

Filter Summary Report: TIA simple Z1 Z5 ZL

Generated by MacAnalog-Symbolix

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10.60INVALID-ORDER-60	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	96
10.61INVALID-ORDER-61	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	97
10.62INVALID-ORDER-62	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	97
10.63INVALID-ORDER-63	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	97
10.64INVALID-ORDER-64	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	97
10.65INVALID-ORDER-65	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	97
10.66INVALID-ORDER-66	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	98
10.67INVALID-ORDER-67	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	98
10.68INVALID-ORDER-68	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	98
10.69INVALID-ORDER-69	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	98
10.70INVALID-ORDER-70	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	98
10.71INVALID-ORDER-71	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	99
10.72INVALID-ORDER-72	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	99
10.73INVALID-ORDER-73	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	99
10.74INVALID-ORDER-74	$Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	99
10.75INVALID-ORDER-75	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	99
10.76INVALID-ORDER-76	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	100
10.77INVALID-ORDER-77	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	100
10.78INVALID-ORDER-78	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	100
10.79INVALID-ORDER-79	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	100

10.80INVALID-ORDER-80	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	100
10.81INVALID-ORDER-81	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	101
10.82INVALID-ORDER-82	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	101
10.83INVALID-ORDER-83	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	101
10.84INVALID-ORDER-84	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_L \right)$	101
10.85INVALID-ORDER-85	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	101
10.86INVALID-ORDER-86	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	102
10.87INVALID-ORDER-87	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	102
10.88INVALID-ORDER-88	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	102
10.89INVALID-ORDER-89	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	102
10.90INVALID-ORDER-90	$Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	102
10.91INVALID-ORDER-91	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	103
10.92INVALID-ORDER-92	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	103
10.93INVALID-ORDER-93	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	103
10.94INVALID-ORDER-94	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	103
10.95INVALID-ORDER-95	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	103
10.96INVALID-ORDER-96	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	103
10.97INVALID-ORDER-97	$Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	104
10.98INVALID-ORDER-98	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	104
10.99INVALID-ORDER-99	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	104

10.100INVALID-ORDER-100	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	104
10.101INVALID-ORDER-101	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	104
10.102INVALID-ORDER-102	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	104
10.103INVALID-ORDER-103	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	105
10.104INVALID-ORDER-104	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	105
10.105INVALID-ORDER-105	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	105
10.106INVALID-ORDER-106	$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	105
10.107INVALID-ORDER-107	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	105
10.108INVALID-ORDER-108	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	106
10.109INVALID-ORDER-109	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	106
10.110INVALID-ORDER-110	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	106
10.111INVALID-ORDER-111	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	106
10.112INVALID-ORDER-112	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	106
10.113INVALID-ORDER-113	$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	107
10.114INVALID-ORDER-114	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	107
10.115INVALID-ORDER-115	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	107
10.116INVALID-ORDER-116	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	107
10.117INVALID-ORDER-117	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	107
10.118INVALID-ORDER-118	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	108
10.119INVALID-ORDER-119	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	108
10.120INVALID-ORDER-120	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	108
10.121INVALID-ORDER-121	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	108

10.122INVALID-ORDER-122	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	108
10.123INVALID-ORDER-123	$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	109
10.124INVALID-ORDER-124	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	109
10.125INVALID-ORDER-125	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	109
10.126INVALID-ORDER-126	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	109
10.127INVALID-ORDER-127	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	109
10.128INVALID-ORDER-128	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	110
10.129INVALID-ORDER-129	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	110
10.130INVALID-ORDER-130	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	110
10.131INVALID-ORDER-131	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	110
10.132INVALID-ORDER-132	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	110
10.133INVALID-ORDER-133	$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	111
10.134INVALID-ORDER-134	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	111
10.135INVALID-ORDER-135	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	111
10.136INVALID-ORDER-136	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	111
10.137INVALID-ORDER-137	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	111
10.138INVALID-ORDER-138	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	112
10.139INVALID-ORDER-139	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	112
10.140INVALID-ORDER-140	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	112
10.141INVALID-ORDER-141	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	112
10.142INVALID-ORDER-142	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	112
10.143INVALID-ORDER-143	$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	113

10.141	INVALID-ORDER-144	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$	113
10.145	INVALID-ORDER-145	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	113
10.146	INVALID-ORDER-146	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	113
10.147	INVALID-ORDER-147	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	113
10.148	INVALID-ORDER-148	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	114
10.149	INVALID-ORDER-149	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	114
10.150	INVALID-ORDER-150	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	114
10.151	INVALID-ORDER-151	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	114
10.152	INVALID-ORDER-152	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	114
10.153	INVALID-ORDER-153	$Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	115
10.154	INVALID-ORDER-154	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$	115
10.155	INVALID-ORDER-155	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	115
10.156	INVALID-ORDER-156	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	115
10.157	INVALID-ORDER-157	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	115
10.158	INVALID-ORDER-158	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	116
10.159	INVALID-ORDER-159	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	116
10.160	INVALID-ORDER-160	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	116
10.161	INVALID-ORDER-161	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	116
10.162	INVALID-ORDER-162	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	116

10.163	INVALID-ORDER-163	$Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	117
10.164	INVALID-ORDER-164	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, R_L \right)$	117
10.165	INVALID-ORDER-165	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{1}{C_L s} \right)$	117
10.166	INVALID-ORDER-166	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	117
10.167	INVALID-ORDER-167	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	117
10.168	INVALID-ORDER-168	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	118
10.169	INVALID-ORDER-169	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	118
10.170	INVALID-ORDER-170	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	118
10.171	INVALID-ORDER-171	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	118
10.172	INVALID-ORDER-172	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	118
10.173	INVALID-ORDER-173	$Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	119
10.174	INVALID-ORDER-174	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, R_L \right)$	119
10.175	INVALID-ORDER-175	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	119
10.176	INVALID-ORDER-176	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	119
10.177	INVALID-ORDER-177	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	119
10.178	INVALID-ORDER-178	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	120
10.179	INVALID-ORDER-179	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	120
10.180	INVALID-ORDER-180	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	120
10.181	INVALID-ORDER-181	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s} \right)$	120
10.182	INVALID-ORDER-182	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	120
10.183	INVALID-ORDER-183	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	121
10.184	INVALID-ORDER-184	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	121

10.185INVALID-ORDER-185	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	121
10.186INVALID-ORDER-186	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	121
10.187INVALID-ORDER-187	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	121
10.188INVALID-ORDER-188	$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	122
10.189INVALID-ORDER-189	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	122
10.190INVALID-ORDER-190	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	122
10.191INVALID-ORDER-191	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	122
10.192INVALID-ORDER-192	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	122
10.193INVALID-ORDER-193	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	123
10.194INVALID-ORDER-194	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	123
10.195INVALID-ORDER-195	$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	123
10.196INVALID-ORDER-196	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$	123
10.197INVALID-ORDER-197	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	123
10.198INVALID-ORDER-198	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	124
10.199INVALID-ORDER-199	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	124
10.200INVALID-ORDER-200	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	124
10.201INVALID-ORDER-201	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	124
10.202INVALID-ORDER-202	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	124
10.203INVALID-ORDER-203	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	124
10.204INVALID-ORDER-204	$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	125
10.205INVALID-ORDER-205	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$	125
10.206INVALID-ORDER-206	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$	125

10.20 INVALID-ORDER-207	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	125
10.20 INVALID-ORDER-208	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	125
10.20 INVALID-ORDER-209	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	126
10.21 INVALID-ORDER-210	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	126
10.21 INVALID-ORDER-211	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	126
10.21 INVALID-ORDER-212	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	126
10.21 INVALID-ORDER-213	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	126
10.21 INVALID-ORDER-214	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	127
10.21 INVALID-ORDER-215	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$	127
10.21 INVALID-ORDER-216	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$	127
10.21 INVALID-ORDER-217	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	127
10.21 INVALID-ORDER-218	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	127
10.21 INVALID-ORDER-219	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	128
10.22 INVALID-ORDER-220	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	128
10.22 INVALID-ORDER-221	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	128
10.22 INVALID-ORDER-222	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	128
10.22 INVALID-ORDER-223	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	128
10.22 INVALID-ORDER-224	$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	129
10.22 INVALID-ORDER-225	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L \right)$	129
10.22 INVALID-ORDER-226	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$	129
10.22 INVALID-ORDER-227	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	129

10.228	INVALID-ORDER-228	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	129
10.229	INVALID-ORDER-229	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	130
10.230	INVALID-ORDER-230	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	130
10.231	INVALID-ORDER-231	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	130
10.232	INVALID-ORDER-232	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	130
10.233	INVALID-ORDER-233	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	130
10.234	INVALID-ORDER-234	$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	131
10.235	INVALID-ORDER-235	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L \right)$	131
10.236	INVALID-ORDER-236	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$	131
10.237	INVALID-ORDER-237	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	131
10.238	INVALID-ORDER-238	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	131
10.239	INVALID-ORDER-239	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	132
10.240	INVALID-ORDER-240	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	132
10.241	INVALID-ORDER-241	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	132
10.242	INVALID-ORDER-242	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	132
10.243	INVALID-ORDER-243	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	132
10.244	INVALID-ORDER-244	$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	133
10.245	INVALID-ORDER-245	$Z(s) = \left(\infty, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$	133
10.246	INVALID-ORDER-246	$Z(s) = \left(\infty, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$	133
10.247	INVALID-ORDER-247	$Z(s) = \left(\infty, \infty, \frac{R_3 (L_3 s + \frac{1}{C_3 s})}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	133

10.24 8 INVALID-ORDER-248	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	133
10.24 9 INVALID-ORDER-249	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	134
10.25 0 INVALID-ORDER-250	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	134
10.25INVALID-ORDER-251	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	134
10.25 2 INVALID-ORDER-252	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	134
10.25 3 INVALID-ORDER-253	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	134
10.25 4 INVALID-ORDER-254	$Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	135
10.25 5 INVALID-ORDER-255	$Z(s) = (\infty, \infty, \infty, R_4, \infty, R_L)$	135
10.25 6 INVALID-ORDER-256	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{1}{C_L s} \right)$	135
10.25 7 INVALID-ORDER-257	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	135
10.25 8 INVALID-ORDER-258	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$	135
10.25 9 INVALID-ORDER-259	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$	136
10.26 0 INVALID-ORDER-260	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	136
10.26INVALID-ORDER-261	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	136
10.26 2 INVALID-ORDER-262	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	136
10.26 3 INVALID-ORDER-263	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	136
10.26 4 INVALID-ORDER-264	$Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	137
10.26 5 INVALID-ORDER-265	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$	137
10.26 6 INVALID-ORDER-266	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	137
10.26 7 INVALID-ORDER-267	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	137
10.26 8 INVALID-ORDER-268	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	137

10.26	INVALID-ORDER-269	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	138
10.27	INVALID-ORDER-270	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	138
10.27	INVALID-ORDER-271	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	138
10.27	INVALID-ORDER-272	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$	138
10.27	INVALID-ORDER-273	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$	138
10.27	INVALID-ORDER-274	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$	139
10.27	INVALID-ORDER-275	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	139
10.27	INVALID-ORDER-276	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	139
10.27	INVALID-ORDER-277	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	139
10.27	INVALID-ORDER-278	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	139
10.27	INVALID-ORDER-279	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	140
10.28	INVALID-ORDER-280	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	140
10.28	INVALID-ORDER-281	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	140
10.28	INVALID-ORDER-282	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	140
10.28	INVALID-ORDER-283	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	140
10.28	INVALID-ORDER-284	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	141
10.28	INVALID-ORDER-285	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	141
10.28	INVALID-ORDER-286	$Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	141
10.28	INVALID-ORDER-287	$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$	141
10.28	INVALID-ORDER-288	$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	141
10.28	INVALID-ORDER-289	$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$	142
10.29	INVALID-ORDER-290	$Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$	142

10.29	INVALID-ORDER-291	$Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	142
10.29	INVALID-ORDER-292	$Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	142
10.29	INVALID-ORDER-293	$Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	142
10.29	INVALID-ORDER-294	$Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	142
10.29	INVALID-ORDER-295	$Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	143
10.29	INVALID-ORDER-296	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, R_L \right)$	143
10.29	INVALID-ORDER-297	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{1}{C_Ls} \right)$	143
10.29	INVALID-ORDER-298	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	143
10.29	INVALID-ORDER-299	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, R_L + \frac{1}{C_Ls} \right)$	143
10.30	INVALID-ORDER-300	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, L_Ls + \frac{1}{C_Ls} \right)$	144
10.30	INVALID-ORDER-301	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	144
10.30	INVALID-ORDER-302	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	144
10.30	INVALID-ORDER-303	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	144
10.30	INVALID-ORDER-304	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	144
10.30	INVALID-ORDER-305	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	145
10.30	INVALID-ORDER-306	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, R_L \right)$	145
10.30	INVALID-ORDER-307	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls} \right)$	145
10.30	INVALID-ORDER-308	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	145
10.30	INVALID-ORDER-309	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, R_L + \frac{1}{C_Ls} \right)$	145
10.31	INVALID-ORDER-310	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls} \right)$	146
10.31	INVALID-ORDER-311	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	146
10.31	INVALID-ORDER-312	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	146

10.31 3 INVALID-ORDER-313	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	146
10.31 4 INVALID-ORDER-314	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	146
10.31 5 INVALID-ORDER-315	$Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	147
10.31 6 INVALID-ORDER-316	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, R_L \right)$	147
10.31 7 INVALID-ORDER-317	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{1}{C_Ls} \right)$	147
10.31 8 INVALID-ORDER-318	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	147
10.31 9 INVALID-ORDER-319	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, R_L + \frac{1}{C_Ls} \right)$	147
10.32 0 INVALID-ORDER-320	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, L_Ls + \frac{1}{C_Ls} \right)$	148
10.32 1 INVALID-ORDER-321	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	148
10.32 2 INVALID-ORDER-322	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	148
10.32 3 INVALID-ORDER-323	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	148
10.32 4 INVALID-ORDER-324	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	148
10.32 5 INVALID-ORDER-325	$Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	149
10.32 6 INVALID-ORDER-326	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, R_L \right)$	149
10.32 7 INVALID-ORDER-327	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{1}{C_Ls} \right)$	149
10.32 8 INVALID-ORDER-328	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	149
10.32 9 INVALID-ORDER-329	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, R_L + \frac{1}{C_Ls} \right)$	149
10.33 0 INVALID-ORDER-330	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, L_Ls + \frac{1}{C_Ls} \right)$	150
10.33 1 INVALID-ORDER-331	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	150
10.33 2 INVALID-ORDER-332	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1} + R_4, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	150

10.333INVALID-ORDER-333	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	150
10.334INVALID-ORDER-334	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	150
10.335INVALID-ORDER-335	$Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	151
10.336INVALID-ORDER-336	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$	151
10.337INVALID-ORDER-337	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s} \right)$	151
10.338INVALID-ORDER-338	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	151
10.339INVALID-ORDER-339	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$	151
10.340INVALID-ORDER-340	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$	152
10.341INVALID-ORDER-341	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	152
10.342INVALID-ORDER-342	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	152
10.343INVALID-ORDER-343	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	152
10.344INVALID-ORDER-344	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	152
10.345INVALID-ORDER-345	$Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	153
10.346INVALID-ORDER-346	$Z(s) = (\infty, \infty, \infty, \infty, R_4, R_L)$	153
10.347INVALID-ORDER-347	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{1}{C_L s} \right)$	153
10.348INVALID-ORDER-348	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{R_L}{C_L R_L s + 1} \right)$	153
10.349INVALID-ORDER-349	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, R_L + \frac{1}{C_L s} \right)$	153
10.350INVALID-ORDER-350	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, L_L s + \frac{1}{C_L s} \right)$	154
10.351INVALID-ORDER-351	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	154
10.352INVALID-ORDER-352	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, L_L s + R_L + \frac{1}{C_L s} \right)$	154

10.353INVALID-ORDER-353	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	154
10.354INVALID-ORDER-354	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	154
10.355INVALID-ORDER-355	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	155
10.356INVALID-ORDER-356	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, R_L \right)$	155
10.357INVALID-ORDER-357	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, L_L s + \frac{1}{C_L s} \right)$	155
10.358INVALID-ORDER-358	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	155
10.359INVALID-ORDER-359	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, L_L s + R_L + \frac{1}{C_L s} \right)$	155
10.360INVALID-ORDER-360	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	156
10.361INVALID-ORDER-361	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	156
10.362INVALID-ORDER-362	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	156
10.363INVALID-ORDER-363	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_L s} \right)$	156
10.364INVALID-ORDER-364	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_L}{C_L R_L s + 1} \right)$	156
10.365INVALID-ORDER-365	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_L + \frac{1}{C_L s} \right)$	157
10.366INVALID-ORDER-366	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_L s + \frac{1}{C_L s} \right)$	157
10.367INVALID-ORDER-367	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	157
10.368INVALID-ORDER-368	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_L s + R_L + \frac{1}{C_L s} \right)$	157
10.369INVALID-ORDER-369	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	157
10.370INVALID-ORDER-370	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	157
10.371INVALID-ORDER-371	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	158
10.372INVALID-ORDER-372	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s} \right)$	158
10.373INVALID-ORDER-373	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1} \right)$	158
10.374INVALID-ORDER-374	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, R_L + \frac{1}{C_L s} \right)$	158

10.375INVALID-ORDER-375	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, L_Ls + \frac{1}{C_Ls} \right)$	158
10.376INVALID-ORDER-376	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	158
10.377INVALID-ORDER-377	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, L_Ls + R_L + \frac{1}{C_Ls} \right)$	159
10.378INVALID-ORDER-378	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	159
10.379INVALID-ORDER-379	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	159
10.380INVALID-ORDER-380	$Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	159
10.381INVALID-ORDER-381	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{1}{C_Ls} \right)$	159
10.382INVALID-ORDER-382	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{R_L}{C_LR_Ls+1} \right)$	160
10.383INVALID-ORDER-383	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, R_L + \frac{1}{C_Ls} \right)$	160
10.384INVALID-ORDER-384	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, L_Ls + \frac{1}{C_Ls} \right)$	160
10.385INVALID-ORDER-385	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	160
10.386INVALID-ORDER-386	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, L_Ls + R_L + \frac{1}{C_Ls} \right)$	160
10.387INVALID-ORDER-387	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	160
10.388INVALID-ORDER-388	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	161
10.389INVALID-ORDER-389	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	161
10.390INVALID-ORDER-390	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, R_L \right)$	161
10.391INVALID-ORDER-391	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{1}{C_Ls} \right)$	161
10.392INVALID-ORDER-392	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{R_L}{C_LR_Ls+1} \right)$	161
10.393INVALID-ORDER-393	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, R_L + \frac{1}{C_Ls} \right)$	162
10.394INVALID-ORDER-394	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, L_Ls + \frac{1}{C_Ls} \right)$	162
10.395INVALID-ORDER-395	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	162
10.396INVALID-ORDER-396	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, L_Ls + R_L + \frac{1}{C_Ls} \right)$	162

10.39	INVALID-ORDER-397	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	162
10.39	INVALID-ORDER-398	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	163
10.39	INVALID-ORDER-399	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	163
10.40	INVALID-ORDER-400	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_L \right)$	163
10.40	INVALID-ORDER-401	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s} \right)$	163
10.40	INVALID-ORDER-402	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1} \right)$	163
10.40	INVALID-ORDER-403	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_L + \frac{1}{C_L s} \right)$	164
10.40	INVALID-ORDER-404	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_L s + \frac{1}{C_L s} \right)$	164
10.40	INVALID-ORDER-405	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	164
10.40	INVALID-ORDER-406	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_L s + R_L + \frac{1}{C_L s} \right)$	164
10.40	INVALID-ORDER-407	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	164
10.40	INVALID-ORDER-408	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	165
10.40	INVALID-ORDER-409	$Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	165
10.41	INVALID-ORDER-410	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, R_L \right)$	165
10.41	INVALID-ORDER-411	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{1}{C_L s} \right)$	165
10.41	INVALID-ORDER-412	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{R_L}{C_L R_L s + 1} \right)$	165
10.41	INVALID-ORDER-413	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, R_L + \frac{1}{C_L s} \right)$	166
10.41	INVALID-ORDER-414	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, L_L s + \frac{1}{C_L s} \right)$	166
10.41	INVALID-ORDER-415	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	166
10.41	INVALID-ORDER-416	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, L_L s + R_L + \frac{1}{C_L s} \right)$	166

10.41	INVALID-ORDER-417	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	166
10.41	INVALID-ORDER-418	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	167
10.41	INVALID-ORDER-419	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	167
10.42	INVALID-ORDER-420	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, R_L \right)$	167
10.42	INVALID-ORDER-421	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{1}{C_L s} \right)$	167
10.42	INVALID-ORDER-422	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{R_L}{C_L R_L s + 1} \right)$	167
10.42	INVALID-ORDER-423	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, R_L + \frac{1}{C_L s} \right)$	168
10.42	INVALID-ORDER-424	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, L_L s + \frac{1}{C_L s} \right)$	168
10.42	INVALID-ORDER-425	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	168
10.42	INVALID-ORDER-426	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, L_L s + R_L + \frac{1}{C_L s} \right)$	168
10.42	INVALID-ORDER-427	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	168
10.42	INVALID-ORDER-428	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	169
10.42	INVALID-ORDER-429	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	169
10.43	INVALID-ORDER-430	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, R_L \right)$	169
10.43	INVALID-ORDER-431	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{1}{C_L s} \right)$	169
10.43	INVALID-ORDER-432	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{R_L}{C_L R_L s + 1} \right)$	169
10.43	INVALID-ORDER-433	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, R_L + \frac{1}{C_L s} \right)$	170
10.43	INVALID-ORDER-434	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, L_L s + \frac{1}{C_L s} \right)$	170
10.43	INVALID-ORDER-435	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 (L_4 s + \frac{1}{C_4 s})}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	170

10.436INVALID-ORDER-436	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, L_L s + R_L + \frac{1}{C_L s} \right)$	170
10.437INVALID-ORDER-437	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	170
10.438INVALID-ORDER-438	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	171
10.439INVALID-ORDER-439	$Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	171
10.440INVALID-ORDER-440	$Z(s) = (R_1, R_2, \infty, \infty, \infty, R_L)$	171
10.441INVALID-ORDER-441	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	171
10.442INVALID-ORDER-442	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	171
10.443INVALID-ORDER-443	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	172
10.444INVALID-ORDER-444	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	172
10.445INVALID-ORDER-445	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	172
10.446INVALID-ORDER-446	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	172
10.447INVALID-ORDER-447	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	172
10.448INVALID-ORDER-448	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	173
10.449INVALID-ORDER-449	$Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	173
10.450INVALID-ORDER-450	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	173
10.451INVALID-ORDER-451	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	173
10.452INVALID-ORDER-452	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	173
10.453INVALID-ORDER-453	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	174
10.454INVALID-ORDER-454	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	174
10.455INVALID-ORDER-455	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	174
10.456INVALID-ORDER-456	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	174
10.457INVALID-ORDER-457	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	174

