C_4 L_1 L_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + 2C_4 L_4 R_L r_o s^2 + C_L L_1 L_4 R_L g_m r_o s^3 + C_L L_1 L_4 R_L s^3}$$

$$10.585 \quad \text{INVALID-ORDER-585} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 r_o s^4 + 2C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 r_o s^2 + 2C_4 C_L L_1 L_4 R_L g_m r_o s^4 + 2C_4 C_L L_1 L_4 R_L s^4}$$

$$10.586 \quad \text{INVALID-ORDER-586} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 r_o s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 L_1 L_4 s^3 + 2C_1 L_1 r_o s^2 + 2C_4 C_L L_1 L_4 L_L g_m r_o s^5 + 2C_4 C_L L_1 L_4 L_L s^5}$$

$$10.587 \quad \text{INVALID-ORDER-587} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_4 L_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 L_L r_o s^4 + C_1 C_L L_1 L_4 L_L r_o s^4 + C_1 L_1 L_4 L_L s^3 + C_1 L_1 L_4 r_o s^2 + 2C_1 L_1 L_L r_o s^2 + 2C_4 L_1 L_4 L_L g_m r_o s^3 + 2C_4 L_1 L_4 L_L s^3 + 2C_4 L_4 L_L r_o s^2 + C_L L_1 L_4 L_L g_m r_o s^3 + C_L L_1 L_4 L_L s^3}$$

$$10.588 \quad \text{INVALID-ORDER-588} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 r_o s^4 + 2C_1 C_L L_1 L_L r_o s^4 + 2C_1 C_L L_1 R_L r_o s^3 + C_1 L_1 L_4 R_L s^3}$$

$$10.589 \quad \text{INVALID-ORDER-589} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 L_L R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_L r_o s^4 + C_1 L_1 L_4 L_L R_L s^3 + C_1 L_1 L_4 L_L r_o s^3 + C_1 L_1 L_4 R_L r_o s^2 + 2C_1 L_1 L_L R_L r_o s^2 + 2C_4 L_1 L_4 L_L R_L g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_L s^3 + 2C_4 L_4 L_L R_L r_o s^2 + C_L L_1 L_4 L_L g_m r_o s^3 + C_L L_1 L_4 L_L s^3}$$

10.590 INVALID-ORDER-590 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_Lr_0s^6 + 2C_1C_4L_1L_4L_Lr_0s^5 + 2C_1C_4L_1L_4R_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^5 + C_1C_LL_1L_4L_Lr_0s^5 + 2C_1C_LL_1L_LR_Lr_0s^4 + C_1L_1L_4L_Ls^4 + C_1L_1L_4R_Ls^3 + C_1L_1L_4L_Ls^3 + C_1L_1L_4R_Ls^2 + C_1L_1L_4L_Ls^2 + C_1L_1L_4R_Ls + C_1L_1L_4L_Ls + C_1L_1L_4R_L + C_1L_1L_4L_L}{2C_1C_4C_LL_1L_4L_LR_Lr_0s^6 + 2C_1C_4L_1L_4L_Lr_0s^5 + 2C_1C_4L_1L_4R_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^5 + C_1C_LL_1L_4L_Lr_0s^5 + 2C_1C_LL_1L_LR_Lr_0s^4 + C_1L_1L_4L_Ls^4 + C_1L_1L_4R_Ls^3 + C_1L_1L_4L_Ls^3 + C_1L_1L_4R_Ls^2 + C_1L_1L_4L_Ls^2 + C_1L_1L_4R_Ls + C_1L_1L_4L_Ls + C_1L_1L_4R_L + C_1L_1L_4L_L}.$$

10.591 INVALID-ORDER-591 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

10.592 INVALID-ORDER-592 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

10.593 INVALID-ORDER-593 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (g_m r_o + 1) (C_4 L_4 s^2 + C_4 R_4 s}{C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 g_m r_o s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_1 R_4 g_m r_o s^3}$$

10.594 INVALID-ORDER-594 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

10.595 INVALID-ORDER-595 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_L s^3 +$$

10.596 INVALID-ORDER-596 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 L_L s^4 +$$

10.597 INVALID-ORDER-597 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_4 L_1 L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L r_o s^4 + C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 L_L r_o s^4 + C_1 L_1 L_L s^3 +$$

10.598 INVALID-ORDER-598 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4}$$

10.599 INVALID-ORDER-599 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 r_o s^4 + 2 C_1 C_4 L_1 L$$

10.600 INVALID-ORDER-600 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4}$$

$$\textbf{10.601 INVALID-ORDER-601 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L r_o s^5 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + \dots}{\dots}$$

10.602 INVALID-ORDER-602 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_4 R_4 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + C_1 L_1 L_4 R_4 R_L s^3 + C_1 L_1 L_4 R_4 r_o s^3 + 2C_1 L_1 L_4 R_L r_o s^3 + 2C_1 L_1 R_4 R_L r_o s^2 + 2C_4 L_1 L_4 R_4 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_4 R_L s^3 + 2C_4 L_4 R_4 R_L r_o s^2 + L_1 L_4 I}$$

10.603 INVALID-ORDER-603 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_4 R_4 s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 R_4 r_o s^4 + C_1 C_L L_1 L_4 R_4 r_o s^4 + C_1 L_1 L_4 R_4 s^3 + 2C_1 L_1 L_4 r_o s^3 + 2C_1 L_1 R_4 r_o s^2 + 2C_4 L_1 L_4 R_4 g_m r_o s^3 + 2C_4 L_1 L_4 R_4 s^3 + 2C_4 L_4 R_4 r_o s^2 + C_L L_1 L_4 R_4 g_m r_o s^3 + C_L L_1 L_4 R_4 s^3 + C_L L_1 L_4 r_o s^2 + C_L L_1 R_4 r_o s^2 + C_L L_1 R_4 s^2 + C_L L_1 r_o s^2 + C_L L_4 R_4 s^2 + C_L L_4 r_o s^2 + C_L R_4 s^2 + r_o s^2 + 1}$$

10.604 INVALID-ORDER-604 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_4R_Lr_0s^4 + C_1C_LL_1L_4R_4R_Lr_0s^4 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4r_0s^3 + 2C_1L_1L_4R_Lr_0s^3 + 2C_1L_1R_4R_Lr_0s^2 + 2C_4L_1L_4R_4R_Lg_mr_0s^3 + 2C_4L_1L_4R_4R_Ls^3 + 2C_4L_1L_4R_4R_Lr_0s^2 + 2C_4L_1L_4R_4R_Lr_0s}{2C_1C_4L_1L_4R_4R_Lr_0s^4 + C_1C_LL_1L_4R_4R_Lr_0s^4 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4r_0s^3 + 2C_1L_1L_4R_Lr_0s^3 + 2C_1L_1R_4R_Lr_0s^2 + 2C_4L_1L_4R_4R_Lg_mr_0s^3 + 2C_4L_1L_4R_4R_Ls^3 + 2C_4L_1L_4R_4R_Lr_0s^2 + 2C_4L_1L_4R_4R_Lr_0s}$$

10.605 INVALID-ORDER-605 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_4R_4R_Ls^4 + C_1C_LL_1L_4R_4r_0s^4 + 2C_1C_LL_1L_4R_Lr_0s^4 + 2C_1C_LL_1R_4R_Lr_0s^3 + C_1L_1L_4R_4s^3 + 2C_1L_1L_4r_0s^3 + 2C_1L_1L_4R_4r_0s^2 + 2C_1L_1L_4R_4r_0s + 2C_1L_1L_4R_4r_0}{2C_1C_4C_LL_1L_4R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_4R_4R_Ls^4 + C_1C_LL_1L_4R_4r_0s^4 + 2C_1C_LL_1L_4R_Lr_0s^4 + 2C_1C_LL_1R_4R_Lr_0s^3 + C_1L_1L_4R_4s^3 + 2C_1L_1L_4r_0s^3 + 2C_1L_1L_4R_4r_0s^2 + 2C_1L_1L_4R_4r_0s + 2C_1L_1L_4R_4r_0}$$

10.606 INVALID-ORDER-606 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

10.607 INVALID-ORDER-607 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L R_4 r_o s^4 + C_1 C_L L_1 L_4 L_L R_4 r_o s^4 + C_1 L_1 L_4 L_L R_4 s^3 + 2C_1 L_1 L_4 L_L r_o s^3 + C_1 L_1 L_4 R_4 r_o s^2 + 2C_1 L_1 L_L R_4 r_o s^2 + 2C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_4 s^3 + 2C_1 C_4 L_1 L_4 L_L R_4 r_o s^4}{2C_1 C_4 L_1 L_4 L_L R_4 r_o s^4 + C_1 C_L L_1 L_4 L_L R_4 r_o s^4 + C_1 L_1 L_4 L_L R_4 s^3 + 2C_1 L_1 L_4 L_L r_o s^3 + C_1 L_1 L_4 R_4 r_o s^2 + 2C_1 L_1 L_L R_4 r_o s^2 + 2C_4 L_1 L_4 L_L R_4 g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_4 s^3 + 2C_1 C_4 L_1 L_4 L_L R_4 r_o s^4}$$

10.608 INVALID-ORDER-608 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_4r_0s^6 + 2C_1C_4C_LL_1L_4R_4R_LR_0s^5 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_4L_LR_4s^5 + 2C_1C_LL_1L_4L_LR_0s^5 + C_1C_LL_1L_4R_4R_LR_0s^4 + C_1C_LL_1L_4R_4r_0s^4 + 2C_1C_L$$

10.609 INVALID-ORDER-609 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

10.610 INVALID-ORDER-610 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LL_4R_4R_Lr_0s^6 + 2C_1C_4L_1L_4L_LL_4R_4r_0s^5 + 2C_1C_4L_1L_4R_4R_Lr_0s^4 + C_1C_LL_1L_4L_LL_4R_4R_Ls^5 + C_1C_LL_1L_4L_LL_4R_4r_0s^5 + 2C_1C_LL_1L_4L_LL_4R_4R_Lr_0s^5 + 2C_1C_LL_1L_4L_LL_4R_4R_Lr_0s^5}{2C_1C_4C_LL_1L_4L_LL_4R_4R_Lr_0s^6 + 2C_1C_4L_1L_4L_LL_4R_4r_0s^5 + 2C_1C_4L_1L_4R_4R_Lr_0s^4 + C_1C_LL_1L_4L_LL_4R_4R_Ls^5 + C_1C_LL_1L_4L_LL_4R_4r_0s^5 + 2C_1C_LL_1L_4L_LL_4R_4R_Lr_0s^5 + 2C_1C_LL_1L_4L_LL_4R_4R_Lr_0s^5}$$

10.611 INVALID-ORDER-611 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LL_4R_4R_Lr_0s^6 + 2C_1C_4L_1L_4R_4R_Lr_0s^4 + C_1C_LL_1L_4L_LL_4R_4R_Ls^5 + C_1C_LL_1L_4L_LL_4R_4r_0s^5 + 2C_1C_LL_1L_4L_LL_4R_Lr_0s^5 + C_1C_LL_1L_4R_4R_Lr_0s^4 + 2C_1C_LL_1L_LL_4R_4R_Lr_0s^4 + 2C_1C_LL_1L_LL_4R_4R_Lr_0s^4}{2C_1C_4C_LL_1L_4L_LL_4R_4R_Lr_0s^6 + 2C_1C_4L_1L_4R_4R_Lr_0s^4 + C_1C_LL_1L_4L_LL_4R_4R_Ls^5 + C_1C_LL_1L_4L_LL_4R_4r_0s^5 + 2C_1C_LL_1L_4L_LL_4R_Lr_0s^5 + C_1C_LL_1L_4R_4R_Lr_0s^4 + 2C_1C_LL_1L_LL_4R_4R_Lr_0s^4 + 2C_1C_LL_1L_LL_4R_4R_Lr_0s^4}$$

10.612 INVALID-ORDER-612 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2 C_1 L_1 R_L r_o s^2 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 g_m r_o s^2 + C_4 L_1 L_4 R_4 g_m r_o s + C_4 L_1 L_4 R_4 g_m r_o}{C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2 C_1 L_1 R_L r_o s^2 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 g_m r_o s^2 + C_4 L_1 L_4 R_4 g_m r_o s + C_4 L_1 L_4 R_4 g_m r_o}$$

10.613 INVALID-ORDER-613 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 r_o s^4 + C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + 2 C_1 L_1 r_o s^2 + C_4 C_L L_1 L_4 R_4 g_m r_o s^4 + C_4 C_L L_1 L_4}$$

10.614 INVALID-ORDER-614 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_L L_1 L_4 R_L r_o s^4 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 r_o s^3 + C_1 L_1 R_4 R_L s^3 + C_1 L_1 R_4 r_o s^3 + C_1 L_1 R_4 s^3 + C_1 L_1 R_L s^3 + C_1 L_1 r_o s^3 + C_1 L_1 s^3}{C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 C_L L_1 L_4 R_L r_o s^4 + C_1 C_L L_1 L_4 R_L r_o s^4 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 r_o s^3 + C_1 L_1 R_4 R_L s^3 + C_1 L_1 R_4 r_o s^3 + C_1 L_1 R_4 s^3 + C_1 L_1 R_L s^3 + C_1 L_1 r_o s^3 + C_1 L_1 s^3}.$$

10.615 INVALID-ORDER-615 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 r_o s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 C_L L_1 r_o s^3}{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 r_o s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 C_L L_1 r_o s^3}.$$

10.616 INVALID-ORDER-616 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2 C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 L_L s^3 + 2 C_1 C_L L_1 L_L r_o s^3 + C_1 C_L L_1 L_L s^2 + 2 C_1 C_L L_1 L_L r_o s^2 + C_1 C_L L_1 L_L s + 2 C_1 C_L L_1 L_L r_o s + C_1 C_L L_1 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2 C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 L_L s^3 + 2 C_1 C_L L_1 L_L r_o s^3 + C_1 C_L L_1 L_L s^2 + 2 C_1 C_L L_1 L_L r_o s^2 + C_1 C_L L_1 L_L s + 2 C_1 C_L L_1 L_L r_o s + C_1 C_L L_1 L_L}$$

10.617 INVALID-ORDER-617 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + C_1 C_L L_1 L_4 L_L r_o s^5 + C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 L_1 L_4 L_L s^4 + C_1 L_1 L_4 r_o s^3 + C_1 L_1 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + C_1 C_L L_1 L_4 L_L r_o s^5 + C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 L_1 L_4 L_L s^4 + C_1 L_1 L_4 r_o s^3 + C_1 L_1 L_L}$$

10.618 INVALID-ORDER-618 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4}$$

10.619 INVALID-ORDER-619 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_L r_o s^5 + C_1 C_L L_1 L_L R_4 R_L r_o s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_L r_o s^5 + C_1 C_L L_1 L_L R_4 R_L r_o s^4}$$

10.620 INVALID-ORDER-620 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

10.621 INVALID-ORDER-621 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 r_o s^3 + C_1 C_4 L_1 R_4 R_L s^2 + C_1 C_4 L_1 R_4 r_o s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 L_1 r_o s^2 + C_1 C_4 R_4 R_L s + C_1 C_4 R_4 r_o s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 r_o s^3 + C_1 C_4 L_1 R_4 R_L s^2 + C_1 C_4 L_1 R_4 r_o s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 L_1 r_o s^2 + C_1 C_4 R_4 R_L s + C_1 C_4 R_4 r_o s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4}.$$

$$\mathbf{10.622} \quad \mathbf{INVALID-ORDER-622} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + 2 C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2 C_1 L_1 R_L r_o s^2 + C_4 L_1 L_4 R_4 g_m r_o s^3 + C_4 L_1 L_4 R_4 s^3 + \dots}{\dots}$$

10.623 INVALID-ORDER-623 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_s}{C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + C_4 C_L L_1 L_4 R_4 q_m r_o s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_1 L_4 R_4 s^4}$$

10.624 INVALID-ORDER-624 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_4 s^2 + 2C_1 L_1 R_4 r_o s + C_1 L_1 R_4}{C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 r_o s^2 + 2C_1 L_1 R_4 s^2 + 2C_1 L_1 R_4 r_o s + C_1 L_1 R_4}$$

$$10.625 \quad \text{INVALID-ORDER-625} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 R_4 R_L s^3}{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 R_4 R_L s^3}$$

$$10.626 \quad \text{INVALID-ORDER-626} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_4 s^4}$$

$$10.627 \quad \text{INVALID-ORDER-627} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_4 r_o s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 L_1 L_L R_4 s^3 + 2 C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L R_4 s^3}{C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_4 r_o s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 L_1 L_L R_4 s^3 + 2 C_1 L_1 L_L r_o s^3 + C_1 L_1 L_L R_4 s^3}$$

$$10.628 \quad \text{INVALID-ORDER-628} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L r_o s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L r_o s^4}$$

$$10.629 \quad \text{INVALID-ORDER-629} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_4 R_L r_o s^4 + C_1 C_L L_1 L_L R_4 R_L r_o s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_4 R_L r_o s^4 + C_1 C_L L_1 L_L R_4 R_L r_o s^4}$$

10.630 INVALID-ORDER-630 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4}$$

10.631 INVALID-ORDER-631 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4}$$

10.632 INVALID-ORDER-632 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4(g_m r_o + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 r_o s^2 + 2C_1 L_1 g_m r_o s^2 + 2C_1 L_1 s^2 + 2C_1 R_1 g_m r_o s + 2C_1 R_1 s + C_1 R_4 s + 2C_1 r_o s + C_L R_4 g_m}$$

10.633 INVALID-ORDER-633 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 L_1 + C_2 L_2 + C_3 L_3 + C_4 L_4 + C_5 L_5 + C_6 L_6 + C_7 L_7 + C_8 L_8 + C_9 L_9 + C_{10} L_{10} + C_{11} L_{11} + C_{12} L_{12} + C_{13} L_{13} + C_{14} L_{14} + C_{15} L_{15} + C_{16} L_{16} + C_{17} L_{17} + C_{18} L_{18} + C_{19} L_{19} + C_{20} L_{20} + C_{21} L_{21} + C_{22} L_{22} + C_{23} L_{23} + C_{24} L_{24} + C_{25} L_{25} + C_{26} L_{26} + C_{27} L_{27} + C_{28} L_{28} + C_{29} L_{29} + C_{30} L_{30} + C_{31} L_{31} + C_{32} L_{32} + C_{33} L_{33} + C_{34} L_{34} + C_{35} L_{35} + C_{36} L_{36} + C_{37} L_{37} + C_{38} L_{38} + C_{39} L_{39} + C_{40} L_{40} + C_{41} L_{41} + C_{42} L_{42} + C_{43} L_{43} + C_{44} L_{44} + C_{45} L_{45} + C_{46} L_{46} + C_{47} L_{47} + C_{48} L_{48} + C_{49} L_{49} + C_{50} L_{50} + C_{51} L_{51} + C_{52} L_{52} + C_{53} L_{53} + C_{54} L_{54} + C_{55} L_{55} + C_{56} L_{56} + C_{57} L_{57} + C_{58} L_{58} + C_{59} L_{59} + C_{60} L_{60} + C_{61} L_{61} + C_{62} L_{62} + C_{63} L_{63} + C_{64} L_{64} + C_{65} L_{65} + C_{66} L_{66} + C_{67} L_{67} + C_{68} L_{68} + C_{69} L_{69} + C_{70} L_{70} + C_{71} L_{71} + C_{72} L_{72} + C_{73} L_{73} + C_{74} L_{74} + C_{75} L_{75} + C_{76} L_{76} + C_{77} L_{77} + C_{78} L_{78} + C_{79} L_{79} + C_{80} L_{80} + C_{81} L_{81} + C_{82} L_{82} + C_{83} L_{83} + C_{84} L_{84} + C_{85} L_{85} + C_{86} L_{86} + C_{87} L_{87} + C_{88} L_{88} + C_{89} L_{89} + C_{90} L_{90} + C_{91} L_{91} + C_{92} L_{92} + C_{93} L_{93} + C_{94} L_{94} + C_{95} L_{95} + C_{96} L_{96} + C_{97} L_{97} + C_{98} L_{98} + C_{99} L_{99} + C_{100} L_{100} + C_{101} L_{101} + C_{102} L_{102} + C_{103} L_{103} + C_{104} L_{104} + C_{105} L_{105} + C_{106} L_{106} + C_{107} L_{107} + C_{108} L_{108} + C_{109} L_{109} + C_{110} L_{110} + C_{111} L_{111} + C_{112} L_{112} + C_{113} L_{113} + C_{114} L_{114} + C_{115} L_{115} + C_{116} L_{116} + C_{117} L_{117} + C_{118} L_{118} + C_{119} L_{119} + C_{120} L_{120} + C_{121} L_{121} + C_{122} L_{122} + C_{123} L_{123} + C_{124} L_{124} + C_{125} L_{125} + C_{126} L_{126} + C_{127} L_{127} + C_{128} L_{128} + C_{129} L_{129} + C_{130} L_{130} + C_{131} L_{131} + C_{132} L_{132} + C_{133} L_{133} + C_{134} L_{134} + C_{135} L_{135} + C_{136} L_{136} + C_{137} L_{137} + C_{138} L_{138} + C_{139} L_{139} + C_{140} L_{140} + C_{141} L_{141} + C_{142} L_{142} + C_{143} L_{143} + C_{144} L_{144} + C_{145} L_{145} + C_{146} L_{146} + C_{147} L_{147} + C_{148} L_{148} + C_{149} L_{149} + C_{150} L_{150} + C_{151} L_{151} + C_{152} L_{152} + C_{153} L_{153} + C_{154} L_{154} + C_{155} L_{155} + C_{156} L_{156} + C_{157} L_{157} + C_{158} L_{158} + C_{159} L_{159} + C_{160} L_{160} + C_{161} L_{161} + C_{162} L_{162} + C_{163} L_{163} + C_{164} L_{164} + C_{165} L_{165} + C_{166} L_{166} + C_{167} L_{167} + C_{168} L_{168} + C_{169} L_{169} + C_{170} L_{170} + C_{171} L_{171} + C_{172} L_{172} + C_{173} L_{173} + C_{174} L_{174} + C_{175} L_{175} + C_{176} L_{176} + C_{177} L_{177} + C_{178} L_{178} + C_{179} L_{179} + C_{180} L_{180} + C_{181} L_{181} + C_{182} L_{182} + C_{183} L_{183} + C_{184} L_{184} + C_{185} L_{185} + C_{186} L_{186} + C_{187} L_{187} + C_{188} L_{188} + C_{189} L_{189} + C_{190} L_{190} + C_{191} L_{191} + C_{192} L_{192} + C_{193} L_{193} + C_{194} L_{194} + C_{195} L_{195} + C_{196} L_{196} + C_{197} L_{197} + C_{198} L_{198} + C_{199} L_{199} + C_{200} L_{200} + C_{201} L_{201} + C_{202} L_{202} + C_{203} L_{203} + C_{204} L_{204} + C_{205} L_{205} + C_{206} L_{206} + C_{207} L_{207} + C_{208} L_{208} + C_{209} L_{209} + C_{210} L_{210} + C_{211} L_{211} + C_{212} L_{212} + C_{213} L_{213} + C_{214} L_{214} + C_{215} L_{215} + C_{216} L_{216} + C_{217} L_{217} + C_{218} L_{218} + C_{219} L_{219} + C_{220} L_{220} + C_{221} L_{221} + C_{222} L_{222} + C_{223} L_{223} + C_{224} L_{224} + C_{225} L_{225} + C_{226} L_{226} + C_{227} L_{227} + C_{228} L_{228} + C_{229} L_{229} + C_{230} L_{230} + C_{231} L_{231} + C_{232} L_{232} + C_{233} L_{233} + C_{234} L_{234} + C_{235} L_{235} + C_{236} L_{236} + C_{237} L_{237} + C_{238} L_{238} + C_{239} L_{239} + C_{240} L_{240} + C_{241} L_{241} + C_{242} L_{242} + C_{243} L_{243} + C_{244} L_{244} + C_{245} L_{245} + C_{246} L_{246} + C_{247} L_{247} + C_{248} L_{248} + C_{249} L_{249} + C_{250} L_{250} + C_{251} L_{251} + C_{252} L_{252} + C_{253} L_{253} + C_{254} L_{254} + C_{255} L_{255} + C_{256} L_{256} + C_{257} L_{257} + C_{258} L_{258} + C_{259} L_{259} + C_{260} L_{260} + C_{261} L_{261} + C_{262} L_{262} + C_{263} L_{263} + C_{264} L_{264} + C_{265} L_{265} + C_{266} L_{266} + C_{267} L_{267} + C_{268} L_{268} + C_{269} L_{269} + C_{270} L_{270} + C_{271} L_{271} + C_{272} L_{272} + C_{273} L_{273} + C_{274} L_{274} + C_{275} L_{275} + C_{276} L_{276} + C_{277} L_{277} + C_{278} L_{278} + C_{279} L_{279} + C_{280} L_{280} + C_{281} L_{281} + C_{282} L_{282} + C_{283} L_{283} + C_{284} L_{284} + C_{285} L_{285} + C_{286} L_{286} + C_{287} L_{287} + C_{288} L_{288} + C_{289} L_{289} + C_{290} L_{290} + C_{291} L_{291} + C_{292} L_{292} + C_{293} L_{293} + C_{294} L_{294} + C_{295} L_{295} + C_{296} L_{296} + C_{297} L_{297} + C_{298} L_{298} + C_{299} L_{299} + C_{300} L_{300} + C_{301} L_{301} + C_{302} L_{302} + C_{303} L_{303} + C_{304} L_{304} + C_{305} L_{305} + C_{306} L_{306} + C_{307} L_{307} + C_{308} L_{308} + C_{309} L_{309} + C_{310} L_{310} + C_{311} L_{311} + C_{312} L_{312} + C_{313} L_{313} + C_{314} L_{314} + C_{315} L_{315} + C_{316} L_{316} + C_{317} L_{317} + C_{318} L_{318} + C_{319} L_{319} + C_{320} L_{320} + C_{321} L_{321} + C_{322} L_{322} + C_{323} L_{323} + C_{324} L_{324} + C_{325} L_{325} + C_{326} L_{326} + C_{327} L_{327} + C_{328} L_{328} + C_{329} L_{329} + C_{330} L_{330} + C_{331} L_{331}$$

10.634 INVALID-ORDER-634 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4(g_m r_o + 1)(C_L R_L s + 1)}{C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_L s^3 + C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + 2C_1 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_L R_1 R_L s^2 + C_1 C_L R_4 R_L s^2 +$$

10.635 INVALID-ORDER-635 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_L L_L s^2 + 2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 C_L L_L r_o s^3 + C_1 C_L R_1 R_4 g_m r_o s^2 +$$

10.636 INVALID-ORDER-636 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_4 s (g_m r_o + 1) (C_1 C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_4 r_o s^3 + 2 C_1 L_1 L_L g_m r_o s^3 + 2 C_1 L_1 L_L s^3 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2 C_1 L_1 R_4)}{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_4 r_o s^3 + 2 C_1 L_1 L_L g_m r_o s^3 + 2 C_1 L_1 L_L s^3 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2 C_1 L_1 R_4}$$

10.637 INVALID-ORDER-637 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_L s^3 + 2C_1 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3}{2C_1 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_L s^3 + 2C_1 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3}$$

10.638 INVALID-ORDER-638 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_4 R_L r_o s^3 + C_1 L_1 L_L R_4 g_m r_o s^3 + C_1 L_1 L_L R_4 s^3 + 2 C_1 L_1 L_L R_L}$$

10.639 INVALID-ORDER-639 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2 C_1 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2 C_1 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_1 C_L L_L R_1 R_L s^3}{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2 C_1 C_L L_1 L_L R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2 C_1 C_L L_L R_1 R_L g_m r_o s^3 + 2 C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_1 R_L g_m r_o s^2 + C_1 C_L L_L R_1 R_L s^2 + C_1 C_L L_L R_1 R_L g_m r_o s + C_1 C_L L_L R_1 R_L s + C_1 C_L L_L R_1 R_L g_m r_o + C_1 C_L L_L R_1 R_L}$$

$$10.640 \quad \text{INVALID-ORDER-640} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad R_4, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L R_L g_m r_o s^4 + 2C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3}{C_1 C_L L_1 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L R_L g_m r_o s^4 + 2C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_L R_1 R_4 s^3}$$

$$10.641 \quad \text{INVALID-ORDER-641} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + 2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 L_1 g_m r_o s^2 + C_1 L_1 s^2 + C_1 R_1 g_m r_o s + C_1 R_1 s + C_1 R_L s + C_1 r_o s + 2C_4 R_L}$$

$$10.642 \quad \text{INVALID-ORDER-642} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 r_o s + C_1 C_L L_1 g_m r_o s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 g_m r_o s + C_1 C_L R_1 s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4)}$$

$$10.643 \quad \text{INVALID-ORDER-643} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + 2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 R_L r_o s^2 + C_1 C_L L_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_1 R_L g_m r_o s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4}$$

$$10.644 \quad \text{INVALID-ORDER-644} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1) (C_L R_L s + 1)}{s (2C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_4 C_L L_1 R_L s^3 + 2C_1 C_4 C_L R_1 R_L g_m r_o s^2 + 2C_1 C_4 C_L R_1 R_L s^2 + 2C_1 C_4 C_L R_L r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + C_1 C_L L_1 R_L g_m r_o s + C_1 C_L L_1 R_L s + C_1 C_L R_1 R_L g_m r_o s + C_1 C_L R_1 R_L s + C_1 C_L r_o s + C_1 + 2C_4 g_m r_o + 2C_4)}$$

10.645 INVALID-ORDER-645 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_L L_L s^2}{s(2C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L s^4 + 2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4$$

10.646 INVALID-ORDER-646 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (g_m r_o + 1) (C_1 L_1 s^2 + C_1 l_1 s + C_1 r_o)}{2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + 2C_1 C_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_L R_1 s^3 + 2C_1 C_4 L_L r_o s^3 + C_1 C_L L_1 L_L g_m r_o s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_1 g_m r_o s^3 + C_1 C_L L_L R_1 s^3 +}$$

10.647 INVALID-ORDER-647 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(2C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L s^4 + 2C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2C_1 C_4 C_L L_1 R_L s^3 + 2C_1 C_4 C_L L_L R_1 g_m r_o s^3 + 2C_1 C_4 C_L L_L R_1 s^3 + 2C_1 C_4 C_L L_L r_o s^3 + 2C_1 C_4 C_L R_1}$$

10.648 INVALID-ORDER-648 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_Lg_mr_os^4 + 2C_1C_4L_1L_LR_Ls^4 + 2C_1C_4L_LR_1R_Lg_mr_os^3 + 2C_1C_4L_LR_1R_Ls^3 + 2C_1C_4L_LR_Lr_os^3 + C_1C_LL_1L_LR_Lg_mr_os^4 + C_1C_LL_1L_LR_Ls^4 + C_1C_LL_R_1R_Lg_m}{2C_1C_4L_1L_LR_Lg_mr_os^4 + 2C_1C_4L_1L_LR_Ls^4 + 2C_1C_4L_LR_1R_Lg_mr_os^3 + 2C_1C_4L_LR_1R_Ls^3 + 2C_1C_4L_LR_Lr_os^3 + C_1C_LL_1L_LR_Lg_mr_os^4 + C_1C_LL_1L_LR_Ls^4 + C_1C_LL_R_1R_Lg_m}$$

10.649 INVALID-ORDER-649 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_L s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 C_L L_L R_L r_o s^4 + 2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + 2C_1 C$$

10.650 INVALID-ORDER-650 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_Ls^5 + 2C_1C_4C_LL_R_1R_Lg_mr_os^4 + 2C_1C_4C_LL_R_1R_Ls^4 + 2C_1C_4C_LL_R_Lr_os^4 + 2C_1C_4L_1R_Lg_mr_os^3 + 2C_1C_4L_1R_Ls^3 + 2C_1C_4L_1R_Lr_os^2 + 2C_1C_4L_1R_Ls^2 + 2C_1C_4L_1R_Lr_os + 2C_1C_4L_1R_Ls + 2C_1C_4L_1R_L}{2C_1C_4C_LL_1L_LR_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_Ls^5 + 2C_1C_4C_LL_R_1R_Lg_mr_os^4 + 2C_1C_4C_LL_R_1R_Ls^4 + 2C_1C_4C_LL_R_Lr_os^4 + 2C_1C_4L_1R_Lg_mr_os^3 + 2C_1C_4L_1R_Ls^3 + 2C_1C_4L_1R_Lr_os^2 + 2C_1C_4L_1R_Ls^2 + 2C_1C_4L_1R_Lr_os + 2C_1C_4L_1R_Ls + 2C_1C_4L_1R_L}$$

10.651 INVALID-ORDER-651 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{R_4 R_L (g_m r_o + 1) (C_1 + C_2)}{2C_1 C_4 L_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_4 R_L s^3 + 2C_1 C_4 R_1 R_4 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_4 R_L s^2 + 2C_1 C_4 R_4 R_L r_o s^2 + C_1 L_1 R_4 g_m r_o s^2 + C_1 L_1 R_4 s^2 + 2C_1 L_1 R_L g_m r_o s^2 + 2C_1 L_1 R_L s^2 + C_2 C_4 L_1 R_4 R_L g_m r_o s^3 + C_2 C_4 L_1 R_4 R_L s^3 + C_2 C_4 R_1 R_4 R_L g_m r_o s^2 + C_2 C_4 R_1 R_4 R_L s^2 + C_2 C_4 R_4 R_L r_o s^2 + C_2 L_1 R_4 g_m r_o s^2 + C_2 L_1 R_4 s^2 + 2C_2 L_1 R_L g_m r_o s^2 + 2C_2 L_1 R_L s^2}$$

10.652 INVALID-ORDER-652 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4(g_m r_o + 1)(C_1 L_1 s^2 + C_1 R_1 s + C_1)}{2C_1 C_4 L_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_1 R_4 g_m r_o s^2 + 2C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_4 r_o s^2 + C_1 C_L L_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L R_1 R_4 g_m r_o s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 r_o s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_1 s + C_1 C_L R_1}$$

10.653 INVALID-ORDER-653 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_1R_4R_Ls^3 + 2C_1C_4R_1R_4R_Lg_mr_0s^2 + 2C_1C_4R_1R_4R_Ls^2 + 2C_1C_4R_4R_LR_0s^2 + C_1C_LL_1R_4R_Lg_mr_0s^3 + C_1C_LL_1R_4R_Ls^3 + C_1C_LR_1R_4R_Lg_m}{2C_1C_4L_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_1R_4R_Ls^3 + 2C_1C_4R_1R_4R_Lg_mr_0s^2 + 2C_1C_4R_1R_4R_Ls^2 + 2C_1C_4R_4R_LR_0s^2 + C_1C_LL_1R_4R_Lg_mr_0s^3 + C_1C_LL_1R_4R_Ls^3 + C_1C_LR_1R_4R_Lg_m}$$

10.654 INVALID-ORDER-654 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1R_4R_Lg_mr_0s^4 + 2C_1C_4C_LL_1R_4R_Ls^4 + 2C_1C_4C_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4C_LR_1R_4R_Ls^3 + 2C_1C_4C_LR_4R_Lr_0s^3 + 2C_1C_4L_1R_4g_mr_0s^3 + 2C_1C_4L_1R_4s^3 + 2C_1C_4$$

10.655 INVALID-ORDER-655 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

10.656 INVALID-ORDER-656 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_4g_mr_0s^4 + 2C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_LR_1R_4g_mr_0s^3 + 2C_1C_4L_LR_1R_4s^3 + 2C_1C_4L_LR_4r_0s^3 + C_1C_LL_1L_LR_4g_mr_0s^4 + C_1C_LL_1L_LR_4s^4 + C_1C_LL_LR_1R_4g_mr_0s^3 + C_1C_LL_LR_1R_4s^3 + C_1C_LL_LR_4r_0s^3}{2C_1C_4L_1L_LR_4g_mr_0s^4 + 2C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_LR_1R_4g_mr_0s^3 + 2C_1C_4L_LR_1R_4s^3 + 2C_1C_4L_LR_4r_0s^3 + C_1C_LL_1L_LR_4g_mr_0s^4 + C_1C_LL_1L_LR_4s^4 + C_1C_LL_LR_1R_4g_mr_0s^3 + C_1C_LL_LR_1R_4s^3 + C_1C_LL_LR_4r_0s^3}$$

10.657 INVALID-ORDER-657 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_LR_4g_mr_os^5 + 2C_1C_4C_LL_LR_4s^5 + 2C_1C_4C_LL_R_4R_Lg_mr_os^4 + 2C_1C_4C_LL_R_4R_Ls^4 + 2C_1C_4C_LL_R_1R_4g_mr_os^4 + 2C_1C_4C_LL_R_1R_4s^4 + 2C_1C_4C_LL_R_4r_o}{2C_1C_4C_LL_LR_4g_mr_os^5 + 2C_1C_4C_LL_LR_4s^5 + 2C_1C_4C_LL_R_4R_Lg_mr_os^4 + 2C_1C_4C_LL_R_4R_Ls^4 + 2C_1C_4C_LL_R_1R_4g_mr_os^4 + 2C_1C_4C_LL_R_1R_4s^4 + 2C_1C_4C_LL_R_4r_o}$$

10.658 INVALID-ORDER-658 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_4R_Ls^4 + 2C_1C_4L_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_LR_4R_Ls^4}{2C_1C_4L_1L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_4R_Ls^4 + 2C_1C_4L_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_LR_4R_Ls^4}$$

10.659 INVALID-ORDER-659 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$10.660 \quad \text{INVALID-ORDER-660} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{R_4}{C_4 R_4 s + 1}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + 2C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_L R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L r_o s^2 + 2C_1 C_4 L_1 R_4 R_L s^2 + 2C_1 C_4 L_1 R_4 R_L r_o s + 2C_1 C_4 L_1 R_4 R_L s + 2C_1 C_4 L_1 R_4 R_L r_o}{s(C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o)}$$

$$10.661 \quad \text{INVALID-ORDER-661} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad R_4 + \frac{1}{C_4 s}, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 R_4 s + 1) (C_1 L_1 s + R_1 + \frac{1}{C_1 s})}{C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_1 R_4 g_m r_o s^2 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_4 R_1 R_L g_m r_o s^2 + 2C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 R_L r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o}$$

$$10.662 \quad \text{INVALID-ORDER-662} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad R_4 + \frac{1}{C_4 s}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(g_m r_o + 1) (C_4 R_4 s + 1) (C_1 L_1 s + R_1 + \frac{1}{C_1 s})}{s(C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o)}$$

$$10.663 \quad \text{INVALID-ORDER-663} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad R_4 + \frac{1}{C_4 s}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 R_L g_m r_o s^2 + 2C_1 C_4 L_1 R_L s^2 + 2C_1 C_4 L_1 R_L r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s^2 + 2C_1 C_4 R_1 s^2 + 2C_1 C_4 R_4 g_m r_o s^2 + 2C_1 C_4 R_4 s^2 + 2C_1 C_4 R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o}{s(C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o)}$$

$$10.664 \quad \text{INVALID-ORDER-664} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad R_4 + \frac{1}{C_4 s}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_4 R_L r_o s^3 + C_1 C_4 L_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 R_L g_m r_o s^2 + 2C_1 C_4 L_1 R_L s^2 + 2C_1 C_4 L_1 R_L r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s^2 + 2C_1 C_4 R_1 s^2 + 2C_1 C_4 R_4 g_m r_o s^2 + 2C_1 C_4 R_4 s^2 + 2C_1 C_4 R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o}{s(C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_4 r_o s^2 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + 2C_1 C_4 R_4 g_m r_o s + 2C_1 C_4 R_4 s + 2C_1 C_4 R_4 r_o)}$$

10.665 INVALID-ORDER-665 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(2C_1C_4C_LL_1L_Lg_mr_0s^4 + 2C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_4g_mr_0s^3 + C_1C_4C_LL_1R_4s^3 + 2C_1C_4C_LL_R_1g_mr_0s^3 + 2C_1C_4C_LL_R_1s^3 + C_1C_4C_LL_R_4s^3 + 2C_1C_4C_LLr_0s}$$

10.666 INVALID-ORDER-666 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4}{C_1 C_4 C_L L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 r_o s^4 + 2C_1 C_4 L_1 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 R_4 s^4}$$

10.667 INVALID-ORDER-667 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

10.668 INVALID-ORDER-668 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_1 L_L R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4}{C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L r_o s^4 + C_1 C_4 L_1 L_L R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4}$$

10.669 INVALID-ORDER-669 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

10.670 INVALID-ORDER-670 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4}{C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4}$$

10.671 INVALID-ORDER-671 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_4 L_4 s^2 + 1) (C_1 C_4 L_1 L_4 q_m r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_L q_m r_o s^3 + 2 C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_1 q_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 R_1 R_L q_m r_o s^2 + 2 C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_1 R_L q_m r_o s + C_1 C_4 R_1 R_L s + C_1 C_4 R_1 R_L)}{C_1 C_4 L_1 L_4 q_m r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_L q_m r_o s^3 + 2 C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_1 q_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 r_o s^3 + 2 C_1 C_4 R_1 R_L q_m r_o s^2 + 2 C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_1 R_L q_m r_o s + C_1 C_4 R_1 R_L s + C_1 C_4 R_1 R_L}$$

10.672 INVALID-ORDER-672 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_4 L_4 s^2 + 1)}{s(C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 r_o s^3 + 2C_1 C_4 L_1 g_m r_o s^2 + 2C_1 C_4 L_1 s^2 + C_1 C_4 L_4 s^2 + 2C_1 C_4 R_1 g_m r_o s + 2C_1 C_4 R_1 s + C_1 C_4 L_1 L_4)}$$

10.673 INVALID-ORDER-673 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_L g_m r_o}{\dots}$$

10.674 INVALID-ORDER-674 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1R_Lg_mr_os^3 + 2C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4R_1g_mr_os^3 + C_1C_4C_LL_4R_1s^3 + C_1C_4C_LL_4R_Ls^3 + C_1C_4C_LL_4R_os^3 + 2$$

10.675 INVALID-ORDER-675 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{1}{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_Lg_mr_os^4 + 2C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_4L_Ls^4 + C_1C_4C_LL_4R_1g_mr_os^3 + C_1C_4C_LL_4R_1s^3 + C_1C_4C_LL_4r_os^3 + 2C_1C_4C_LL_4R_1r_os^2 + C_1C_4C_LL_4R_1s^2 + C_1C_4C_LL_4r_os^2 + C_1C_4C_LL_4R_1s + C_1C_4C_LL_4r_os + C_1C_4C_LL_4R_1 + C_1C_4C_LL_4r_o)}$$

10.676 INVALID-ORDER-676 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{1}{C_1C_4C_LL_1L_4L_Lg_mr_os^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_4L_LR_1g_mr_os^5 + C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4L_LR_1r_os^5 + C_1C_4L_1L_4g_mr_os^4 + C_1C_4L_1L_4s^4 + 2C_1C_4L_1L_Lg_mr_os^3 + 2C_1C_4L_1L_Ls^3 + C_1C_4L_1L_LR_1g_mr_os^2 + C_1C_4L_1L_LR_1s^2 + C_1C_4L_1L_LR_1r_os^2 + C_1C_4L_1L_LR_1s + C_1C_4L_1L_LR_1r_o}$$

10.677 INVALID-ORDER-677 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{1}{s(C_1C_4C_LL_1L_4g_mr_os^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_Lg_mr_os^4 + 2C_1C_4C_LL_1L_Ls^4 + 2C_1C_4C_LL_1R_Lg_mr_os^3 + 2C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4L_Ls^4 + C_1C_4C_LL_4R_1g_mr_os^3 + C_1C_4C_LL_4R_1s^3 + C_1C_4C_LL_4R_1r_os^3 + 2C_1C_4C_LL_4R_1r_os^2 + C_1C_4C_LL_4R_1s^2 + C_1C_4C_LL_4R_1r_os^2 + C_1C_4C_LL_4R_1s + C_1C_4C_LL_4R_1r_o)}$$