10.45 8 INVALID-ORDER-458	$Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	175
10.45 9 INVALID-ORDER-459	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	175
10.46 0 INVALID-ORDER-460	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	175
10.46 1 INVALID-ORDER-461	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	175
10.46 2 INVALID-ORDER-462	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	175
10.46 3 INVALID-ORDER-463	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	176
10.46 4 INVALID-ORDER-464	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	176
10.46 5 INVALID-ORDER-465	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	176
10.46 6 INVALID-ORDER-466	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	176
10.46 7 INVALID-ORDER-467	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	176
10.46 8 INVALID-ORDER-468	$Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	177
10.46 9 INVALID-ORDER-469	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	177
10.47 0 INVALID-ORDER-470	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	177
10.47 1 INVALID-ORDER-471	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	177
10.47 2 INVALID-ORDER-472	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	177
10.47 3 INVALID-ORDER-473	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	178
10.47 4 INVALID-ORDER-474	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	178
10.47 5 INVALID-ORDER-475	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	178
10.47 6 INVALID-ORDER-476	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	178
10.47 7 INVALID-ORDER-477	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	178
10.47 8 INVALID-ORDER-478	$Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	179
10.47 9 INVALID-ORDER-479	$Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	179

10.480INVALID-ORDER-480	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	179
10.481INVALID-ORDER-481	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	179
10.482INVALID-ORDER-482	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	179
10.483INVALID-ORDER-483	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	180
10.484INVALID-ORDER-484	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	180
10.485INVALID-ORDER-485	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	180
10.486INVALID-ORDER-486	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	180
10.487INVALID-ORDER-487	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	180
10.488INVALID-ORDER-488	$Z(s) = \left(R_1, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	181
10.489INVALID-ORDER-489	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L \right)$	181
10.490INVALID-ORDER-490	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	181
10.491INVALID-ORDER-491	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	181
10.492INVALID-ORDER-492	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	181
10.493INVALID-ORDER-493	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	182
10.494INVALID-ORDER-494	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	182
10.495INVALID-ORDER-495	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	182
10.496INVALID-ORDER-496	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	182
10.497INVALID-ORDER-497	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	182
10.498INVALID-ORDER-498	$Z(s) = \left(R_1, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	183
10.499INVALID-ORDER-499	$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L \right)$	183
10.500INVALID-ORDER-500	$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	183
10.501INVALID-ORDER-501	$Z(s) = \left(R_1, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	183

10.502INVALID-ORDER-502	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	183
10.503INVALID-ORDER-503	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	184
10.504INVALID-ORDER-504	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	184
10.505INVALID-ORDER-505	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	184
10.506INVALID-ORDER-506	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	184
10.507INVALID-ORDER-507	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	184
10.508INVALID-ORDER-508	$Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	185
10.509INVALID-ORDER-509	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$	185
10.510INVALID-ORDER-510	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	185
10.511INVALID-ORDER-511	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	185
10.512INVALID-ORDER-512	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	185
10.513INVALID-ORDER-513	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	186
10.514INVALID-ORDER-514	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	186
10.515INVALID-ORDER-515	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	186
10.516INVALID-ORDER-516	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	186
10.517INVALID-ORDER-517	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	186
10.518INVALID-ORDER-518	$Z(s) = \left(R_1, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	187
10.519INVALID-ORDER-519	$Z(s) = (L_1 s, R_2, \infty, \infty, \infty, R_L)$	187
10.520INVALID-ORDER-520	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	187
10.521INVALID-ORDER-521	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	187

10.522INVALID-ORDER-522	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	187
10.523INVALID-ORDER-523	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	188
10.524INVALID-ORDER-524	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	188
10.525INVALID-ORDER-525	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	188
10.526INVALID-ORDER-526	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	188
10.527INVALID-ORDER-527	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	188
10.528INVALID-ORDER-528	$Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	189
10.529INVALID-ORDER-529	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	189
10.530INVALID-ORDER-530	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	189
10.531INVALID-ORDER-531	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	189
10.532INVALID-ORDER-532	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	189
10.533INVALID-ORDER-533	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	190
10.534INVALID-ORDER-534	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	190
10.535INVALID-ORDER-535	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	190
10.536INVALID-ORDER-536	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	190
10.537INVALID-ORDER-537	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	190
10.538INVALID-ORDER-538	$Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	191
10.539INVALID-ORDER-539	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	191
10.540INVALID-ORDER-540	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	191
10.541INVALID-ORDER-541	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	191
10.542INVALID-ORDER-542	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	191
10.543INVALID-ORDER-543	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	192

10.541INVALID-ORDER-544	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	192
10.545INVALID-ORDER-545	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	192
10.546INVALID-ORDER-546	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	192
10.547INVALID-ORDER-547	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	192
10.548INVALID-ORDER-548	$Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	193
10.549INVALID-ORDER-549	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	193
10.550INVALID-ORDER-550	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	193
10.551INVALID-ORDER-551	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	193
10.552INVALID-ORDER-552	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	193
10.553INVALID-ORDER-553	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	193
10.554INVALID-ORDER-554	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	194
10.555INVALID-ORDER-555	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	194
10.556INVALID-ORDER-556	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	194
10.557INVALID-ORDER-557	$Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	194
10.558INVALID-ORDER-558	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	194
10.559INVALID-ORDER-559	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	195
10.560INVALID-ORDER-560	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	195
10.561INVALID-ORDER-561	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	195
10.562INVALID-ORDER-562	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	195
10.563INVALID-ORDER-563	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	195
10.564INVALID-ORDER-564	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	195
10.565INVALID-ORDER-565	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	196

10.566INVALID-ORDER-566	$Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	196
10.567INVALID-ORDER-567	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	196
10.568INVALID-ORDER-568	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	196
10.569INVALID-ORDER-569	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	196
10.570INVALID-ORDER-570	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	196
10.571INVALID-ORDER-571	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	197
10.572INVALID-ORDER-572	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	197
10.573INVALID-ORDER-573	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	197
10.574INVALID-ORDER-574	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	197
10.575INVALID-ORDER-575	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	197
10.576INVALID-ORDER-576	$Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	198
10.577INVALID-ORDER-577	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$	198
10.578INVALID-ORDER-578	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	198
10.579INVALID-ORDER-579	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	198
10.580INVALID-ORDER-580	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	198
10.581INVALID-ORDER-581	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	198
10.582INVALID-ORDER-582	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	199
10.583INVALID-ORDER-583	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	199
10.584INVALID-ORDER-584	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	199
10.585INVALID-ORDER-585	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	199
10.586INVALID-ORDER-586	$Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	199
10.587INVALID-ORDER-587	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$	200

10.58 8 INVALID-ORDER-588	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	200
10.58 9 INVALID-ORDER-589	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	200
10.59 0 INVALID-ORDER-590	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	200
10.59 1 INVALID-ORDER-591	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	200
10.59 2 INVALID-ORDER-592	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	201
10.59 3 INVALID-ORDER-593	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	201
10.59 4 INVALID-ORDER-594	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	201
10.59 5 INVALID-ORDER-595	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	201
10.59 6 INVALID-ORDER-596	$Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	201
10.59 7 INVALID-ORDER-597	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$	202
10.59 8 INVALID-ORDER-598	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	202
10.59 9 INVALID-ORDER-599	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	202
10.60 0 INVALID-ORDER-600	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	202
10.60 1 INVALID-ORDER-601	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	202
10.60 2 INVALID-ORDER-602	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	202
10.60 3 INVALID-ORDER-603	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	203
10.60 4 INVALID-ORDER-604	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	203
10.60 5 INVALID-ORDER-605	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	203
10.60 6 INVALID-ORDER-606	$Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	203
10.60 7 INVALID-ORDER-607	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	203

10.60	INVALID-ORDER-608	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	204
10.60	INVALID-ORDER-609	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	204
10.61	INVALID-ORDER-610	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	204
10.61	INVALID-ORDER-611	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	204
10.61	INVALID-ORDER-612	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	204
10.61	INVALID-ORDER-613	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	204
10.61	INVALID-ORDER-614	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	205
10.61	INVALID-ORDER-615	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	205
10.61	INVALID-ORDER-616	$Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	205
10.61	INVALID-ORDER-617	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	205
10.61	INVALID-ORDER-618	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	205
10.61	INVALID-ORDER-619	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	206
10.62	INVALID-ORDER-620	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	206
10.62	INVALID-ORDER-621	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	206
10.62	INVALID-ORDER-622	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	206
10.62	INVALID-ORDER-623	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	206
10.62	INVALID-ORDER-624	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	207
10.62	INVALID-ORDER-625	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	207
10.62	INVALID-ORDER-626	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	207
10.62	INVALID-ORDER-627	$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	207
10.62	INVALID-ORDER-628	$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	207
10.62	INVALID-ORDER-629	$Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	208

10.630INVALID-ORDER-630	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	208
10.631INVALID-ORDER-631	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	208
10.632INVALID-ORDER-632	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	208
10.633INVALID-ORDER-633	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	208
10.634INVALID-ORDER-634	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	209
10.635INVALID-ORDER-635	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	209
10.636INVALID-ORDER-636	$Z(s) = \left(\frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	209
10.637INVALID-ORDER-637	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L \right)$	209
10.638INVALID-ORDER-638	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	209
10.639INVALID-ORDER-639	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	210
10.640INVALID-ORDER-640	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	210
10.641INVALID-ORDER-641	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	210
10.642INVALID-ORDER-642	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	210
10.643INVALID-ORDER-643	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	210
10.644INVALID-ORDER-644	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	211
10.645INVALID-ORDER-645	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	211
10.646INVALID-ORDER-646	$Z(s) = \left(\frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	211
10.647INVALID-ORDER-647	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	211
10.648INVALID-ORDER-648	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	211
10.649INVALID-ORDER-649	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	212
10.650INVALID-ORDER-650	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	212
10.651INVALID-ORDER-651	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	212

10.652INVALID-ORDER-652	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	212
10.653INVALID-ORDER-653	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L + \frac{1}{L_Ls}}} \right)$	212
10.654INVALID-ORDER-654	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	213
10.655INVALID-ORDER-655	$Z(s) = \left(\frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	213
10.656INVALID-ORDER-656	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L \right)$	213
10.657INVALID-ORDER-657	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	213
10.658INVALID-ORDER-658	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LL_Ls+1} \right)$	213
10.659INVALID-ORDER-659	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	214
10.660INVALID-ORDER-660	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	214
10.661INVALID-ORDER-661	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	214
10.662INVALID-ORDER-662	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	214
10.663INVALID-ORDER-663	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L + \frac{1}{L_Ls}}} \right)$	214
10.664INVALID-ORDER-664	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	215
10.665INVALID-ORDER-665	$Z(s) = \left(\frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	215
10.666INVALID-ORDER-666	$Z(s) = \left(\frac{1}{C_1s}, \frac{R_2 \left(L_2s + \frac{1}{C_2s} \right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_L \right)$	215
10.667INVALID-ORDER-667	$Z(s) = \left(\frac{1}{C_1s}, \frac{R_2 \left(L_2s + \frac{1}{C_2s} \right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	215
10.668INVALID-ORDER-668	$Z(s) = \left(\frac{1}{C_1s}, \frac{R_2 \left(L_2s + \frac{1}{C_2s} \right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_L}{C_LL_Ls+1} \right)$	215
10.669INVALID-ORDER-669	$Z(s) = \left(\frac{1}{C_1s}, \frac{R_2 \left(L_2s + \frac{1}{C_2s} \right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	216
10.670INVALID-ORDER-670	$Z(s) = \left(\frac{1}{C_1s}, \frac{R_2 \left(L_2s + \frac{1}{C_2s} \right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	216
10.671INVALID-ORDER-671	$Z(s) = \left(\frac{1}{C_1s}, \frac{R_2 \left(L_2s + \frac{1}{C_2s} \right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	216

10.672INVALID-ORDER-672	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	216
10.673INVALID-ORDER-673	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$	216
10.674INVALID-ORDER-674	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	217
10.675INVALID-ORDER-675	$Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	217
10.676INVALID-ORDER-676	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L \right)$	217
10.677INVALID-ORDER-677	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	217
10.678INVALID-ORDER-678	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	217
10.679INVALID-ORDER-679	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	218
10.680INVALID-ORDER-680	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	218
10.681INVALID-ORDER-681	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	218
10.682INVALID-ORDER-682	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	218
10.683INVALID-ORDER-683	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$	218
10.684INVALID-ORDER-684	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	219
10.685INVALID-ORDER-685	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	219
10.686INVALID-ORDER-686	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	219
10.687INVALID-ORDER-687	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	219
10.688INVALID-ORDER-688	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	219
10.689INVALID-ORDER-689	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	220
10.690INVALID-ORDER-690	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	220
10.691INVALID-ORDER-691	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	220
10.692INVALID-ORDER-692	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	220

10.693	INVALID-ORDER-693	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	220
10.694	INVALID-ORDER-694	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	221
10.695	INVALID-ORDER-695	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	221
10.696	INVALID-ORDER-696	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	221
10.697	INVALID-ORDER-697	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	221
10.698	INVALID-ORDER-698	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	221
10.699	INVALID-ORDER-699	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	222
10.700	INVALID-ORDER-700	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	222
10.701	INVALID-ORDER-701	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	222
10.702	INVALID-ORDER-702	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	222
10.703	INVALID-ORDER-703	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	222
10.704	INVALID-ORDER-704	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	223
10.705	INVALID-ORDER-705	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	223
10.706	INVALID-ORDER-706	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	223
10.707	INVALID-ORDER-707	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	223
10.708	INVALID-ORDER-708	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	223
10.709	INVALID-ORDER-709	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	224
10.710	INVALID-ORDER-710	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	224
10.711	INVALID-ORDER-711	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	224
10.712	INVALID-ORDER-712	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	224
10.713	INVALID-ORDER-713	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	224
10.714	INVALID-ORDER-714	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	225

10.715INVALID-ORDER-715	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	225
10.716INVALID-ORDER-716	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	225
10.717INVALID-ORDER-717	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	225
10.718INVALID-ORDER-718	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	225
10.719INVALID-ORDER-719	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	226
10.720INVALID-ORDER-720	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	226
10.721INVALID-ORDER-721	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	226
10.722INVALID-ORDER-722	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	226
10.723INVALID-ORDER-723	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	226
10.724INVALID-ORDER-724	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	227
10.725INVALID-ORDER-725	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	227
10.726INVALID-ORDER-726	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	227
10.727INVALID-ORDER-727	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	227
10.728INVALID-ORDER-728	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	227
10.729INVALID-ORDER-729	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	228
10.730INVALID-ORDER-730	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	228
10.731INVALID-ORDER-731	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	228
10.732INVALID-ORDER-732	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	228
10.733INVALID-ORDER-733	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	228
10.734INVALID-ORDER-734	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	229
10.735INVALID-ORDER-735	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	229
10.736INVALID-ORDER-736	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$	229

10.73	INVALID-ORDER-737	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	229
10.73	INVALID-ORDER-738	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	229
10.73	INVALID-ORDER-739	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	230
10.74	INVALID-ORDER-740	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	230
10.74	INVALID-ORDER-741	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	230
10.74	INVALID-ORDER-742	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	230
10.74	INVALID-ORDER-743	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	230
10.74	INVALID-ORDER-744	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	231
10.74	INVALID-ORDER-745	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	231
10.74	INVALID-ORDER-746	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	231
10.74	INVALID-ORDER-747	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	231
10.74	INVALID-ORDER-748	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	231
10.74	INVALID-ORDER-749	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	232
10.75	INVALID-ORDER-750	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	232
10.75	INVALID-ORDER-751	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	232
10.75	INVALID-ORDER-752	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	232
10.75	INVALID-ORDER-753	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	232
10.75	INVALID-ORDER-754	$Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	233
10.75	INVALID-ORDER-755	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$	233
10.75	INVALID-ORDER-756	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	233

10.75	INVALID-ORDER-757	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	233
10.75	INVALID-ORDER-758	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	233
10.75	INVALID-ORDER-759	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	233
10.76	INVALID-ORDER-760	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	234
10.76	INVALID-ORDER-761	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	234
10.76	INVALID-ORDER-762	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	234
10.76	INVALID-ORDER-763	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	234
10.76	INVALID-ORDER-764	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	234
10.76	INVALID-ORDER-765	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	235
10.76	INVALID-ORDER-766	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	235
10.76	INVALID-ORDER-767	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	235
10.76	INVALID-ORDER-768	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	235
10.76	INVALID-ORDER-769	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	235
10.77	INVALID-ORDER-770	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	235
10.77	INVALID-ORDER-771	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	236
10.77	INVALID-ORDER-772	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	236
10.77	INVALID-ORDER-773	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$	236
10.77	INVALID-ORDER-774	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	236
10.77	INVALID-ORDER-775	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	236
10.77	INVALID-ORDER-776	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	237
10.77	INVALID-ORDER-777	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	237
10.77	INVALID-ORDER-778	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	237

10.77	INVALID-ORDER-779	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	237
10.78	INVALID-ORDER-780	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	237
10.78	INVALID-ORDER-781	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	237
10.78	INVALID-ORDER-782	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	238
10.78	INVALID-ORDER-783	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	238
10.78	INVALID-ORDER-784	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	238
10.78	INVALID-ORDER-785	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	238
10.78	INVALID-ORDER-786	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	238
10.78	INVALID-ORDER-787	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	239
10.78	INVALID-ORDER-788	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	239
10.78	INVALID-ORDER-789	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	239
10.79	INVALID-ORDER-790	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	239
10.79	INVALID-ORDER-791	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	239
10.79	INVALID-ORDER-792	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	240
10.79	INVALID-ORDER-793	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	240
10.79	INVALID-ORDER-794	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	240
10.79	INVALID-ORDER-795	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	240
10.79	INVALID-ORDER-796	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	240
10.79	INVALID-ORDER-797	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	241
10.79	INVALID-ORDER-798	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	241
10.79	INVALID-ORDER-799	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	241
10.80	INVALID-ORDER-800	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	241

10.80	INVALID-ORDER-801	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	241
10.80	INVALID-ORDER-802	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	242
10.80	INVALID-ORDER-803	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	242
10.80	INVALID-ORDER-804	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	242
10.80	INVALID-ORDER-805	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	242
10.80	INVALID-ORDER-806	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	242
10.80	INVALID-ORDER-807	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	243
10.80	INVALID-ORDER-808	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	243
10.80	INVALID-ORDER-809	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	243
10.81	INVALID-ORDER-810	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	243
10.81	INVALID-ORDER-811	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	243
10.81	INVALID-ORDER-812	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	244
10.81	INVALID-ORDER-813	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	244
10.81	INVALID-ORDER-814	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$	244
10.81	INVALID-ORDER-815	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	244
10.81	INVALID-ORDER-816	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	244
10.81	INVALID-ORDER-817	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	245
10.81	INVALID-ORDER-818	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	245
10.81	INVALID-ORDER-819	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	245
10.82	INVALID-ORDER-820	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	245
10.82	INVALID-ORDER-821	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	245
10.82	INVALID-ORDER-822	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	246

10.82 3 INVALID-ORDER-823	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	246
10.82 4 INVALID-ORDER-824	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$	246
10.82 5 INVALID-ORDER-825	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	246
10.82 6 INVALID-ORDER-826	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	246
10.82 7 INVALID-ORDER-827	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	247
10.82 8 INVALID-ORDER-828	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	247
10.82 9 INVALID-ORDER-829	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	247
10.83 0 INVALID-ORDER-830	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	247
10.83 1 INVALID-ORDER-831	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	247
10.83 2 INVALID-ORDER-832	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	248
10.83 3 INVALID-ORDER-833	$Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	248
10.83 4 INVALID-ORDER-834	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$	248
10.83 5 INVALID-ORDER-835	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	248
10.83 6 INVALID-ORDER-836	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	248
10.83 7 INVALID-ORDER-837	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	249
10.83 8 INVALID-ORDER-838	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	249
10.83 9 INVALID-ORDER-839	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	249
10.84 0 INVALID-ORDER-840	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	249
10.84 1 INVALID-ORDER-841	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	249

10.842INVALID-ORDER-842	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	250
10.843INVALID-ORDER-843	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	250
10.844INVALID-ORDER-844	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	250
10.845INVALID-ORDER-845	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	250
10.846INVALID-ORDER-846	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	250
10.847INVALID-ORDER-847	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	251
10.848INVALID-ORDER-848	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	251
10.849INVALID-ORDER-849	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	251
10.850INVALID-ORDER-850	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	251
10.851INVALID-ORDER-851	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	251
10.852INVALID-ORDER-852	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	252
10.853INVALID-ORDER-853	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	252
10.854INVALID-ORDER-854	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	252
10.855INVALID-ORDER-855	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	252
10.856INVALID-ORDER-856	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	252
10.857INVALID-ORDER-857	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	253
10.858INVALID-ORDER-858	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	253
10.859INVALID-ORDER-859	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	253
10.860INVALID-ORDER-860	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	253
10.861INVALID-ORDER-861	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	253
10.862INVALID-ORDER-862	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	254
10.863INVALID-ORDER-863	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	254

10.861INVALID-ORDER-864	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	254
10.865INVALID-ORDER-865	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	254
10.866INVALID-ORDER-866	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	254
10.867INVALID-ORDER-867	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	255
10.868INVALID-ORDER-868	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	255
10.869INVALID-ORDER-869	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	255
10.870INVALID-ORDER-870	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	255
10.871INVALID-ORDER-871	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	255
10.872INVALID-ORDER-872	$Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	256
10.873INVALID-ORDER-873	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L \right)$	256
10.874INVALID-ORDER-874	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	256
10.875INVALID-ORDER-875	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	256
10.876INVALID-ORDER-876	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	256
10.877INVALID-ORDER-877	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	257
10.878INVALID-ORDER-878	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	257
10.879INVALID-ORDER-879	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	257
10.880INVALID-ORDER-880	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	257
10.881INVALID-ORDER-881	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	257
10.882INVALID-ORDER-882	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	258
10.883INVALID-ORDER-883	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L \right)$	258
10.884INVALID-ORDER-884	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	258
10.885INVALID-ORDER-885	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	258

10.886INVALID-ORDER-886	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	258
10.887INVALID-ORDER-887	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	259
10.888INVALID-ORDER-888	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	259
10.889INVALID-ORDER-889	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	259
10.890INVALID-ORDER-890	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	259
10.891INVALID-ORDER-891	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	259
10.892INVALID-ORDER-892	$Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	260
10.893INVALID-ORDER-893	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L \right)$	260
10.894INVALID-ORDER-894	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	260
10.895INVALID-ORDER-895	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	260
10.896INVALID-ORDER-896	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	260
10.897INVALID-ORDER-897	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$	261
10.898INVALID-ORDER-898	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$	261
10.899INVALID-ORDER-899	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$	261
10.900INVALID-ORDER-900	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$	261
10.901INVALID-ORDER-901	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$	261
10.902INVALID-ORDER-902	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$	262
10.903INVALID-ORDER-903	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{R_2(L_2s + \frac{1}{C_2s})}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_L \right)$	262
10.904INVALID-ORDER-904	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{R_2(L_2s + \frac{1}{C_2s})}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{1}{C_Ls} \right)$	262
10.905INVALID-ORDER-905	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{R_2(L_2s + \frac{1}{C_2s})}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1} \right)$	262
10.906INVALID-ORDER-906	$Z(s) = \left(L_1s + \frac{1}{C_1s}, \frac{R_2(L_2s + \frac{1}{C_2s})}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$	262

10.90INVALID-ORDER-907	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	263
10.90INVALID-ORDER-908	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	263
10.90INVALID-ORDER-909	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	263
10.91INVALID-ORDER-910	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	263
10.91INVALID-ORDER-911	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	263
10.91INVALID-ORDER-912	$Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	264
10.91INVALID-ORDER-913	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L \right)$	264
10.91INVALID-ORDER-914	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	264
10.91INVALID-ORDER-915	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	264
10.91INVALID-ORDER-916	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	264
10.91INVALID-ORDER-917	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	265
10.91INVALID-ORDER-918	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	265
10.91INVALID-ORDER-919	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	265
10.92INVALID-ORDER-920	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	265
10.92INVALID-ORDER-921	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	265
10.92INVALID-ORDER-922	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	266
10.92INVALID-ORDER-923	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	266
10.92INVALID-ORDER-924	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	266
10.92INVALID-ORDER-925	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	266
10.92INVALID-ORDER-926	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	266
10.92INVALID-ORDER-927	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	267

10.92	INVALID-ORDER-928	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	267
10.92	INVALID-ORDER-929	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	267
10.93	INVALID-ORDER-930	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	267
10.93	INVALID-ORDER-931	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	267
10.93	INVALID-ORDER-932	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	268
10.93	INVALID-ORDER-933	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	268
10.93	INVALID-ORDER-934	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	268
10.93	INVALID-ORDER-935	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	268
10.93	INVALID-ORDER-936	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	268
10.93	INVALID-ORDER-937	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	269
10.93	INVALID-ORDER-938	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	269
10.93	INVALID-ORDER-939	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	269
10.94	INVALID-ORDER-940	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	269
10.94	INVALID-ORDER-941	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	269
10.94	INVALID-ORDER-942	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	270
10.94	INVALID-ORDER-943	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	270
10.94	INVALID-ORDER-944	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	270
10.94	INVALID-ORDER-945	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	270
10.94	INVALID-ORDER-946	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	270
10.94	INVALID-ORDER-947	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	271
10.94	INVALID-ORDER-948	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	271
10.94	INVALID-ORDER-949	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	271

10.950INVALID-ORDER-950	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	271
10.951INVALID-ORDER-951	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	271
10.952INVALID-ORDER-952	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	272
10.953INVALID-ORDER-953	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	272
10.954INVALID-ORDER-954	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	272
10.955INVALID-ORDER-955	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	272
10.956INVALID-ORDER-956	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	272
10.957INVALID-ORDER-957	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	272
10.958INVALID-ORDER-958	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	273
10.959INVALID-ORDER-959	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	273
10.960INVALID-ORDER-960	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	273
10.961INVALID-ORDER-961	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	273
10.962INVALID-ORDER-962	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	273
10.963INVALID-ORDER-963	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	274
10.964INVALID-ORDER-964	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	274
10.965INVALID-ORDER-965	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	274
10.966INVALID-ORDER-966	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	274
10.967INVALID-ORDER-967	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	274
10.968INVALID-ORDER-968	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	274
10.969INVALID-ORDER-969	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	275
10.970INVALID-ORDER-970	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	275
10.971INVALID-ORDER-971	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	275

10.972INVALID-ORDER-972	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$	275
10.973INVALID-ORDER-973	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	275
10.974INVALID-ORDER-974	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	276
10.975INVALID-ORDER-975	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	276
10.976INVALID-ORDER-976	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	276
10.977INVALID-ORDER-977	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	276
10.978INVALID-ORDER-978	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	276
10.979INVALID-ORDER-979	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	277
10.980INVALID-ORDER-980	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	277
10.981INVALID-ORDER-981	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	277
10.982INVALID-ORDER-982	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$	277
10.983INVALID-ORDER-983	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	277
10.984INVALID-ORDER-984	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	278
10.985INVALID-ORDER-985	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	278
10.986INVALID-ORDER-986	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	278
10.987INVALID-ORDER-987	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	278
10.988INVALID-ORDER-988	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	278
10.989INVALID-ORDER-989	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	279
10.990INVALID-ORDER-990	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	279

10.99 INVALID -ORDER-991	$Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	279
10.99 INVALID -ORDER-992	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$	279
10.99 INVALID -ORDER-993	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	279
10.99 INVALID -ORDER-994	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	280
10.99 INVALID -ORDER-995	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	280
10.99 INVALID -ORDER-996	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	280
10.99 INVALID -ORDER-997	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	280
10.99 INVALID -ORDER-998	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	280
10.99 INVALID -ORDER-999	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	281
10.10 INVALID -ORDER-1000	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	281
10.10 INVALID -ORDER-1001	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	281
10.10 INVALID -ORDER-1002	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	281
10.10 INVALID -ORDER-1003	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	281
10.10 INVALID -ORDER-1004	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	282
10.10 INVALID -ORDER-1005	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	282
10.10 INVALID -ORDER-1006	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	282
10.10 INVALID -ORDER-1007	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	282
10.10 INVALID -ORDER-1008	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	282
10.10 INVALID -ORDER-1009	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	283
10.10 INVALID -ORDER-1010	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	283
10.10 INVALID -ORDER-1011	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	283
10.10 INVALID -ORDER-1012	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$	283

10.10 15 INVALID-ORDER-1013	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	283
10.10 15 INVALID-ORDER-1014	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	284
10.10 15 INVALID-ORDER-1015	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	284
10.10 15 INVALID-ORDER-1016	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	284
10.10 15 INVALID-ORDER-1017	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	284
10.10 15 INVALID-ORDER-1018	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	284
10.10 15 INVALID-ORDER-1019	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	285
10.10 21 INVALID-ORDER-1020	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	285
10.10 21 INVALID-ORDER-1021	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	285
10.10 21 INVALID-ORDER-1022	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	285
10.10 21 INVALID-ORDER-1023	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	285
10.10 21 INVALID-ORDER-1024	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	286
10.10 21 INVALID-ORDER-1025	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	286
10.10 21 INVALID-ORDER-1026	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	286
10.10 21 INVALID-ORDER-1027	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	286
10.10 21 INVALID-ORDER-1028	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	286
10.10 21 INVALID-ORDER-1029	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	287
10.10 31 INVALID-ORDER-1030	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	287
10.10 31 INVALID-ORDER-1031	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	287
10.10 31 INVALID-ORDER-1032	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$	287
10.10 31 INVALID-ORDER-1033	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$	287
10.10 31 INVALID-ORDER-1034	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$	288

10.1035	INVALID-ORDER-1035	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$	288
10.1036	INVALID-ORDER-1036	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$	288
10.1037	INVALID-ORDER-1037	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	288
10.1038	INVALID-ORDER-1038	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$	288
10.1039	INVALID-ORDER-1039	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$	289
10.1040	INVALID-ORDER-1040	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	289
10.1041	INVALID-ORDER-1041	$Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$	289

1 Examined $H(z)$ for TIA simple Z1 Z5 ZL: $\frac{Z_1 Z_L (Z_5 g_m - 1)}{Z_1 Z_5 g_m + 2Z_1 Z_L g_m + Z_1 + Z_5 + Z_L}$

$$H(z) = \frac{Z_1 Z_L (Z_5 g_m - 1)}{Z_1 Z_5 g_m + 2Z_1 Z_L g_m + Z_1 + Z_5 + Z_L}$$

2 HP

3 BP

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

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

Parameters:

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

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

bandwidth: $\frac{2R_1 g_m + 1}{C_L (R_1 R_4 g_m + R_1 + R_4)}$

K-LP: 0

K-HP: 0

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

Qz: 0

Wz: None

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

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

Parameters:

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

$$\mathbf{3.3 \quad BP-3} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

Parameters:

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

$$\mathbf{3.4 \quad BP-4} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

Parameters:

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

$$\mathbf{3.5 \quad BP-5} \quad Z(s) = \left(L_1 s, \quad R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

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

Parameters:

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

$$\mathbf{3.6 \quad BP-6} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \quad \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

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

Parameters:

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

4 LP

4.1 LP-1 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$

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

Parameters:

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

4.2 LP-2 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

Parameters:

Q: $\frac{C_1 C_L R_4 R_L \sqrt{\frac{R_4 g_m + 2 R_L g_m + 1}{C_1 C_L R_4 R_L}}}{C_1 R_4 + C_1 R_L + C_L R_4 R_L g_m + C_L R_L}$

wo: $\sqrt{\frac{R_4 g_m + 2 R_L g_m + 1}{C_1 C_L R_4 R_L}}$

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

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

K-HP: 0

K-BP: 0

QZ: None

WZ: None

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

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

Parameters:

Q: $\frac{C_1 C_L R_1 R_4 \sqrt{\frac{2 R_1 g_m + 1}{C_1 C_L R_1 R_4}}}{C_1 R_1 + C_L R_1 R_4 g_m + C_L R_1 + C_L R_4}$

wo: $\sqrt{\frac{2 R_1 g_m + 1}{C_1 C_L R_1 R_4}}$

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

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

K-HP: 0

K-BP: 0

QZ: None

WZ: None

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

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

Parameters:

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

5 BS

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

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

Parameters:

Q: $\frac{L_L \sqrt{\frac{1}{C_L L_L}} (2 R_1 g_m + 1)}{R_1 R_4 g_m + R_1 + R_4}$
 wo: $\sqrt{\frac{1}{C_L L_L}}$
 bandwidth: $\frac{R_1 R_4 g_m + R_1 + R_4}{L_L (2 R_1 g_m + 1)}$
 K-LP: $\frac{R_1 (R_4 g_m - 1)}{2 R_1 g_m + 1}$
 K-HP: $\frac{R_1 (R_4 g_m - 1)}{2 R_1 g_m + 1}$
 K-BP: 0

Qz: None
Wz: $\sqrt{\frac{1}{C_L L_L}}$

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

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

Parameters:

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

5.3 BS-3 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

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

Parameters:

Q: $\frac{L_1 \sqrt{\frac{1}{C_1 L_1}} (R_4 g_m + 2R_L g_m + 1)}{R_4 + R_L}$
wo: $\sqrt{\frac{1}{C_1 L_1}}$
bandwidth: $\frac{R_4 + R_L}{L_1 (R_4 g_m + 2R_L g_m + 1)}$
K-LP: $\frac{R_L (R_4 g_m - 1)}{R_4 g_m + 2R_L g_m + 1}$

$$\begin{aligned} \text{K-HP: } & \frac{R_L(R_4g_m-1)}{R_4g_m+2R_Lg_m+1} \\ \text{K-BP: } & 0 \\ \text{QZ: } & \text{None} \\ \text{WZ: } & \sqrt{\frac{1}{C_1L_1}} \end{aligned}$$

5.4 BS-4 $Z(s) = \left(\frac{L_1s}{C_1L_1s^2+1}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1R_L(R_4g_m-1)(C_1L_1s^2+1)}{C_1L_1R_1R_4g_ms^2 + 2C_1L_1R_1R_Lg_ms^2 + C_1L_1R_1s^2 + C_1L_1R_4s^2 + C_1L_1R_Ls^2 + C_1R_1R_4s + C_1R_1R_Ls + R_1R_4g_m + 2R_1R_Lg_m + R_1 + R_4 + R_L}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_1R_4g_m+2R_1R_Lg_m+R_1+R_4+R_L)}{R_1(R_4+R_L)} \\ \text{wo: } & \sqrt{\frac{1}{C_1L_1}} \\ \text{bandwidth: } & \frac{R_1(R_4+R_L)}{L_1(R_1R_4g_m+2R_1R_Lg_m+R_1+R_4+R_L)} \\ \text{K-LP: } & \frac{R_1R_L(R_4g_m-1)}{R_1R_4g_m+2R_1R_Lg_m+R_1+R_4+R_L} \\ \text{K-HP: } & \frac{R_1R_L(R_4g_m-1)}{R_1R_4g_m+2R_1R_Lg_m+R_1+R_4+R_L} \\ \text{K-BP: } & 0 \\ \text{QZ: } & \text{None} \\ \text{WZ: } & \sqrt{\frac{1}{C_1L_1}} \end{aligned}$$

6 GE

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

$$H(s) = \frac{R_1(R_4g_m-1)(C_LL_Ls^2 + C_LR_Ls + 1)}{2C_LL_LR_1g_ms^2 + C_LL_Ls^2 + C_LR_1R_4g_ms + 2C_LR_1R_Lg_ms + C_LR_1s + C_LR_4s + C_LR_Ls + 2R_1g_m + 1}$$

Parameters:

$$\text{Q: } \frac{L_L\sqrt{\frac{1}{C_LL_L}}(2R_1g_m+1)}{R_1R_4g_m+2R_1R_Lg_m+R_1+R_4+R_L}$$

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

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

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

Parameters:

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

6.3 GE-3 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L \right)$

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

Parameters:

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

6.4 GE-4 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L \right)$

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

Parameters:

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

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

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

Parameters:

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

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

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

Parameters:

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

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

$$\mathbf{6.7 \quad GE-7} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, R_L \right)$$

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

Parameters:

$$\text{Q: } \frac{C_4 \sqrt{\frac{1}{C_4 L_4}} (R_1 R_4 g_m + 2R_1 R_L g_m + R_1 + R_4 + R_L)}{R_1 g_m + 1}$$

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

$$\text{bandwidth: } \frac{R_1 g_m + 1}{C_4 (R_1 R_4 g_m + 2R_1 R_L g_m + R_1 + R_4 + R_L)}$$

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

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

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

$$\text{QZ: } \frac{C_4 \sqrt{\frac{1}{C_4 L_4}} (R_4 g_m - 1)}{g_m}$$

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

$$\mathbf{6.8 \quad GE-8} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, R_L \right)$$

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

Parameters:

$$\text{Q: } \frac{L_4 \sqrt{\frac{1}{C_4 L_4}} (R_1 R_4 g_m + 2R_1 R_L g_m + R_1 + R_4 + R_L)}{R_4 (2R_1 R_L g_m + R_1 + R_L)}$$

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

$$\text{bandwidth: } \frac{R_4 (2R_1 R_L g_m + R_1 + R_L)}{L_4 (R_1 R_4 g_m + 2R_1 R_L g_m + R_1 + R_4 + R_L)}$$

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

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

6.9 GE-9 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

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

Parameters:

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

6.10 GE-10 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

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

Parameters:

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

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

7 AP

8 INVALID-NUMER

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

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

Parameters:

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

8.2 INVALID-NUMER-2 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

Parameters:

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

8.3 INVALID-NUMER-3 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

Parameters:

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

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

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

Parameters:

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

8.5 INVALID-NUMER-5 $Z(s) = \left(\frac{R_1 (L_1 s + \frac{1}{C_1 s})}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

Parameters:

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

8.6 INVALID-NUMER-6 $Z(s) = (\infty, R_2, \infty, \infty, \infty, R_L)$

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

Parameters:

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

8.7 INVALID-NUMER-7 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

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

Parameters:

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

8.8 INVALID-NUMER-8 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

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

Parameters:

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

8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$

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

Parameters:

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

8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

Parameters:

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

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

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

Parameters:

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

8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, R_L \right)$

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

Parameters:

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

8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

Parameters:

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

8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

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

Parameters:

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

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

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

Parameters:

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

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

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

Parameters:

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

8.17 INVALID-NUMER-17 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$

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

Parameters:

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

8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$

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

Parameters:

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

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

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

Parameters:

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

8.20 INVALID-NUMER-20 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

Parameters:

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

8.21 INVALID-NUMER-21 $Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$

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

Parameters:

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

8.22 INVALID-NUMER-22 $Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$

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

Parameters:

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

8.23 INVALID-NUMER-23 $Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

Parameters:

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

8.24 INVALID-NUMER-24 $Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, R_L \right)$

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

Parameters:

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

8.25 INVALID-NUMER-25 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s}, \frac{1}{C_Ls} \right)$

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

Parameters:

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

8.26 INVALID-NUMER-26 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1} \right)$

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

Parameters:

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

8.27 INVALID-NUMER-27 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (-C_4 s + g_m)}{C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 s^2 + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

Parameters:

$$\begin{aligned} \text{Q: } & \frac{\sqrt{\frac{C_4 + C_L}{L_1 (C_1 C_4 + C_1 C_L + C_4 C_L)}} (C_1 C_4 + C_1 C_L + C_4 C_L)}{g_m (2C_4 + C_L)} \\ \text{wo: } & \sqrt{\frac{C_4 + C_L}{L_1 (C_1 C_4 + C_1 C_L + C_4 C_L)}} \\ \text{bandwidth: } & \frac{g_m (2C_4 + C_L)}{C_1 C_4 + C_1 C_L + C_4 C_L} \\ \text{K-LP: } & \frac{L_1 g_m}{C_4 + C_L} \\ \text{K-HP: } & 0 \\ \text{K-BP: } & -\frac{C_4}{g_m (2C_4 + C_L)} \\ \text{QZ: } & 0 \\ \text{Wz: } & \text{None} \end{aligned}$$

8.28 INVALID-NUMER-28 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 (-C_4 s + g_m)}{C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_1 s^2 + 2C_4 L_1 R_1 g_m s + C_4 L_1 s + C_4 R_1 + C_L L_1 R_1 g_m s + C_L L_1 s + C_L R_1}$$

Parameters:

$$\text{Q: } \frac{R_1 \sqrt{\frac{C_4 + C_L}{L_1 (C_1 C_4 + C_1 C_L + C_4 C_L)}} (C_1 C_4 + C_1 C_L + C_4 C_L)}{2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L}$$

$$\text{wo: } \sqrt{\frac{C_4 + C_L}{L_1 (C_1 C_4 + C_1 C_L + C_4 C_L)}}$$

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

$$\text{K-LP: } \frac{L_1 g_m}{C_4 + C_L}$$

$$\text{K-HP: } 0$$

$$\text{K-BP: } -\frac{C_4 R_1}{2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L}$$

$$\text{QZ: } 0$$

$$\text{Wz: None}$$

9 INVALID-WZ

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

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

Parameters:

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

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

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

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

$$\text{K-HP: } -\frac{R_1 R_L}{2R_1 R_L g_m + R_1 + R_L}$$

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

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

9.2 INVALID-WZ-2 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_4 C_L L_1 \sqrt{\frac{C_4 + C_L}{C_4 C_L L_1 (2R_L g_m + 1)}} (2R_L g_m + 1)}{C_4 C_L R_L + 2C_4 L_1 g_m + C_L L_1 g_m} \\ \text{wo: } & \sqrt{\frac{C_4 + C_L}{C_4 C_L L_1 (2R_L g_m + 1)}} \\ \text{bandwidth: } & \frac{C_4 C_L R_L + 2C_4 L_1 g_m + C_L L_1 g_m}{C_4 C_L L_1 (2R_L g_m + 1)} \\ \text{K-LP: } & \frac{L_1 g_m}{C_4 + C_L} \\ \text{K-HP: } & -\frac{R_L}{2R_L g_m + 1} \\ \text{K-BP: } & \frac{L_1 (-C_4 + C_L R_L g_m)}{C_4 C_L R_L + 2C_4 L_1 g_m + C_L L_1 g_m} \\ \text{QZ: } & \frac{C_4 C_L R_L \sqrt{\frac{C_4 + C_L}{C_4 C_L L_1 (2R_L g_m + 1)}}}{C_4 - C_L R_L g_m} \\ \text{WZ: } & \sqrt{-\frac{g_m}{C_4 C_L R_L}} \end{aligned}$$

9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

Parameters:

$$\begin{aligned} \text{Q: } & \frac{C_4 C_L L_1 \sqrt{\frac{C_4 + C_L}{C_4 C_L L_1 (R_4 g_m + 2R_L g_m + 1)}} (R_4 g_m + 2R_L g_m + 1)}{C_4 C_L R_4 + C_4 C_L R_L + 2C_4 L_1 g_m + C_L L_1 g_m} \\ \text{wo: } & \sqrt{\frac{C_4 + C_L}{C_4 C_L L_1 (R_4 g_m + 2R_L g_m + 1)}} \end{aligned}$$

$$\text{bandwidth: } \frac{C_4 C_L R_4 + C_4 C_L R_L + 2C_4 L_1 g_m + C_L L_1 g_m}{C_4 C_L L_1 (R_4 g_m + 2R_L g_m + 1)}$$

$$\text{K-LP: } \frac{L_1 g_m}{C_4 + C_L}$$

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

$$\text{K-BP: } \frac{L_1 (C_4 R_4 g_m - C_4 + C_L R_L g_m)}{C_4 C_L R_4 + C_4 C_L R_L + 2C_4 L_1 g_m + C_L L_1 g_m}$$

$$\text{QZ: } \frac{C_4 C_L R_L \sqrt{\frac{C_4 + C_L}{C_4 C_L L_1 (R_4 g_m + 2R_L g_m + 1)}} (R_4 g_m - 1)}{C_4 R_4 g_m - C_4 + C_L R_L g_m}$$

$$\text{WZ: } \sqrt{\frac{g_m}{C_4 C_L R_L (R_4 g_m - 1)}}$$

$$\mathbf{9.4 \quad INVALID-WZ-4} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, R_L + \frac{1}{C_L s} \right)$$

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

Parameters:

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

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

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

$$\text{K-LP: } \frac{R_4 g_m - 1}{2g_m}$$

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

$$\text{K-BP: } \frac{C_1 R_1 R_4 g_m - C_1 R_1 + C_L R_4 R_L g_m - C_L R_L}{2C_1 R_1 g_m + C_1 + C_L R_4 g_m + 2C_L R_L g_m + C_L}$$

$$\text{QZ: } \frac{\sqrt{2} C_1 C_L R_1 R_L \sqrt{\frac{g_m}{C_1 C_L (R_1 R_4 g_m + 2R_1 R_L g_m + R_1 + R_4 + R_L)}}}{C_1 R_1 + C_L R_L}$$

$$\text{WZ: } \sqrt{\frac{1}{C_1 C_L R_1 R_L}}$$

$$\mathbf{9.5 \quad INVALID-WZ-5} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_L \right)$$

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

Parameters:

$$\begin{aligned}
Q: & \frac{C_1 C_4 \sqrt{\frac{g_m}{C_1 C_4 (2R_1 R_L g_m + R_1 + R_L)}} (2R_1 R_L g_m + R_1 + R_L)}{C_1 R_1 g_m + C_1 + 2C_4 R_L g_m + C_4} \\
wo: & \sqrt{\frac{g_m}{C_1 C_4 (2R_1 R_L g_m + R_1 + R_L)}} \\
bandwidth: & \frac{C_1 R_1 g_m + C_1 + 2C_4 R_L g_m + C_4}{C_1 C_4 (2R_1 R_L g_m + R_1 + R_L)} \\
K-LP: & R_L \\
K-HP: & -\frac{R_1 R_L}{2R_1 R_L g_m + R_1 + R_L} \\
K-BP: & \frac{R_L (C_1 R_1 g_m - C_4)}{C_1 R_1 g_m + C_1 + 2C_4 R_L g_m + C_4} \\
QZ: & -\frac{C_1 C_4 R_1 \sqrt{\frac{g_m}{C_1 C_4 (2R_1 R_L g_m + R_1 + R_L)}}}{C_1 R_1 g_m - C_4} \\
Wz: & \sqrt{-\frac{g_m}{C_1 C_4 R_1}}
\end{aligned}$$

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

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

Parameters:

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

9.7 INVALID-WZ-7 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, R_L \right)$

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

Parameters:

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

10 INVALID-ORDER

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

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

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

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

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

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

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

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

10.5 INVALID-ORDER-5 $Z(s) = (L_1 s, \infty, \infty, \infty, \infty, R_L)$

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

10.6 INVALID-ORDER-6 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

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

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

10.8 INVALID-ORDER-8 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.9 INVALID-ORDER-9 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.10 INVALID-ORDER-10 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.11 INVALID-ORDER-11 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.12 INVALID-ORDER-12 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.13 INVALID-ORDER-13 $Z(s) = \left(L_1 s, \infty, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.14 INVALID-ORDER-14 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L \right)$