10.678 INVALID-ORDER-678 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{1}{C_1C_4C_LL_1L_4L_LR_Lg_mr_os^6 + C_1C_4C_LL_1L_4L_LR_Ls^6 + C_1C_4C_LL_4L_LR_1R_Lg_mr_os^5 + C_1C_4C_LL_4L_LR_1R_Ls^5 + C_1C_4C_LL_4L_LR_1R_Lr_os^5 + C_1C_4L_1L_4L_Lg_mr_os^5 + C_1C_4L_1L_4L_Ls^5 + 2C_1C_4L_1L_LR_1g_mr_os^4 + 2C_1C_4L_1L_LR_1s^4 + C_1C_4L_1L_LR_1r_os^4 + C_1C_4L_1L_LR_1s^3 + C_1C_4L_1L_LR_1r_os^3 + C_1C_4L_1L_LR_1s^2 + C_1C_4L_1L_LR_1r_os^2 + C_1C_4L_1L_LR_1s + C_1C_4L_1L_LR_1r_o}$$

10.679 INVALID-ORDER-679 $Z(s) = \left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{1}{C_1C_4C_LL_1L_4L_Lg_mr_os^6 + C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_1L_LR_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_Ls^5 + C_1C_4C_LL_4L_LR_1g_mr_os^5 + C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4L_LR_1r_os^5 + C_1C_4C_LL_4L_LR_1s^4 + C_1C_4C_LL_4L_LR_1r_os^4 + C_1C_4C_LL_4L_LR_1s^3 + C_1C_4C_LL_4L_LR_1r_os^3 + C_1C_4C_LL_4L_LR_1s^2 + C_1C_4C_LL_4L_LR_1r_os^2 + C_1C_4C_LL_4L_LR_1s + C_1C_4C_LL_4L_LR_1r_o}$$

$$10.680 \quad \text{INVALID-ORDER-680} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad L_4 s + \frac{1}{C_4 s}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5}{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5}$$

$$10.681 \quad \text{INVALID-ORDER-681} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1}, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{L_4 R_L s (g_m r_o + 1) (C_1 L_1 s^2 + C_1 L_1 s + R_1)}{2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 L_1 L_4 g_m r_o s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 R_L g_m r_o s^2 + 2C_1 L_1 R_L s^2 + C_1 R_1 g_m r_o s^2 + C_1 R_1 s^2}$$

$$10.682 \quad \text{INVALID-ORDER-682} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_4 s (g_m r_o + 1) (C_1 L_1 s^2 + C_1 L_1 s + R_1)}{2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^3 + 2C_1 C_4 L_4 R_1 s^3 + 2C_1 C_4 L_4 r_o s^3 + C_1 C_L L_1 L_4 g_m r_o s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_4 R_1 g_m r_o s^3 + C_1 C_L L_4 R_1 s^3 + C_1 R_1 g_m r_o s^2 + C_1 R_1 s^2}$$

$$10.683 \quad \text{INVALID-ORDER-683} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_1 L_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_4 R_1 R_L g_m r_o s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 R_1 g_m r_o s^2 + C_1 R_1 s^2}{C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3 + 2C_1 C_4 L_4 R_L r_o s^3 + C_1 C_L L_1 L_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_4 R_1 R_L g_m r_o s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 R_1 g_m r_o s^2 + C_1 R_1 s^2}$$

$$10.684 \quad \text{INVALID-ORDER-684} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + C_1 R_1 g_m r_o s^2 + C_1 R_1 s^2}{2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 C_L L_4 R_L r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + C_1 R_1 g_m r_o s^2 + C_1 R_1 s^2}$$

10.685 INVALID-ORDER-685 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_4L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1s^5 + 2C_1C_4C_LL_4L_LR_0s^5 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_4}{2C_1C_4C_LL_1L_4L_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_4L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1s^5 + 2C_1C_4C_LL_4L_LR_0s^5 + 2C_1C_4L_1L_4g_mr_0s^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_4}$$

10.686 INVALID-ORDER-686 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 L_L s^4 + 2C_1 C_4 L_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_4 L_L R_1 s^3 + 2C_1 C_4 L_4 L_L r_o s^3 + C_1 C_L L_1 L_4 L_L g_m r_o s^4 + C_1 C_L L_1 L_4 L_L s^4 + C_1 C_L L_4 L_L R_1 g_m r_o s^3}{2C_1 C_4 L_1 L_4 L_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 L_L s^4 + 2C_1 C_4 L_4 L_L R_1 g_m r_o s^3 + 2C_1 C_4 L_4 L_L R_1 s^3 + 2C_1 C_4 L_4 L_L r_o s^3 + C_1 C_L L_1 L_4 L_L g_m r_o s^4 + C_1 C_L L_1 L_4 L_L s^4 + C_1 C_L L_4 L_L R_1 g_m r_o s^3}$$

10.687 INVALID-ORDER-687 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4LLg_mr_0s^6 + 2C_1C_4C_LL_1L_4LLs^6 + 2C_1C_4C_LL_1L_4RLg_mr_0s^5 + 2C_1C_4C_LL_1L_4RLs^5 + 2C_1C_4C_LL_4LLR_1g_mr_0s^5 + 2C_1C_4C_LL_4LLR_1s^5 + 2C_1C_4C_LL_4LLr_0s^5}{2C_1C_4C_LL_1L_4LLg_mr_0s^6 + 2C_1C_4C_LL_1L_4LLs^6 + 2C_1C_4C_LL_1L_4RLg_mr_0s^5 + 2C_1C_4C_LL_1L_4RLs^5 + 2C_1C_4C_LL_4LLR_1g_mr_0s^5 + 2C_1C_4C_LL_4LLR_1s^5 + 2C_1C_4C_LL_4LLr_0s^5}$$

10.688 INVALID-ORDER-688 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_Ls^4 + 2C_1C_4L_4L_LR_1R_Lg_mr_0s^3 + 2C_1C_4L_4L_LR_1R_Ls^3 + 2C_1C_4L_4L_LR_Lr_0s^3 + C_1C_LL_1L_4L_LR_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4}{2C_1C_4L_1L_4L_LR_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_Ls^4 + 2C_1C_4L_4L_LR_1R_Lg_mr_0s^3 + 2C_1C_4L_4L_LR_1R_Ls^3 + 2C_1C_4L_4L_LR_Lr_0s^3 + C_1C_LL_1L_4L_LR_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4}$$

10.689 INVALID-ORDER-689 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L g_m r_o s^5 + 2C_1 C_4$$

10.690 INVALID-ORDER-690 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_Lg_m r_o s^6 + 2C_1C_4C_LL_1L_4L_LR_Ls^6 + 2C_1C_4C_LL_4L_LR_LR_Lg_m r_o s^5 + 2C_1C_4C_LL_4L_LR_LR_Ls^5 + 2C_1C_4C_LL_4L_LR_Lr_o s^5 + 2C_1C_4L_1L_4R_LR_Lg_m r_o s^4 + 2C_1C_4L_1L_4R_LR_Ls^4 + 2C_1C_4L_1L_4R_Ls^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_1L_4R_Ls^3 + 2C_1C_4L_1L_4R_Lr_o s^3 + 2C_1C_4L_1L_4R_Ls^3 + 2C_1C_4L_1L_4s^3 + 2C_1C_4L_1L_4R_Ls^2 + 2C_1C_4L_1L_4R_Lr_o s^2 + 2C_1C_4L_1L_4R_Ls^2 + 2C_1C_4L_1L_4s^2 + 2C_1C_4L_1L_4R_Ls + 2C_1C_4L_1L_4R_Lr_o s + 2C_1C_4L_1L_4R_Ls + 2C_1C_4L_1L_4s + 2C_1C_4L_1L_4R_L + 2C_1C_4L_1L_4R_Lr_o + 2C_1C_4L_1L_4R_L + 2C_1C_4L_1L_4}{2C_1C_4C_LL_1L_4L_LR_Lg_m r_o s^6 + 2C_1C_4C_LL_1L_4L_LR_Ls^6 + 2C_1C_4C_LL_4L_LR_LR_Lg_m r_o s^5 + 2C_1C_4C_LL_4L_LR_LR_Ls^5 + 2C_1C_4C_LL_4L_LR_Lr_o s^5 + 2C_1C_4L_1L_4R_LR_Lg_m r_o s^4 + 2C_1C_4L_1L_4R_LR_Ls^4 + 2C_1C_4L_1L_4R_Ls^4 + 2C_1C_4L_1L_4s^4 + 2C_1C_4L_1L_4R_Ls^3 + 2C_1C_4L_1L_4R_Lr_o s^3 + 2C_1C_4L_1L_4R_Ls^3 + 2C_1C_4L_1L_4s^3 + 2C_1C_4L_1L_4R_Ls^2 + 2C_1C_4L_1L_4R_Lr_o s^2 + 2C_1C_4L_1L_4R_Ls^2 + 2C_1C_4L_1L_4s^2 + 2C_1C_4L_1L_4R_Ls + 2C_1C_4L_1L_4R_Lr_o s + 2C_1C_4L_1L_4R_Ls + 2C_1C_4L_1L_4s + 2C_1C_4L_1L_4R_L + 2C_1C_4L_1L_4R_Lr_o + 2C_1C_4L_1L_4R_L + 2C_1C_4L_1L_4}$$

10.691 INVALID-ORDER-691 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 q_m r_o s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 q_m r_o s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 R_L q_m r_o s^3 + 2C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_1 q_m r_o s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_L q_m r_o s^2 + C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L q_m r_o s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2 + C_1 C_4 q_m r_o s + C_1 C_4 s + C_1 R_1 R_L q_m r_o + C_1 R_1 R_L + C_1 R_1 + C_1 R_L q_m r_o + C_1 R_L + C_1 + R_1 R_L q_m r_o + R_1 R_L + R_1 + R_L q_m r_o + R_L + 1}.$$

10.692 INVALID-ORDER-692 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_4 r_o s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 +$$

10.693 INVALID-ORDER-693 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_L s^4}$$

10.694 INVALID-ORDER-694 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3}{s(C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3)}$$

10.695 INVALID-ORDER-695 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3}{s^5 + C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_4 L_L s^4 + C_1 C_4 C_L L_4 R_1 g_m r_o s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 R_1 g_m r_o s + C_1 C_4 C_L R_4 R_1 s + C_1 C_4 C_L R_4 s + C_1 C_4 C_L s}$$

10.696 INVALID-ORDER-696 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L q_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 q_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 q_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 L_L s^5}{C_1 C_4 C_L L_1 L_4 L_L q_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 q_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 q_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L r_o s^5 + C_1 C_4 C_L L_4 L_L s^5}.$$

10.697 INVALID-ORDER-697 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3}{s(C_1 C_4 C_L L_1 L_4 g_m r_o s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 g_m r_o s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2 C_1 C_4 C_L L_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_L s^3)}$$

10.698 INVALID-ORDER-698 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5}$$

10.699 INVALID-ORDER-699 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5}$$

$$\mathbf{10.700 \quad INVALID-ORDER-700} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad L_4 s + R_4 + \frac{1}{C_4 s}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m r_o s^5}{}$$

$$\mathbf{10.701 \quad INVALID-ORDER-701} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{2 C_1 C_4 L_1 L_4 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2 C_1 C_4 L_4 R_1 R_4 R_L g_m r_o s^3 + 2 C_1 C_4 L_4 R_1 R_4 R_L s^3 + 2 C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 L_1 L_4 R_4 g_m r_o s^3 + C_1 L_1 L_4 R_4 s^3 + 2 C_1 L_1 L_4 R_4}{}$$

$$\mathbf{10.702 \quad INVALID-ORDER-702} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2 C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + 2 C_1 C_4 L_4 R_1 R_4 s^3 + 2 C_1 C_4 L_4 R_4 r_o s^3 + C_1 C_L L_1 L_4 R_4 g_m r_o s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_4 R_1 R_4 g_m r_o s^3}{}$$

$$\mathbf{10.703 \quad INVALID-ORDER-703} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{2 C_1 C_4 L_1 L_4 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2 C_1 C_4 L_4 R_1 R_4 R_L g_m r_o s^3 + 2 C_1 C_4 L_4 R_1 R_4 R_L s^3 + 2 C_1 C_4 L_4 R_4 R_L r_o s^3 + C_1 C_L L_1 L_4 R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_4 R_4 R_L s^4 +}{}$$

$$\mathbf{10.704 \quad INVALID-ORDER-704} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2 C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + 2 C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 s^4 +}{}$$

10.705 INVALID-ORDER-705 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4}{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 s^4}$$

10.706 INVALID-ORDER-706 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 L_L R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_4 L_L R_1 R_4 s^3 + 2C_1 C_4 L_4 L_L R_4 r_o s^3 + C_1 C_L L_1 L_4 L_L R_4 g_m r_o s^4 + C_1 C_L L_1 L_4 L_L R_4 s^4 +$$

10.707 INVALID-ORDER-707 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^5}{\dots}$$

10.708 INVALID-ORDER-708 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_4R_Ls^4 + 2C_1C_4L_4L_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_4R_Ls^4 + 2C_1C_LL_1L_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Ls^3 + C_1C_LL_1L_4L_LR_4R_Ls^2 + C_1C_LL_1L_4L_LR_4R_Ls + C_1C_LL_1L_4L_LR_4R_L}{2C_1C_4L_1L_4L_LR_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_4R_Ls^4 + 2C_1C_4L_4L_LR_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_4L_LR_1R_4R_Ls^3 + 2C_1C_4L_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_4R_Ls^4 + 2C_1C_LL_1L_4L_LR_4R_Lr_0s^3 + C_1C_LL_1L_4L_LR_4R_Ls^3 + C_1C_LL_1L_4L_LR_4R_Ls^2 + C_1C_LL_1L_4L_LR_4R_Ls + C_1C_LL_1L_4L_LR_4R_L}.$$

10.709 INVALID-ORDER-709 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4}{2C_1C_4C_LL_1L_4L_LR_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_4L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4}$$

$$10.710 \quad \text{INVALID-ORDER-710} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 R_4 R_L s^5}{2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 R_4 R_L s^5}$$

$$10.711 \quad \text{INVALID-ORDER-711} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3}{C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_4 R_1 R_L s^3}$$

$$10.712 \quad \text{INVALID-ORDER-712} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_4 R_1 s^4}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_4 R_1 s^4}$$

$$10.713 \quad \text{INVALID-ORDER-713} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4}{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4}$$

$$10.714 \quad \text{INVALID-ORDER-714} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_4 R_1 R_L s^4}$$

$$\mathbf{10.715 \quad INVALID-ORDER-715} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 +$$

$$\mathbf{10.716 \quad INVALID-ORDER-716} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 L_L g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L$$

$$\mathbf{10.717 \quad INVALID-ORDER-717} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m r_o s^5 +$$

$$\mathbf{10.718 \quad INVALID-ORDER-718} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m r_o s^5 +$$

$$\mathbf{10.719 \quad INVALID-ORDER-719} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4$$

10.720 INVALID-ORDER-720 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5}{\dots}$$

10.721 INVALID-ORDER-721 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4 + 2 C_1 C_4 L_1 R_4 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_4 R_1 R_4 s^3}$$

10.722 INVALID-ORDER-722 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_4 g_m r_o}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_4 g_m r_o}$$

10.723 INVALID-ORDER-723 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4}{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_4 s^4}$$

10.724 INVALID-ORDER-724 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_4 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_L R_1 g_m r_o s^3 + C_1 C_4 C_L R_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_L R_1 g_m r_o s^2 + C_1 C_4 C_L R_L R_1 s^2 + C_1 C_4 C_L R_1 R_4 g_m r_o s + C_1 C_4 C_L R_1 R_4 s + C_1 C_4 C_L R_L R_1 g_m r_o s + C_1 C_4 C_L R_L R_1 s + C_1 C_4 C_L R_1 R_4 g_m r_o + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 g_m r_o + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4 g_m + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 g + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4 g + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4}{C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_4 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 g_m r_o s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_L R_1 g_m r_o s^3 + C_1 C_4 C_L R_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 g_m r_o s^2 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_L R_1 g_m r_o s^2 + C_1 C_4 C_L R_L R_1 s^2 + C_1 C_4 C_L R_1 R_4 g_m r_o s + C_1 C_4 C_L R_1 R_4 s + C_1 C_4 C_L R_L R_1 g_m r_o s + C_1 C_4 C_L R_L R_1 s + C_1 C_4 C_L R_1 R_4 g_m r_o + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 g_m r_o + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4 g_m + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 g + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4 g + C_1 C_4 C_L R_1 R_4 + C_1 C_4 C_L R_L R_1 + C_1 C_4 C_L R_1 R_4}$$

10.725 INVALID-ORDER-725 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m r_o}{\dots}$$

10.726 INVALID-ORDER-726 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L$$

10.727 INVALID-ORDER-727 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5}{2C_1 C_4 C_L L_1 L_4 L_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_4 s^5}$$

10.728 INVALID-ORDER-728 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m r_o s^5}$$

10.729 INVALID-ORDER-729 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_{4g} m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^4 + C_1 C_4 C_L L_1 L_L R_4 R_L s^4 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^3 + C_1 C_4 C_L L_1 L_L R_4 R_L s^3 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^2 + C_1 C_4 C_L L_1 L_L R_4 R_L s^2 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s + C_1 C_4 C_L L_1 L_L R_4 R_L s}{C_1 C_4 C_L L_1 L_4 L_L R_{4g} m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^4 + C_1 C_4 C_L L_1 L_L R_4 R_L s^4 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^3 + C_1 C_4 C_L L_1 L_L R_4 R_L s^3 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s^2 + C_1 C_4 C_L L_1 L_L R_4 R_L s^2 + C_1 C_4 C_L L_1 L_L R_4 R_L g m r_o s + C_1 C_4 C_L L_1 L_L R_4 R_L s}$$

10.730 INVALID-ORDER-730 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2 C_1 C_4$$

10.731 INVALID-ORDER-731 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 R_4 s (g_m r_o + 1)}{C_1 C_L L_1 R_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + C_L L_1 R_1 R_4 g_m r_o s^2 + C_L L_1 R_1 R_4 s^2 + C_L L_1 R_4 r_o s^2 + C_L R_1 R_4 r_o s + 2L_1 R_1 g_m r_o s + 2L_1 R_1 s + L_1 R_4 s + 2L_1 r_o s + R_1 R_4}$$

10.732 INVALID-ORDER-732 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1 + \frac{1}{L_1 s}}}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_4 R_L s (g_m r_o + 1)}{C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2C_1 L_1 R_1 R_L r_o s^2 + C_L L_1 R_1 R_4 R_L g_m r_o s^2 + C_L L_1 R_1 R_4 R_L s^2 + C_L L_1 R_4 R_L r_o s^2 + C_L R_1 R_4 R_L r_o s + L_1 R_1 R_4 g_m}$$

10.733 INVALID-ORDER-733 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 R_4 s (g_m r_o + 1) (\dots)}{C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + 2 C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2 C_1 L_1 R_1 r_o s^2 + C_L L_1 R_1 R_4 g_m r_o s^2 + C_L L_1 R_1 R_4 s^2 + 2 C_L L_1 R_1 R_L g_m r_o s^2 + 2 C_L L_1 R_1 R_L}$$

10.734 INVALID-ORDER-734 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 R_4 s (g_m r_o + 1) (C_L + C_{L1})}{C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2 C_1 L_1 R_1 r_o s^2 + 2 C_L L_1 L_L R_1 g_m r_o s^3 + 2 C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_4 s^3 + 2 C_L L_1 L_L r_o s^3 + C_L L_1 L_L s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_4 s + C_L R_1}$$

10.735 INVALID-ORDER-735 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 R_4 s^2 (g_m r_o + 1)}{C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + C_1 L_1 L_L R_1 R_4 s^3 + 2C_1 L_1 L_L R_1 r_o s^3 + C_1 L_1 R_1 R_4 r_o s^2 + C_L L_1 L_L R_1 R_4 g_m r_o s^3 + C_L L_1 L_L R_1 R_4 s^3 + C_L L_1 L_L R_4 r_o s^3 + C_L L_L R_1 R_4 r_o s^2 + 2L_1 L_L R_1 g_m}$$

10.736 INVALID-ORDER-736 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + 2C_L L_1 L_L R_1 g_m r_o s^3 + 2C_L L_1 L_L R_1 g_m r_o s^2 + 2C_L L_1 L_L R_1 g_m r_o s + 2C_L L_1 L_L R_1 g_m r_o}{C_1 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + 2C_L L_1 L_L R_1 g_m r_o s^3 + 2C_L L_1 L_L R_1 g_m r_o s^2 + 2C_L L_1 L_L R_1 g_m r_o s + 2C_L L_1 L_L R_1 g_m r_o}$$

10.737 INVALID-ORDER-737 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 R_L r_o s^4 + C_1 L_1 L_L R_1 R_4 R_L s^3 + C_1 L_1 L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_L R_1 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L r_o s^2 + C_L L_1 L_L R_1 R_4 R_L g_m r_o s^3 + C_L L_1 L_L R_1 R_4 R_L s^3 + C_L L_1 L_L R_1 R_4 R_L r_o s^2}{C_1 C_L L_1 L_L R_1 R_4 R_L r_o s^4 + C_1 L_1 L_L R_1 R_4 R_L s^3 + C_1 L_1 L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_L R_1 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L r_o s^2 + C_L L_1 L_L R_1 R_4 R_L g_m r_o s^3 + C_L L_1 L_L R_1 R_4 R_L s^3 + C_L L_1 L_L R_1 R_4 R_L r_o s^2}$$

10.738 INVALID-ORDER-738 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + 2C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 L_1 L_L R_1 R_4 s^3 + 2C_1 L_1 L_L R_1 r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2C_1 L_1 R_1 R_L r_o s^2 + C_1 L_1 R_1 R_L r_o^2}{\dots}$$