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

10.15 INVALID-ORDER-15 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.16 INVALID-ORDER-16 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.17 INVALID-ORDER-17 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.18 INVALID-ORDER-18 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.19 INVALID-ORDER-19 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.20 INVALID-ORDER-20 $Z(s) = \left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.21 INVALID-ORDER-21 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, R_L \right)$

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

10.22 INVALID-ORDER-22 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

10.23 INVALID-ORDER-23 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

10.24 INVALID-ORDER-24 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.25 INVALID-ORDER-25 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.26 INVALID-ORDER-26 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.27 INVALID-ORDER-27 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.28 INVALID-ORDER-28 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.29 INVALID-ORDER-29 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \infty, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.30 INVALID-ORDER-30 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

10.31 INVALID-ORDER-31 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.32 INVALID-ORDER-32 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

10.33 INVALID-ORDER-33 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.34 INVALID-ORDER-34 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.35 INVALID-ORDER-35 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

$$\mathbf{10.36 \quad INVALID-ORDER-36} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

$$\mathbf{10.37 \quad INVALID-ORDER-37} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

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

$$\mathbf{10.38 \quad INVALID-ORDER-38} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$\mathbf{10.39 \quad INVALID-ORDER-39} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

$$\mathbf{10.40 \quad INVALID-ORDER-40} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.41 \quad \text{INVALID-ORDER-41} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

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

$$10.42 \quad \text{INVALID-ORDER-42} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

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

$$10.43 \quad \text{INVALID-ORDER-43} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$10.44 \quad \text{INVALID-ORDER-44} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

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

$$10.45 \quad \text{INVALID-ORDER-45} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

10.46 INVALID-ORDER-46 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.47 INVALID-ORDER-47 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.48 INVALID-ORDER-48 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

10.49 INVALID-ORDER-49 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.50 INVALID-ORDER-50 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

10.51 INVALID-ORDER-51 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.52 INVALID-ORDER-52 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.53 INVALID-ORDER-53 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.54 INVALID-ORDER-54 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.55 INVALID-ORDER-55 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.56 INVALID-ORDER-56 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.57 INVALID-ORDER-57 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

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

10.58 INVALID-ORDER-58 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.59 INVALID-ORDER-59 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

10.60 INVALID-ORDER-60 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.61 INVALID-ORDER-61 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.62 INVALID-ORDER-62 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.63 INVALID-ORDER-63 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.64 INVALID-ORDER-64 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_4C_L L_4 L_L R_1 R_4 R_L q_m s^4 + C_4C_L L_4 L_L R_1 R_4 s^4 + C_4C_L L_4 L_L R_4 R_L s^4 + 2C_4L_4 L_L R_1 R_4 q_m s^3 + C_4L_4 L_L R_4 s^3 + 2C_4L_4 R_1 R_4 R_L q_m s^2 + C_4L_4 R_1 R_4 s^2 + C_4L_4 R_4 R_L s^2 + C_4L_4 R_4 s^2 + C_4L_4 s^2}{2C_4C_L L_4 L_L R_1 R_4 R_L q_m s^4 + C_4C_L L_4 L_L R_1 R_4 s^4 + C_4C_L L_4 L_L R_4 R_L s^4 + 2C_4L_4 L_L R_1 R_4 q_m s^3 + C_4L_4 L_L R_4 s^3 + 2C_4L_4 R_1 R_4 R_L q_m s^2 + C_4L_4 R_1 R_4 s^2 + C_4L_4 R_4 R_L s^2 + C_4L_4 R_4 s^2 + C_4L_4 s^2}.$$

10.65 INVALID-ORDER-65 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_4C_LL_4L_LR_1R_4R_Lg_ms^4 + C_4C_LL_4L_LR_1R_4s^4 + C_4C_LL_4L_LR_4R_Ls^4 + C_4C_LL_4R_1R_4R_Ls^3 + 2C_4L_4R_1R_4R_Lg_ms^2 + C_4L_4R_1R_4s^2 + C_4L_4R_4R_Ls^2 + C_LL_4L_LR_1R_4g_ms^2}{2C_4C_LL_4L_LR_1R_4R_Lg_ms^4 + C_4C_LL_4L_LR_1R_4s^4 + C_4C_LL_4L_LR_4R_Ls^4 + C_4C_LL_4R_1R_4R_Ls^3 + 2C_4L_4R_1R_4R_Lg_ms^2 + C_4L_4R_1R_4s^2 + C_4L_4R_4R_Ls^2 + C_LL_4L_LR_1R_4g_ms^2}.$$

$$10.66 \quad \text{INVALID-ORDER-66} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

$$10.67 \quad \text{INVALID-ORDER-67} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.68 \quad \text{INVALID-ORDER-68} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

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

$$10.69 \quad \text{INVALID-ORDER-69} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

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

$$10.70 \quad \text{INVALID-ORDER-70} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$10.71 \quad \text{INVALID-ORDER-71} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

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

$$10.72 \quad \text{INVALID-ORDER-72} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

$$10.73 \quad \text{INVALID-ORDER-73} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

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

$$10.74 \quad \text{INVALID-ORDER-74} \quad Z(s) = \left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.75 \quad \text{INVALID-ORDER-75} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

$$\mathbf{10.76 \quad INVALID-ORDER-76} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$\mathbf{10.77 \quad INVALID-ORDER-77} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

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

$$\mathbf{10.78 \quad INVALID-ORDER-78} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

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

$$\mathbf{10.79 \quad INVALID-ORDER-79} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$\mathbf{10.80 \quad INVALID-ORDER-80} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

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

10.81 INVALID-ORDER-81 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.82 INVALID-ORDER-82 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

$$\text{10.83 INVALID-ORDER-83 } Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

10.84 INVALID-ORDER-84 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, R_L \right)$

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

10.85 INVALID-ORDER-85 $Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

$$10.86 \quad \text{INVALID-ORDER-86} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$10.87 \quad \text{INVALID-ORDER-87} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

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

$$10.88 \quad \text{INVALID-ORDER-88} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

$$10.89 \quad \text{INVALID-ORDER-89} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

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

$$10.90 \quad \text{INVALID-ORDER-90} \quad Z(s) = \left(\frac{R_1 \left(L_1 s + \frac{1}{C_1 s} \right)}{L_1 s + R_1 + \frac{1}{C_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

10.91 INVALID-ORDER-91 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.92 INVALID-ORDER-92 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.93 INVALID-ORDER-93 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.94 INVALID-ORDER-94 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.95 INVALID-ORDER-95 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.96 INVALID-ORDER-96 $Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

$$10.97 \quad \text{INVALID-ORDER-97} \quad Z(s) = \left(\infty, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.98 \quad \text{INVALID-ORDER-98} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

$$10.99 \quad \text{INVALID-ORDER-99} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.100 \quad \text{INVALID-ORDER-100} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

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

$$10.101 \quad \text{INVALID-ORDER-101} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

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

$$10.102 \quad \text{INVALID-ORDER-102} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$10.103 \quad \text{INVALID-ORDER-103} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

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

$$10.104 \quad \text{INVALID-ORDER-104} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

$$10.105 \quad \text{INVALID-ORDER-105} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

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

$$10.106 \quad \text{INVALID-ORDER-106} \quad Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.107 \quad \text{INVALID-ORDER-107} \quad Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

10.108 INVALID-ORDER-108 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

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

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

10.110 INVALID-ORDER-110 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.111 INVALID-ORDER-111 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.112 INVALID-ORDER-112 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

$$10.113 \quad \text{INVALID-ORDER-113} \quad Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.114 \quad \text{INVALID-ORDER-114} \quad Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$$

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

$$10.115 \quad \text{INVALID-ORDER-115} \quad Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

$$10.116 \quad \text{INVALID-ORDER-116} \quad Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.117 \quad \text{INVALID-ORDER-117} \quad Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

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

10.118 INVALID-ORDER-118 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.119 INVALID-ORDER-119 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.120 INVALID-ORDER-120 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.121 INVALID-ORDER-121 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.122 INVALID-ORDER-122 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

$$10.123 \quad \text{INVALID-ORDER-123} \quad Z(s) = \left(\infty, \quad R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.124 \quad \text{INVALID-ORDER-124} \quad Z(s) = \left(\infty, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

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

$$10.125 \quad \text{INVALID-ORDER-125} \quad Z(s) = \left(\infty, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

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

$$10.126 \quad \text{INVALID-ORDER-126} \quad Z(s) = \left(\infty, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.127 \quad \text{INVALID-ORDER-127} \quad Z(s) = \left(\infty, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

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

10.128 INVALID-ORDER-128 $Z(s) = \left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{L_1s (C_LL_Ls^2 + 1) (C_4L_4s^2 - L_4g_ms + 1)}{2C_4C_LL_1L_4L_Lg_ms^5 + C_4C_LL_1L_4s^4 + C_4C_LL_4L_Ls^4 + 2C_4L_1L_4g_ms^3 + C_4L_4s^2 + C_LL_1L_4g_ms^3 + 2C_LL_1L_Lg_ms^3 + C_LL_1s^2 + C_LL_4s^2 + C_LL_Ls^2 + 2L_1g_ms + 1}$$

10.129 INVALID-ORDER-129 $Z(s) = \left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$

$$H(s) = \frac{L_1L_Ls (-C_4L_4s^2 + L_4g_ms - 1)}{C_4C_LL_1L_4L_Ls^4 + 2C_4L_1L_4L_Lg_ms^3 + C_4L_1L_4s^2 + C_4L_4L_Ls^2 + C_LL_1L_4L_Lg_ms^3 + C_LL_1L_Ls^2 + C_LL_4L_Ls^2 + L_1L_4g_ms + 2L_1L_Lg_ms + L_1 + L_4 + L_L}$$

10.130 INVALID-ORDER-130 $Z(s) = \left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{L_1s (C_4L_4s^2 - L_4g_ms + 1) (C_LL_Ls^2 + C_LR_Ls + 1)}{2C_4C_LL_1L_4L_Lg_ms^5 + 2C_4C_LL_1L_4R_Lg_ms^4 + C_4C_LL_1L_4s^4 + C_4C_LL_4L_Ls^4 + C_4C_LL_4R_Ls^3 + 2C_4L_1L_4g_ms^3 + C_4L_4s^2 + C_LL_1L_4g_ms^3 + 2C_LL_1L_Lg_ms^3 + 2C_LL_1R_Lg_ms^3 + C_LL_1s^2 + C_LL_4s^2 + C_LL_Ls^2 + 2L_1g_ms + 2L_1R_Lg_ms + L_1 + L_4 + L_L}$$

10.131 INVALID-ORDER-131 $Z(s) = \left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_1L_LR_Ls (-C_4L_4s^2 + L_4g_ms - 1)}{C_4C_LL_1L_4L_LR_Ls^4 + 2C_4L_1L_4L_LR_Lg_ms^3 + C_4L_1L_4L_Ls^3 + C_4L_1L_4R_Ls^2 + C_4L_4L_LR_Ls^2 + C_LL_1L_4L_LR_Lg_ms^3 + C_LL_1L_LR_Ls^2 + C_LL_4L_LR_Ls^2 + L_1L_4L_LR_Lg_ms^2 + L_1L_4R_Lg_ms^2 + L_1L_4s^2 + L_1L_LR_Ls^2 + L_1L_Ls^2 + L_1 + L_4 + L_L}$$

10.132 INVALID-ORDER-132 $Z(s) = \left(\infty, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$

$$H(s) = -\frac{L_1s (C_4L_4s^2 - L_4g_ms + 1) (C_LL_LR_Ls^2 + L_Ls + R_L)}{2C_4C_LL_1L_4L_LR_Lg_ms^5 + C_4C_LL_1L_4L_Ls^5 + C_4C_LL_4L_LR_Ls^4 + 2C_4L_1L_4L_LR_Lg_ms^4 + 2C_4L_1L_4R_Lg_ms^3 + C_4L_1L_4s^3 + C_4L_4L_Ls^3 + C_4L_4R_Ls^2 + C_LL_1L_4L_LR_Lg_ms^4 + 2C_LL_1L_LR_Lg_ms^3 + C_LL_1s^2 + C_LL_4s^2 + C_LL_Ls^2 + 2L_1g_ms + 2L_1R_Lg_ms + L_1 + L_4 + L_L}$$

$$10.133 \quad \text{INVALID-ORDER-133} \quad Z(s) = \left(\infty, \quad L_2s + \frac{1}{C_2s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$$

$$H(s) = -\frac{L_1R_Ls \left(C_LL_Ls^2 + 1 \right) \left(C_4L_4s^2 - L_4g_ms - \frac{1}{C_4s} \right)}{2C_4C_LL_1L_4L_LR_Lg_ms^5 + C_4C_LL_1L_4L_Ls^5 + C_4C_LL_1L_4R_Ls^4 + C_4C_LL_4L_LR_Ls^4 + 2C_4L_1L_4R_Lg_ms^3 + C_4L_1L_4s^3 + C_4L_4R_Ls^2 + C_LL_1L_4L_LR_Lg_ms^4 + C_LL_1L_4R_Lg_ms^3 + 2C_4L_1L_4R_Ls^2 + C_4L_4s^2 + C_4R_4s + C_4R_Ls + L_1g_ms + 1}$$

$$10.134 \quad \text{INVALID-ORDER-134} \quad Z(s) = \left(\infty, \quad L_2s + R_2 + \frac{1}{C_2s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{L_1R_Ls \left(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m \right)}{C_4L_1L_4g_ms^3 + C_4L_1R_4g_ms^2 + 2C_4L_1R_Lg_ms^2 + C_4L_1s^2 + C_4L_4s^2 + C_4R_4s + C_4R_Ls + L_1g_ms + 1}$$

$$10.135 \quad \text{INVALID-ORDER-135} \quad Z(s) = \left(\infty, \quad L_2s + R_2 + \frac{1}{C_2s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{L_1 \left(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m \right)}{C_4C_LL_1L_4g_ms^3 + C_4C_LL_1R_4g_ms^2 + C_4C_LL_1s^2 + C_4C_LL_4s^2 + C_4C_LR_4s + 2C_4L_1g_ms + C_4 + C_LL_1g_ms + C_L}$$

$$10.136 \quad \text{INVALID-ORDER-136} \quad Z(s) = \left(\infty, \quad L_2s + R_2 + \frac{1}{C_2s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_LR_Ls+1} \right)$$

$$H(s) = \frac{L_1R_Ls \left(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m \right)}{C_4C_LL_1L_4R_Lg_ms^4 + C_4C_LL_1R_4R_Lg_ms^3 + C_4C_LL_1R_Ls^3 + C_4C_LL_4R_Ls^3 + C_4C_LR_4R_Ls^2 + C_4L_1L_4g_ms^3 + C_4L_1R_4g_ms^2 + 2C_4L_1R_Lg_ms^2 + C_4L_1s^2 + C_4L_4s^2 + C_4R_4s + C_4R_Ls + L_1g_ms + 1}$$

$$10.137 \quad \text{INVALID-ORDER-137} \quad Z(s) = \left(\infty, \quad L_2s + R_2 + \frac{1}{C_2s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{L_1 \left(C_LR_Ls + 1 \right) \left(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m \right)}{C_4C_LL_1L_4g_ms^3 + C_4C_LL_1R_4g_ms^2 + 2C_4C_LL_1R_Lg_ms^2 + C_4C_LL_1s^2 + C_4C_LL_4s^2 + C_4C_LR_4s + C_4C_LR_Ls + 2C_4L_1g_ms + C_4 + C_LL_1g_ms + C_L}$$

10.138 INVALID-ORDER-138 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

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

10.139 INVALID-ORDER-139 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.140 INVALID-ORDER-140 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

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

10.141 INVALID-ORDER-141 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.142 INVALID-ORDER-142 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

$$10.143 \quad \text{INVALID-ORDER-143} \quad Z(s) = \left(\infty, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.144 \quad \text{INVALID-ORDER-144} \quad Z(s) = \left(\infty, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

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

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

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

$$10.146 \quad \text{INVALID-ORDER-146} \quad Z(s) = \left(\infty, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.147 \quad \text{INVALID-ORDER-147} \quad Z(s) = \left(\infty, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

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

$$10.148 \quad \text{INVALID-ORDER-148} \quad Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{2C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 L_1 L_4 R_4 g_m s^3 + C_4 L_4 R_4 s^2 + 2C_L L_1 L_4 L_L g_m s^4 + C_L L_1 L_4 R_4 g_m s^3 + C_L L_1 L_4 s^3 + 2C_L L_1 L_L R_4 g_m s^3 +}$$

$$10.149 \quad \text{INVALID-ORDER-149} \quad Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$10.150 \quad \text{INVALID-ORDER-150} \quad Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{2C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + 2C_4 C_L L_1 L_4 R_4 R_L g_m s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 L_L R_4 s^4 + C_4 C_L L_4 R_4 R_L s^3 + 2C_4 L_1 L_4 R_4 g_m s^3 + C_4 L_4 R_4 s^2 + 2C_L L_1 L_4 L_L g_m s^4 + C_L L_1 L_4 R_4 s^3 +}$$

$$10.151 \quad \text{INVALID-ORDER-151} \quad Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

$$10.152 \quad \text{INVALID-ORDER-152} \quad Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{2C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_4 L_L R_4 R_L s^4 + 2C_4 L_1 L_4 L_L R_4 g_m s^4 + 2C_4 L_1 L_4 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_4 L_L R_4 s^3 + C_4 L_4 R_4 R_L s^2 + C_L L_1 L_4 L_L R_4 R_L g_m s^3 +}$$

$$10.153 \quad \text{INVALID-ORDER-153} \quad Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.154 \quad \text{INVALID-ORDER-154} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$$

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

$$10.155 \quad \text{INVALID-ORDER-155} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

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

$$10.156 \quad \text{INVALID-ORDER-156} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.157 \quad \text{INVALID-ORDER-157} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

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

$$10.158 \quad \text{INVALID-ORDER-158} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (C_L L_L s^2 + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{2C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 R_4 g_m s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_4 s^3 + 2C_4 L_1 L_4 g_m s^3 + C_4 L_4 s^2 + C_L L_1 L_4 g_m s^3 + 2C_L L_1 L_L g_m s^3 + C_L L_1 R_4 g_m s^2 + C_L L_1 L_L R_4 g_m s^2 + C_L L_1 L_L s^2 + C_L R_4 g_m s^2 + C_L s^2 + C_L g_m s + C_L R_4 g_m - 1}$$

$$10.159 \quad \text{INVALID-ORDER-159} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L s^2 (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_4 L_L R_4 s^4 + 2C_4 L_1 L_4 L_L g_m s^4 + C_4 L_1 L_4 R_4 g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_4 s^2 + C_L L_1 L_4 L_L g_m s^4 + C_L L_1 L_L R_4 g_m s^4 + C_L L_1 L_L s^4 + C_L R_4 g_m s^4 + C_L s^4 + C_L g_m s^4 + C_L R_4 g_m - 1}$$

$$10.160 \quad \text{INVALID-ORDER-160} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{2C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_4 s^3 + C_4 C_L L_4 R_L s^3 + 2C_4 L_1 L_4 g_m s^3 + C_4 L_4 s^2 + C_L L_1 L_4 g_m s^3 + C_L L_1 L_L R_4 g_m s^3 + C_L L_1 L_L s^3 + C_L R_4 g_m s^3 + C_L s^3 + C_L g_m s^3 + C_L R_4 g_m - 1}$$

$$10.161 \quad \text{INVALID-ORDER-161} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 s (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^5 + C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 L_1 L_4 L_L R_4 g_m s^4 + 2C_4 L_1 L_4 L_L R_L g_m s^4 + C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_1 L_L R_4 g_m s^3 + C_4 L_1 L_L s^3 + C_4 R_4 g_m s^3 + C_4 s^3 + C_4 g_m s^3 + C_4 R_4 g_m - 1}$$

$$10.162 \quad \text{INVALID-ORDER-162} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 s (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + 2C_4 C_L L_1 L_4 L_L R_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_4 L_L R_4 s^4 + C_4 C_L L_4 L_L R_L s^4 + 2C_4 L_1 L_4 L_L g_m s^4 + C_4 L_1 L_4 R_4 g_m s^3 + 2C_4 L_1 L_4 R_L g_m s^3 + C_4 L_1 L_L R_4 g_m s^3 + C_4 L_1 L_L s^3 + C_4 R_4 g_m s^3 + C_4 s^3 + C_4 g_m s^3 + C_4 R_4 g_m - 1}$$

$$10.163 \quad \text{INVALID-ORDER-163} \quad Z(s) = \left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

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

$$10.164 \quad \text{INVALID-ORDER-164} \quad Z(s) = (\infty, \infty, R_3, \infty, \infty, R_L)$$

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

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

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

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

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

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

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

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

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s - R_4 g_m)}{2C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 R_4 g_m s^4 + C_4 C_L L_1 L_4 s^4 + 2C_4 C_L L_1 L_L R_4 g_m s^4 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_4 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 L_1 L_4 g_m s^3 + 2C_4 L_1 L_4 R_4 s^2 + C_4 L_1 L_4 s^2 + C_4 L_1 R_4 s + C_4 L_1 g_m}$$

$$10.169 \quad \text{INVALID-ORDER-169} \quad Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

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

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s - R_4 g_m)}{2C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1 L_4 s^4 + 2C_4 C_L L_1 L_L R_4 g_m s^4 + 2C_4 C_L L_1 R_4 R_L g_m s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_4 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 L_1 L_4 g_m s^3 + 2C_4 L_1 L_4 R_4 s^2 + C_4 L_1 L_4 s^2 + C_4 L_1 R_4 s + C_4 L_1 g_m}$$

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

$$H(s) = \frac{L_1 s (C_L L_L s^2 + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s - R_4 g_m)}{C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^5 + C_4 C_L L_1 L_4 L_L R_L s^5 + C_4 C_L L_1 L_L R_4 R_L s^4 + C_4 C_L L_4 L_L R_4 R_L s^4 + C_4 L_1 L_4 L_L R_4 g_m s^4 + 2C_4 L_1 L_4 L_L R_L g_m s^4 + C_4 L_1 L_4 L_L s^4 + C_4 L_1 L_4 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_1 L_L R_4 R_L s^3 + 2C_4 L_1 L_4 g_m s^3 + 2C_4 L_1 L_4 R_4 s^2 + C_4 L_1 L_4 s^2 + C_4 L_1 R_4 s + C_4 L_1 g_m}$$

$$10.172 \quad \text{INVALID-ORDER-172} \quad Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s - R_4 g_m)}{C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + 2C_4 C_L L_1 L_4 L_L R_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + 2C_4 C_L L_1 L_L R_4 R_L g_m s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_4 L_L R_4 s^4 + C_4 C_L L_4 L_L R_L s^4 + C_4 C_L L_L R_4 R_L s^3 + 2C_4 L_1 L_4 g_m s^3 + 2C_4 L_1 L_4 R_4 s^2 + C_4 L_1 L_4 s^2 + C_4 L_1 R_4 s + C_4 L_1 g_m}$$

10.173 INVALID-ORDER-173 $Z(s) = \left(\infty, \infty, R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

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

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

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

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

10.176 INVALID-ORDER-176 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.177 INVALID-ORDER-177 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

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

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

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

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

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

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

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

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

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

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

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

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

10.184 INVALID-ORDER-184 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

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

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

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

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

10.187 INVALID-ORDER-187 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

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

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

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

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

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

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

$$10.191 \quad \text{INVALID-ORDER-191} \quad Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

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

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

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

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

$$10.194 \quad \text{INVALID-ORDER-194} \quad Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

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

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

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

$$10.196 \quad \text{INVALID-ORDER-196} \quad Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

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

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

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

10.198 INVALID-ORDER-198 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(C_LR_Ls + 1)(C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LR_4s^2 + C_1C_4C_LR_Ls^2 + C_1C_4s + C_1C_Ls + C_4C_LR_4g_ms + 2C_4C_LR_Lg_ms + C_4C_Ls + 2C_4g_m + C_Lg_m)}$$

10.199 INVALID-ORDER-199 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(C_LL_Ls^2 + 1)(C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_Ls^3 + C_1C_4C_LR_4s^2 + C_1C_4s + C_1C_Ls + 2C_4C_LL_Lg_ms^2 + C_4C_LR_4g_ms + C_4C_Ls + 2C_4g_m + C_Lg_m)}$$

10.200 INVALID-ORDER-200 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$

$$H(s) = \frac{L_Ls(C_4R_4g_ms - C_4s + g_m)}{C_1C_4C_LL_LR_4s^4 + C_1C_4L_Ls^3 + C_1C_4R_4s^2 + C_1C_LL_Ls^3 + C_1s + C_4C_LL_LR_4g_ms^3 + C_4C_LL_Ls^3 + 2C_4L_Lg_ms^2 + C_4R_4g_ms + C_4s + C_LL_Lg_ms^2 + g_m}$$

10.201 INVALID-ORDER-201 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(C_LL_Ls^2 + C_LR_Ls + 1)(C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_Ls^3 + C_1C_4C_LR_4s^2 + C_1C_4C_LR_Ls^2 + C_1C_4s + C_1C_Ls + 2C_4C_LL_Lg_ms^2 + C_4C_LR_4g_ms + 2C_4C_LR_Lg_ms + C_4C_Ls + 2C_4g_m + C_Lg_m)}$$

10.202 INVALID-ORDER-202 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_LR_Ls(C_4R_4g_ms - C_4s + g_m)}{C_1C_4C_LL_LR_4R_Ls^4 + C_1C_4L_LR_4s^3 + C_1C_4L_LR_Ls^3 + C_1C_4R_4R_Ls^2 + C_1C_LL_LR_Ls^3 + C_1L_Ls^2 + C_1R_Ls + C_4C_LL_LR_4R_Lg_ms^3 + C_4C_LL_LR_Ls^3 + C_4L_LR_4g_ms^2 + 2C_4L_LR_Lg_ms}$$

10.203 INVALID-ORDER-203 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$

$$H(s) = \frac{(C_4R_4g_ms - C_4s + g_m)(C_LL_LR_Ls^2 + L_Ls + R_L)}{C_1C_4C_LL_LR_4s^4 + C_1C_4C_LL_LR_Ls^4 + C_1C_4L_Ls^3 + C_1C_4R_4s^2 + C_1C_4R_Ls^2 + C_1C_LL_Ls^3 + C_1s + C_4C_LL_LR_4g_ms^3 + 2C_4C_LL_LR_Lg_ms^3 + C_4C_LL_Ls^3 + 2C_4L_Lg_ms^2 + C_4L_LR_Lg_ms}$$

10.204 INVALID-ORDER-204 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

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

10.205 INVALID-ORDER-205 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L \right)$

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

10.206 INVALID-ORDER-206 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{1}{C_L s} \right)$

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

10.207 INVALID-ORDER-207 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.208 INVALID-ORDER-208 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3 L_3 s^2 + 1}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$10.215 \quad \text{INVALID-ORDER-215} \quad Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, R_L \right)$$

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

$$10.216 \quad \text{INVALID-ORDER-216} \quad Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_L s} \right)$$

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

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

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

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

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

$$10.219 \quad \text{INVALID-ORDER-219} \quad Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$$

$$H(s) = -\frac{(C_LL_Ls^2 + 1)(C_4L_4s^2 - L_4g_ms + 1)}{C_1C_4C_LL_4L_Ls^5 + C_1C_4L_4s^3 + C_1C_LL_4s^3 + C_1C_LL_Ls^3 + C_1s + 2C_4C_LL_4L_Lg_ms^4 + C_4C_LL_4s^3 + 2C_4L_4g_ms^2 + C_LL_4g_ms^2 + 2C_LL_Lg_ms^2 + C_Ls + 2g_m}$$

$$10.220 \quad \text{INVALID-ORDER-220} \quad Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$$

$$H(s) = \frac{L_Ls(-C_4L_4s^2 + L_4g_ms - 1)}{C_1C_4L_4L_Ls^4 + C_1C_LL_4L_Ls^4 + C_1L_4s^2 + C_1L_Ls^2 + C_4C_LL_4L_Ls^4 + 2C_4L_4L_Lg_ms^3 + C_4L_4s^2 + C_LL_4L_Lg_ms^3 + C_LL_Ls^2 + L_4g_ms + 2L_Lg_ms + 1}$$

$$10.221 \quad \text{INVALID-ORDER-221} \quad Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = -\frac{(C_4L_4s^2 - L_4g_ms + 1)(C_LL_Ls^2 + C_LR_Ls + 1)}{C_1C_4C_LL_4L_Ls^5 + C_1C_4C_LL_4R_Ls^4 + C_1C_4L_4s^3 + C_1C_LL_4s^3 + C_1C_LL_Ls^3 + C_1C_LR_Ls^2 + C_1s + 2C_4C_LL_4L_Lg_ms^4 + 2C_4C_LL_4R_Lg_ms^3 + C_4C_LL_4s^3 + 2C_4L_4g_ms^2 + C_LR_Ls^2 + C_LL_Lg_ms^2 + C_LR_Lg_ms^2 + C_LR_Ls + 2g_m}$$

$$10.222 \quad \text{INVALID-ORDER-222} \quad Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{L_LR_Ls(-C_4L_4s^2 + L_4g_ms - 1)}{C_1C_4L_4L_LR_Ls^4 + C_1C_LL_4L_LR_Ls^4 + C_1L_4L_Ls^3 + C_1L_4R_Ls^2 + C_1L_LR_Ls^2 + C_4C_LL_4L_LR_Ls^4 + 2C_4L_4L_LR_Lg_ms^3 + C_4L_4L_Ls^3 + C_4L_4R_Ls^2 + C_LL_4L_LR_Lg_ms^3 + C_LL_Ls^2 + L_4g_ms + 2L_LR_Lg_ms + 1}$$

$$10.223 \quad \text{INVALID-ORDER-223} \quad Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$$

$$H(s) = -\frac{(C_4L_4s^2 - L_4g_ms + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)}{C_1C_4C_LL_4L_LR_Ls^5 + C_1C_4L_4L_Ls^4 + C_1C_4L_4R_Ls^3 + C_1C_LL_4L_Ls^4 + C_1C_LL_LR_Ls^3 + C_1L_4s^2 + C_1L_Ls^2 + C_1R_Ls + 2C_4C_LL_4L_LR_Lg_ms^4 + C_4C_LL_4L_Ls^4 + 2C_4L_4L_LR_Lg_ms^3 + C_4L_4L_Ls^3 + C_4L_4R_Ls^2 + C_LL_4L_LR_Lg_ms^3 + C_LL_Ls^2 + L_4g_ms + 2L_LR_Lg_ms + 1}$$

$$10.224 \quad \text{INVALID-ORDER-224} \quad Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$$

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

$$10.225 \quad \text{INVALID-ORDER-225} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, R_L \right)$$

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

$$10.226 \quad \text{INVALID-ORDER-226} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{1}{C_Ls} \right)$$

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

$$10.227 \quad \text{INVALID-ORDER-227} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

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

$$10.228 \quad \text{INVALID-ORDER-228} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, R_L + \frac{1}{C_Ls} \right)$$

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

$$10.229 \quad \text{INVALID-ORDER-229} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{(C_LL_Ls^2 + 1)(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_4s^3 + C_1C_4C_LL_Ls^3 + C_1C_4C_LR_4s^2 + C_1C_4s + C_1C_Ls + C_4C_LL_4g_ms^2 + 2C_4C_LL_Lg_ms^2 + C_4C_LR_4g_ms + C_4C_Ls + 2C_4g_m + C_Lg_m)}$$

$$10.230 \quad \text{INVALID-ORDER-230} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$$

$$H(s) = \frac{L_Ls(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{C_1C_4C_LL_4L_Ls^5 + C_1C_4C_LL_LR_4s^4 + C_1C_4L_4s^3 + C_1C_4L_Ls^3 + C_1C_4R_4s^2 + C_1C_LL_Ls^3 + C_1s + C_4C_LL_4L_Lg_ms^4 + C_4C_LL_LR_4g_ms^3 + C_4C_LL_Ls^3 + C_4L_4g_ms^2 + 2C_4L_Lg_m}$$

$$10.231 \quad \text{INVALID-ORDER-231} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{(C_LL_Ls^2 + C_LR_Ls + 1)(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_4s^3 + C_1C_4C_LL_Ls^3 + C_1C_4C_LR_4s^2 + C_1C_4C_LR_Ls^2 + C_1C_4s + C_1C_Ls + C_4C_LL_4g_ms^2 + 2C_4C_LL_Lg_ms^2 + C_4C_LR_4g_ms + 2C_4C_LR_Lg_ms + C_4C_Ls + 2C_4g_m + C_Lg_m)}$$

$$10.232 \quad \text{INVALID-ORDER-232} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{L_LR_Ls(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{C_1C_4C_LL_4L_LR_Ls^5 + C_1C_4C_LL_LR_4R_Ls^4 + C_1C_4L_4L_Ls^4 + C_1C_4L_4R_Ls^3 + C_1C_4L_LR_4s^3 + C_1C_4L_LR_Ls^3 + C_1C_4R_4R_Ls^2 + C_1C_LL_LR_Ls^3 + C_1L_Ls^2 + C_1R_Ls + C_4C_LL_4L_LR_Ls^4 + C_4C_LL_LR_4R_Ls^3 + C_4C_LL_LR_Ls^3 + C_4L_4R_Ls^2 + 2C_4L_LR_Ls^2 + C_4L_LR_Ls^2 + C_4R_4R_Ls + 2C_4R_LR_Ls + C_4R_Ls + 2C_4g_m + C_Lg_m}$$

$$10.233 \quad \text{INVALID-ORDER-233} \quad Z(s) = \left(\infty, \infty, \frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L \right)$$

$$H(s) = \frac{(C_LL_LR_Ls^2 + L_Ls + R_L)(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{C_1C_4C_LL_4L_LR_Ls^5 + C_1C_4C_LL_LR_4R_Ls^4 + C_1C_4C_LL_LR_Ls^4 + C_1C_4L_4s^3 + C_1C_4L_Ls^3 + C_1C_4R_4s^2 + C_1C_4R_Ls^2 + C_1C_LL_Ls^3 + C_1s + C_4C_LL_4L_LR_Ls^4 + C_4C_LL_LR_4R_Ls^3 + 2C_4L_LR_Ls^2 + C_4L_LR_Ls^2 + C_4R_4R_Ls + 2C_4R_LR_Ls + C_4R_Ls + 2C_4g_m + C_Lg_m}$$

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

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

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

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

$$10.236 \quad \text{INVALID-ORDER-236} \quad Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s} \right)$$

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

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

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

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

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

10.239 INVALID-ORDER-239 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.240 INVALID-ORDER-240 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.241 INVALID-ORDER-241 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.242 INVALID-ORDER-242 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.243 INVALID-ORDER-243 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.244 INVALID-ORDER-244 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.245 INVALID-ORDER-245 $Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L \right)$

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

10.246 INVALID-ORDER-246 $Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s} \right)$

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

10.247 INVALID-ORDER-247 $Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.248 INVALID-ORDER-248 $Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

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

$$\mathbf{10.249 \quad INVALID-ORDER-249} \quad Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

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

$$\mathbf{10.250 \quad INVALID-ORDER-250} \quad Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

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

$$\mathbf{10.251 \quad INVALID-ORDER-251} \quad Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

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

$$\mathbf{10.252 \quad INVALID-ORDER-252} \quad Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

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

$$\mathbf{10.253 \quad INVALID-ORDER-253} \quad Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

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

10.254 INVALID-ORDER-254 $Z(s) = \left(\infty, \infty, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.255 INVALID-ORDER-255 $Z(s) = (\infty, \infty, \infty, R_4, \infty, R_L)$

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

10.256 INVALID-ORDER-256 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{1}{C_{Ls}} \right)$

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

10.257 INVALID-ORDER-257 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

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

10.258 INVALID-ORDER-258 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, R_L + \frac{1}{C_L s} \right)$

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

10.259 INVALID-ORDER-259 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, L_L s + \frac{1}{C_L s} \right)$

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

10.260 INVALID-ORDER-260 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

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

10.261 INVALID-ORDER-261 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

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

10.262 INVALID-ORDER-262 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

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

10.263 INVALID-ORDER-263 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

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

10.264 INVALID-ORDER-264 $Z(s) = \left(\infty, \infty, \infty, R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

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

10.265 INVALID-ORDER-265 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, R_L \right)$

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

10.266 INVALID-ORDER-266 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_L L_L s^2 + 1)}{C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + 2 C_L L_L R_1 g_m s^2 + C_L L_L s^2 + C_L R_1 R_4 g_m s + C_L R_1 s + C_L R_4 s + 2 R_1 g_m + 1}$$

10.267 INVALID-ORDER-267 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (R_4 g_m - 1)}{C_1 C_L L_L R_1 R_4 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_L L_L R_1 R_4 g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + 2 L_L R_1 g_m s + L_L s + R_1 R_4 g_m + R_1 + R_4}$$

10.268 INVALID-ORDER-268 $Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2 C_L L_L R_1 g_m s^2 + C_L L_L s^2 + C_L R_1 R_4 g_m s + 2 C_L R_1 R_L g_m s + C_L R_1 s + C_L R_4 s + C_L R_L s + 2 R_1 g_m + 1}$$

$$10.269 \quad \text{INVALID-ORDER-269} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L s (R_4 g_m - 1)}{C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_L R_1 R_4 s^2 + C_1 L_L R_1 R_L s^2 + C_1 R_1 R_4 R_L s + C_L L_L R_1 R_4 R_L g_m s^2 + C_L L_L R_1 R_L s^2 + C_L L_L R_4 R_L s^2 + L_L R_1 R_4 g_m s + 2 L_L R_1 R_L g_m s + L_L R_1 s + L_L}$$

$$10.270 \quad \text{INVALID-ORDER-270} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_L L_L R_1 R_4 g_m s^2 + 2 C_L L_L R_1 R_L g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + C_L L_L R_L s^2 + 2 L_L R_1 g_m s}$$

$$10.271 \quad \text{INVALID-ORDER-271} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_1 R_L (R_4 g_m - 1) (C_L L_L s^2 + 1)}{C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_L L_L R_1 R_4 g_m s^2 + 2 C_L L_L R_1 R_L g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_4 s^2 + C_L L_L R_L s^2 + C_L R_1}$$

$$10.272 \quad \text{INVALID-ORDER-272} \quad Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s} \right)$$

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

$$10.273 \quad \text{INVALID-ORDER-273} \quad Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, R_L + \frac{1}{C_L s} \right)$$

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

10.274 INVALID-ORDER-274 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_L L_L s^2 + 1)}{s (C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 R_1 s + C_1 C_L R_1 s + 2C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L R_1 s + 2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L)}$$

10.275 INVALID-ORDER-275 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (-C_4 s + g_m)}{C_1 C_4 L_L R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_L R_1 s^3 + 2C_4 L_L R_1 g_m s^2 + C_4 L_L s^2 + C_4 R_1 s + C_L L_L R_1 g_m s^2 + C_L L_L s^2 + R_1 g_m + 1}$$

10.276 INVALID-ORDER-276 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_L L_L s^2 + C_L R_L s + 1)}{s (C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_L s^2 + C_1 C_4 R_1 s + C_1 C_L R_1 s + 2C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + 2C_4 C_L R_1 R_L g_m s + C_4 C_L R_1 s + C_4 C_L R_L s + 2C_4 R_1 g_m + C_4 + C_L R_1 g_m)}$$

10.277 INVALID-ORDER-277 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_1 R_L s (-C_4 s + g_m)}{C_1 C_4 L_L R_1 R_L s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_L s + C_4 C_L L_L R_1 R_L s^3 + 2C_4 L_L R_1 R_L g_m s^2 + C_4 L_L R_1 s^2 + C_4 L_L R_L s^2 + C_4 R_1 R_L s + C_L L_L R_1 R_L g_m s^2 + C_L L_L}$$

10.278 INVALID-ORDER-278 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + 2C_4 C_L L_L R_1 R_L g_m s^3 + C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_L s^3 + 2C_4 L_L R_1 g_m s^2 + C_4 L_L s^2 + 2C_4}$$

$$10.279 \quad \text{INVALID-ORDER-279} \quad Z(s) = \left(\infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{R_1 R_L (C_4 s - g_m) (C_L L_L s^2 + 1)}{C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2C_4 C_L L_L R_1 R_L g_m s^3 + C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_L s^3 + C_4 C_L R_1 R_L s^2 + 2C_4 R_1 R_L g_m s}$$

$$10.280 \quad \text{INVALID-ORDER-280} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{R_1 (C_L R_L s + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2C_4 C_L R_1 R_4 R_L g_m s^2 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_4 R_L s^2 + 2C_4 R_1 R_4 g_m s + C_4 R_4 s + C_L R_1 s}$$

$$10.281 \quad \text{INVALID-ORDER-281} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{R_1 (C_L L_L s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + 2C_4 C_L L_L R_1 R_4 g_m s^3 + C_4 C_L L_L R_4 s^3 + C_4 C_L R_1 R_4 s^2 + 2C_4 R_1 R_4 g_m s + C_4 R_4 s + 2C_L L_L R_1 s}$$

$$10.282 \quad \text{INVALID-ORDER-282} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_4 C_L L_L R_1 R_4 s^3 + 2C_4 L_L R_1 R_4 g_m s^2 + C_4 L_L R_4 s^2 + C_4 R_1 R_4 s + C_L L_L R_1 R_4 g_m s^2 + C_L L_L R_1 s^2 + C_L L_L R_4 s}$$

$$10.283 \quad \text{INVALID-ORDER-283} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{R_1 (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2C_4 C_L L_L R_1 R_4 g_m s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 C_L R_1 s}$$

$$10.284 \quad \text{INVALID-ORDER-284} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_1 R_L s (-C_4 R_4 s}{C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_L R_1 R_4 s^2 + C_1 L_L R_1 R_L s^2 + C_1 R_1 R_4 R_L s + C_4 C_L L_L R_1 R_4 R_L s^3 + 2C_4 L_L R_1 R_4 R_L g_m s^2 + C_4 L_L R_1 R_4 s^2 + C_4 L_L R_4 R_L s^2 +$$

$$10.285 \quad \text{INVALID-ORDER-285} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + 2C_4 C_L L_L R_1 R_4 R_L g_m s^3 + C_4$$

$$10.286 \quad \text{INVALID-ORDER-286} \quad Z(s) = \left(\infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + 2C_4 C_L L_L R_1 R_4 R_L g_m s^3 + C_4 C_L L_L R_1 R_4 s^2 +$$

$$10.287 \quad \text{INVALID-ORDER-287} \quad Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

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

$$10.288 \quad \text{INVALID-ORDER-288} \quad Z(s) = \left(\infty, \infty, \infty, L_4 s + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_4 C_L R_1 R_4 R_L g_m s^2 + C_4 C_L R_1 R_L s^2 + C_4 C_L R_4 R_L s^2 + C_4 R_1 R_4 g_m s + 2C_4 R_1 R_L g_m s + C_4}$$

$$10.289 \quad \text{INVALID-ORDER-289} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, R_L + \frac{1}{C_Ls} \right)$$

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

$$10.290 \quad \text{INVALID-ORDER-290} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{R_1 (C_L L_L s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 R_1 s + C_1 C_L R_1 s + 2C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L R_1 R_4 g_m s + C_4 C_L R_1 s + C_4 C_L R_4 s + 2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L R_4 s + C_L R_L s)}$$

$$10.291 \quad \text{INVALID-ORDER-291} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 s (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_L R_1 R_4 g_m s^3 + C_4 C_L L_L R_1 s^3 + C_4 C_L L_L R_4 s^3 + 2C_4 L_L R_1 g_m s^2 + C_4 L_L s^2 + C_4 R_1 R_4 s + C_4 R_L s + C_4 R_4 s}$$

$$10.292 \quad \text{INVALID-ORDER-292} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{R_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_1 R_L s^2 + C_1 C_4 R_1 s + C_1 C_L R_1 s + 2C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L R_1 R_4 g_m s + 2C_4 C_L R_1 R_L g_m s + C_4 C_L R_1 s + C_4 C_L R_4 s + C_4 C_L R_L s)}$$

$$10.293 \quad \text{INVALID-ORDER-293} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{R_1 (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 L_L R_1 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_L s + C_4 C_L L_L R_1 R_4 R_L g_m s^3 + C_4 C_L L_L R_1 R_L s^3 + C_4 C_L R_1 R_4 R_L s^2 + C_4 C_L R_1 R_L s^2 + C_4 C_L R_4 R_L s + C_4 C_L R_L s}$$

$$10.294 \quad \text{INVALID-ORDER-294} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{R_1 (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_L R_1 R_4 g_m s^3 + 2C_4 C_L L_L R_1 R_L g_m s^3 + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_1 R_L s^2 + C_4 C_L R_4 s + C_4 C_L R_L s}$$

10.295 INVALID-ORDER-295 $Z(s) = \left(\infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \infty, \frac{R_L(L_Ls + \frac{1}{C_Ls})}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$

$$H(s) = \frac{C_1C_4C_LL_LR_1R_4s^4 + C_1C_4C_LL_LR_1R_Ls^4 + C_1C_4C_LR_1R_4R_Ls^3 + C_1C_4R_1R_4s^2 + C_1C_4R_1R_Ls^2 + C_1C_LL_R_1s^3 + C_1C_LR_1R_Ls^2 + C_1R_1s + C_4C_LL_R_1R_4g_ms^3 + 2C_4C_LR_1R_4g_ms^2 + C_4C_LR_1R_Lg_ms + C_4C_LR_1s + C_4C_LR_Ls + R_1g_m + 1}{C_1C_4C_LL_LR_1R_4s^4 + C_1C_4C_LL_LR_1R_Ls^4 + C_1C_4C_LR_1R_4R_Ls^3 + C_1C_4R_1R_4s^2 + C_1C_4R_1R_Ls^2 + C_1C_LL_R_1s^3 + C_1C_LR_1R_Ls^2 + C_1R_1s + C_4C_LL_R_1R_4g_ms^3 + 2C_4C_LR_1R_4g_ms^2 + C_4C_LR_1R_Lg_ms + C_4C_LR_1s + C_4C_LR_Ls + R_1g_m + 1}$$