10.739 INVALID-ORDER-739 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + C_L L_1 L_L R_1 R_4 g}{C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + C_L L_1 L_L R_1 R_4 g}$$

$$10.740 \quad \text{INVALID-ORDER-740} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + 2C_4 L_1 R_1 R_L g_m r_o s^2 + 2C_4 L_1 R_1 R_L s^2 + 2C_4 L_1 R_L r_o s^2 + 2C_4 R_1 R_L r_o s + L_1 R_1 g_m r_o s + L_1 R_1 s + L_1 R_L s + L_1 r_o s + R_1}$$

$$10.741 \quad \text{INVALID-ORDER-741} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (g_m r_o + 1)}{2C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + 2C_4 L_1 R_1 g_m r_o s^2 + 2C_4 L_1 R_1 s^2 + 2C_4 L_1 r_o s^2 + 2C_4 R_1 r_o s + C_L L_1 R_1 g_m r_o s^2 + C_L L_1 R_1 s^2 + C_L L_1 r_o s^2 + C_L R_1 r_o s + L_1 s}$$

$$10.742 \quad \text{INVALID-ORDER-742} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + 2C_4 L_1 R_1 R_L g_m r_o s^2 + 2C_4 L_1 R_1 R_L s^2 + 2C_4 L_1 R_L r_o s^2 + 2C_4 R_1 R_L r_o s + C_L L_1 R_1 R_L g_m r_o s^2 + C_L L_1 R_1 R_L s^2 + C_L L_1 R_L r_o s^2 + C_L R_1 R_L r_o s + L_1 s}$$

$$10.743 \quad \text{INVALID-ORDER-743} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 R_1 R_L g_m r_o s^3 + 2C_4 C_L L_1 R_1 R_L s^3 + 2C_4 C_L L_1 R_L r_o s^3 + 2C_4 C_L R_1 R_L r_o s + L_1 s}$$

$$10.744 \quad \text{INVALID-ORDER-744} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (g_m r_o + 1) (C_L R_L s + 1)}{2C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + 2C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_4 C_L L_1 L_L R_1 s^4 + 2C_4 C_L L_1 L_L r_o s^4 + 2C_4 C_L L_L R_1 r_o s + L_1 s}$$

10.745 INVALID-ORDER-745 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 r_o s^2 + 2C_4 L_1 L_L R_1 g_m r_o s^3 + 2C_4 L_1 L_L R_1 s^3 + 2C_4 L_1 L_L r_o s^3 + 2C_4 L_L R_1 r_o s^2 + C_L L_1 L_L R_1 g_m r_o s^3 + C_L L_1 L_L R_1 r_o s^2}$$

10.746 INVALID-ORDER-746 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1r_os^5 + 2C_1C_4C_LL_1R_1R_LR_os^4 + 2C_1C_4L_1R_1r_os^3 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1R_1R_Ls^3 + C_1C_LL_1R_1r_os^3 + C_1L_1R_1s^2 + 2C_4C_LL_1L_LR_1g_mr_os^4 + 2C_4C_LL_1L_LR_1r_os^3 + 2C_4C_LL_1L_LR_1r_os^2 + 2C_4C_LL_1L_LR_1r_os}{2C_1C_4C_LL_1L_LR_1r_os^5 + 2C_1C_4C_LL_1R_1R_LR_os^4 + 2C_1C_4L_1R_1r_os^3 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1R_1R_Ls^3 + C_1C_LL_1R_1r_os^3 + C_1L_1R_1s^2 + 2C_4C_LL_1L_LR_1g_mr_os^4 + 2C_4C_LL_1L_LR_1r_os^3 + 2C_4C_LL_1L_LR_1r_os^2 + 2C_4C_LL_1L_LR_1r_os}$$

10.747 INVALID-ORDER-747 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1R_Lr_0s^4 + C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1L_1L_LR_1R_Ls^3 + C_1L_1L_LR_1r_0s^3 + C_1L_1R_1R_Lr_0s^2 + 2C_4L_1L_LR_1R_Lg_mr_0s^3 + 2C_4L_1L_LR_1R_Ls^3 + 2C_4L_1L_LR_1r_0s^3 + 2C_4L_1L_LR_1R_Lr_0s^2}{2C_1C_4L_1L_LR_1R_Lr_0s^4 + C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1L_1L_LR_1R_Ls^3 + C_1L_1L_LR_1r_0s^3 + C_1L_1R_1R_Lr_0s^2 + 2C_4L_1L_LR_1R_Lg_mr_0s^3 + 2C_4L_1L_LR_1R_Ls^3 + 2C_4L_1L_LR_1r_0s^3 + 2C_4L_1L_LR_1R_Lr_0s^2}$$

10.748 INVALID-ORDER-748 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_Lr_os^5 + 2C_1C_4L_1L_LR_1r_os^4 + 2C_1C_4L_1R_1R_Lr_os^3 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_1r_os^4 + C_1L_1L_LR_1s^3 + C_1L_1R_1R_Ls^2 + C_1L_1R_1r_os^2 + 2C_4C_LL_1L_LR_1R_1r_os}{2C_1C_4C_LL_1L_LR_1R_1R_Lr_os^5 + 2C_1C_4L_1L_LR_1r_os^4 + 2C_1C_4L_1R_1R_Lr_os^3 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_1r_os^4 + C_1L_1L_LR_1s^3 + C_1L_1R_1R_Ls^2 + C_1L_1R_1r_os^2 + 2C_4C_LL_1L_LR_1R_1r_os}$$

10.749 INVALID-ORDER-749 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_LR_0s^5 + 2C_1C_4L_1R_1R_LR_0s^3 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_1r_0s^4 + C_1C_LL_1R_1R_LR_0s^3 + C_1L_1R_1R_Ls^2 + C_1L_1R_1r_0s^2 + 2C_4C_LL_1L_LR_1R_Lg_mr_0s}{2C_1C_4C_LL_1L_LR_1R_LR_0s^5 + 2C_1C_4L_1R_1R_LR_0s^3 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_1r_0s^4 + C_1C_LL_1R_1R_LR_0s^3 + C_1L_1R_1R_Ls^2 + C_1L_1R_1r_0s^2 + 2C_4C_LL_1L_LR_1R_Lg_mr_0s}$$

$$\mathbf{10.750 \quad INVALID-ORDER-750} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2C_1 L_1 R_1 R_L r_o s^2 + 2C_4 L_1 R_1 R_4 R_L g_m r_o s^2 + 2C_4 L_1 R_1 R_4 R_L s^2 + 2C_4 L_1 R_4 R_L r_o s^2 + 2C_4 R_1 R_4 R_L r_o s + L_1 R_1 R_4 R_L}$$

$$\mathbf{10.751 \quad INVALID-ORDER-751} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_4 s (g_m r_o + 1)}{2C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + 2C_4 L_1 R_1 R_4 g_m r_o s^2 + 2C_4 L_1 R_1 R_4 s^2 + 2C_4 L_1 R_4 r_o s^2 + 2C_4 R_1 R_4 r_o s + C_L L_1 R_1 R_4 g_m r_o s^2 + C_L L_1 R_1 R_4}$$

$$\mathbf{10.752 \quad INVALID-ORDER-752} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2C_1 L_1 R_1 R_L r_o s^2 + 2C_4 L_1 R_1 R_4 R_L g_m r_o s^2 + 2C_4 L_1 R_1 R_4 R_L s^2 + 2C_4 L_1 R_4 R_L r_o s^2 + 2C_4 R_1 R_4 R_L r_o s + C_L L_1 R_1 R_4 R_L}$$

$$\mathbf{10.753 \quad INVALID-ORDER-753} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + 2C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^2 + 2C_4 C_L L_1 R_1 R_4 R_L s^2 + 2C_4 C_L L_1 R_4 R_L r_o s^2 + 2C_4 C_L R_1 R_4 R_L r_o s + C_L L_1 R_1 R_4 R_L}$$

$$\mathbf{10.754 \quad INVALID-ORDER-754} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_4 R_L s (g_m r_o + 1)}{2C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + 2C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^2 + 2C_4 C_L L_1 L_L R_1 R_4 s^2 + 2C_4 C_L L_1 R_4 R_L r_o s^2 + 2C_4 C_L R_1 R_4 R_L r_o s + C_L L_1 R_1 R_4 R_L}$$

10.755 INVALID-ORDER-755 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_L R_1 R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + C_1 L_1 L_L R_1 R_4 s^3 + 2C_1 L_1 L_L R_1 r_o s^3 + C_1 L_1 R_1 R_4 r_o s^2 + 2C_4 L_1 L_L R_1 R_4 g_m r_o s^3 + 2C_4 L_1 L_L R_1 R_4 s^3 + 2C_4 L_1 L_L R_4 r_o s^3 + 2C_4 L_1 L_L R_1 R_4 s^3}{\dots}$$

10.756 INVALID-ORDER-756 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_1 R_4 s^2 + 2C_1 C_L L_1 R_1 r_o s^2 + 2C_1 C_L L_1 R_1 s + 2C_1 C_L L_1 r_o + 2C_1 C_L L_1}{2C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_1 R_4 s^2 + 2C_1 C_L L_1 R_1 r_o s^2 + 2C_1 C_L L_1 R_1 s + 2C_1 C_L L_1 r_o + 2C_1 C_L L_1}$$

10.757 INVALID-ORDER-757 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1R_4R_Lr_0s^4 + C_1C_LL_1L_LR_1R_4R_Lr_0s^4 + C_1L_1L_LR_1R_4R_Ls^3 + C_1L_1L_LR_1R_4r_0s^3 + 2C_1L_1L_LR_1R_Lr_0s^3 + C_1L_1R_1R_4R_Lr_0s^2 + 2C_4L_1L_LR_1R_4R_Lg_mr_0s^3 + 2C_4L_1L_LR_1R_4R_Lg_mr_0s^2 + 2C_4L_1L_LR_1R_4R_Lg_mr_0s + 2C_4L_1L_LR_1R_4R_Lg_mr_0}{2C_1C_4L_1L_LR_1R_4R_Lr_0s^4 + C_1C_LL_1L_LR_1R_4R_Lr_0s^4 + C_1L_1L_LR_1R_4R_Ls^3 + C_1L_1L_LR_1R_4r_0s^3 + 2C_1L_1L_LR_1R_Lr_0s^3 + C_1L_1R_1R_4R_Lr_0s^2 + 2C_4L_1L_LR_1R_4R_Lg_mr_0s^3 + 2C_4L_1L_LR_1R_4R_Lg_mr_0s^2 + 2C_4L_1L_LR_1R_4R_Lg_mr_0s + 2C_4L_1L_LR_1R_4R_Lg_mr_0}$$

10.758 INVALID-ORDER-758 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_LR_1R_4r_0s^4 + 2C_1C_4L_1R_1R_4R_Lr_0s^3 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_1R_4r_0s^4 + 2C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1L_1L_LR_1R_4s^3}{2C_1C_4C_LL_1L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_LR_1R_4r_0s^4 + 2C_1C_4L_1R_1R_4R_Lr_0s^3 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_1R_4r_0s^4 + 2C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1L_1L_LR_1R_4s^3}$$

10.759 INVALID-ORDER-759 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1R_1R_4R_Lr_0s^3 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_1R_4r_0s^4 + 2C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1C_LL_1R_1R_4R_Lr_0s^3 + C_1L_1R_1R_4R_Ls^2}{2C_1C_4C_LL_1L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1R_1R_4R_Lr_0s^3 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_1R_4r_0s^4 + 2C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1C_LL_1R_1R_4R_Lr_0s^3 + C_1L_1R_1R_4R_Ls^2}$$

$$\mathbf{10.760 \quad INVALID-ORDER-760} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1) (C_4 R_4 + 1)}{C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + C_4 L_1 R_1 R_4 g_m r_o s^2 + C_4 L_1 R_1 R_4 s^2 + 2 C_4 L_1 R_1 R_L g_m r_o s^2 + 2 C_4 L_1 R_1 R_L s^2 + 1}$$

$$\mathbf{10.761 \quad INVALID-ORDER-761} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (g_m r_o + 1) (C_4 R_4 + 1)}{C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_4 g_m r_o s^3 + C_4 C_L L_1 R_1 R_4 s^3 + C_4 C_L L_1 R_4 r_o s^3 + C_4 C_L R_1 R_4 r_o s^2 + 1}$$

$$\mathbf{10.762 \quad INVALID-ORDER-762} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1) (C_4 R_4 + 1)}{C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + 1}$$

$$\mathbf{10.763 \quad INVALID-ORDER-763} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1) (C_4 R_4 + 1)}{C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + 1}$$

$$\mathbf{10.764 \quad INVALID-ORDER-764} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1) (C_4 R_4 + 1)}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + 1}$$

10.765 INVALID-ORDER-765 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_1 R_4 s^3 + C_4 C_L L_1 L_L R_1 R_4 r_o s^2 + C_4 C_L L_1 L_L R_1 R_4 s}{C_1 C_4 C_L L_L R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_4 C_L L_1 L_L R_1 R_4 s^3 + C_4 C_L L_1 L_L R_1 R_4 r_o s^2 + C_4 C_L L_1 L_L R_1 R_4 s}$$

10.766 INVALID-ORDER-766 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L$$

10.767 INVALID-ORDER-767 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 L_1 L_L R_1 R_L s^3 + \dots}{\dots}$$

10.768 INVALID-ORDER-768 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_4 s^2 + 2 C_1 C_4 L_1 R_1 R_4 r_o s^2 + C_1 C_4 L_1 R_1 R_4 s + C_1 C_4 L_1 R_1 R_4 r_o s + C_1 C_4 L_1 R_1 R_4}{C_1 C_4 C_L L_L L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_4 s^2 + 2 C_1 C_4 L_1 R_1 R_4 r_o s^2 + C_1 C_4 L_1 R_1 R_4 s + C_1 C_4 L_1 R_1 R_4 r_o s + C_1 C_4 L_1 R_1 R_4}$$

10.769 INVALID-ORDER-769 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3}{C_1 C_4 C_L L_L L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_L L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_L L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3}$$

10.770 INVALID-ORDER-770 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (g_m r_o + 1) (C_4 L_4 + C_5 L_5)}{C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + C_4 L_1 L_4 R_1 g_m r_o s^3 + C_4 L_1 L_4 R_1 s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_1 L_4 r_o s^3 + 2 C_4 L_1 R_1 r_o s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 r_o s^2 + C_4 R_1 s^2 + C_4 r_o s^2 + C_4}.$$

10.771 INVALID-ORDER-771 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 s (g_m r_o + 1) (C_4 L_4 s}{C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 r_o s^4 + C_4 C_L L_4 R_1 r_o s^3 +$$

10.772 INVALID-ORDER-772 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_L L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L r_o s^3 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 C_L L_1 R_1 r_o s^2 + C_1 C_4 C_L L_1 R_L s^2 + C_1 C_4 C_L L_1 r_o s^2 + C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 R_L s^4}.$$

10.773 INVALID-ORDER-773 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 r_o s^2 + C_4 C_L L_1 R_1 R_L s^2 + C_4 C_L L_1 R_1 r_o s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_1 r_o s^2 + C_4 R_1 s^2}{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 r_o s^2 + C_4 C_L L_1 R_1 R_L s^2 + C_4 C_L L_1 R_1 r_o s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_1 r_o s^2 + C_4 R_1 s^2}$$

10.774 INVALID-ORDER-774 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4}$$

10.775 INVALID-ORDER-775 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 L_L R_1 r_o s^3 + C_4 C_L L_1 L_4 L_L R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 r_o s + C_4 C_L L_1 L_4 L_L R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_L L_1 L_L R_1 r_o s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 L_L R_1 r_o s^3 + C_4 C_L L_1 L_4 L_L R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 r_o s + C_4 C_L L_1 L_4 L_L R_1}$$

10.776 INVALID-ORDER-776 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^3 + C_1 C_L L_1 L_L R_1 r_o s^2 + C_1 C_L L_1 L_L R_1 s^2 + C_1 C_L L_1 L_L R_1 r_o s + C_1 C_L L_1 L_L R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 s^3 + C_1 C_L L_1 L_L R_1 r_o s^2 + C_1 C_L L_1 L_L R_1 s^2 + C_1 C_L L_1 L_L R_1 r_o s + C_1 C_L L_1 L_L R_1}$$

10.777 INVALID-ORDER-777 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 L_1 L_L R_1 R_L s^3 + C_1 L_1 L_L R_1 r_o s^3 + C_1 L_1 L_L R_1 s^2 + C_1 L_1 L_L r_o s^2 + C_1 L_1 R_1 s + C_1 R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 L_L R_1 R_L r_o s^4 + C_1 L_1 L_L R_1 R_L s^3 + C_1 L_1 L_L R_1 r_o s^3 + C_1 L_1 L_L R_1 s^2 + C_1 L_1 L_L r_o s^2 + C_1 L_1 R_1 s + C_1 R_1}$$

10.778 INVALID-ORDER-778 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 s^3 + C_1 C_4 L_1 L_L R_1 r_o s^3 + C_1 C_4 L_1 L_L R_1 s^2 + C_1 C_4 L_1 L_L R_1 r_o s^2 + C_1 C_4 L_1 L_L R_1 s + C_1 C_4 L_1 L_L R_1 r_o}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 s^3 + C_1 C_4 L_1 L_L R_1 r_o s^3 + C_1 C_4 L_1 L_L R_1 s^2 + C_1 C_4 L_1 L_L R_1 r_o s^2 + C_1 C_4 L_1 L_L R_1 s + C_1 C_4 L_1 L_L R_1 r_o}$$

10.779 INVALID-ORDER-779 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3}$$

10.780 INVALID-ORDER-780 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{L_1 L_4 R_1 R_L s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 r_o s^3 + 2C_1 L_1 R_1 R_L r_o s^2 + 2C_4 L_1 L_4 R_1 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_1 R_L s^3 + 2C_4 L_1 L_4 R_L r_o s^3 + 2C_4 L_4 R_1 R_L r_o s^2 + L_1 L_4 R_1 R_L s^2}$$

10.781 INVALID-ORDER-781 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 L_4 R_1 s^2 (g_m r_o + 1)}{2C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_L L_1 L_4 R_1 r_o s^4 + C_1 L_1 L_4 R_1 s^3 + 2C_1 L_1 R_1 r_o s^2 + 2C_4 L_1 L_4 R_1 g_m r_o s^3 + 2C_4 L_1 L_4 R_1 s^3 + 2C_4 L_1 L_4 r_o s^3 + 2C_4 L_4 R_1 r_o s^2 + C_L L_1 L_4 R_1 g_m r_o s^3 + C_L L_1 L_4 R_1 r_o s^2}$$

10.782 INVALID-ORDER-782 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_L L_1 L_4 R_1 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 r_o s^3 + 2C_1 L_1 R_1 R_L r_o s^2 + 2C_4 L_1 L_4 R_1 R_L g_m r_o s^3 + 2C_4 L_1 L_4 R_1 R_L s^3 + 2C_4 L_1 L_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + 2C_4 L_1 L_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_L s^3 + 2C_4 L_1 L_4 R_L r_o s^3 + 2C_4 L_1 L_4 R_L s^3}{\dots}$$

10.783 INVALID-ORDER-783 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_1R_Lr_os^5 + 2C_1C_4L_1L_4R_1r_os^4 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_1r_os^4 + 2C_1C_LL_1R_1R_Lr_os^3 + C_1L_1L_4R_1s^3 + 2C_1L_1R_1r_os^2 + 2C_4C_LL_1L_4R_1R_Lg_mr_os}{2C_1C_4C_LL_1L_4R_1R_Lr_os^5 + 2C_1C_4L_1L_4R_1r_os^4 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_1r_os^4 + 2C_1C_LL_1R_1R_Lr_os^3 + C_1L_1L_4R_1s^3 + 2C_1L_1R_1r_os^2 + 2C_4C_LL_1L_4R_1R_Lg_mr_os}$$

10.784 INVALID-ORDER-784 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1r_os^6 + 2C_1C_4L_1L_4R_1r_os^4 + C_1C_LL_1L_4L_LR_1s^5 + C_1C_LL_1L_4R_1r_os^4 + 2C_1C_LL_1L_LR_1r_os^4 + C_1L_1L_4R_1s^3 + 2C_1L_1R_1r_os^2 + 2C_4C_LL_1L_4L_LR_1g_mr_os^5}{2C_1C_4C_LL_1L_4L_LR_1r_os^6 + 2C_1C_4L_1L_4R_1r_os^4 + C_1C_LL_1L_4L_LR_1s^5 + C_1C_LL_1L_4R_1r_os^4 + 2C_1C_LL_1L_LR_1r_os^4 + C_1L_1L_4R_1s^3 + 2C_1L_1R_1r_os^2 + 2C_4C_LL_1L_4L_LR_1g_mr_os^5}$$

10.785 INVALID-ORDER-785 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L R_1 r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 r_o s^4 + C_1 L_1 L_4 L_L R_1 s^3 + C_1 L_1 L_4 R_1 r_o s^2 + 2C_1 L_1 L_L R_1 r_o s^2 + 2C_4 L_1 L_4 L_L R_1 g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_1 s^3 + 2C_4 L_1 L_4 L_L r_o s^3 + 2C_1 C_4 L_1 L_4 L_L R_1 s^4}{2C_1 C_4 L_1 L_4 L_L R_1 r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 r_o s^4 + C_1 L_1 L_4 L_L R_1 s^3 + C_1 L_1 L_4 R_1 r_o s^2 + 2C_1 L_1 L_L R_1 r_o s^2 + 2C_4 L_1 L_4 L_L R_1 g_m r_o s^3 + 2C_4 L_1 L_4 L_L R_1 s^3 + 2C_4 L_1 L_4 L_L r_o s^3 + 2C_1 C_4 L_1 L_4 L_L R_1 s^4}.$$