10.296 INVALID-ORDER-296 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, R_L \right)$

$$H(s) = \frac{R_1R_L(C_4L_4g_ms^2 - C_4s + g_m)}{C_1C_4L_4R_1s^3 + C_1C_4R_1R_Ls^2 + C_1R_1s + C_4L_4R_1g_ms^2 + C_4L_4s^2 + 2C_4R_1R_Lg_ms + C_4R_1s + C_4R_Ls + R_1g_m + 1}$$

10.297 INVALID-ORDER-297 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{1}{C_Ls} \right)$

$$H(s) = \frac{R_1(C_4L_4g_ms^2 - C_4s + g_m)}{s(C_1C_4C_LL_4R_1s^3 + C_1C_4R_1s + C_1C_LR_1s + C_4C_LL_4R_1g_ms^2 + C_4C_LL_4s^2 + C_4C_LR_1s + 2C_4R_1g_m + C_4 + C_LR_1g_m + C_L)}$$

10.298 INVALID-ORDER-298 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, \frac{R_L}{C_LR_Ls+1} \right)$

$$H(s) = \frac{R_1R_L(C_4L_4g_ms^2 - C_4s + g_m)}{C_1C_4C_LL_4R_1R_Ls^4 + C_1C_4L_4R_1s^3 + C_1C_4R_1R_Ls^2 + C_1C_LR_1R_Ls^2 + C_1R_1s + C_4C_LL_4R_1R_Lg_ms^3 + C_4C_LL_4R_Ls^3 + C_4C_LR_1R_Ls^2 + C_4L_4R_1g_ms^2 + C_4L_4s^2 + 2C_4R_1R_Lg_ms + C_4C_LR_1s + C_4C_LR_Ls + R_1g_m + 1}$$

10.299 INVALID-ORDER-299 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4s}{C_4L_4s^2+1}, \infty, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{R_1(C_LR_Ls + 1)(C_4L_4g_ms^2 - C_4s + g_m)}{s(C_1C_4C_LL_4R_1s^3 + C_1C_4C_LR_1R_Ls^2 + C_1C_4R_1s + C_1C_LR_1s + C_4C_LL_4R_1g_ms^2 + C_4C_LL_4s^2 + 2C_4C_LR_1R_Lg_ms + C_4C_LR_1s + C_4C_LR_Ls + 2C_4R_1g_m + C_4 + C_LR_1g_m + 1)}$$

10.300 INVALID-ORDER-300 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 R_1 s + C_1 C_L R_1 s + C_4 C_L L_4 R_1 g_m s^2 + C_4 C_L L_4 s^2 + 2 C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L R_1 s + 2 C_4 R_1 g_m + C_4 + C_L R_1 g_m)}$$

10.301 INVALID-ORDER-301 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_L R_1 s^3 + C_4 L_4 R_1 g_m s^2 + C_4 L_4 s^2 + 2 C_4 L_L R_1 g_m s + C_4 R_1 g_m}$$

10.302 INVALID-ORDER-302 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_L s^2 + C_1 C_4 R_1 s + C_1 C_L R_1 s + C_4 C_L L_4 R_1 g_m s^2 + C_4 C_L L_4 s^2 + 2 C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + 2 C_4 C_L R_1 R_L g_m s + C_4 R_1 g_m)}$$

10.303 INVALID-ORDER-303 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{R_1 (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_L R_1 R_L s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_L s + C_4 C_L L_4 L_L R_1 R_L g_m s^4 + C_4 C_L L_4 L_L R_L s^4 + 2 C_4 C_L L_L R_1 R_L g_m s + C_4 R_1 g_m}$$

10.304 INVALID-ORDER-304 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{R_1 (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + 2 C_4 C_L L_L R_1 R_L g_m s + C_4 R_1 g_m}$$

$$10.305 \quad \text{INVALID-ORDER-305} \quad Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_L R_1 R_L s^2 + C_4 C_L R_1 R_L s + C_4 R_1}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_L R_1 R_L s^2 + C_4 C_L R_1 R_L s + C_4 R_1}$$

$$10.306 \quad \text{INVALID-ORDER-306} \quad Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_4 R_1 R_L s^3 + C_1 L_4 R_1 s^2 + C_1 R_1 R_L s + 2C_4 L_4 R_1 R_L g_m s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + L_4 R_1 g_m s + L_4 s + 2R_1 R_L g_m + R_1 + R_L}$$

$$10.307 \quad \text{INVALID-ORDER-307} \quad Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 R_1 s + C_4 C_L L_4 R_1 s^3 + 2C_4 L_4 R_1 g_m s^2 + C_4 L_4 s^2 + C_L L_4 R_1 g_m s^2 + C_L L_4 s^2 + C_L R_1 s + 2R_1 g_m + 1}$$

$$10.308 \quad \text{INVALID-ORDER-308} \quad Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 L_4 R_1 s^2 + C_1 R_1 R_L s + C_4 C_L L_4 R_1 R_L s^3 + 2C_4 L_4 R_1 R_L g_m s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_L s^2 + C_L L_4 R_1 R_L g_m s^2 + C_L L_4 R_L s^2 + C_L R_1 R_L s + 2R_1 g_m + 1}$$

$$10.309 \quad \text{INVALID-ORDER-309} \quad Z(s) = \left(\infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{R_1 (C_L R_L s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2C_4 C_L L_4 R_1 R_L g_m s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^3 + 2C_4 L_4 R_1 g_m s^2 + C_4 L_4 s^2 + C_L L_4 R_1 R_L s^2 + C_L R_1 R_L s + 2R_1 g_m + 1}$$

10.310 INVALID-ORDER-310 $Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{R_1 (C_L L_L s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + 2C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 s^3 + 2C_4 L_4 R_1 g_m s^2 + C_4 L_4 s^2 + C_L L_4 R_1 s}$$

10.311 INVALID-ORDER-311 $Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_L L_4 L_L R_1 s^4 + C_1 L_4 R_1 s^2 + C_1 L_L R_1 s^2 + C_4 C_L L_4 L_L R_1 s^4 + 2C_4 L_4 L_L R_1 g_m s^3 + C_4 L_4 L_L s^3 + C_4 L_4 R_1 s^2 + C_L L_4 L_L R_1 g_m s^3 + C_L L_4 L_L s^3 + C_L L_L R_1 s}$$

10.312 INVALID-ORDER-312 $Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{R_1 (C_4 L_4 s^2 - L_4 g_m s - 1)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + 2C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_L s^2 + C_4 C_L L_L R_1 s^2 + C_4 C_L R_1 R_L s + C_4 C_L R_L s}$$

10.313 INVALID-ORDER-313 $Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{L_L R_1 R_L s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_L L_4 L_L R_1 R_L s^4 + C_1 L_4 L_L R_1 s^3 + C_1 L_4 R_1 R_L s^2 + C_1 L_L R_1 R_L s^2 + C_4 C_L L_4 L_L R_1 R_L s^4 + 2C_4 L_4 L_L R_1 R_L g_m s^3 + C_4 L_4 L_L R_1 s^3 + C_4 L_4 L_L R_L s^3 + C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_L s^2 + C_4 L_L R_1 R_L s + C_4 L_L R_L s}$$

10.314 INVALID-ORDER-314 $Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{L_Ls}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{R_1 (C_4 L_4 s^2 - L_4 g_m s - 1)}{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_4 R_1 s^2 + C_1 L_L R_1 s^2 + C_1 R_1 R_L s + 2C_4 C_L L_4 L_L R_1 R_L g_m s^4 + C_4 C_L L_4 L_L R_1 R_L s^4 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_L R_1 R_L s^2 + C_4 C_L R_1 R_L s + C_4 C_L R_L s}$$

$$10.315 \quad \text{INVALID-ORDER-315} \quad Z(s) = \left(\infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_Ls} \right)}{L_Ls + R_L + \frac{1}{C_Ls}} \right)$$

$$H(s) = - \frac{C_1C_4C_LL_4L_LR_1R_Ls^5 + C_1C_4L_4R_1R_Ls^3 + C_1C_LL_4L_LR_1s^4 + C_1C_LL_4R_1R_Ls^3 + C_1C_LL_LR_1R_Ls^3 + C_1L_4R_1s^2 + C_1R_1R_Ls + 2C_4C_LL_4L_LR_1R_Lg_ms^4 + C_4C_LL_4L_LR_1s^3}{C_1C_4C_LL_4L_LR_1R_Ls^5 + C_1C_4L_4R_1R_Ls^3 + C_1C_LL_4L_LR_1s^4 + C_1C_LL_4R_1R_Ls^3 + C_1C_LL_LR_1R_Ls^3 + C_1L_4R_1s^2 + C_1R_1R_Ls + 2C_4C_LL_4L_LR_1R_Lg_ms^4 + C_4C_LL_4L_LR_1s^3}$$

$$10.316 \quad \text{INVALID-ORDER-316} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, R_L \right)$$

$$H(s) = \frac{R_1R_L (C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{C_1C_4L_4R_1s^3 + C_1C_4R_1R_4s^2 + C_1C_4R_1R_Ls^2 + C_1R_1s + C_4L_4R_1g_ms^2 + C_4L_4s^2 + C_4R_1R_4g_ms + 2C_4R_1R_Lg_ms + C_4R_1s + C_4R_4s + C_4R_Ls + R_1g_m + 1}$$

$$10.317 \quad \text{INVALID-ORDER-317} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{R_1 (C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_4R_1s^3 + C_1C_4C_LR_1R_4s^2 + C_1C_4R_1s + C_1C_LR_1s + C_4C_LL_4R_1g_ms^2 + C_4C_LL_4s^2 + C_4C_LR_1R_4g_ms + C_4C_LR_1s + C_4C_LR_4s + 2C_4R_1g_m + C_4 + C_LR_1g_m + C)}$$

$$10.318 \quad \text{INVALID-ORDER-318} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{R_L}{C_LR_Ls + 1} \right)$$

$$H(s) = \frac{R_1R_L (C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{C_1C_4C_LL_4R_1R_Ls^4 + C_1C_4C_LR_1R_4R_Ls^3 + C_1C_4L_4R_1s^3 + C_1C_4R_1R_4s^2 + C_1C_4R_1R_Ls^2 + C_1C_LR_1R_Ls^2 + C_1R_1s + C_4C_LL_4R_1R_Lg_ms^3 + C_4C_LL_4R_Ls^3 + C_4C_LR_1R_4R_Ls^2 + C_4C_LR_1R_4s^2 + C_4C_LR_1R_Ls^2 + C_4C_LR_1s + C_4C_LR_4s + 2C_4R_1g_m + C_4 + C_LR_1g_m + C}$$

$$10.319 \quad \text{INVALID-ORDER-319} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{R_1 (C_LR_Ls + 1) (C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_4R_1s^3 + C_1C_4C_LR_1R_4s^2 + C_1C_4C_LR_1R_Ls^2 + C_1C_4R_1s + C_1C_LR_1s + C_4C_LL_4R_1g_ms^2 + C_4C_LL_4s^2 + C_4C_LR_1R_4g_ms + 2C_4C_LR_1R_Lg_ms + C_4C_LR_1s + C_4C_LR_4s + 2C_4R_1g_m + C_4 + C_LR_1g_m + C)}$$

$$\mathbf{10.320 \quad INVALID-ORDER-320} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, L_Ls + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{R_1 (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 R_1 s + C_1 C_L R_1 s + C_4 C_L L_4 R_1 g_m s^2 + C_4 C_L L_4 s^2 + 2 C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L R_1 R_4 g_m s + C_4 C_L R_1 s)}$$

$$\mathbf{10.321 \quad INVALID-ORDER-321} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L R_1 s (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_L R_1 R_4 g_m s^3 + C_4 C_L L_L R_1 s^3}$$

$$\mathbf{10.322 \quad INVALID-ORDER-322} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{R_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_1 R_L s^2 + C_1 C_4 R_1 s + C_1 C_L R_1 s + C_4 C_L L_4 R_1 g_m s^2 + C_4 C_L L_4 s^2 + 2 C_4 C_L L_L R_1 g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L R_1 R_4 g_m s + C_4 C_L R_1 s)}$$

$$\mathbf{10.323 \quad INVALID-ORDER-323} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{L_L R_1 s (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 L_L R_1 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_L R_1 s}$$

$$\mathbf{10.324 \quad INVALID-ORDER-324} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_L R_1 s (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s^3 + C_1 R_1 s + C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_L R_1 R_4 g_m s^3 + C_4 C_L L_L R_1 s^3}$$

$$10.325 \quad \text{INVALID-ORDER-325} \quad Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 s}$$

$$10.326 \quad \text{INVALID-ORDER-326} \quad Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L (-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s - L_4 s - R_4)}{C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 L_4 R_1 R_4 s^2 + C_1 L_4 R_1 R_L s^2 + C_1 R_1 R_4 R_L s + 2C_4 L_4 R_1 R_4 R_L g_m s^2 + C_4 L_4 R_1 R_4 s^2 + C_4 L_4 R_4 R_L s^2 + L_4 R_1 R_4 g_m s + 2L_4 R_1 R_L g_m s + L_4 R_1 s + L_4 R_4}$$

$$10.327 \quad \text{INVALID-ORDER-327} \quad Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s - L_4 s - R_4)}{C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + C_4 C_L L_4 R_1 R_4 s^3 + 2C_4 L_4 R_1 R_4 g_m s^2 + C_4 L_4 R_4 s^2 + C_L L_4 R_1 R_4 g_m s^2 + C_L L_4 R_1 s^2 + C_L L_4 R_4 s^2 + C_L R_1 R_4 s}$$

$$10.328 \quad \text{INVALID-ORDER-328} \quad Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_1 R_L (-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s - L_4 s - R_4)}{C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 R_1 R_4 R_L s^3 + C_1 L_4 R_1 R_4 s^2 + C_1 L_4 R_1 R_L s^2 + C_1 R_1 R_4 R_L s + C_4 C_L L_4 R_1 R_4 R_L s^3 + 2C_4 L_4 R_1 R_4 R_L g_m s^2 + C_4 L_4 R_1 R_4 s^2 + C_4 L_4 R_4 R_L s^2 + C_L L_4 R_1 R_4 g_m s^2 + C_L L_4 R_1 s^2 + C_L L_4 R_4 s^2 + C_L R_1 R_4 s}$$

$$10.329 \quad \text{INVALID-ORDER-329} \quad Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{R_1}{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + 2C_4 C_L L_4 R_1 R_4 R_L g_m s^3 + C_4 C_L L_4 R_1 R_4 s^3}$$

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

$$H(s) = -\frac{R_1 (C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + 2 C_4 C_L L_4 L_L R_1 R_4 g_m s^4 + C_4 C_L L_4 L_L R_4 s^4)}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + 2 C_4 C_L L_4 L_L R_1 R_4 g_m s^4 + C_4 C_L L_4 L_L R_4 s^4}$$

10.331 INVALID-ORDER-331 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (-C_4 L_4 R_4 s^2 + L_4 R_4)}{C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_L L_4 L_L R_1 R_4 s^4 + C_1 L_4 L_L R_1 s^3 + C_1 L_4 R_1 R_4 s^2 + C_1 L_L R_1 R_4 s^2 + C_4 C_L L_4 L_L R_1 R_4 s^4 + 2C_4 L_4 L_L R_1 R_4 q_m s^3 + C_4 L_4 L_L R_4 s^3 + C_4 L_4 R_1 R_4 s^2 + C_L}$$

10.332 INVALID-ORDER-332 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 R_L s^2}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 R_4 s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_4 R_1 R_4 R_L s^2}$$

10.333 INVALID-ORDER-333 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_4 L_L R_1 R_4 R_L s^4 + C_1 L_4 L_L R_1 R_4 s^3 + C_1 L_4 L_L R_1 R_L s^3 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_4 L_L R_1 R_4 R_L s^4 + 2C_4 L_4 L_L R_1 R_4 R_L g}{C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_4 L_L R_1 R_4 R_L s^4 + C_1 L_4 L_L R_1 R_4 s^3 + C_1 L_4 L_L R_1 R_L s^3 + C_1 L_4 R_1 R_4 R_L s^2 + C_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_4 L_L R_1 R_4 R_L s^4 + 2C_4 L_4 L_L R_1 R_4 R_L g}$$

10.334 INVALID-ORDER-334 $Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 L_L R_1 R_4 s^4 + C_1 C_L L_4 L_L R_1 R_L s^4 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_4 L_L R_1 s^3 + C_1 L_4 R_1 R_4 s^2 +$$

$$\mathbf{10.335 \quad INVALID-ORDER-335} \quad Z(s) = \left(\infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 L_L R_1 R_4 s^4 + C_1 C_L L_4 L_L R_1 R_L s^4 + C_1 C_L L_4 R_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_4 R_1 R_4 s^2 + C_1 L_4 R_1 R_L s^2 +$$

$$\mathbf{10.336 \quad INVALID-ORDER-336} \quad Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L \right)$$

$$H(s) = \frac{R_1 R_L (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_4 L_4 R_1 R_4 g_m s^2 + 2 C_4 L_4 R_1 R_L g_m s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_4 s^2 + C_4 L_4 R_L s^2 + L_4 R_1 g_m s + L_4 s +$$

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

$$H(s) = \frac{R_1 (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 R_4 g_m s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_4 s^3 + 2 C_4 L_4 R_1 g_m s^2 + C_4 L_4 s^2 + C_L L_4 R_1 g_m s +$$

$$\mathbf{10.338 \quad INVALID-ORDER-338} \quad Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 L_4 R_1 s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_4 C_L L_4 R_1 R_4 R_L g_m s^3 + C_4 C_L L_4 R_1 R_4 s^3 +$$

$$\mathbf{10.339 \quad INVALID-ORDER-339} \quad Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (C_L R_L s + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 R_4 g_m s^3 + 2 C_4 C_L L_4 R_1 R_L g_m s^3 + C_4 C_L L_4 R_1 R_4 s^3 +$$

10.340 INVALID-ORDER-340 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_L L_L s^2 + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 R_4)}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + 2 C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L s^4 + C_4 C_L L_4 R_1 R_4}$$

10.341 INVALID-ORDER-341 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_4 R_1 s^2 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_4 C_L L_4 L_L R_1 R_4 q_m s^4 + C_4 C_L L_4 L_L R_1 R_4 s^3 + C_4 C_L L_4 L_L R_1 R_4 s^2 + C_4 C_L L_4 L_L R_1 R_4 s + C_4 C_L L_4 L_L R_1 R_4}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_4 R_1 s^2 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_4 C_L L_4 L_L R_1 R_4 q_m s^4 + C_4 C_L L_4 L_L R_1 R_4 s^3 + C_4 C_L L_4 L_L R_1 R_4 s^2 + C_4 C_L L_4 L_L R_1 R_4 s + C_4 C_L L_4 L_L R_1 R_4}$$

10.342 INVALID-ORDER-342 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2 C_4 C_L L_4 L_L R_1}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + 2 C_4 C_L L_4 L_L R_1}$$

10.343 INVALID-ORDER-343 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 L_L R_1 R_L s^4 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_4 L_L R_1 s^3 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 s^2}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 L_L R_1 R_L s^4 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_4 L_L R_1 s^3 + C_1 L_4 R_1 R_L s^2 + C_1 L_4 R_1 s^2}$$

10.344 INVALID-ORDER-344 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_4 R_1 R_4 s^3}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 L_4 R_1 R_4 s^3}$$

10.345 INVALID-ORDER-345 $Z(s) = \left(\infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3}$$

10.346 INVALID-ORDER-346 $Z(s) = (\infty, \infty, \infty, \infty, R_4, R_L)$

$$H(s) = \frac{R_1 R_L (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 - C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_4 L_4 R_1 R_4 g_m s^2 + 2 C_4 L_4 R_1 R_L g_m s^2 + C_4 L_4 R_1 s^2 + C_4 L_4 R_4 s^2 + C_4 L_4 R_L s^2 + 2 C_4 R_1 R_4 R_L s + R_1 R_4 g_m - 1}$$

10.347 INVALID-ORDER-347 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{1}{C_{Ls}} \right)$

$$H(s) = \frac{R_1 (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 - C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 R_4 g_m s^3 + C_4 C_L L_4 R_1 s^3 + C_4 C_L L_4 R_4 s^3 + C_4 C_L R_1 R_4 s^2 + 2 C_4 L_4 R_1 g_m s^2 + C_4 L_4 R_1 g_m s + C_4 R_1 g_m - 1}$$

10.348 INVALID-ORDER-348 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L R_1 R_4 R_L s^2 + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_4 C_L L_4 R_1 R_4 R_L g_m s^3 + C_4 C_L L_4 R_1 R_L s^3 + C_4 C_L L_4 R_1 R_4 s^2 + C_4 C_L L_4 R_1 R_L s + C_4 C_L L_4 R_1 R_4}{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^3 + C_1 C_4 C_L L_4 R_1 R_L s^3 + C_1 C_4 C_L L_4 R_1 s^2 + C_1 C_4 C_L L_4 R_4 s^2 + C_1 C_4 C_L L_4 s + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_1 R_L s^2 + C_1 C_4 C_L R_4 R_L s^2 + C_1 C_4 C_L R_4 s + C_1 C_4 C_L s + C_4 C_L L_4 R_1 R_4 R_L g_m s^3 + C_4 C_L L_4 R_1 R_4 s^2 + C_4 C_L L_4 R_1 R_L s + C_4 C_L L_4 R_4 s + C_4 C_L L_4 s + C_4 C_L R_1 R_4 s^2 + C_4 C_L R_1 R_L s + C_4 C_L R_4 s + C_4 C_L s + C_4 C_L g_m s^3 + C_4 C_L s + C_4 C_L g_m}$$

10.349 INVALID-ORDER-349 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 R_4 g_m s^3 + 2 C_4 C_L L_4 R_1 R_4 s^4}{C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + C_1 R_1 s + C_4 C_L L_4 R_1 R_4 g_m s^3 + 2 C_4 C_L L_4 R_1 R_4 s^4}$$

10.350 INVALID-ORDER-350 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + 2C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L R_1 g_m^2 s^5}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 R_1 s + 2C_4 C_L L_4 L_L R_1 g_m s^4 + C_4 C_L L_4 L_L R_1 g_m^2 s^5}$$

10.351 INVALID-ORDER-351 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_4 C_L L_4 L_L R_1 R_4 g_m s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_4 s^3 + C_1 L_L R_1 s^2 + C_1 R_1 R_4 s + C_4 C_L L_4 L_L R_1 R_4 g_m s^4 + C_4 C_L L_4 L_L R_1 s^4 + C_4 C_L L_4 L_L R_1 R_4 s^4}$$

10.352 INVALID-ORDER-352 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4}{C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4}$$

10.353 INVALID-ORDER-353 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_L R_1 R_4 s^2 + C_1 L_L R_1 R_L s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 R_L s + C_1 L_L R_1 R_4 + C_1 L_L R_1 R_L}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_L R_1 R_4 s^2 + C_1 L_L R_1 R_L s^2 + C_1 L_L R_1 R_4 s + C_1 L_L R_1 R_L s + C_1 L_L R_1 R_4 + C_1 L_L R_1 R_L}$$

10.354 INVALID-ORDER-354 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 R_1 R_4 R_L s^2 +$$

10.355 INVALID-ORDER-355 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_4 s}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_4 s}$$

10.356 INVALID-ORDER-356 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, R_L \right)$

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

10.357 INVALID-ORDER-357 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_{4s}}, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_1 R_1 s + 1)(C_L L_L s^2 + 1)}{2C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + 2C_1 R_1 g_m s + C_1 s + 2C_L L_L g_m s^2 + C_L R_4 g_m s + C_L s + 2g_m}$$