10.786 INVALID-ORDER-786 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1r_0s^6 + 2C_1C_4C_LL_1L_4R_1R_LR_0s^5 + 2C_1C_4L_1L_4R_1r_0s^4 + C_1C_LL_1L_4L_LR_1s^5 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_1r_0s^4 + 2C_1C_LL_1L_LR_1r_0s^4 + 2C_1C_L}{2C_1C_4C_LL_1L_4L_LR_1r_0s^6 + 2C_1C_4C_LL_1L_4R_1R_LR_0s^5 + 2C_1C_4L_1L_4R_1r_0s^4 + C_1C_LL_1L_4L_LR_1s^5 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_1r_0s^4 + 2C_1C_LL_1L_LR_1r_0s^4 + 2C_1C_L}$$

10.787 INVALID-ORDER-787 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^4 + C_1 L_1 L_4 L_L R_1 R_L s^3 + C_1 L_1 L_4 L_L R_1 r_o s^3 + C_1 L_1 L_4 R_1 R_L r_o s^2 + 2C_1 L_1 L_L R_1 R_L r_o s^2 + 2C_4 L_1 L_4 L_L R_1 R_L g_m r_o s^3 + 2C$$

10.788 INVALID-ORDER-788 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_LR_0s^6 + 2C_1C_4L_1L_4L_LR_1r_0s^5 + 2C_1C_4L_1L_4R_1R_LR_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^5 + C_1C_LL_1L_4L_LR_1r_0s^5 + 2C_1C_LL_1L_LR_1R_LR_0s^4 + C_1L_1L_4L_LR_1s^4}{2C_1C_4C_LL_1L_4L_LR_1R_LR_0s^6 + 2C_1C_4L_1L_4L_LR_1r_0s^5 + 2C_1C_4L_1L_4R_1R_LR_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^5 + C_1C_LL_1L_4L_LR_1r_0s^5 + 2C_1C_LL_1L_LR_1R_LR_0s^4 + C_1L_1L_4L_LR_1s^4}$$

10.789 INVALID-ORDER-789 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_Lr_0s^6 + 2C_1C_4L_1L_4R_1R_Lr_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^5 + C_1C_LL_1L_4L_LR_1r_0s^5 + C_1C_LL_1L_4R_1R_Lr_0s^4 + 2C_1C_LL_1L_LR_1R_Lr_0s^4 + C_1L_1L_4R_1R_Ls^3 -$$

$$\mathbf{10.790 \quad INVALID-ORDER-790} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + C_4 L_1 L_4 R_1 g_m r_o s^3 + C_4 L_1 L_4 R_1 s^5}{C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 r_o s^2 + C_4 L_1 L_4 R_1 g_m r_o s^3 + C_4 L_1 L_4 R_1 s^5}$$

$$\mathbf{10.791 \quad INVALID-ORDER-791} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}{C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}$$

$$\mathbf{10.792 \quad INVALID-ORDER-792} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}{C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}$$

$$\mathbf{10.793 \quad INVALID-ORDER-793} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}$$

$$\mathbf{10.794 \quad INVALID-ORDER-794} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 r_o s^3 + C_1 C_L L_1 R_1 r_o s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m r_o s^4 + C_4 C_L L_1 L_4 R_1 s^5}$$

10.795 INVALID-ORDER-795 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 r_o s^4 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 L_L}$$

10.796 INVALID-ORDER-796 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1 + \frac{1}{L_1 s}}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 r_o s^4 + \dots}{\dots}$$

10.797 INVALID-ORDER-797 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s^2 + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s^2 + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s + C_1 C_4 L_1 L_L R_1 R_4 R_L r_o}$$

10.798 INVALID-ORDER-798 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 s^5 + C_1 C_4 L_1 L_4 R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^3 + C_1 C_4 L_1 L_4 R_1 r_o s^3 + C_1 C_4 L_1 L_4 R_1 s^2 + C_1 C_4 L_1 L_4 R_1 r_o s^2 + C_1 C_4 L_1 L_4 R_1 s + C_1 C_4 L_1 L_4 R_1 r_o}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 s^5 + C_1 C_4 L_1 L_4 R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^3 + C_1 C_4 L_1 L_4 R_1 r_o s^3 + C_1 C_4 L_1 L_4 R_1 s^2 + C_1 C_4 L_1 L_4 R_1 r_o s^2 + C_1 C_4 L_1 L_4 R_1 s + C_1 C_4 L_1 L_4 R_1 r_o}$$

10.799 INVALID-ORDER-799 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5}$$

10.800 INVALID-ORDER-800 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 R_1 R_4 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_4 R_L s^3 + C_1 L_1 L_4 R_1 R_4 r_o s^3 + 2C_1 L_1 L_4 R_1 R_L r_o s^3 + 2C_1 L_1 R_1 R_4 R_L r_o s^2 + 2C_4 L_1 L_4 R_1 R_4 R_L q_m r_o s^3 + 2C_4 L_1 L_4 R_1 R_4 R_L s^3 + 2C_4 L_1 L_4 R_1 R_4 R_L q_m s^2}{2C_1 C_4 L_1 L_4 R_1 R_4 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_4 R_L s^3 + C_1 L_1 L_4 R_1 R_4 r_o s^3 + 2C_1 L_1 L_4 R_1 R_L r_o s^3 + 2C_1 L_1 R_1 R_4 R_L r_o s^2 + 2C_4 L_1 L_4 R_1 R_4 R_L q_m r_o s^3 + 2C_4 L_1 L_4 R_1 R_4 R_L s^3 + 2C_4 L_1 L_4 R_1 R_4 R_L q_m s^2}$$

10.801 INVALID-ORDER-801 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + C_1 C_L L_1 L_4 R_1 R_4 r_o s^4 + C_1 L_1 L_4 R_1 R_4 s^3 + 2C_1 L_1 L_4 R_1 r_o s^3 + 2C_1 L_1 R_1 R_4 r_o s^2 + 2C_4 L_1 L_4 R_1 R_4 g_m r_o s^3 + 2C_4 L_1 L_4 R_1 R_4 s^3 + 2C_4 L_1 L_4 R_4 r_o s^3 + 2C_4 L_1 L_4 R_1 R_4 r_o s^3 + 2C_4 L_1 L_4 R_1 R_4 r_o s^3}{\dots}$$

10.802 INVALID-ORDER-802 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4R_Lr_0s^4 + C_1C_LL_1L_4R_1R_4R_Lr_0s^4 + C_1L_1L_4R_1R_4R_Ls^3 + C_1L_1L_4R_1R_4r_0s^3 + 2C_1L_1L_4R_1R_Lr_0s^3 + 2C_1L_1R_1R_4R_Lr_0s^2 + 2C_4L_1L_4R_1R_4R_Lg_mr_0s^3 + 2C_4L_1L_4R_1R_4R_Lr_0s^2 + 2C_4L_1L_4R_1R_4R_Lr_0s}{2C_1C_4L_1L_4R_1R_4R_Lr_0s^4 + C_1C_LL_1L_4R_1R_4R_Lr_0s^4 + C_1L_1L_4R_1R_4R_Ls^3 + C_1L_1L_4R_1R_4r_0s^3 + 2C_1L_1L_4R_1R_Lr_0s^3 + 2C_1L_1R_1R_4R_Lr_0s^2 + 2C_4L_1L_4R_1R_4R_Lg_mr_0s^3 + 2C_4L_1L_4R_1R_4R_Lr_0s^2 + 2C_4L_1L_4R_1R_4R_Lr_0s}$$

10.803 INVALID-ORDER-803 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1R_4r_0s^4 + C_1C_LL_1L_4R_1R_4R_Ls^4 + C_1C_LL_1L_4R_1R_4r_0s^4 + 2C_1C_LL_1L_4R_1R_LR_0s^4 + 2C_1C_LL_1R_1R_4R_LR_0s^3 + C_1L_1L_4R_1R_4s^3 -$$

10.804 INVALID-ORDER-804 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_4r_0s^6 + 2C_1C_4L_1L_4R_1R_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4s^5 + 2C_1C_LL_1L_4L_LR_1r_0s^5 + C_1C_LL_1L_4R_1R_4r_0s^4 + 2C_1C_LL_1L_LR_1R_4r_0s^4 + C_1L_1L_4R_1R_4s^3 +$$

10.805 INVALID-ORDER-805 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_1R_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4r_0s^4 + C_1L_1L_4L_LR_1R_4s^3 + 2C_1L_1L_4L_LR_1r_0s^3 + C_1L_1L_4R_1R_4r_0s^2 + 2C_1L_1L_LR_1R_4r_0s^2 + 2C_4L_1L_4L_LR_1R_4g_mr_0s^3 + 2C_4L_1L_4L_LR_1R_4r_0s^2 + 2C_4L_1L_4L_LR_1R_4r_0s}{2C_1C_4L_1L_4L_LR_1R_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4r_0s^4 + C_1L_1L_4L_LR_1R_4s^3 + 2C_1L_1L_4L_LR_1r_0s^3 + C_1L_1L_4R_1R_4r_0s^2 + 2C_1L_1L_LR_1R_4r_0s^2 + 2C_4L_1L_4L_LR_1R_4g_mr_0s^3 + 2C_4L_1L_4L_LR_1R_4r_0s^2 + 2C_4L_1L_4L_LR_1R_4r_0s}$$

10.806 INVALID-ORDER-806 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_4r_0s^6 + 2C_1C_4C_LL_1L_4R_1R_4R_LR_0s^5 + 2C_1C_4L_1L_4R_1R_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4s^5 + 2C_1C_LL_1L_4L_LR_1r_0s^5 + C_1C_LL_1L_4R_1R_4R_Ls^4 + C_1C_LL_1L_4R_1R_4R_Lr_0s^4}{2C_1C_4C_LL_1L_4L_LR_1R_4r_0s^6 + 2C_1C_4C_LL_1L_4R_1R_4R_LR_0s^5 + 2C_1C_4L_1L_4R_1R_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4s^5 + 2C_1C_LL_1L_4L_LR_1r_0s^5 + C_1C_LL_1L_4R_1R_4R_Ls^4 + C_1C_LL_1L_4R_1R_4R_Lr_0s^4}$$

10.807 INVALID-ORDER-807 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L r_o s^4 + C_1 L_1 L_4 L_L R_1 R_4 R_L s^3 + C_1 L_1 L_4 L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_4 L_L R_1 R_L r_o s^3 + C_1 L_1 L_4 R_1 R_4 R_L r_o s^2 + 2C_1 L_1 L_L R_1 R_4}{\dots}$$

10.808 INVALID-ORDER-808 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_4R_LR_0s^6 + 2C_1C_4L_1L_4L_LR_1R_4r_0s^5 + 2C_1C_4L_1L_4R_1R_4R_LR_0s^4 + C_1C_LL_1L_4L_LR_1R_4R_Ls^5 + C_1C_LL_1L_4L_LR_1R_4r_0s^5 + 2C_1C_LL_1L_4L_LR_1R_LR_0s^5 +$$

10.809 INVALID-ORDER-809 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L r_o s^6 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^5 + C_1 C_L L_1 L_4 L_L R_1 R_4 r_o s^5 + 2C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_L L_1 L_4 R_1 R_4 R_L r_o s^4 + 2$$

10.810 INVALID-ORDER-810 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + C_4 L_1 R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 r_o s^2 + C_4 L_1 R_1 R_L r_o s^2 + C_4 L_1 R_1 r_o s^2 + C_4 L_1 R_L r_o s^2 + C_4 L_1 r_o s^2 + C_4 R_1 R_4 R_L s^2 + C_4 R_1 R_4 r_o s^2 + C_4 R_1 R_L r_o s^2 + C_4 R_1 r_o s^2 + C_4 R_4 R_L r_o s^2 + C_4 R_4 r_o s^2 + C_4 R_L r_o s^2 + C_4 r_o s^2}{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + C_4 L_1 R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 r_o s^2 + C_4 L_1 R_1 R_L r_o s^2 + C_4 L_1 R_1 r_o s^2 + C_4 L_1 R_L r_o s^2 + C_4 L_1 r_o s^2 + C_4 R_1 R_4 R_L s^2 + C_4 R_1 R_4 r_o s^2 + C_4 R_1 R_L r_o s^2 + C_4 R_1 r_o s^2 + C_4 R_4 R_L r_o s^2 + C_4 R_4 r_o s^2 + C_4 R_L r_o s^2 + C_4 r_o s^2}$$

10.811 INVALID-ORDER-811 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_L L_1 L_4 R_1 r_o s^4 + C_1 C_L L_1 R_1 R_4 r_o s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_4 R_1 r_o s + C_4 C_L L_1 L_4 R_1}.$$

10.812 INVALID-ORDER-812 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_L L_1 L_4 R_1 R_L r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 R_L r_o s^2 + C_1 L_1 L_4 R_1 R_L r_o^2 s^2 + C_1 L_1 L_4 R_1 R_L r_o^3 s^2 + C_1 L_1 L_4 R_1 R_L r_o^4 s^2 + C_1 L_1 L_4 R_1 R_L r_o^5 s^2 + C_1 L_1 L_4 R_1 R_L r_o^6 s^2 + C_1 L_1 L_4 R_1 R_L r_o^7 s^2 + C_1 L_1 L_4 R_1 R_L r_o^8 s^2 + C_1 L_1 L_4 R_1 R_L r_o^9 s^2 + C_1 L_1 L_4 R_1 R_L r_o^{10} s^2}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_L L_1 L_4 R_1 R_L r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 R_L r_o s^2 + C_1 L_1 L_4 R_1 R_L r_o^2 s^2 + C_1 L_1 L_4 R_1 R_L r_o^3 s^2 + C_1 L_1 L_4 R_1 R_L r_o^4 s^2 + C_1 L_1 L_4 R_1 R_L r_o^5 s^2 + C_1 L_1 L_4 R_1 R_L r_o^6 s^2 + C_1 L_1 L_4 R_1 R_L r_o^7 s^2 + C_1 L_1 L_4 R_1 R_L r_o^8 s^2 + C_1 L_1 L_4 R_1 R_L r_o^9 s^2 + C_1 L_1 L_4 R_1 R_L r_o^{10} s^2}$$

10.813 INVALID-ORDER-813 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 R_1 r_o s^4 + C_1 C$$

10.814 INVALID-ORDER-814 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 r_o s^4 + C_1 C$$

10.815 INVALID-ORDER-815 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 r_o s^5 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + C_1 L_1 L_4 L_L R_1 s^4 + C_1}{\dots}$$

10.816 INVALID-ORDER-816 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^3 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^3 + C_1 C_4 L_1 L_4 R_1 R_L s^2 + C_1 C_4 L_1 L_4 R_1 R_L r_o s^2 + C_1 C_4 L_1 L_4 R_1 R_L s + C_1 C_4 L_1 L_4 R_1 R_L r_o}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^3 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^3 + C_1 C_4 L_1 L_4 R_1 R_L s^2 + C_1 C_4 L_1 L_4 R_1 R_L r_o s^2 + C_1 C_4 L_1 L_4 R_1 R_L s + C_1 C_4 L_1 L_4 R_1 R_L r_o}$$

10.817 INVALID-ORDER-817 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^3 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^2 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s + C_1 C_L L_1 L_4 L_L R_1 R_L r_o}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^3 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s^2 + C_1 C_L L_1 L_4 L_L R_1 R_L r_o s + C_1 C_L L_1 L_4 L_L R_1 R_L r_o}$$

10.818 INVALID-ORDER-818 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 L_1 r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_4 R_1 R_L r_o s^2 + C_1 C_4 R_L r_o s^2 + C_1 C_4 r_o s^2 + C_1 C_4 L_1 R_1 R_4 s + C_1 C_4 L_1 R_1 R_L s + C_1 C_4 L_1 R_L s + C_1 C_4 L_1 r_o s + C_1 C_4 R_1 R_4 s + C_1 C_4 R_1 R_L s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4 L_1 R_1 s + C_1 C_4 L_1 R_L s + C_1 C_4 L_1 r_o s + C_1 C_4 R_1 s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4 L_1 s + C_1 C_4 R_1 s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4 s}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_4 L_1 R_1 R_L r_o s^3 + C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 L_1 r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_4 R_1 R_L r_o s^2 + C_1 C_4 R_L r_o s^2 + C_1 C_4 r_o s^2 + C_1 C_4 L_1 R_1 R_4 s + C_1 C_4 L_1 R_1 R_L s + C_1 C_4 L_1 R_L s + C_1 C_4 L_1 r_o s + C_1 C_4 R_1 R_4 s + C_1 C_4 R_1 R_L s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4 L_1 R_1 s + C_1 C_4 L_1 R_L s + C_1 C_4 L_1 r_o s + C_1 C_4 R_1 s + C_1 C_4 R_L s + C_1 C_4 r_o s + C_1 C_4 s}.$$

10.819 INVALID-ORDER-819 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 s^3 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^3 + C_1 C_4 L_1 L_4 R_1 s^2 + C_1 C_4 L_1 L_4 R_1 r_o s^2 + C_1 C_4 L_1 L_4 s + C_1 C_4 L_1 s + C_1 C_4 L_1 r_o + C_1 C_4 L_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_4 s^3 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^3 + C_1 C_4 C_L L_1 L_4 R_1 s^2 + C_1 C_4 C_L L_1 L_4 R_1 r_o s^2 + C_1 C_4 C_L L_1 L_4 s + C_1 C_4 C_L L_1 s + C_1 C_4 C_L L_1 r_o + C_1 C_4 C_L L_1}$$

10.820 INVALID-ORDER-820 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + C_4 L_1 L_4 R_1 R_4 g_m r_o}{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 R_L r_o s^2 + C_4 L_1 L_4 R_1 R_4 g_m r_o}$$

10.821 INVALID-ORDER-821 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 R_1 R_4 r_o s^3 + C_1 C_L L_1 R_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 s^2 + 2 C_1 L_1 R_1 r_o s^2 + C_4 C_L L_1 L_4 R_1 R_4 q_m r_o s^4 +$$

10.822 INVALID-ORDER-822 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 r_o s^2 + C_1 L_1 s^2 + C_1 R_1 R_4 R_L s^2 + C_1 R_1 R_4 r_o s^2 + C_1 R_1 s^2 + C_1 R_4 R_L s^2 + C_1 R_4 r_o s^2 + C_1 s^2}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 r_o s^2 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 r_o s^2 + C_1 L_1 s^2 + C_1 R_1 R_4 R_L s^2 + C_1 R_1 R_4 r_o s^2 + C_1 R_1 s^2 + C_1 R_4 R_L s^2 + C_1 R_4 r_o s^2 + C_1 s^2}.$$

10.823 INVALID-ORDER-823 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 r_o s^3 + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2 s^3 + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2 s^2 + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2 s + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 r_o s^3 + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2 s^3 + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2 s^2 + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2 s + C_1 C_4 L_1 L_4 R_1 R_4 r_o^2}$$

10.824 INVALID-ORDER-824 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 R_1 R_4 r_o s^3}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 L_1 R_1 R_4 r_o s^3}$$

10.825 INVALID-ORDER-825 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 L_1 L_L R_1 R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + C_1 L_1 L_L R_1 R_4 s^3 + 2C_1 L_1 L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_L R_1 R_4 s^2 + 2C_1 L_1 L_L R_1 R_4 r_o s^2 + C_1 L_1 L_L R_1 R_4 s + C_1 L_1 L_L R_1 R_4 r_o s + C_1 L_1 L_L R_1 R_4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 r_o s^4 + 2C_1 C_4 L_1 L_L R_1 R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 r_o s^4 + C_1 L_1 L_L R_1 R_4 s^3 + 2C_1 L_1 L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_L R_1 R_4 s^2 + 2C_1 L_1 L_L R_1 R_4 r_o s^2 + C_1 L_1 L_L R_1 R_4 s + C_1 L_1 L_L R_1 R_4 r_o s + C_1 L_1 L_L R_1 R_4}$$

10.826 INVALID-ORDER-826 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^4 + 2 C_1 C_4 C_L L_1 L_L R_1 s^4 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^3 + 2 C_1 C_4 C_L L_1 L_L R_1 s^3 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s^2 + 2 C_1 C_4 C_L L_1 L_L R_1 s^2 + 2 C_1 C_4 C_L L_1 L_L R_1 r_o s + 2 C_1 C_4 C_L L_1 L_L R_1 s + 2 C_1 C_4 C_L L_1 L_L R_1 r_o + 2 C_1 C_4 C_L L_1 L_L R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 L_4 R_1 r_o s^4 + 2 C_1 C_4 C_L L_1 L_4 R_1 s^4 + 2 C_1 C_4 C_L L_1 L_4 R_1 r_o s^3 + 2 C_1 C_4 C_L L_1 L_4 R_1 s^3 + 2 C_1 C_4 C_L L_1 L_4 R_1 r_o s^2 + 2 C_1 C_4 C_L L_1 L_4 R_1 s^2 + 2 C_1 C_4 C_L L_1 L_4 R_1 r_o s + 2 C_1 C_4 C_L L_1 L_4 R_1 s + 2 C_1 C_4 C_L L_1 L_4 R_1 r_o + 2 C_1 C_4 C_L L_1 L_4 R_1}$$

10.827 INVALID-ORDER-827 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 R_4 R_L r_o s^4 + C_1$$

10.828 INVALID-ORDER-828 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L r_o s^5}$$

10.829 INVALID-ORDER-829 $Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4}.$$

10.830 INVALID-ORDER-830 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2C_1 L_1 R_1 g_m r_o s^2 + 2C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + 2C_1 L_1 r_o s^2 + C_L L_1 R_4 g_m r_o s^2 + C_L L_1 R_4 s^2 + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s}$$

10.831 INVALID-ORDER-831 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 R_L g_m r_o s^2 + 2C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 R_L s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s}$$

10.832 INVALID-ORDER-832 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + 2C_1 C_L L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2C_1 C_L L_1 R_L r_o s^3 + 2C_1 L_1 R_1 g_m r_o s^2 + 2C_1 L_1 R_1 s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 R_L s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s}$$

10.833 INVALID-ORDER-833 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2C_1 L_1 R_1 g_m r_o s^2 + 2C_1 L_1 R_1 s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 R_L s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s}$$

10.834 INVALID-ORDER-834 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2C_1 L_1 L_L R_1 g_m r_o s^3 + 2C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 R_L s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s}$$