10.358 INVALID-ORDER-358 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_{4s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (R_4 g_m - 1) (C_1 R_1 s + 1)}{C_1 C_L L_L R_1 R_4 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + 2 C_1 L_L R_1 g_m s^2 + C_1 L_L s^2 + C_1 R_1 R_4 g_m s + C_1 R_1 s + C_1 R_4 s + C_L L_L R_4 g_m s^2 + C_L L_L s^2 + 2 L_L g_m s + R_4 g_m + 1}$$

10.359 INVALID-ORDER-359 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s}, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_1 R_1 s + 1)(C_L L_L s^2 + C_L R_L s + 1)}{2C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 R_4 g_m s^2 + 2C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + 2C_1 R_1 g_m s + C_1 s + 2C_L L_L g_m s^2 + C_L R_4 g_m s + 2C_L R_L g_m}$$

$$10.360 \quad \text{INVALID-ORDER-360} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L R_L s (R_4 g_m - 1) (C_1 R_1 s + 1)}{C_1 C_L L_L R_1 R_4 R_L g_m s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_4 R_L s^3 + C_1 L_L R_1 R_4 g_m s^2 + 2 C_1 L_L R_1 R_L g_m s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_L s^2 + C_1 R_1 R_4 R_L g_m s + C_1 R_1 R_L s}$$

$$10.361 \quad \text{INVALID-ORDER-361} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{(R_4 g_m - 1) (C_1 R_1 s + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_L L_L R_1 R_4 g_m s^3 + 2 C_1 C_L L_L R_1 R_L g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + C_1 C_L L_L R_L s^3 + 2 C_1 L_L R_1 g_m s^2 + C_1 L_L s^2 + C_1 R_1 R_4 g_m s + 2 C_1 R_1 R_L g_m s + C_1 R_1 s + C_1 R_4 s}$$

$$10.362 \quad \text{INVALID-ORDER-362} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s}, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L (R_4 g_m - 1) (C_1 R_1 s + 1) (C_L L_L s^2 + L_L s + R_L)}{C_1 C_L L_L R_1 R_4 g_m s^3 + 2 C_1 C_L L_L R_1 R_L g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + C_1 C_L L_L R_L s^3 + C_1 C_L R_1 R_4 R_L g_m s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_4 R_L s^2 + C_1 R_1 R_4 g_m s + 2 C_1 R_1 R_L g_m s + C_1 R_1 s + C_1 R_4 s}$$

$$10.363 \quad \text{INVALID-ORDER-363} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_L s} \right)$$

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

$$10.364 \quad \text{INVALID-ORDER-364} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_L}{C_L R_L s + 1} \right)$$

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

10.365 INVALID-ORDER-365 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_L + \frac{1}{C_L s} \right)$

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

10.366 INVALID-ORDER-366 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 R_1 s + 1)(C_L L_L s^2 + 1)}{s(2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + 2C_4 C_L L_L g_m s^2 + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

10.367 INVALID-ORDER-367 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L s (C_4 s - g_m)(C_1 R_1 s + 1)}{C_1 C_4 C_L L_L R_1 s^4 + 2C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_1 s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 R_1 g_m s + C_1 s + C_4 C_L L_L s^3 + 2C_4 L_L g_m s^2 + C_4 s + C_L L_L g_m s^2 + g_m}$$

10.368 INVALID-ORDER-368 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 R_1 s + 1)(C_L L_L s^2 + C_L R_L s + 1)}{s(2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + 2C_4 C_L L_L g_m s^2 + 2C_4 R_L g_m s + C_4 s)}$$

10.369 INVALID-ORDER-369 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{L_L R_L s (C_4 s - g_m)(C_1 R_1 s + 1)}{C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 L_L R_1 R_L g_m s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_L R_1 R_L g_m s^3 + C_1 C_L L_L R_L s^3 + C_1 L_L R_1 g_m s^2 + C_1 L_L s^2 + C_1 R_1 R_L s}$$

10.370 INVALID-ORDER-370 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 R_1 s + 1)(C_L L_L R_L s^2 + L_L s + R_L)}{2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + 2C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L R_L g_m s^2 + C_1 R_1 R_L s}$$

10.371 INVALID-ORDER-371 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{R_L (C_4 s - g_m) (C_1 R_1 s + 1) (C_L s + 1)}{2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L}$$

10.372 INVALID-ORDER-372 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 R_1 s + 1)(C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L R_1 R_4 s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + 2C_1 R_1 g_m s + C_1 s + C_4 C_L R_4 s^2 + 2C_4 R_4 g_m s + C_L R_4 g_m s + C_L s + 2g_m}$$

10.373 INVALID-ORDER-373 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{R_L (C_1 R_1 s + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L R_1 R_4 R_L s^3 + 2 C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_L R_1 R_4 R_L g_m s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_4 R_L s^2 + C_1 R_1 R_4 g_m s + 2 C_1 R_1 R_L g_m s + C_1 R_1 R_4}$$

10.374 INVALID-ORDER-374 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 R_1 s + 1)(C_L R_L s + 1)(C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + C_1 C_L R_1 R_4 g_m s^2 + 2C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_4 g_m s + C_1 C_L R_4}.$$

10.375 INVALID-ORDER-375 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_{4s}}, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 R_1 s + 1)(C_L L_L s^2 + 1)(C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + 2C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s + 1}$$

10.376 INVALID-ORDER-376 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_{4s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L s (C_1 R_1 s + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_L R_1 R_4 g_m s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_L R_1 R_4 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 L_L R_1 g_m s^2 + C_1 L_L s^2 + C_1 R_1 R_4}$$

10.377 INVALID-ORDER-377 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_LR_1R_4g_ms^4 + C_1C_4C_LL_LR_4s^4 + 2C_1C_4C_LR_1R_4R_Lg_ms^3 + C_1C_4C_LR_1R_4s^3 + C_1C_4C_LR_4R_Ls^3 + 2C_1C_4R_1R_4g_ms^2 + C_1C_4R_4s^2 + 2C_1C_LL_LR_1g_ms^3 + C_1C_LL$$

10.378 INVALID-ORDER-378 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + 2 C_1 C_4 L_L R_1 R_4 R_L q_m s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 L_L R_4 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_4 R_L q_m s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_4 R_L s^3}{C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + 2 C_1 C_4 L_L R_1 R_4 R_L q_m s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 L_L R_4 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_L R_1 R_4 R_L q_m s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_4 R_L s^3}$$

10.379 INVALID-ORDER-379 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_LR_1R_4R_Lg_ms^4 + C_1C_4C_LL_LR_1R_4s^4 + C_1C_4C_LL_LR_4R_Ls^4 + 2C_1C_4LLR_1R_4g_ms^3 + C_1C_4LLR_4s^3 + 2C_1C_4R_1R_4R_Lg_ms^2 + C_1C_4R_1R_4s^2 + C_1C_4R_4R_Ls^2 + C_1C_4R_4s^2 + C_1C_4R_Ls^2 + C_1C_4s^2}{2C_1C_4C_LL_LR_1R_4R_Lg_ms^4 + C_1C_4C_LL_LR_1R_4s^4 + C_1C_4C_LL_LR_4R_Ls^4 + 2C_1C_4LLR_1R_4g_ms^3 + C_1C_4LLR_4s^3 + 2C_1C_4R_1R_4R_Lg_ms^2 + C_1C_4R_1R_4s^2 + C_1C_4R_4R_Ls^2 + C_1C_4R_4s^2 + C_1C_4R_Ls^2 + C_1C_4s^2}.$$

10.380 INVALID-ORDER-380 $Z(s) = \left(\infty, \infty, \infty, \infty, R_4 + \frac{1}{C_4s}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_L L_L R_1 R_4 R_L g_m s^4 + C_1C_4C_L L_L R_1 R_4 s^4 + C_1C_4C_L L_L R_4 R_L s^4 + C_1C_4C_L R_1 R_4 R_L s^3 + 2C_1C_4R_1 R_4 R_L g_m s^2 + C_1C_4R_1 R_4 s^2 + C_1C_4R_4 R_L s^2 + C_1C_L L_L R_1 R_4 g_m s}{2C_1C_4C_L L_L R_1 R_4 R_L g_m s^4 + C_1C_4C_L L_L R_1 R_4 s^4 + C_1C_4C_L L_L R_4 R_L s^4 + C_1C_4C_L R_1 R_4 R_L s^3 + 2C_1C_4R_1 R_4 R_L g_m s^2 + C_1C_4R_1 R_4 s^2 + C_1C_4R_4 R_L s^2 + C_1C_L L_L R_1 R_4 g_m s}$$

10.381 INVALID-ORDER-381 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + \frac{1}{C_{4s}}, \frac{1}{C_{Ls}} \right)$

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

$$10.382 \quad \text{INVALID-ORDER-382} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + C_1 C_L s^2}$$

$$10.383 \quad \text{INVALID-ORDER-383} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, R_L + \frac{1}{C_L s} \right)$$

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

$$10.384 \quad \text{INVALID-ORDER-384} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_L L_L s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + 2C_4 C_L L_L g_m s^2 + C_4 C_L L_L s^2 + C_4 C_L s^2)}$$

$$10.385 \quad \text{INVALID-ORDER-385} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L s (C_1 R_1 s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + 2C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + C_1 C_L s^2}$$

$$10.386 \quad \text{INVALID-ORDER-386} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + C_1 C_L s^2)}$$

$$10.387 \quad \text{INVALID-ORDER-387} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_L R_1 R_4 g_m s^3 + 2C_1 C_4 L_L R_1 R_L g_m s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + C_1 C_L s^2}$$

$$10.388 \quad \text{INVALID-ORDER-388} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{L_Ls}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L R_L s^4 + 2C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2C_1 C_4 R_1 R_L g_m s + C_1 C_4 R_1 s + C_4 L_4 g_m s^2 + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.389 \quad \text{INVALID-ORDER-389} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + \frac{1}{C_4s}, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2C_1 C_4 R_1 R_L g_m s + C_1 C_4 R_1 s + C_4 L_4 g_m s^2 + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.390 \quad \text{INVALID-ORDER-390} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4 L_4 s^2 + 1}, R_L \right)$$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.391 \quad \text{INVALID-ORDER-391} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4 L_4 s^2 + 1}, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + C_4 C_L L_4 g_m s^2 + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

$$10.392 \quad \text{INVALID-ORDER-392} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4s}{C_4 L_4 s^2 + 1}, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_L s^2 + C_1 C_L R_1 s + C_4 L_4 g_m s^2 + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.393 \quad \text{INVALID-ORDER-393} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)(C_L R_L s + 1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{s(C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + C_4 C_L L_4 g_m s^2 + 2C_4 C_L R_1 g_m s + C_4 C_L s + g_m)}$$

$$10.394 \quad \text{INVALID-ORDER-394} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)(C_L L_L s^2 + 1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{s(C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + C_4 C_L L_4 g_m s^2 + 2C_4 C_L R_1 g_m s + C_4 C_L s + g_m)}$$

$$10.395 \quad \text{INVALID-ORDER-395} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L s (C_1 R_1 s + 1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_1 s^2 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 g_m s + C_1 C_L s + g_m}$$

$$10.396 \quad \text{INVALID-ORDER-396} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)(C_L L_L s^2 + C_L R_L s + 1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{s(C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + g_m)}$$

$$10.397 \quad \text{INVALID-ORDER-397} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_L s^3 + 2C_1 C_4 L_L R_1 R_L g_m s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 R_1 R_L g_m s + C_1 C_4 s + g_m}$$

$$10.398 \quad \text{INVALID-ORDER-398} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + 2 C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2 C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + 2 C_1 C_4 L_L R_L g_m s^2 + C_1 C_4 L_L s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

$$10.399 \quad \text{INVALID-ORDER-399} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2 C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + 2 C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + 2 C_1 C_4 L_L R_L g_m s^2 + C_1 C_4 L_L s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

$$10.400 \quad \text{INVALID-ORDER-400} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_L \right)$$

$$H(s) = - \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 L_4 R_1 g_m s^2 + C_1 L_4 s^2 + 2 C_1 R_1 R_L g_m s + C_1 R_1 s + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

$$10.401 \quad \text{INVALID-ORDER-401} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{(C_1 R_1 s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_4 R_1 s^4 + 2 C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_4 R_1 g_m s^3 + C_1 C_L L_4 s^3 + C_1 C_L R_1 s^2 + 2 C_1 R_1 g_m s + C_1 s + C_4 C_L L_4 s^3 + 2 C_4 L_4 g_m s^2 + C_L L_4 g_m s^2 + C_L s + 2 g_m}$$

$$10.402 \quad \text{INVALID-ORDER-402} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = - \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_4 R_1 R_L s^4 + 2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 R_1 R_L g_m s^3 + C_1 C_L L_4 R_L s^3 + C_1 C_L R_1 R_L s^2 + C_1 L_4 R_1 g_m s^2 + C_1 L_4 s^2 + 2 C_1 R_1 R_L g_m s + C_1 R_1 s + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

10.403 INVALID-ORDER-403 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, R_L + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{(C_1R_1s+1)(C_LR_Ls+1)(C_4L_4s^2-L_4g_ms+1)}{2C_1C_4C_LL_4R_1R_Lg_ms^4+C_1C_4C_LL_4R_1s^4+C_1C_4C_LL_4R_Ls^4+2C_1C_4L_4R_1g_ms^3+C_1C_4L_4s^3+C_1C_LL_4R_1g_ms^3+C_1C_LL_4s^3+2C_1C_LR_1R_Lg_ms^2+C_1C_LR_1s^2+C_1C_L}$$

10.404 INVALID-ORDER-404 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{(C_1R_1s+1)(C_LL_Ls^2+1)(C_4L_4s^2-L_4g_ms+1)}{2C_1C_4C_LL_4L_LR_1g_ms^5+C_1C_4C_LL_4L_Ls^5+C_1C_4C_LL_4R_1s^4+2C_1C_4L_4R_1g_ms^3+C_1C_4L_4s^3+C_1C_LL_4R_1g_ms^3+C_1C_LL_4s^3+2C_1C_LL_LR_1g_ms^3+C_1C_LL_Ls^3+C_1C_L}$$

10.405 INVALID-ORDER-405 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = -\frac{L_Ls(C_1R_1s+1)(C_4L_4s^2-L_4g_ms+1)}{C_1C_4C_LL_4L_LR_1s^5+2C_1C_4L_4L_LR_1g_ms^4+C_1C_4L_4L_Ls^4+C_1C_4L_4R_1s^3+C_1C_LL_4L_LR_1g_ms^4+C_1C_LL_4L_Ls^4+C_1C_LL_LR_1s^3+C_1L_4R_1g_ms^2+C_1L_4s^2+2C_1L_LR_1g_m}$$

10.406 INVALID-ORDER-406 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{L_Ls(C_1R_1s+1)(C_4L_4s^2-L_4g_ms+1)}{2C_1C_4C_LL_4L_LR_1g_ms^5+C_1C_4C_LL_4L_Ls^5+2C_1C_4C_LL_4R_1R_Lg_ms^4+C_1C_4C_LL_4R_1s^4+C_1C_4C_LL_4R_Ls^4+2C_1C_4L_4R_1g_ms^3+C_1C_4L_4s^3+C_1C_LL_4R_1g_ms^3+C_1C_LL_L}$$

10.407 INVALID-ORDER-407 $Z(s) = \left(\infty, \infty, \infty, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = -\frac{L_Ls(C_1R_1s+1)(C_4L_4s^2-L_4g_ms+1)}{C_1C_4C_LL_4L_LR_1R_Ls^5+2C_1C_4L_4L_LR_1R_Lg_ms^4+C_1C_4L_4L_LR_1s^4+C_1C_4L_4L_LR_Ls^4+C_1C_4L_4R_1R_Ls^3+C_1C_LL_4L_LR_1R_Lg_ms^4+C_1C_LL_4L_LR_Ls^4+C_1C_LL_LR_1R_Ls^3}$$

$$10.408 \quad \text{INVALID-ORDER-408} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 L_L R_1 g_m s^4}{2C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 L_L R_1 g_m s^4}$$

$$10.409 \quad \text{INVALID-ORDER-409} \quad Z(s) = \left(\infty, \infty, \infty, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 L_L R_1 g_m s^4}{2C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 L_L R_1 g_m s^4}$$

$$10.410 \quad \text{INVALID-ORDER-410} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, R_L \right)$$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 + C_4 R_4 g_m s + 2C_4 R_L g_m s + C_4}$$

$$10.411 \quad \text{INVALID-ORDER-411} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L R_1 g_m s + C_1 C_L s + C_4 C_L L_4 g_m s^2 + C_4 C_L R_4 g_m s + C_4)}$$

$$10.412 \quad \text{INVALID-ORDER-412} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2C_1 C_4 R_1 R_L s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 + C_4 R_4 g_m s + 2C_4 R_L g_m s + C_4}$$

$$10.413 \quad \text{INVALID-ORDER-413} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{(C_1R_1s + 1)(C_LR_Ls + 1)(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_4R_1g_ms^3 + C_1C_4C_LL_4s^3 + C_1C_4C_LR_1R_4g_ms^2 + 2C_1C_4C_LR_1R_Lg_ms^2 + C_1C_4C_LR_1s^2 + C_1C_4C_LR_4s^2 + C_1C_4C_LR_Ls^2 + 2C_1C_4R_1g_ms + C_1C_4s + C_1C_LR_1g_m)}$$

$$10.414 \quad \text{INVALID-ORDER-414} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, L_Ls + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{(C_1R_1s + 1)(C_LL_Ls^2 + 1)(C_4L_4g_ms^2 + C_4R_4g_ms - C_4s + g_m)}{s(C_1C_4C_LL_4R_1g_ms^3 + C_1C_4C_LL_4s^3 + 2C_1C_4C_LL_LR_1g_ms^3 + C_1C_4C_LL_Ls^3 + C_1C_4C_LR_1R_4g_ms^2 + C_1C_4C_LR_1s^2 + C_1C_4C_LR_4s^2 + 2C_1C_4R_1g_ms + C_1C_4s + C_1C_LR_1g_m)}$$

$$10.415 \quad \text{INVALID-ORDER-415} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} \right)$$

$$H(s) = \frac{L_Ls}{C_1C_4C_LL_4L_LR_1g_ms^5 + C_1C_4C_LL_4L_Ls^5 + C_1C_4C_LL_LR_1R_4g_ms^4 + C_1C_4C_LL_LR_1s^4 + C_1C_4C_LL_LR_4s^4 + C_1C_4L_4R_1g_ms^3 + C_1C_4L_4s^3 + 2C_1C_4L_LR_1g_ms^3 + C_1C_4L_Ls^3 +}$$

$$10.416 \quad \text{INVALID-ORDER-416} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, L_Ls + R_L + \frac{1}{C_Ls} \right)$$

$$H(s) = \frac{(C_1R_1s + 1)(C_LL_Ls^2 + C_LR_Ls + 1)(C_4L_4g_ms^2 - C_4R_4g_ms + C_4s - g_m)}{s(C_1C_4C_LL_4R_1g_ms^3 + C_1C_4C_LL_4s^3 + 2C_1C_4C_LL_LR_1g_ms^3 + C_1C_4C_LL_Ls^3 + C_1C_4C_LR_1R_4g_ms^2 + 2C_1C_4C_LR_1R_Lg_ms^2 + C_1C_4C_LR_1s^2 + C_1C_4C_LR_4s^2 + C_1C_4C_LR_Ls^2 + 2C_1C_4R_1g_ms + C_1C_4s + C_1C_LR_1g_m)}$$

$$10.417 \quad \text{INVALID-ORDER-417} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4s + \frac{1}{R_4} + \frac{1}{L_4s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$$

$$H(s) = \frac{1}{C_1C_4C_LL_4L_LR_1R_Lg_ms^5 + C_1C_4C_LL_4L_LR_Ls^5 + C_1C_4C_LL_LR_1R_4R_Lg_ms^4 + C_1C_4C_LL_LR_1R_Ls^4 + C_1C_4C_LL_LR_4R_Ls^4 + C_1C_4L_4L_LR_1g_ms^4 + C_1C_4L_4L_Ls^4 + C_1C_4L_4R_1g_ms^3 + C_1C_4L_4s^3 + 2C_1C_4L_LR_1g_ms^3 + C_1C_4L_Ls^3 +}$$

10.418 INVALID-ORDER-418 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 L_4 R_1 g_m s^3 +$$

10.419 INVALID-ORDER-419 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{1}{C_4 s + \frac{1}{R_4} + \frac{1}{L_4 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R$$

10.420 INVALID-ORDER-420 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, R_L \right)$

$$H(s) = -\frac{R_L (C_1 R_1 s + 1) (C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{2C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 L_4 R_1 R_4 g_m s^2 + 2C_1 L_4 R_1 R_L g_m s^2 + C_1 L_4 R_1 s^2 + C_1 L_4 R_4 s^2 + C_1 L_4 R_L s^2 + 2C_1 R_1 R_4 R_L g_m s + C_1 R_1 R_4}$$

10.421 INVALID-ORDER-421 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 R_1 s + 1)(C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_4 R_1 R_4 g_m s^3 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_4 R_4 s^3 + C_1 C_L R_1 R_4 s^2 + 2C_1 L_4 R_1 g_m s^2 + C_1 L_4 s^2 + 2C_1 R_1 R_4 g_m}$$

10.422 INVALID-ORDER-422 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{1}{C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_L L_4 R_1 R_4 R_L g_m s^3 + C_1 C_L L_4 R_1 R_L s^3 + C_1 C_L L_4 R_4 R_L s^3 + C_1 C_L R_1 R_4 R_L s^2}$$

10.423 INVALID-ORDER-423 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_4 R_1 R_4 g_m s^3 + 2C_1 C_L L_4 R_1 R_L g_m s^3 + C_1 C_L L_4 R_1 s^3}{2C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_4 R_1 R_4 g_m s^3 + 2C_1 C_L L_4 R_1 R_L g_m s^3 + C_1 C_L L_4 R_1 s^3}$$

10.424 INVALID-ORDER-424 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_L L_4 L_L R_1 g_m s^4 + C_1 C_L L_4 L_L s^4 + C_1 C_L L_4 R_1 R_4 g_m s^3}{2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_L L_4 L_L R_1 g_m s^4 + C_1 C_L L_4 L_L s^4 + C_1 C_L L_4 R_1 R_4 g_m s^3}$$

10.425 INVALID-ORDER-425 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 R_4 g_m s^4 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 L_L R_4 s^4 + C_1 C_L L_L R_1 R_4 s^3}{C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_4 L_L R_1 R_4 g_m s^4 + C_1 C_L L_4 L_L R_1 s^4 + C_1 C_L L_4 L_L R_4 s^4 + C_1 C_L L_L R_1 R_4 s^3}$$

10.426 INVALID-ORDER-426 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_L L_4 L_L R_1 R_4 g_m s^4}{2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_L L_4 L_L R_1 R_4 g_m s^4}$$

10.427 INVALID-ORDER-427 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 L_4 L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 L_L R_1 R_4 R_L g_m s^4 + C_1 C_L L_4 L_L R_1 R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 L_4 L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_4 L_L R_1 R_4 R_L g_m s^4 + C_1 C_L L_4 L_L R_1 R_L s^4}$$