10.835 INVALID-ORDER-835 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_4 (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + 2C_1 C_L L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2C_1 L_1 R_1 g_m r_o s^2 + 2C_1 L_1 R_1 s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 R_L s + C_L R_1 R_4 g_m r_o s + C_L R_1 R_4 s}$$

10.836 INVALID-ORDER-836 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L r_o s^4 + C_1 L_1 L_L R_1 R_4 g_m r_o s^3 + C_1 L_1 L_L R_1 R_4 s^3 + 2 C_1 L_1 L_L R_1 R_L g_m r_o s^3 + 2 C_1 L_1 L_L R_1 R_L s^3 + C_1 L_1 L_L R_1 R_L g_m r_o s^2 + C_1 L_1 L_L R_1 R_L s^2 + C_1 L_1 L_L R_1 R_L g_m r_o s + C_1 L_1 L_L R_1 R_L s + C_1 L_1 L_L R_1 R_L g_m r_o + C_1 L_1 L_L R_1 R_L}{C_1 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L r_o s^4 + C_1 L_1 L_L R_1 R_4 g_m r_o s^3 + C_1 L_1 L_L R_1 R_4 s^3 + 2 C_1 L_1 L_L R_1 R_L g_m r_o s^3 + 2 C_1 L_1 L_L R_1 R_L s^3 + C_1 L_1 L_L R_1 R_L g_m r_o s^2 + C_1 L_1 L_L R_1 R_L s^2 + C_1 L_1 L_L R_1 R_L g_m r_o s + C_1 L_1 L_L R_1 R_L s + C_1 L_1 L_L R_1 R_L g_m r_o + C_1 L_1 L_L R_1 R_L}$$

10.837 INVALID-ORDER-837 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_L r_o s^4 + 2 C_1 C_L L_1 L_L R_L s^4}{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_L r_o s^4 + 2 C_1 C_L L_1 L_L R_L s^4}.$$

10.838 INVALID-ORDER-838 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4}{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4}$$

10.839 INVALID-ORDER-839 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_L (g_m r_o + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_1 g_m r_o s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + 2C_4 L_1 R_L g_m r_o s^2 + 2C_4 L_1 R_L s^2 + 2C_4 R_1 R_L g_m r_o s}$$

10.840 INVALID-ORDER-840 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(g_m r_o + 1)(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 s^3 + 2C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 r_o s^3 + C_1 L_1 s^2 + 2C_4 L_1 g_m r_o s^2 + 2C_4 L_1 s^2 + 2C_4 R_1 g_m r_o s + 2C_4 R_1 s +}$$

10.841 INVALID-ORDER-841 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1R_1R_Lg_mr_0s^3 + 2C_1C_4L_1R_1R_Ls^3 + 2C_1C_4L_1R_LR_0s^3 + C_1C_LL_1R_1R_Lg_mr_0s^3 + C_1C_LL_1R_1R_Ls^3 + C_1C_LL_1R_LR_0s^3 + C_1L_1R_1g_mr_0s^2 + C_1L_1R_1s^2 + C_1L_1R_Ls^2 +$$

10.842 INVALID-ORDER-842 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1R_1R_LR_0s^4 + 2C_1C_4C_LL_1R_1R_Ls^4 + 2C_1C_4C_LL_1R_LR_0s^4 + 2C_1C_4L_1R_1g_mr_0s^3 + 2C_1C_4L_1R_1s^3 + 2C_1C_4L_1r_0s^3 + C_1C_LL_1R_1g_mr_0s^3 + C_1C_LL_1R_1s^3 + C_1C_L}{2C_1C_4C_LL_1R_1R_LR_0s^4 + 2C_1C_4C_LL_1R_1R_Ls^4 + 2C_1C_4C_LL_1R_LR_0s^4 + 2C_1C_4L_1R_1g_mr_0s^3 + 2C_1C_4L_1R_1s^3 + 2C_1C_4L_1r_0s^3 + C_1C_LL_1R_1g_mr_0s^3 + C_1C_LL_1R_1s^3 + C_1C_L}$$

10.843 INVALID-ORDER-843 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1s^5 + 2C_1C_4C_LL_1L_Lr_0s^5 + 2C_1C_4L_1R_1g_mr_0s^3 + 2C_1C_4L_1R_1s^3 + 2C_1C_4L_1r_0s^3 + C_1C_LL_1L_Ls^4 + C_1C_LL_1R_1g_mr_0s^3 + C_1C_LL_1R_1s^3 + C_1C_LL_1r_0s^3}{2C_1C_4C_LL_1L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1s^5 + 2C_1C_4C_LL_1L_Lr_0s^5 + 2C_1C_4L_1R_1g_mr_0s^3 + 2C_1C_4L_1R_1s^3 + 2C_1C_4L_1r_0s^3 + C_1C_LL_1L_Ls^4 + C_1C_LL_1R_1g_mr_0s^3 + C_1C_LL_1R_1s^3 + C_1C_LL_1r_0s^3}.$$

10.844 INVALID-ORDER-844 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1g_mr_0s^4 + 2C_1C_4L_1L_LR_1s^4 + 2C_1C_4L_1L_LR_0s^4 + C_1C_LL_1L_LR_1g_mr_0s^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_0s^4 + C_1L_1L_Ls^3 + C_1L_1R_1g_mr_0s^2 + C_1L_1R_1s^2 + C_1L_1R_0s^2 + C_1L_1R_0}{2C_1C_4L_1L_LR_1g_mr_0s^4 + 2C_1C_4L_1L_LR_1s^4 + 2C_1C_4L_1L_LR_0s^4 + C_1C_LL_1L_LR_1g_mr_0s^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_0s^4 + C_1L_1L_Ls^3 + C_1L_1R_1g_mr_0s^2 + C_1L_1R_1s^2 + C_1L_1R_0s^2 + C_1L_1R_0}$$

10.845 INVALID-ORDER-845 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C$$

10.846 INVALID-ORDER-846 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_1R_Ls^4 + 2C_1C_4L_1L_LR_Lr_0s^4 + C_1C_LL_1L_LR_1R_Lg_mr_0s^4 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_Lr_0s^4 + C_1L_1L_LR_1g_mr_0s^3 + C_1L_1L_LR_1R_Ls^3 + C_1L_1L_LR_Lr_0s^3 + C_1L_1L_LR_Ls^3}{2C_1C_4L_1L_LR_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_1R_Ls^4 + 2C_1C_4L_1L_LR_Lr_0s^4 + C_1C_LL_1L_LR_1R_Lg_mr_0s^4 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_Lr_0s^4 + C_1L_1L_LR_1g_mr_0s^3 + C_1L_1L_LR_1R_Ls^3 + C_1L_1L_LR_Lr_0s^3 + C_1L_1L_LR_Ls^3}.$$

10.847 INVALID-ORDER-847 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_LR_1R_Lg_mr_0s^5 + 2C_1C_4C_LL_LR_1R_Ls^5 + 2C_1C_4C_LL_LR_Lr_0s^5 + 2C_1C_4L_LL_R_1g_mr_0s^4 + 2C_1C_4L_LL_R_1s^4 + 2C_1C_4L_LL_R_0s^4 + 2C_1C_4L_1R_Lg_mr_0s^3 +$$

10.848 INVALID-ORDER-848 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_LR_LR_Lg_mr_os^5 + 2C_1C_4C_LL_LR_LR_Ls^5 + 2C_1C_4C_LL_LR_LR_Lr_os^5 + 2C_1C_4L_1R_LR_Lg_mr_os^3 + 2C_1C_4L_1R_LR_Ls^3 + 2C_1C_4L_1R_LR_Lr_os^3 + C_1C_LL_LL_Lg_mr_os^4 +$$

10.849 INVALID-ORDER-849 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L \right)$

$$H(s) = \frac{2C_1 C_4 L_1 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 R_L g_m r_o s^2 + 2C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1}{\dots}$$

10.850 INVALID-ORDER-850 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4L_1R_1R_4g_mr_0s^3 + 2C_1C_4L_1R_1R_4s^3 + 2C_1C_4L_1R_4r_0s^3 + C_1C_LL_1R_1R_4g_mr_0s^3 + C_1C_LL_1R_1R_4s^3 + C_1C_LL_1R_4r_0s^3 + 2C_1L_1R_1g_mr_0s^2 + 2C_1L_1R_1s^2 + C_1L_1R_4s^2 +$$

10.851 INVALID-ORDER-851 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s + C_1 L_1 R_1 R_4 R_L s + C_1 L_1 R_1 R_4 R_L r_o}{2C_1 C_4 L_1 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 R_4 R_L r_o s^4 + C_1 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s + C_1 L_1 R_1 R_4 R_L s + C_1 L_1 R_1 R_4 R_L r_o}$$

10.852 INVALID-ORDER-852 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s + C_1 L_1 R_1 R_4 R_L s + C_1 L_1 R_1 R_4 R_L r_o}{2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s + C_1 L_1 R_1 R_4 R_L s + C_1 L_1 R_1 R_4 R_L r_o}$$

10.853 INVALID-ORDER-853 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 r_o s^3 + 2C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_L L_1 L_L R_1 s^4 + 2C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 s^3 + C_1 C_L L_1 L_L R_4 r_o s^3 + C_1 L_1 L_L R_1 g_m r_o s^2 + C_1 L_1 L_L R_1 g_m r_o s + C_1 L_1 L_L R_1 R_L s + C_1 L_1 L_L R_1 R_L r_o}{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_4 C_L L_1 L_L R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 s^3 + C_1 C_L L_1 L_L R_4 r_o s^3 + 2C_1 L_1 L_L R_1 g_m r_o s^2 + 2C_1 L_1 L_L R_1 g_m r_o s + 2C_1 L_1 L_L R_1 R_L s + 2C_1 L_1 L_L R_1 R_L r_o}$$

10.854 INVALID-ORDER-854 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1 C_4 L_1 L_L R_1 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2C_1 L_1 L_L R_1 g_m r_o s^3 + 2C_1 L_1 L_L R_1 g_m r_o s + 2C_1 L_1 L_L R_1 R_L s + 2C_1 L_1 L_L R_1 R_L r_o}{2C_1 C_4 L_1 L_L R_1 R_4 g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_4 r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2C_1 L_1 L_L R_1 g_m r_o s^3 + 2C_1 L_1 L_L R_1 g_m r_o s + 2C_1 L_1 L_L R_1 R_L s + 2C_1 L_1 L_L R_1 R_L r_o}$$

10.855 INVALID-ORDER-855 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 L_L R_1 R_4 s^3 + C_1 C_L L_1 L_L R_4 r_o s^3 + C_1 L_1 L_L R_1 g_m r_o s^2 + C_1 L_1 L_L R_1 g_m r_o s + C_1 L_1 L_L R_1 R_L s + C_1 L_1 L_L R_1 R_L r_o}{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 s^4 + 2C_1 C_4 C_L L_1 L_L R_4 r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L s^3 + 2C_1 C_4 C_L L_1 R_4 R_L r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 g_m r_o s^2 + 2C_1 C_4 L_1 R_1 R_4 g_m r_o s + 2C_1 C_4 L_1 R_1 R_4 R_L s + 2C_1 C_4 L_1 R_1 R_4 R_L r_o}$$

10.856 INVALID-ORDER-856 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_1R_4R_Ls^4 + 2C_1C_4L_1L_LR_4R_Lr_0s^4 + C_1C_LL_1L_LR_1R_4R_Lg_mr_0s^4 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_4R_Lr_0s^4 + C_1L_1L_LR_1R_4R_Ls^4}{2C_1C_4L_1L_LR_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_LR_1R_4R_Ls^4 + 2C_1C_4L_1L_LR_4R_Lr_0s^4 + C_1C_LL_1L_LR_1R_4R_Lg_mr_0s^4 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_4R_Lr_0s^4 + C_1L_1L_LR_1R_4R_Ls^4}$$

10.857 INVALID-ORDER-857 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_I L_L R_1 R_4 R_L q_m r_o s^5 + 2C_1 C_4 C_L L_I L_L R_1 R_4 R_L s^5 + 2C_1 C_4 C_L L_I L_L R_4 R_L r_o s^5 + 2C_1 C_4 L_I L_L R_1 R_4 q_m r_o s^4 + 2C_1 C_4 L_I L_L R_1 R_4 s^4 + 2C_1 C_4 L_I L_L R_4 r_o s^4 + 2C_1 C_4 L_I L_L R_4 s^4}{\dots}$$

10.858 INVALID-ORDER-858 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_LR_4R_Lr_0s^5 + 2C_1C_4L_1R_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_1R_1R_4R_Ls^3 + 2C_1C_4L_1R_4R_Lr_0s^3 + C_1C_LL}{2C_1C_4C_LL_1L_LR_1R_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_LR_4R_Lr_0s^5 + 2C_1C_4L_1R_1R_4R_Lg_mr_0s^3 + 2C_1C_4L_1R_1R_4R_Ls^3 + 2C_1C_4L_1R_4R_Lr_0s^3 + C_1C_LL}$$

10.859 INVALID-ORDER-859 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_1 g_m r_o s^2 + C_1 L_1 R_1 s^2}{C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_1 g_m r_o s^2 + C_1 L_1 R_1 s^2}$$

10.860 INVALID-ORDER-860 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + 2 C_1 C_L L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + 2 C_1 C_L L_1 r_o s^2 + C_1 C_L L_1 R_1 s + C_1 C_L L_1 R_4 s + 2 C_1 C_L L_1 r_o s + C_1 C_L L_1 R_1 + C_1 C_L L_1 R_4 + 2 C_1 C_L L_1 r_o}{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + 2 C_1 C_L L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + 2 C_1 C_L L_1 r_o s^2 + C_1 C_L L_1 R_1 s + C_1 C_L L_1 R_4 s + 2 C_1 C_L L_1 r_o s + C_1 C_L L_1 R_1 + C_1 C_L L_1 R_4 + 2 C_1 C_L L_1 r_o}$$

10.861 INVALID-ORDER-861 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4$$

10.862 INVALID-ORDER-862 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L q m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4 + 2 C_1 C_4 C_L L_1 R_L s^4}{\dots}$$

10.863 INVALID-ORDER-863 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2C_1 C_4}{\dots}$$

10.864 INVALID-ORDER-864 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2C_1 C_4 L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 L_L R_4 s^4 + 2C_1 C_4 L_1 L_L r_o s^4 + C_1 C_4 L_1 R_1}{\dots}$$

10.865 INVALID-ORDER-865 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1g_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1s^5 + C_1C_4C_LL_1L_LR_4s^5 + 2C_1C_4C_LL_1L_LR_0s^5 + C_1C_4C_LL_1R_1R_4g_mr_0s^4 + C_1C_4C_LL_1R_1R_4s^4 + 2C_1C_4C_LL_1R_1R_Lg_mr_0s^4 +$$

10.866 INVALID-ORDER-866 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L s^4}{C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L s^4}$$

10.867 INVALID-ORDER-867 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L$$

10.868 INVALID-ORDER-868 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L$$

10.869 INVALID-ORDER-869 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 L_1 R_1 g_m r_o s^2 + C_1 L_1 R_1 s^2}$$

10.870 INVALID-ORDER-870 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 r_o s^3 + C_1 C_L R_1 g_m r_o s^3 + C_1 C_L R_1 s^3 + C_1 C_L r_o s^3 + C_1 R_1 g_m r_o s^3 + C_1 R_1 s^3 + C_1 r_o s^3 + g_m r_o s^2 + R_1 s^2 + r_o s^2 + 1}{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 r_o s^3 + C_1 C_L R_1 g_m r_o s^3 + C_1 C_L R_1 s^3 + C_1 C_L r_o s^3 + C_1 R_1 g_m r_o s^3 + C_1 R_1 s^3 + C_1 r_o s^3 + g_m r_o s^2 + R_1 s^2 + r_o s^2 + 1}$$

10.871 INVALID-ORDER-871 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 R_L}{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 R_L}$$

10.872 INVALID-ORDER-872 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_L q_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_1 L_4 R_1 q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5}{C_1 C_4 C_L L_1 L_4 R_1 q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 R_1 R_L q_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_1 L_4 R_1 q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5}.$$

10.873 INVALID-ORDER-873 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 L_1$$

10.874 INVALID-ORDER-874 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1}$$

10.875 INVALID-ORDER-875 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 s^5 + 2 C_1 C_4 C$$

10.876 INVALID-ORDER-876 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 L_L r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 L_L r_o s^5}$$

10.877 INVALID-ORDER-877 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2C_1 C_4 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_L s^5}{\dots}$$

10.878 INVALID-ORDER-878 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 L_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 L_L s^5}$$

10.879 INVALID-ORDER-879 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + C_1L_1L_4R_1g_mr_0s^3 + C_1L_1L_4R_1s^3 + C_1L_1L_4R_Ls^3 + C_1L_1L_4R_0s^3 + 2C_1L_1R_1R_Lg_mr_0s^2 + 2C_1L_1R_1R_Ls^2 + 2C_1L_1R_1R_0s^2 + C_1L_1R_1s^2 + C_1L_1R_LR_0s^2 + C_1L_1R_Ls^2 + C_1L_1R_0s^2 + C_1L_1s^2 + C_1R_1R_LR_0s + C_1R_1R_Ls + C_1R_1R_0s + C_1R_1s + C_1R_LR_0 + C_1R_L + C_1R_0 + C_1}{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + C_1L_1L_4R_1g_mr_0s^3 + C_1L_1L_4R_1s^3 + C_1L_1L_4R_Ls^3 + C_1L_1L_4R_0s^3 + 2C_1L_1R_1R_Lg_mr_0s^2 + 2C_1L_1R_1R_Ls^2 + 2C_1L_1R_1R_0s^2 + C_1L_1R_1s^2 + C_1L_1R_LR_0s^2 + C_1L_1R_Ls^2 + C_1L_1R_0s^2 + C_1L_1s^2 + C_1R_1R_LR_0s + C_1R_1R_Ls + C_1R_1R_0s + C_1R_1s + C_1R_LR_0 + C_1R_L + C_1R_0 + C_1}.$$

10.880 INVALID-ORDER-880 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1g_mr_os^4 + 2C_1C_4L_1L_4R_1s^4 + 2C_1C_4L_1L_4r_os^4 + C_1C_LL_1L_4R_1g_mr_os^4 + C_1C_LL_1L_4R_1s^4 + C_1C_LL_1L_4r_os^4 + C_1L_1L_4s^3 + 2C_1L_1R_1g_mr_os^2 + 2C_1L_1R_1s^2 + 2C_1L_1R_1r_o}{2C_1C_4L_1L_4R_1g_mr_os^4 + 2C_1C_4L_1L_4R_1s^4 + 2C_1C_4L_1L_4r_os^4 + C_1C_LL_1L_4R_1g_mr_os^4 + C_1C_LL_1L_4R_1s^4 + C_1C_LL_1L_4r_os^4 + C_1L_1L_4s^3 + 2C_1L_1R_1g_mr_os^2 + 2C_1L_1R_1s^2 + 2C_1L_1R_1r_o}$$

10.881 INVALID-ORDER-881 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + C_1C_LL_1L_4R_1R_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_LR_0s^4 + C_1L_1L_4R_1g_mr_0s^3 + C_1L_1L_4$$

10.882 INVALID-ORDER-882 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_1R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4C_LL_1L_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1g_mr_0s^4 + 2C_1C_4L_1L_4R_1s^4 + 2C_1C_4L_1L_4r_0s^4 + C_1C_LL_1L_4R_1g_mr_0s^4 + C_1C_LL_1L_4R_1s^4 + C_1C_LL_1L_4r_0s^4 + C_1C_LL_1R_1g_mr_0s^4 + C_1C_LL_1R_1s^4 + C_1C_LL_1r_0s^4 + C_1C_LR_1g_mr_0s^4 + C_1C_LR_1s^4 + C_1C_LR_1r_0s^4 + C_1C_LR_Lg_mr_0s^4 + C_1C_LR_Ls^4 + C_1C_LR_Lr_0s^4 + C_1C_LR_1g_mr_0s^4 + C_1C_LR_1s^4 + C_1C_LR_1r_0s^4 + C_1C_LR_Lg_mr_0s^4 + C_1C_LR_Ls^4 + C_1C_LR_Lr_0s^4 + C_1C_LR_1g_mr_0s^4 + C_1C_LR_1s^4 + C_1C_LR_1r_0s^4 + C_1C_LR_Lg_mr_0s^4 + C_1C_LR_Ls^4 + C_1C_LR_Lr_0s^4}{2C_1C_4C_LL_1L_4R_1R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4C_LL_1L_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1g_mr_0s^4 + 2C_1C_4L_1L_4R_1s^4 + 2C_1C_4L_1L_4r_0s^4 + C_1C_LL_1L_4R_1g_mr_0s^4 + C_1C_LL_1L_4R_1s^4 + C_1C_LL_1L_4r_0s^4 + C_1C_LL_1R_1g_mr_0s^4 + C_1C_LL_1R_1s^4 + C_1C_LL_1R_1r_0s^4 + C_1C_LR_1g_mr_0s^4 + C_1C_LR_1s^4 + C_1C_LR_1r_0s^4 + C_1C_LR_Lg_mr_0s^4 + C_1C_LR_Ls^4 + C_1C_LR_Lr_0s^4 + C_1C_LR_1g_mr_0s^4 + C_1C_LR_1s^4 + C_1C_LR_1r_0s^4 + C_1C_LR_Lg_mr_0s^4 + C_1C_LR_Ls^4 + C_1C_LR_Lr_0s^4 + C_1C_LR_1g_mr_0s^4 + C_1C_LR_1s^4 + C_1C_LR_1r_0s^4 + C_1C_LR_Lg_mr_0s^4 + C_1C_LR_Ls^4 + C_1C_LR_Lr_0s^4}.$$

10.883 INVALID-ORDER-883 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_{1g_m} r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2C_1 C_4 L_1 L_4 R_{1g_m} r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1}{\dots}$$

10.884 INVALID-ORDER-884 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_1g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1s^4 + 2C_1C_4L_1L_4L_LR_0s^4 + C_1C_LL_1L_4L_LR_1g_mr_0s^4 + C_1C_LL_1L_4L_LR_1s^4 + C_1C_LL_1L_4L_LR_0s^4 + C_1L_1L_4L_LR_1s^3 + C_1L_1L_4R_1g_m}{2C_1C_4L_1L_4L_LR_1g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1s^4 + 2C_1C_4L_1L_4L_LR_0s^4 + C_1C_LL_1L_4L_LR_1g_mr_0s^4 + C_1C_LL_1L_4L_LR_1s^4 + C_1C_LL_1L_4L_LR_0s^4 + C_1L_1L_4L_LR_1s^3 + C_1L_1L_4R_1g_m}$$

10.885 INVALID-ORDER-885 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + 2C_1 C_4 C_L}{\dots}$$

10.886 INVALID-ORDER-886 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1R_Ls^4 + 2C_1C_4L_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_1R_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1L_1L_4L_L}{2C_1C_4L_1L_4L_LR_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1R_Ls^4 + 2C_1C_4L_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_1R_Lg_mr_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1L_1L_4L_L}$$

10.887 INVALID-ORDER-887 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 L_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L s^5}{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 L_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L s^5}.$$

10.888 INVALID-ORDER-888 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_Ls^6 + 2C_1C_4C_LL_1L_4L_LR_Lr_0s^6 + 2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + C_1C_LL_1L_4L_LR_1R_Lr_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^4 + C_1C_LL_1L_4L_LR_LR_0s^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4}{2C_1C_4C_LL_1L_4L_LR_1R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_Ls^6 + 2C_1C_4C_LL_1L_4L_LR_Lr_0s^6 + 2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + C_1C_LL_1L_4L_LR_1R_Lr_0s^4 + C_1C_LL_1L_4L_LR_1R_Ls^4 + C_1C_LL_1L_4L_LR_LR_0s^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4 + C_1C_LL_1L_4L_LR_Lr_0s^4 + C_1C_LL_1L_4L_LR_Ls^4}$$

10.889 INVALID-ORDER-889 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4$$

10.890 INVALID-ORDER-890 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s}{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s}$$

10.896 INVALID-ORDER-896 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5}$$

10.897 INVALID-ORDER-897 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 s^5}{\dots}$$

10.898 INVALID-ORDER-898 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 L s^5}{\dots}$$

10.899 INVALID-ORDER-899 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_LR_0s^4 + C_1L_1L_4R_1R_4g_mr_0s^3 + C_1L_1L_4R_1R_4s^3 + 2C_1L_1L_4R_1R_Lg_mr_0s^3 + 2C_1L_1L_4R_1R_Ls^3 + C_1L_1L_4R_1R_Lg_m}{2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_LR_0s^4 + C_1L_1L_4R_1R_4g_mr_0s^3 + C_1L_1L_4R_1R_4s^3 + 2C_1L_1L_4R_1R_Lg_mr_0s^3 + 2C_1L_1L_4R_1R_Ls^3 + C_1L_1L_4R_1R_Lg_m}$$

10.900 INVALID-ORDER-900 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_4R_1R_4g_mr_0s^4 + C_1C_LL_1L_4R_1R_4s^4 + C_1C_LL_1L_4R_4r_0s^4 + 2C_1L_1L_4R_1g_mr_0s^3 + 2C_1L_1L_4R_1g_ms^3 + 2C_1L_1L_4R_1R_4s^3 + 2C_1L_1L_4R_1R_4r_0s^3 + 2C_1L_1L_4R_1R_4s^3}{2C_1C_4L_1L_4R_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_4R_1R_4g_mr_0s^4 + C_1C_LL_1L_4R_1R_4s^4 + C_1C_LL_1L_4R_4r_0s^4 + 2C_1L_1L_4R_1g_mr_0s^3 + 2C_1L_1L_4R_1g_ms^3 + 2C_1L_1L_4R_1R_4s^3 + 2C_1L_1L_4R_1R_4r_0s^3 + 2C_1L_1L_4R_1R_4s^3}$$

10.901 INVALID-ORDER-901 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_LR_0s^4 + C_1C_LL_1L_4R_1R_4R_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_4R_Ls^4 + C_1C_LL_1L_4R_4R_LR_0s^4 + C_1L_1L_4R_1R_4R_LR_0s^4}{2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_LR_0s^4 + C_1C_LL_1L_4R_1R_4R_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_4R_Ls^4 + C_1C_LL_1L_4R_4R_LR_0s^4 + C_1L_1L_4R_1R_4R_LR_0s^4}$$

10.902 INVALID-ORDER-902 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_1R_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_4R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_1L_4R_1R_4R_Lg_mr_0s^5 + C_1C_LL_1L_1L_4R_1R_4R_Ls^5 + C_1C_LL_1L_1L_4R_4R_Lr_0s^5 + C_1C_LL_1L_1L_4R_1R_4g_mr_0s^4 + C_1C_LL_1L_1L_4R_1R_4s^4 + C_1C_LL_1L_1L_4R_4r_0s^4}{2C_1C_4C_LL_1L_4R_1R_4R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_4R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_0s^4 + C_1C_LL_1L_1L_4R_1R_4R_Lg_mr_0s^5 + C_1C_LL_1L_1L_4R_1R_4R_Ls^5 + C_1C_LL_1L_1L_4R_4R_Lr_0s^5 + C_1C_LL_1L_1L_4R_1R_4g_mr_0s^4 + C_1C_LL_1L_1L_4R_1R_4s^4 + C_1C_LL_1L_1L_4R_4r_0s^4}$$

10.903 INVALID-ORDER-903 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_4g_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_4s^6 + 2C_1C_4C_LL_1L_4L_LR_4r_0s^6 + 2C_1C_4L_1L_4R_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_0s^4 + 2C_1C_LL_1L_4L_LR_1R_4g_mr_0s^4 + 2C_1C_LL_1L_4L_LR_1R_4s^4 + 2C_1C_LL_1L_4L_LR_4r_0s^4 + 2C_1C_LL_1L_4L_LR_4s^4}{2C_1C_4C_LL_1L_4L_LR_1R_4g_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_4s^6 + 2C_1C_4C_LL_1L_4L_LR_4r_0s^6 + 2C_1C_4L_1L_4R_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_0s^4 + 2C_1C_LL_1L_4L_LR_1R_4g_mr_0s^4 + 2C_1C_LL_1L_4L_LR_1R_4s^4 + 2C_1C_LL_1L_4L_LR_4r_0s^4 + 2C_1C_LL_1L_4L_LR_4s^4}.$$

10.904 INVALID-ORDER-904 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1R_4s^4 + 2C_1C_4L_1L_4L_LR_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4g_mr_0s^4 + C_1C_LL_1L_4L_LR_1R_4s^4 + C_1C_LL_1L_4L_LR_4r_0s^4 + 2C_1L_1L_4L_L}{2C_1C_4L_1L_4L_LR_1R_4g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1R_4s^4 + 2C_1C_4L_1L_4L_LR_4r_0s^4 + C_1C_LL_1L_4L_LR_1R_4g_mr_0s^4 + C_1C_LL_1L_4L_LR_1R_4s^4 + C_1C_LL_1L_4L_LR_4r_0s^4 + 2C_1L_1L_4L_L}$$

10.905 INVALID-ORDER-905 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L}{\dots}$$

$$10.906 \quad \text{INVALID-ORDER-906} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 R_L r_o s^4}{2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 R_L r_o s^4}$$

$$10.907 \quad \text{INVALID-ORDER-907} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L r_o s^5}{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L r_o s^5}$$

$$10.908 \quad \text{INVALID-ORDER-908} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L r_o s^4}{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L r_o s^4}$$

$$10.909 \quad \text{INVALID-ORDER-909} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 L_1 L_4 R_1 R_4 s^4 + C_1 L_1 L_4 R_4 R_L r_o s^4 + C_1 L_1 L_4 R_4 R_L s^4}{C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 L_1 L_4 R_1 R_4 s^4 + C_1 L_1 L_4 R_4 R_L r_o s^4 + C_1 L_1 L_4 R_4 R_L s^4}$$

$$10.910 \quad \text{INVALID-ORDER-910} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_L L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_4 R_L r_o s^4 + C_1 C_L L_1 L_4 R_4 R_L s^4}$$

10.911 INVALID-ORDER-911 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L s^4}$$

10.912 INVALID-ORDER-912 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 s^5}.$$

10.913 INVALID-ORDER-913 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_{1gmr_o} s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_{4gmr_o} s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5}{\dots}$$

10.914 INVALID-ORDER-914 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_4 r_o s^5}{\dots}$$

10.915 INVALID-ORDER-915 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1}{\dots}$$

10.916 INVALID-ORDER-916 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_r}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_r}$$

10.917 INVALID-ORDER-917 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o}$$

10.918 INVALID-ORDER-918 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o}{\dots}$$

10.919 INVALID-ORDER-919 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + 2 C_1 C_4 L_1$$

10.920 INVALID-ORDER-920 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 i}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 i}$$

10.921 INVALID-ORDER-921 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L s^4}.$$

10.922 INVALID-ORDER-922 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 s^5}.$$

10.923 INVALID-ORDER-923 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1q_m r_o s^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4L_LR_os^6 + C_1C_4C_LL_1L_4R_1R_4q_m r_o s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5}{2C_1C_4C_LL_1L_4L_LR_1q_m r_o s^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4L_LR_os^6 + C_1C_4C_LL_1L_4R_1R_4q_m r_o s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5}$$

10.924 INVALID-ORDER-924 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L}{\dots}$$

10.925 INVALID-ORDER-925 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1}{\dots}$$

10.926 INVALID-ORDER-926 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_r}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_r}$$

10.927 INVALID-ORDER-927 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o}{\dots}$$

10.928 INVALID-ORDER-928 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o}{\dots}$$

10.929 INVALID-ORDER-929 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 R_4 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 C_L R_1 R_4 r_o s^2 + 2 C_1 L_1 R_1 g_m r_o s^2 + 2 C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + 2 C_1 L_1 r_o s^2 + C_1 R_1 R_4 s + 2 C_1 R_1 r_o s + C_L R_1 L_1}$$

10.930 INVALID-ORDER-930 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 R_L g_m r_o s^2 + 2C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 R_4 g_m r_o s + C_1 L_1 R_1 R_4 s + C_1 L_1 R_4 g_m r_o + C_1 L_1 R_4 + C_1 L_1 + C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + C_1 R_1 + C_1 R_4 g_m r_o + C_1 R_4 + C_1 + L_1 R_1 R_4 g_m r_o + L_1 R_1 R_4 + L_1 R_1 + L_1 R_4 g_m r_o + L_1 R_4 + L_1 + R_1 R_4 g_m r_o + R_1 R_4 + R_1 + R_4 g_m r_o + R_4 + g_m r_o + 1}{C_1 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 C_L R_1 R_4 R_L r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 R_L g_m r_o s^2 + 2C_1 L_1 R_1 R_L s^2 + C_1 L_1 R_1 R_4 g_m r_o s + C_1 L_1 R_1 R_4 s + C_1 L_1 R_4 g_m r_o + C_1 L_1 R_4 + C_1 L_1 + C_1 R_1 R_4 g_m r_o + C_1 R_1 R_4 + C_1 R_1 + C_1 R_4 g_m r_o + C_1 R_4 + C_1 + L_1 R_1 R_4 g_m r_o + L_1 R_1 R_4 + L_1 R_1 + L_1 R_4 g_m r_o + L_1 R_4 + L_1 + R_1 R_4 g_m r_o + R_1 R_4 + R_1 + R_4 g_m r_o + R_4 + g_m r_o + 1}$$

10.931 INVALID-ORDER-931 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + 2 C_1 C_L L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 r_o s^3 + 2 C_1 C_L L_1 R_L r_o s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 C_L}$$

10.932 INVALID-ORDER-932 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 C_L$$

10.933 INVALID-ORDER-933 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 C_L L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_L R_1 g_m r_o s^3 + 2C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L r_o s^3 + C_1 L_1 R_1}{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + C_1 C_L L_L R_1 R_4 r_o s^3 + 2C_1 L_1 L_L R_1 g_m r_o s^3 + 2C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_4 s^3 + 2C_1 L_1 L_L r_o s^3 + C_1 L_1 R_1}$$

10.934 INVALID-ORDER-934 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + 2C_1 C_L L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_1 R_L s^3}{2C_1 C_L L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + 2C_1 C_L L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_L L_1 R_1 R_L s^3}$$

10.935 INVALID-ORDER-935 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L r_o s^4 + C_1 C_L L_L R_1 R_4 R_L r_o s^3 + C_1 L_1 L_L R_1 R_4 g_m r_o s^3 + C_1 L_1 L_L R_1 R_4 s^3 + 2 C_1 L_1 L_L R_1 R_L g_m r_o s^3 +$$

10.936 INVALID-ORDER-936 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C$$

10.937 INVALID-ORDER-937 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + 2 C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 r_o s^4 + 2 C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C$$

10.938 INVALID-ORDER-938 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 L_1 R_1 g_m r_o s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + C_1 L_1 r_o s^2 + C_1 R_1 R_L s + C_1 R_1 r_o s + 2C_4 R_1}$$

10.939 INVALID-ORDER-939 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (g_m r_o + 1) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 s^3 + 2C_1 C_4 L_1 r_o s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_L L_1 R_1 g_m r_o s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 r_o s^3 + C_1 C_L R_1 r_o s^2 + C_1 L_1 s^2 + C_1 R_1 s + 2C_4 R_1 g_m r_o}$$

10.940 INVALID-ORDER-940 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_1 R_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 C_L R_1 R_L r_o s^2 + C_1 C_L L_1 R_1 R_L s^2 + C_1 C_L L_1 R_1 R_L s)}{2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + 2C_1 C_4 R_1 R_L r_o s^2 + C_1 C_L L_1 R_1 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_L r_o s^3 + C_1 C_L R_1 R_L r_o s^2 + C_1 C_L L_1 R_1 R_L s^2 + C_1 C_L L_1 R_1 R_L s}$$

$$\mathbf{10.941 \quad INVALID-ORDER-941} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + 2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 s^3 + 2C_1 C_4 L_1 r_o s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_1}{2C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 C_L R_1 R_L r_o s^3 + 2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 s^3 + 2C_1 C_4 L_1 r_o s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_1}$$

$$\mathbf{10.942 \quad INVALID-ORDER-942} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 s^3 + 2C_1 C_4 L_1 r_o s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_1}{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 L_1 R_1 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 s^3 + 2C_1 C_4 L_1 r_o s^3 + 2C_1 C_4 R_1 r_o s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_1}$$

$$\mathbf{10.943 \quad INVALID-ORDER-943} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1}{2C_1 C_4 L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 s^4 + 2C_1 C_4 L_1 L_L r_o s^4 + 2C_1 C_4 L_L R_1 r_o s^3 + C_1 C_L L_1 L_L R_1 g_m r_o s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L r_o s^4 + C_1 C_L L_L R_1 r_o s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_1}$$

$$\mathbf{10.944 \quad INVALID-ORDER-944} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_1}{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 R_L r_o s^4 + 2C_1 C_4 C_L L_L R_1 r_o s^4 + 2C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_1}$$

$$\mathbf{10.945 \quad INVALID-ORDER-945} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 L_1 L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 R_L s^4 + 2C_1 C_4 L_1 L_L R_L r_o s^4 + 2C_1 C_4 L_L R_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L}{2C_1 C_4 L_1 L_L R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 R_L s^4 + 2C_1 C_4 L_1 L_L R_L r_o s^4 + 2C_1 C_4 L_L R_1 R_L r_o s^3 + C_1 C_L L_1 L_L R_1 R_L g_m r_o s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_L r_o s^4 + C_1 C_L L_1 L_L R_L}$$

$$\mathbf{10.946 \quad INVALID-ORDER-946} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_L r_o s^4 + 2C_1 C_4 L_1 L_L R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_L R_1 s^4 + 2C_1 C_4 L_1 L_L r_o s^4 + \dots}{\dots}$$

$$\mathbf{10.947 \quad INVALID-ORDER-947} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{1}{C_4 s}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_L R_L r_o s^5 + 2C_1 C_4 C_L L_L R_1 R_L r_o s^4 + 2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + \dots}{\dots}$$

$$\mathbf{10.948 \quad INVALID-ORDER-948} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4}{C_4 R_4 s + 1}, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{2C_1 C_4 L_1 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L r_o s^3 + 2C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 L_1 R_1 R_4 g_m r_o s^2 + C_1 L_1 R_1 R_4 s^2 + 2C_1 L_1 R_1 R_L g_m r_o s^2 + 2C_1 L_1 R_1 R_L s^2 + \dots}{\dots}$$

$$\mathbf{10.949 \quad INVALID-ORDER-949} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4}{C_4 R_4 s + 1}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{2C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 r_o s^3 + 2C_1 C_4 R_1 R_4 r_o s^2 + C_1 C_L L_1 R_1 R_4 g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_4 r_o s^3 + C_1 C_L R_1 R_4 r_o s^2 + 2C_1 L_1 R_1 R_4 R_L s^2 + \dots}{\dots}$$

$$\mathbf{10.950 \quad INVALID-ORDER-950} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4}{C_4 R_4 s + 1}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{2C_1 C_4 L_1 R_1 R_4 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L r_o s^3 + 2C_1 C_4 R_1 R_4 R_L r_o s^2 + C_1 C_L L_1 R_1 R_4 R_L g_m r_o s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L r_o s^3 + C_1 C_L R_1 R_4 R_L r_o s^2 + \dots}{\dots}$$

10.951 INVALID-ORDER-951 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1R_1R_4R_Lg_mr_0s^4 + 2C_1C_4C_LL_1R_1R_4R_Ls^4 + 2C_1C_4C_LL_1R_4R_Lr_0s^4 + 2C_1C_4C_LR_1R_4R_Lr_0s^3 + 2C_1C_4L_1R_1R_4g_mr_0s^3 + 2C_1C_4L_1R_1R_4s^3 + 2C_1C_4L_1R_4r_0s^3 +$$

10.952 INVALID-ORDER-952 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_4g_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1R_4s^5 + 2C_1C_4C_LL_1L_LR_4r_0s^5 + 2C_1C_4C_LL_1R_1R_4r_0s^4 + 2C_1C_4L_1R_1R_4g_mr_0s^3 + 2C_1C_4L_1R_1R_4s^3 + 2C_1C_4L_1R_4r_0s^3 + 2C_1C_4L_1R_4s^3 + 2C_1C_4L_1R_4g_mr_0s^2 + 2C_1C_4L_1R_4s^2 + 2C_1C_4L_1R_4g_mr_0s + 2C_1C_4L_1R_4s + 2C_1C_4L_1R_4g_m + 2C_1C_4L_1R_4}{2C_1C_4C_LL_1L_LR_1R_4g_mr_0s^5 + 2C_1C_4C_LL_1L_LR_1R_4s^5 + 2C_1C_4C_LL_1L_LR_4r_0s^5 + 2C_1C_4C_LL_1R_1R_4r_0s^4 + 2C_1C_4C_LL_1R_1R_4g_mr_0s^3 + 2C_1C_4C_LL_1R_1R_4s^3 + 2C_1C_4C_LL_1R_4r_0s^3 + 2C_1C_4C_LL_1R_4s^3 + 2C_1C_4C_LL_1R_4g_mr_0s^2 + 2C_1C_4C_LL_1R_4s^2 + 2C_1C_4C_LL_1R_4g_m + 2C_1C_4C_LL_1R_4}.$$

10.953 INVALID-ORDER-953 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1R_4g_mr_0s^4 + 2C_1C_4L_1L_LR_1R_4s^4 + 2C_1C_4L_1L_LR_4r_0s^4 + 2C_1C_4L_LR_1R_4r_0s^3 + C_1C_LL_1L_LR_1R_4g_mr_0s^4 + C_1C_LL_1L_LR_1R_4s^4 + C_1C_LL_1L_LR_4r_0s^4 + C_1C_LL_1L_LR_4r_0s^3 + C_1C_LL_1L_LR_4r_0s^2 + C_1C_LL_1L_LR_4r_0s + C_1C_LL_1L_LR_4}{2C_1C_4L_1L_LR_1R_4g_mr_0s^4 + 2C_1C_4L_1L_LR_1R_4s^4 + 2C_1C_4L_1L_LR_4r_0s^4 + 2C_1C_4L_LR_1R_4r_0s^3 + C_1C_LL_1L_LR_1R_4g_mr_0s^4 + C_1C_LL_1L_LR_1R_4s^4 + C_1C_LL_1L_LR_4r_0s^4 + C_1C_LL_1L_LR_4r_0s^3 + C_1C_LL_1L_LR_4r_0s^2 + C_1C_LL_1L_LR_4r_0s + C_1C_LL_1L_LR_4}$$

10.954 INVALID-ORDER-954 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + 2C_1 C_4 C_L}{...}$$

10.955 INVALID-ORDER-955 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_LR_1R_4R_LR_og_m r_os^4 + 2C_1C_4L_1L_LR_1R_4R_Ls^4 + 2C_1C_4L_1L_LR_4R_LR_os^4 + 2C_1C_4L_LR_1R_4R_LR_os^3 + C_1C_LL_1L_LR_1R_4R_LR_og_m r_os^4 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_4R_LR_os^3 + C_1C_LL_1L_LR_4R_Ls^3 + C_1C_LL_1L_LR_4R_og_m r_os^4 + C_1C_LL_1L_LR_4R_og_m r_os^3 + C_1C_LL_1L_LR_4R_og_m r_os^2 + C_1C_LL_1L_LR_4R_og_m r_os + C_1C_LL_1L_LR_4R_og_m}{2C_1C_4L_1L_LR_1R_4R_LR_og_m r_os^4 + 2C_1C_4L_1L_LR_1R_4R_Ls^4 + 2C_1C_4L_1L_LR_4R_LR_os^4 + 2C_1C_4L_LR_1R_4R_LR_os^3 + C_1C_LL_1L_LR_1R_4R_LR_og_m r_os^4 + C_1C_LL_1L_LR_1R_4R_Ls^4 + C_1C_LL_1L_LR_4R_LR_os^3 + C_1C_LL_1L_LR_4R_Ls^3 + C_1C_LL_1L_LR_4R_og_m r_os^4 + C_1C_LL_1L_LR_4R_og_m r_os^3 + C_1C_LL_1L_LR_4R_og_m r_os^2 + C_1C_LL_1L_LR_4R_og_m r_os + C_1C_LL_1L_LR_4R_og_m}$$

10.956 INVALID-ORDER-956 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_4R_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_LR_4R_Lr_os^5 + 2C_1C_4C_LL_1R_1R_4R_Lr_os^4 + 2C_1C_4L_1L_LR_1R_4g_mr_os^4 + 2C_1C_4L_1L_LR_1R_4s^4 + 2C_1C_4L_1L_LR_1R_4R_Lr_os^3 + 2C_1C_4L_1L_LR_1R_4R_Ls^3 + 2C_1C_4L_1L_LR_1R_4R_Lr_o^2s^2 + 2C_1C_4L_1L_LR_1R_4R_Ls^2 + 2C_1C_4L_1L_LR_1R_4R_Lr_o^2s + 2C_1C_4L_1L_LR_1R_4R_Ls + 2C_1C_4L_1L_LR_1R_4R_Lr_o + 2C_1C_4L_1L_LR_1R_4R_L}{2C_1C_4C_LL_1L_LR_1R_4R_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_LR_4R_Lr_os^5 + 2C_1C_4C_LL_1R_1R_4R_Lr_os^4 + 2C_1C_4L_1L_LR_1R_4g_mr_os^4 + 2C_1C_4L_1L_LR_1R_4s^4 + 2C_1C_4L_1L_LR_1R_4R_Lr_os^3 + 2C_1C_4L_1L_LR_1R_4R_Ls^3 + 2C_1C_4L_1L_LR_1R_4R_Lr_o^2s^2 + 2C_1C_4L_1L_LR_1R_4R_Ls^2 + 2C_1C_4L_1L_LR_1R_4R_Lr_o^2s + 2C_1C_4L_1L_LR_1R_4R_Ls + 2C_1C_4L_1L_LR_1R_4R_Lr_o + 2C_1C_4L_1L_LR_1R_4R_L}$$

10.957 INVALID-ORDER-957 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1R_4R_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_LR_4R_Lr_os^5 + 2C_1C_4C_LL_LR_1R_4R_Lr_os^4 + 2C_1C_4L_1R_1R_4R_Lg_mr_os^3 + 2C_1C_4L_1R_1R_4R_Ls^3 + 2C_1C_4L_1R_1R_4R_Lr_os^2 + 2C_1C_4L_1R_1R_4R_Ls^2 + 2C_1C_4L_1R_1R_4R_Lr_os + 2C_1C_4L_1R_1R_4R_Ls}{2C_1C_4C_LL_1L_LR_1R_4R_Lg_mr_os^5 + 2C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4C_LL_1L_LR_4R_Lr_os^5 + 2C_1C_4C_LL_LR_1R_4R_Lr_os^4 + 2C_1C_4L_1R_1R_4R_Lg_mr_os^3 + 2C_1C_4L_1R_1R_4R_Ls^3 + 2C_1C_4L_1R_1R_4R_Lr_os^2 + 2C_1C_4L_1R_1R_4R_Ls^2 + 2C_1C_4L_1R_1R_4R_Lr_os + 2C_1C_4L_1R_1R_4R_Ls}$$

10.958 INVALID-ORDER-958 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 s^2}{C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_4 R_1 R_4 s^2}$$

10.959 INVALID-ORDER-959 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_4 R_1 R_4}{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 C_L R_1 R_4 r_o s^3 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_4 R_1 R_4}$$

10.960 INVALID-ORDER-960 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 C_L R_1 R_4 R_L r_o s^3 + C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2$$

10.961 INVALID-ORDER-961 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 C_L}{C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + 2 C_1 C_4 C_L L_1 R_L r_o s^4 + C_1 C_4 C_L}$$

10.962 INVALID-ORDER-962 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 C_L L_1 R_4 s^4}{\dots}$$

10.963 INVALID-ORDER-963 $Z(s) = \left(\frac{R_1(L_1s + \frac{1}{C_1s})}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, R_4 + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 g_m r_o s^4 + 2 C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 L_L R_4 s^4 + 2 C_1 C$$

10.964 INVALID-ORDER-964 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_LR_1g_mr_os^5 + 2C_1C_4C_LL_1L_LR_1s^5 + C_1C_4C_LL_1L_LR_4s^5 + 2C_1C_4C_LL_1L_LR_os^5 + C_1C_4C_LL_1R_1R_4g_mr_os^4 + C_1C_4C_LL_1R_1R_4s^4 + 2C_1C_4C_LL_1R_1R_Lg_mr_os^4 +$$

10.965 INVALID-ORDER-965 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + 2 C_1 C_4 L$$

10.966 INVALID-ORDER-966 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L$$

10.967 INVALID-ORDER-967 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_{mr_o} s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_{mr_o} s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + 2 C_1 C_4 C_L L$$

10.968 INVALID-ORDER-968 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_L s^3}{C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2C_1 C_4 L_1 R_1 R_L s^3 + 2C_1 C_4 L_1 R_L r_o s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_4 R_L s^3}$$

10.969 INVALID-ORDER-969 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 s^3 + 2 C_1 C_4 L_1 r_o s^3 + C_1 C_4 L_4 R_1}$$

10.970 INVALID-ORDER-970 $Z(s) = \left(\frac{R_1(L_1s + \frac{1}{C_1s})}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{R_L}{C_LR_Ls + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 R_L r_o s^3 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 R_L r_o s^2 + C_1 C_4 L_1 L_4 R_L s^2 + C_1 C_4 L_1 L_4 R_L r_o s + C_1 C_4 L_1 L_4 R_L}{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 R_L r_o s^3 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 R_L r_o s^2 + C_1 C_4 L_1 L_4 R_L s^2 + C_1 C_4 L_1 L_4 R_L r_o s + C_1 C_4 L_1 L_4 R_L}$$

10.976 INVALID-ORDER-976 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L s^5}{\dots}$$

10.977 INVALID-ORDER-977 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 q_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 q_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 L s^5}$$

10.978 INVALID-ORDER-978 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1L_1L_4R_1g_mr_0s^3 + C_1L_1L_4R_1s^3 + C_1L_1L_4R_Ls^3 + C_1L_1L_4R_0s^3 + 2C_1L_1R_1}{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1L_1L_4R_1g_mr_0s^3 + C_1L_1L_4R_1s^3 + C_1L_1L_4R_Ls^3 + C_1L_1L_4R_0s^3 + 2C_1L_1R_1}$$

10.979 INVALID-ORDER-979 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_4 I}{2C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_4 R_1 r_o s^3 + C_1 C_L L_1 L_4 R_1 g_m r_o s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 r_o s^4 + C_1 C_L L_4 R_1 r_o s^3 + C_1 L_1 L_4 s^3}$$

10.980 INVALID-ORDER-980 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1C_LL_1L_4R_1R_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_LR_0s^4 + C_1C_LL_1L_4R_LR_0s^3}{2C_1C_4L_1L_4R_1R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_LR_0s^4 + 2C_1C_4L_4R_1R_LR_0s^3 + C_1C_LL_1L_4R_1R_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_Ls^4 + C_1C_LL_1L_4R_LR_0s^4 + C_1C_LL_1L_4R_LR_0s^3}$$

10.981 INVALID-ORDER-981 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4R_1R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4C_LL_1L_4R_Lr_0s^5 + 2C_1C_4C_LL_4R_1R_Lr_0s^4 + 2C_1C_4L_1L_4R_1g_mr_0s^4 + 2C_1C_4L_1L_4R_1s^4 + 2C_1C_4L_1L_4r_0s^4 + 2C_1C_4L_1L_4R_1r_0s^3 + 2C_1C_4L_1L_4R_1s^3 + 2C_1C_4L_1L_4r_0s^3 + 2C_1C_4L_1L_4R_1s^2 + 2C_1C_4L_1L_4r_0s^2 + 2C_1C_4L_1L_4R_1s + 2C_1C_4L_1L_4r_0s + 2C_1C_4L_1L_4R_1 + 2C_1C_4L_1L_4r_0}{2C_1C_4C_LL_1L_4R_1R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4C_LL_1L_4R_Lr_0s^5 + 2C_1C_4C_LL_4R_1R_Lr_0s^4 + 2C_1C_4L_1L_4R_1g_mr_0s^4 + 2C_1C_4L_1L_4R_1s^4 + 2C_1C_4L_1L_4r_0s^4 + 2C_1C_4L_1L_4R_1r_0s^3 + 2C_1C_4L_1L_4R_1s^3 + 2C_1C_4L_1L_4r_0s^3 + 2C_1C_4L_1L_4R_1s^2 + 2C_1C_4L_1L_4r_0s^2 + 2C_1C_4L_1L_4R_1s + 2C_1C_4L_1L_4r_0s + 2C_1C_4L_1L_4R_1 + 2C_1C_4L_1L_4r_0}.$$

10.982 INVALID-ORDER-982 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + 2C_1 C_4 C_L L_4 L_L R_1 r_o s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 s^4 + 2C_1 C_4 L_1 L_4 r_o s^4 + 2C_1 C_4 L_1 L_4 s^4}{\dots}$$

10.983 INVALID-ORDER-983 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_1g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1s^4 + 2C_1C_4L_1L_4L_LR_0s^4 + 2C_1C_4L_4L_LR_1r_0s^3 + C_1C_LL_1L_4L_LR_1g_mr_0s^4 + C_1C_LL_1L_4L_LR_1s^4 + C_1C_LL_1L_4L_LR_0s^4 + C_1C_LL_4L_LR_1r_0s^3}{2C_1C_4L_1L_4L_LR_1g_mr_0s^4 + 2C_1C_4L_1L_4L_LR_1s^4 + 2C_1C_4L_1L_4L_LR_0s^4 + 2C_1C_4L_4L_LR_1r_0s^3 + C_1C_LL_1L_4L_LR_1g_mr_0s^4 + C_1C_LL_1L_4L_LR_1s^4 + C_1C_LL_1L_4L_LR_0s^4 + C_1C_LL_4L_LR_1r_0s^3}$$

10.984 INVALID-ORDER-984 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1g_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + 2C_1C_4C_LL_1L_4L_LR_0s^6 + 2C_1C_4C_LL_1L_4R_1R_Lg_mr_0s^5 + 2C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4C_LL_1L_4R_LR_0s^5 + 2C_1C_4C_L$$

10.985 INVALID-ORDER-985 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4L_LR_1R_LR_gm_r os^4 + 2C_1C_4L_1L_4L_LR_1R_Ls^4 + 2C_1C_4L_1L_4L_LR_LR_ os^4 + 2C_1C_4L_4L_LR_1R_LR_ os^3 + C_1C_LL_1L_4L_LR_1R_LR_gm_r os^4 + C_1C_LL_1L_4L_LR_1R_Ls^4 + C_1C_LL_1L_4L_LR_LR_ os^4 + C_1C_LL_1L_4L_LR_LR_ os^3 + C_1C_LL_1L_4L_LR_LR_ os^2 + C_1C_LL_1L_4L_LR_LR_ os}{2C_1C_4L_1L_4L_LR_1R_LR_gm_r os^4 + 2C_1C_4L_1L_4L_LR_1R_Ls^4 + 2C_1C_4L_1L_4L_LR_LR_ os^4 + 2C_1C_4L_4L_LR_1R_LR_ os^3 + C_1C_LL_1L_4L_LR_1R_LR_gm_r os^4 + C_1C_LL_1L_4L_LR_1R_Ls^4 + C_1C_LL_1L_4L_LR_LR_ os^4 + C_1C_LL_1L_4L_LR_LR_ os^3 + C_1C_LL_1L_4L_LR_LR_ os^2 + C_1C_LL_1L_4L_LR_LR_ os}$$

10.986 INVALID-ORDER-986 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 L_L R_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_L s^5}{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 L_L R_L r_o s^5 + 2C_1 C_4 L_1 L_4 L_L R_L s^5}$$

10.987 INVALID-ORDER-987 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + 2C_1 C_4 C_L L_4 L_L R_1 R_L r_o s^5 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_L r_o s^4 + 2C_1 C_4 L_1 L_4 R_L s^4}{\dots}$$

10.988 INVALID-ORDER-988 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 r_o s^4 + C_1 C_4 L_1 R_1 R_4 g_m r_o s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4$$

10.989 INVALID-ORDER-989 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_{1g} m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_{4g} m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 r_o s^4 + C_1 C_4 C_L L_4 R_1 r_o s^4 + C_1 C_4 C_L L_4 R_1 I}{\dots}$$

10.990 INVALID-ORDER-990 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_4 s^4 + C_1 C_4 C_L s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_L r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L r_o s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m r_o s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_L r_o s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_4 s^4 + C_1 C_4 C_L s^4}.$$

10.991 INVALID-ORDER-991 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^2 + C_1 C_4 C_L L_1 R_1 R_L s^2 + C_1 C_4 C_L L_1 R_1 R_L g_m r_o s + C_1 C_4 C_L L_1 R_1 R_L s}{C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m r_o s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L s^4 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^3 + 2 C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 C_L L_1 R_1 R_L g_m r_o s^2 + C_1 C_4 C_L L_1 R_1 R_L s^2 + C_1 C_4 C_L L_1 R_1 R_L g_m r_o s + C_1 C_4 C_L L_1 R_1 R_L s}$$

10.992 INVALID-ORDER-992 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 s^5}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 s^5}$$

10.993 INVALID-ORDER-993 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 R_4 r_o s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_4 s^5}$$

10.994 INVALID-ORDER-994 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 L_L s^6}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L r_o s^5 + C_1 C_4 C_L L_1 L_L s^6}$$

10.995 INVALID-ORDER-995 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L r_o s^5}$$

10.996 INVALID-ORDER-996 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L}{\dots}$$

10.997 INVALID-ORDER-997 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 q_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 q_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L q_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 L s^5}$$

10.998 INVALID-ORDER-998 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, R_L \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_Lr_0s^4 + 2C_1C_4L_4R_1R_4R_Lr_0s^3 + C_1L_1L_4R_1R_4g_mr_0s^3 + C_1L_1L_4R_1R_4s^3 + 2C_1L_1L_4R_1R_Lg_mr_0s^3 -$$

10.999 INVALID-ORDER-999 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4 + \frac{1}{L_4 s}}}, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4g_mr_o s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_o s^4 + 2C_1C_4L_4R_1R_4r_o s^3 + C_1C_LL_1L_4R_1R_4g_mr_o s^4 + C_1C_LL_1L_4R_1R_4s^4 + C_1C_LL_1L_4R_4r_o s^4 + C_1C_LL_4R_1R_4r_o s^3}{2C_1C_4L_1L_4R_1R_4g_mr_o s^4 + 2C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4r_o s^4 + 2C_1C_4L_4R_1R_4r_o s^3 + C_1C_LL_1L_4R_1R_4g_mr_o s^4 + C_1C_LL_1L_4R_1R_4s^4 + C_1C_LL_1L_4R_4r_o s^4 + C_1C_LL_4R_1R_4r_o s^3}$$

10.1000 INVALID-ORDER-1000 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_4R_LR_0s^4 + 2C_1C_4L_4R_1R_4R_LR_0s^3 + C_1C_LL_1L_4R_1R_4R_LR_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_4R_Ls^4 + C_1C_LL_1L_4R_4R_LR_0s^3 + C_1C_LL_1L_4R_4R_LR_0s^2 + C_1C_LL_1L_4R_4R_LR_0s}{2C_1C_4L_1L_4R_1R_4R_LR_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_LR_Ls^4 + 2C_1C_4L_1L_4R_4R_LR_0s^4 + 2C_1C_4L_4R_1R_4R_LR_0s^3 + C_1C_LL_1L_4R_1R_4R_LR_Lg_mr_0s^4 + C_1C_LL_1L_4R_1R_4R_LR_Ls^4 + C_1C_LL_1L_4R_4R_LR_0s^3 + C_1C_LL_1L_4R_4R_LR_0s^2 + C_1C_LL_1L_4R_4R_LR_0s}$$

10.1006 INVALID-ORDER-1006 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_4R_Ls^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Lr_0s^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_1R_4g_mr_0s^5 + 2C_1C_4L_1L_4L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4R_Lr_0s^5}{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_4R_Ls^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Lr_0s^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_1R_4g_mr_0s^5 + 2C_1C_4L_1L_4L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4R_Lr_0s^5 + 2C_1C_4L_1L_4L_LR_4R_Lr_0s^5}$$

10.1007 INVALID-ORDER-1007 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_4R_Ls^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Lr_0s^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s^3 + 2C_1C_4L_1L_4R_1R_4R_Ls^3 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s^2 + 2C_1C_4L_1L_4R_1R_4R_Ls^2 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s + 2C_1C_4L_1L_4R_1R_4R_L}{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_mr_0s^6 + 2C_1C_4C_LL_1L_4L_LR_1R_4R_Ls^6 + 2C_1C_4C_LL_1L_4L_LR_4R_Lr_0s^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lr_0s^5 + 2C_1C_4L_1L_4R_1R_4R_Lg_mr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s^4 + 2C_1C_4L_1L_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s^3 + 2C_1C_4L_1L_4R_1R_4R_Ls^3 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s^2 + 2C_1C_4L_1L_4R_1R_4R_Ls^2 + 2C_1C_4L_1L_4R_1R_4R_Lr_0s + 2C_1C_4L_1L_4R_1R_4R_L}$$

10.1008 INVALID-ORDER-1008 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + C_1 C_4 L_4 F}{\dots}$$

10.1009 INVALID-ORDER-1009 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L$$

10.1010 INVALID-ORDER-1010 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4}{\dots}$$

$$\text{10.1011 INVALID-ORDER-1011 } Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4}{\dots}$$

10.1012 INVALID-ORDER-1012 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1g_mr_os^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4L_LR_os^6 + C_1C_4C_LL_1L_4R_1R_4g_mr_os^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5}{2C_1C_4C_LL_1L_4L_LR_1g_mr_os^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4L_LR_os^6 + C_1C_4C_LL_1L_4R_1R_4g_mr_os^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5}$$

10.1013 INVALID-ORDER-1013 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^4 + C_1 C_4 L_1 L_4 L_L R_4 s^4 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 L_L R_1 s^4 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^3 + C_1 C_4 L_1 L_4 L_L R_4 s^3 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^3 + C_1 C_4 L_1 L_4 L_L R_1 s^3 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^2 + C_1 C_4 L_1 L_4 L_L R_4 s^2 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^2 + C_1 C_4 L_1 L_4 L_L R_1 s^2 + C_1 C_4 L_1 L_4 L_L R_4 r_o s + C_1 C_4 L_1 L_4 L_L R_4 s + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s + C_1 C_4 L_1 L_4 L_L R_1 s + C_1 C_4 L_1 L_4 L_L R_4 r_o + C_1 C_4 L_1 L_4 L_L R_4 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o + C_1 C_4 L_1 L_4 L_L R_1 + C_1 C_4 L_1 L_4 L_L R_4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^4 + C_1 C_4 L_1 L_4 L_L R_4 s^4 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^4 + C_1 C_4 L_1 L_4 L_L R_1 s^4 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^3 + C_1 C_4 L_1 L_4 L_L R_4 s^3 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^3 + C_1 C_4 L_1 L_4 L_L R_1 s^3 + C_1 C_4 L_1 L_4 L_L R_4 r_o s^2 + C_1 C_4 L_1 L_4 L_L R_4 s^2 + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^2 + C_1 C_4 L_1 L_4 L_L R_1 s^2 + C_1 C_4 L_1 L_4 L_L R_4 r_o s + C_1 C_4 L_1 L_4 L_L R_4 s + C_1 C_4 L_1 L_4 L_L R_1 g_m r_o + C_1 C_4 L_1 L_4 L_L R_1 + C_1 C_4 L_1 L_4 L_L R_4}.$$

10.1014 INVALID-ORDER-1014 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_{1g_m} r_o s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_{4g_m} r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1}{\dots}$$

10.1015 INVALID-ORDER-1015 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5}.$$

$$\mathbf{10.1016 \quad INVALID-ORDER-1016} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}$$

$$\mathbf{10.1017 \quad INVALID-ORDER-1017} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}$$

$$\mathbf{10.1018 \quad INVALID-ORDER-1018} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4}{C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L r_o s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4}$$

$$\mathbf{10.1019 \quad INVALID-ORDER-1019} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_4 r_o s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m r_o s^4 + 2 C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_4 r_o s^4}$$

$$\mathbf{10.1020 \quad INVALID-ORDER-1020} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L r_o s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L r_o s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m r_o s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_4 R_L r_o s^4}$$

10.1021 INVALID-ORDER-1021 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m r_o s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 r_o s^5 + 2 C_1 C_4 C_L L_1 L_4 R_4 s^5}.$$

10.1022 INVALID-ORDER-1022 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1g_mr_os^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4L_LR_os^6 + C_1C_4C_LL_1L_4R_1R_4g_mr_os^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5}{2C_1C_4C_LL_1L_4L_LR_1g_mr_os^6 + 2C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4L_LR_os^6 + C_1C_4C_LL_1L_4R_1R_4g_mr_os^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_1R_4s^5}$$

10.1023 INVALID-ORDER-1023 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m r_o s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1}{\dots}$$

10.1024 INVALID-ORDER-1024 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_{1gmr_o} s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 C_L L_1 L_4 L_L r_o s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_{4gmr_o} s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 C_L L_1}{\dots}$$

10.1025 INVALID-ORDER-1025 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L r_o s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m r_o s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^5}.$$

$$\mathbf{10.1026 \quad INVALID-ORDER-1026} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}$$

$$\mathbf{10.1027 \quad INVALID-ORDER-1027} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \quad \infty, \quad \infty, \quad \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m r_o s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m r_o s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 r_o s^6}$$