10.428 INVALID-ORDER-428 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_L L_4L_L R_1R_4R_L g_m s^5 + C_1C_4C_L L_4L_L R_1R_4 s^5 + C_1C_4C_L L_4L_L R_4R_L s^5 + 2C_1C_4L_4L_L R_1R_4g_m s^4 + C_1C_4L_4L_L R_4 s^4 + 2C_1C_4L_4R_1R_4R_L g_m s^3 + C_1C_4L_4R_1R_4 s^3 +$$

$$\text{10.429 INVALID-ORDER-429 } Z(s) = \left(\infty, \infty, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1} + R_4, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{2C_1C_4C_LL_4L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_4L_LR_1R_4s^5 + C_1C_4C_LL_4L_LR_4R_Ls^5 + C_1C_4C_LL_4R_1R_4R_Ls^4 + 2C_1C_4L_4R_1R_4R_Lg_ms^3 + C_1C_4L_4R_1R_4s^3 + C_1C_4L_4R_4R_Ls^3 +$$

10.430 INVALID-ORDER-430 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, R_L \right)$

$$H(s) = \frac{R_L (C_1 R_1 s + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 L_4 R_1 g_m s^2 + C_1 L_4 s^2 + C_1 R_1 R_4 g_m s + 2C_1 R_1 R_L g_m s + C_1 R_1 s + C_1 R_4 s + C_1}$$

10.431 INVALID-ORDER-431 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 R_1 s + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2 C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_4 R_1 g_m s^3 + C_1 C_L L_4 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2}$$

10.432 INVALID-ORDER-432 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 R_1 R_4 R_L g_m s^2 + C_1 C_L L_4 R_1 R_L s^2 + C_1 C_L L_4 R_4 R_L s^2 + C_1 C_L L_4 R_1 s^2 + C_1 C_L L_4 R_4 s^2 + C_1 C_L L_4 R_L s^2 + C_1 C_L L_4 s^2 + C_1 C_L R_1 R_4 R_L g_m s + C_1 C_L R_1 R_L s + C_1 C_L R_4 R_L s + C_1 C_L R_1 s + C_1 C_L R_4 s + C_1 C_L R_L s + C_1 C_L s + C_1 R_1 R_4 R_L g_m + C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_1 + C_1 R_4 + C_1 R_L + C_1}{C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_4 R_1 R_4 R_L g_m s^2 + C_1 C_L L_4 R_1 R_L s^2 + C_1 C_L L_4 R_4 R_L s^2 + C_1 C_L L_4 R_1 s^2 + C_1 C_L L_4 R_4 s^2 + C_1 C_L L_4 R_L s^2 + C_1 C_L L_4 s^2 + C_1 C_L R_1 R_4 R_L g_m s + C_1 C_L R_1 R_L s + C_1 C_L R_4 R_L s + C_1 C_L R_1 s + C_1 C_L R_4 s + C_1 C_L R_L s + C_1 C_L s + C_1 R_1 R_4 R_L g_m + C_1 R_1 R_L + C_1 R_4 R_L + C_1 R_1 + C_1 R_4 + C_1 R_L + C_1}$$

$$\mathbf{10.433 \quad INVALID-ORDER-433} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)}{C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_4 R_1 g_m s^3 + C_1 C_L L_4 s^3 +}$$

$$\mathbf{10.434 \quad INVALID-ORDER-434} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)}{2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_4 R_1 g_m s^3 + C_1 C_L L_4 s^3 +}$$

$$\mathbf{10.435 \quad INVALID-ORDER-435} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_4 s^3 +}$$

$$\mathbf{10.436 \quad INVALID-ORDER-436} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)}{2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 +}$$

$$\mathbf{10.437 \quad INVALID-ORDER-437} \quad Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{(C_1 R_1 s + 1)}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + 2C_1 C_4 L_4 L_L R_1 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_L L_4 s^4 +}$$

10.438 INVALID-ORDER-438 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2 C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 R_1 s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2 C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 g_m s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 R_1 s^4}$$

10.439 INVALID-ORDER-439 $Z(s) = \left(\infty, \infty, \infty, \infty, \frac{R_4 \left(L_4 s + \frac{1}{C_4 s} \right)}{L_4 s + R_4 + \frac{1}{C_4 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 +$$

10.440 INVALID-ORDER-440 $Z(s) = (R_1, R_2, \infty, \infty, \infty, R_L)$

$$H(s) = -\frac{R_L (C_1 R_1 s + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s - C_4 R_4 g_m s)}{C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + 2C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L s^2 + C_1 R_1 R_4 g_m s + 2C_1 R_1}$$

10.441 INVALID-ORDER-441 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 R_1 s + 1)(-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4}{C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + C_1 C_L R_1 R_4 g_m s^2 + C_1}$$

10.442 INVALID-ORDER-442 $Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 +$$

$$10.443 \quad \text{INVALID-ORDER-443} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L s^3}{C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L s^3}$$

$$10.444 \quad \text{INVALID-ORDER-444} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3}{2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3}$$

$$10.445 \quad \text{INVALID-ORDER-445} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3}$$

$$10.446 \quad \text{INVALID-ORDER-446} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3}{2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3}$$

$$10.447 \quad \text{INVALID-ORDER-447} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + 2C_1 C_4 L_4 L_L R_1 R_L g_m s^4 + C_1 C_4 L_4 L_L R_4 g_m s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_4 L_4 L_L R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + 2C_1 C_4 L_4 L_L R_1 R_L g_m s^4 + C_1 C_4 L_4 L_L R_4 g_m s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_4 L_4 L_L R_L s^4}$$

$$10.448 \quad \text{INVALID-ORDER-448} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2 C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2 C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4}$$

$$10.449 \quad \text{INVALID-ORDER-449} \quad Z(s) = \left(R_1, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4}{C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4}$$

$$10.450 \quad \text{INVALID-ORDER-450} \quad Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_4 s^2 + 2 C_1 L_1 g_m s^2 + C_1 s + C_L R_4 g_m s + C_L s + 2 g_m}$$

$$10.451 \quad \text{INVALID-ORDER-451} \quad Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 R_4 s + C_1 R_L s + C_L R_4 R_L g_m s + C_L R_L s + R_4 g_m + 2 R_L g_m + 1}$$

$$10.452 \quad \text{INVALID-ORDER-452} \quad Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{C_1 C_L L_1 R_4 g_m s^3 + 2 C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + 2 C_1 L_1 g_m s^2 + C_1 s + C_L R_4 g_m s + 2 C_L R_L g_m s + C_L s + 2 g_m}$$

10.453 INVALID-ORDER-453 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{2C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L L_L s^3 + C_1 C_L R_4 s^2 + 2C_1 L_1 g_m s^2 + C_1 s + 2C_L L_L g_m s^2 + C_L R_4 g_m s + C_L s + 2g_m}$$

10.454 INVALID-ORDER-454 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 L_L R_4 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_4 s^3 + 2C_1 L_1 L_L g_m s^3 + C_1 L_1 R_4 g_m s^2 + C_1 L_1 s^2 + C_1 L_L s^2 + C_1 R_4 s + C_L L_L R_4 g_m s^2 + C_L L_L s^2 + 2L_L g_m s + R_4 g_m + 1}$$

10.455 INVALID-ORDER-455 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L L_L s^3 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + 2C_1 L_1 g_m s^2 + C_1 s + 2C_L L_L g_m s^2 + C_L R_4 g_m s + 2C_L R_L g_m s + 1}$$

10.456 INVALID-ORDER-456 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_L R_L s (R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 L_L R_4 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_4 R_L s^3 + C_1 L_1 L_L R_4 g_m s^3 + 2C_1 L_1 L_L R_L g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 R_L g_m s^2 + C_1 L_1 R_L s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_L s^2 + 1}$$

10.457 INVALID-ORDER-457 $Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{(R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_L L_1 L_L R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_L g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_4 s^3 + C_1 C_L L_L R_L s^3 + 2C_1 L_1 L_L g_m s^3 + C_1 L_1 R_4 g_m s^2 + 2C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_L s^2 + C_1 R_L s^2 + 1}$$

$$10.458 \quad \text{INVALID-ORDER-458} \quad Z(s) = \left(R_1, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L (R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{C_1 C_L L_1 L_L R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_L g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_L R_4 s^3 + C_1 C_L L_L R_L s^3 + C_1 C_L R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2C_1 L_1 R_4 s^2 + 2C_1 L_1 R_L g_m s^2 + 2C_1 L_1 R_L s^2 + C_1 L_1 s^2 + C_1 s + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.459 \quad \text{INVALID-ORDER-459} \quad Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = -\frac{R_L (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.460 \quad \text{INVALID-ORDER-460} \quad Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{(C_4 s - g_m) (C_1 L_1 s^2 + 1)}{s (C_1 C_4 C_L L_1 s^3 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

$$10.461 \quad \text{INVALID-ORDER-461} \quad Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = -\frac{R_L (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 R_L s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + C_4 C_L R_L s^2 + 2C_4 R_L g_m s + C_4 s + C_L R_L g_m s + g_m}$$

$$10.462 \quad \text{INVALID-ORDER-462} \quad Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{(C_4 s - g_m) (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{s (2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + 2C_4 C_L R_L g_m s + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

10.463 INVALID-ORDER-463 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 L_1 s^2 + 1)(C_L L_L s^2 + 1)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_L s^3 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + 2C_4 C_L L_L g_m s^2 + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

10.464 INVALID-ORDER-464 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L s(C_4 s - g_m)(C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_L s^5 + 2C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 s^3 + C_1 C_4 L_L s^3 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_L s^3 + C_1 L_1 g_m s^2 + C_1 s + C_4 C_L L_L s^3 + 2C_4 L_L g_m s^2 + C_4 s + C_L L_L g_m s^2 + g_m}$$

10.465 INVALID-ORDER-465 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 L_1 s^2 + 1)(C_L L_L s^2 + C_L R_L s + 1)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + 2C_4 C_L L_L g_m s^2 + 2C_4 R_L g_m s + C_L g_m)}$$

10.466 INVALID-ORDER-466 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{L_L R_L s(C_4 s - g_m)(C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_L R_L s^5 + 2C_1 C_4 L_1 L_L R_L g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_L L_1 L_L R_L g_m s^4 + C_1 C_L L_L R_L s^3 + C_1 L_1 L_L g_m s^3 + C_1 L_1 R_L g_m s^2 + C_1 L_1 R_L s + C_L g_m}$$

10.467 INVALID-ORDER-467 $Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 L_1 s^2 + 1)(C_L L_L R_L s^2 + L_L s + R_L)}{2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_L R_L s^4 + 2C_1 C_4 L_1 L_L g_m s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_L s^2 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_L R_L s^3 + C_1 L_1 L_L g_m s^3 + C_1 L_1 R_L g_m s^2 + C_1 L_1 R_L s + C_L g_m}$$

$$10.468 \quad \text{INVALID-ORDER-468} \quad Z(s) = \left(R_1, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{R_L (C_4 s - g_m) (C_1 L_1 s^2 + 1) (C_L}{2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_L R_L s^4 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_L s^2 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 R_L g_m s^3 +$$

$$10.469 \quad \text{INVALID-ORDER-469} \quad Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = - \frac{R_L (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{2 C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 R_4 s + C_1 R_L s + 2 C_4 R_4 R_L g_m s + C_4 R_4 s + R_4 g_m + 2 R_L g_m + 1}$$

$$10.470 \quad \text{INVALID-ORDER-470} \quad Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 R_4 s^4 + 2 C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 R_4 s^2 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_4 s^2 + 2 C_1 L_1 g_m s^2 + C_1 s + C_4 C_L R_4 s^2 + 2 C_4 R_4 g_m s + C_L R_4 g_m s + C_L s + 2 g_m}$$

$$10.471 \quad \text{INVALID-ORDER-471} \quad Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = - \frac{R_L (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 R_4 R_L s^4 + 2 C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 R_4 s + C_1 R_L s + 2 C_4 R_4 R_L g_m s + C_4 R_4 s + R_4 g_m + 2 R_L g_m + 1}$$

$$10.472 \quad \text{INVALID-ORDER-472} \quad Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_4 R_4 s - R_4 g_m + 1)}{2 C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L R_4 R_L s^3 + 2 C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 R_4 s^2 + C_1 C_L L_1 R_4 g_m s^3 + 2 C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_4 s^2 + C_1 C_L s^2 + C_1 R_4 s + C_1 R_L s + 2 C_4 R_4 R_L g_m s + C_4 R_4 s + R_4 g_m + 2 R_L g_m + 1}$$

10.473 INVALID-ORDER-473 $Z(s) = \left(R_1, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{(C_1 L_1 s^2 + 1)(C_L L_L s^2 + 1)(C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 s^4 + 2C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 R_4 s^2 + 2C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L L_L s^3 + C_1 C_L}$$

10.474 INVALID-ORDER-474 $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L s (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_L R_4 g_m s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_L L_1 L_L R_4 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_4 s^3 + 2 C_1 L_1 L_L g_m s^3 + C_1 L_1 R_4 g_m s^2 + C_1 L_1 R_4 s + C_1 L_1}$$

10.475 INVALID-ORDER-475 $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_LR_4g_ms^5 + 2C_1C_4C_LL_1R_4R_Lg_ms^4 + C_1C_4C_LL_1R_4s^4 + C_1C_4C_LL_LR_4s^4 + C_1C_4C_LR_4R_Ls^3 + 2C_1C_4L_1R_4g_ms^3 + C_1C_4R_4s^2 + 2C_1C_LL_1L_Lg_ms^4 + C_1C_LL_L}{2C_1C_4C_LL_1L_LR_4g_ms^5 + 2C_1C_4C_LL_1R_4R_Lg_ms^4 + C_1C_4C_LL_1R_4s^4 + C_1C_4C_LL_LR_4s^4 + C_1C_4C_LR_4R_Ls^3 + 2C_1C_4L_1R_4g_ms^3 + C_1C_4R_4s^2 + 2C_1C_LL_1L_Lg_ms^4 + C_1C_LL_L}$$

10.476 INVALID-ORDER-476 $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + 2C_1 C_4 L_1 L_L R_4 R_L g_m s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_L R_4 R_L s^3 + C_1 C_L L_1 L_L R_4 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_4 R_L s^3}{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + 2C_1 C_4 L_1 L_L R_4 R_L g_m s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_L R_4 R_L s^3 + C_1 C_L L_1 L_L R_4 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_4 R_L s^3}$$

10.477 INVALID-ORDER-477 $Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_L R_4 s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + 2C_1 C_4 L_1 L_L R_4 g_m s^4 + 2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4}{2C_1 C_4 C_L L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_L R_4 s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + 2C_1 C_4 L_1 L_L R_4 g_m s^4 + 2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4}$$

$$10.478 \quad \text{INVALID-ORDER-478} \quad Z(s) = \left(R_1, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + 2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_L L_1 L_L R_4 g_m s^4}{2C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + 2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_4 R_L s^2 + C_1 C_L L_1 L_L R_4 g_m s^4}$$

$$10.479 \quad \text{INVALID-ORDER-479} \quad Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + C_4 R_4 g_m s + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.480 \quad \text{INVALID-ORDER-480} \quad Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L R_4 g_m s + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

$$10.481 \quad \text{INVALID-ORDER-481} \quad Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_L s^3}$$

$$10.482 \quad \text{INVALID-ORDER-482} \quad Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L R_4 g_m s + 2C_4 C_L s)}$$

10.483 INVALID-ORDER-483 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)(C_L L_L s^2 + 1)(C_4 R_4 g_m s - C_4 s + g_m)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + 2C_4 C_L L_L g_m s^2 + C_4 C_L s + 2C_4 L_1 g_m s + C_4)}.$$

10.484 INVALID-ORDER-484 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (C_1 L_1 s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_4 s^2 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_L s^3}$$

10.485 INVALID-ORDER-485 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)(C_L L_L s^2 + C_L R_L s + 1)(C_4 R_4 g_m s - C_4 s + g_m)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m)}$$

10.486 INVALID-ORDER-486 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 g_m s^4 + 2 C_1 C_4 L_1 L_L R_L g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_L s^3 +$$

10.487 INVALID-ORDER-487 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{(C_1 L_1 s^6 + C_2 L_1 s^5 + C_3 L_1 s^4 + C_4 L_1 s^3 + C_5 L_1 s^2 + C_6 L_1 s + C_7)}{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L R_L s^4 + 2C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_1 s^2 + C_1 C_4 L_1 s + C_1 C_4}.$$

10.488 INVALID-ORDER-488 $Z(s) = \left(R_1, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L R_4 R_L s^3 +$$

10.489 INVALID-ORDER-489 $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_1 L_4 q_m s^4 + 2 C_1 C_4 L_1 R_L q_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_L s^2 + C_1 L_1 q_m s^2 + C_1 s + C_4 L_4 q_m s^2 + 2 C_4 R_L q_m s + C_4 s + g_m}$$

10.490 INVALID-ORDER-490 $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L L_4 g_m s^2 + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

10.491 INVALID-ORDER-491 $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_L s^2}$$

10.492 INVALID-ORDER-492 $Z(s) = \left(R_1, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)(C_L R_L s + 1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L L_4 g_m s^2 + 2C_4 C_L}$$

$$10.493 \quad \text{INVALID-ORDER-493} \quad Z(s) = \left(R_1, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + 2 C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L L_4 g_m s^2 + 2 C_4 C_L s)}$$

$$10.494 \quad \text{INVALID-ORDER-494} \quad Z(s) = \left(R_1, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L s (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 L_L s^3 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_L s^3}$$

$$10.495 \quad \text{INVALID-ORDER-495} \quad Z(s) = \left(R_1, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + 2 C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_L s^2 + 2 C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_L s + C_4 C_L L_4 g_m s^2 + 2 C_4 C_L s)}$$

$$10.496 \quad \text{INVALID-ORDER-496} \quad Z(s) = \left(R_1, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_L g_m s^4 + 2 C_1 C_4 L_1 L_L R_L g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L R_L s + C_4 C_L L_4 g_m s^2 + 2 C_4 C_L s)}$$

$$10.497 \quad \text{INVALID-ORDER-497} \quad Z(s) = \left(R_1, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L R_L s + C_4 C_L L_4 g_m s^2 + 2 C_4 C_L s)}$$

$$10.498 \quad \text{INVALID-ORDER-498} \quad Z(s) = \left(R_1, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L L_1 L_4 R_L g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_4 s^2 + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L L_1 L_4 R_L g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_4 s^2 + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

$$10.499 \quad \text{INVALID-ORDER-499} \quad Z(s) = \left(R_1, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = - \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_4 s^2 + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

$$10.500 \quad \text{INVALID-ORDER-500} \quad Z(s) = \left(R_1, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 s^5 + 2 C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + C_1 C_L L_1 s^3 + C_1 C_L L_4 s^3 + 2 C_1 L_1 g_m s^2 + C_1 s + C_4 C_L L_4 s^3 + 2 C_4 L_4 g_m s^2 + C_L L_4 g_m s^2 + C_L s + 2 g_m}$$

$$10.501 \quad \text{INVALID-ORDER-501} \quad Z(s) = \left(R_1, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = - \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_1 L_4 R_L g_m s^4 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + 2 C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_4 s^2 + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

$$10.502 \quad \text{INVALID-ORDER-502} \quad Z(s) = \left(R_1, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_L s^4 + 2 C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + 2 C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L L_4 s^3 + C_1 C_L s^2 + C_1 L_1 L_4 g_m s^2 + C_1 L_1 s^2 + C_1 L_4 s^2 + C_1 R_L s + 2 C_4 L_4 R_L g_m s^2 + C_4 L_4 s^2 + L_4 g_m s + 2 R_L g_m + 1}$$

10.503 INVALID-ORDER-503 $Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 L_L s^5 + 2 C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + 2 C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 s^3 + C_1 C_L L_4 s^3 + C_1 C_L L_L s^3 + C_1 C_L L_L s^2 + C_1 C_L L_L s + C_1 C_L}$$

10.504 INVALID-ORDER-504 $Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = - \frac{L_L s (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_L L_1 L_4 L_L g_m s^5 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_4 L_L s^4 + C_1 L_1 L_4 g_m s^3 + 2 C_1 L_1 L_L g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 L_L s^2 + C_1 L_1 L_L s + C_1 L_1}$$

10.505 INVALID-ORDER-505 $Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_L s^4 + 2 C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + 2 C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 s^3 + C_1 C_L L_4 s^3 + C_1 C_L L_L s^3 + C_1 C_L L_L s^2 + C_1 C_L L_L s + C_1 C_L}$$

10.506 INVALID-ORDER-506 $Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 L_L R_L s^4 + C_1 C_L L_1 L_4 L_L R_L g_m s^5 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_4 L_L R_L s^4 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L R_L s^2 + C_1 C_L L_L R_L s + C_1 C_L}$$

10.507 INVALID-ORDER-507 $Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2 C_1 C_4 L_1 L_4 L_L g_m s^5 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_1 L_4 L_L R_L g_m s^5 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_4 L_L R_L s^4 + C_1 C_L L_L R_L s^3 + C_1 C_L L_L R_L s^2 + C_1 C_L L_L R_L s + C_1 C_L}$$

$$10.508 \quad \text{INVALID-ORDER-508} \quad Z(s) = \left(R_1, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{2C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_1 L_4 L_L g_m s^5 -$$

$$10.509 \quad \text{INVALID-ORDER-509} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + C_4 L_4 g_m s^2 + C_4 R_4 g_m s + 2C_4 R_L g_m s + C_4 s}$$

$$10.510 \quad \text{INVALID-ORDER-510} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L L_4 g_m s^2 + C_4 C_L R_4 s}$$

$$10.511 \quad \text{INVALID-ORDER-511} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 s + C_4 L_4 g_m s^2 + C_4 R_4 g_m s + 2C_4 R_L g_m s + C_4 s}$$

$$10.512 \quad \text{INVALID-ORDER-512} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L R_L s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L s + C_4 C_L L_4 g_m s^2 + C_4 C_L R_4 s}$$

$$10.513 \quad \text{INVALID-ORDER-513} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + 2 C_1 C_4 L_1 g_m s^2 + C_1 C_4 s + C_1 C_L L_1 g_m s)}$$

$$10.514 \quad \text{INVALID-ORDER-514} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_L s (C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L L_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}$$

$$10.515 \quad \text{INVALID-ORDER-515} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + 1) (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}$$

$$10.516 \quad \text{INVALID-ORDER-516} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_L s (C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_1 L_4 L_L g_m s^4 + C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}$$

$$10.517 \quad \text{INVALID-ORDER-517} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_L s (C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s + C_1 C_4 L_1 g_m s)}$$

$$10.518 \quad \text{INVALID-ORDER-518} \quad Z(s) = \left(R_1, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L$$

10.519 INVALID-ORDER-519 $Z(s) = (L_1 s, R_2, \infty, \infty, \infty, R_L)$

$$H(s) = -\frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{2C_1 C_4 L_1 L_4 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 L_1 L_4 R_4 g_m s^3 + 2C_1 L_1 L_4 R_L g_m s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 R_4 R_L g_m s^2 + C_1 L_1 R_4 s^2 + C_1 L_4 R_4 s^2 + C_1 L_4 R_L}$$

10.520 INVALID-ORDER-520 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 L_1 s^2 + 1)(C_4 L_4 R_4 s^2 - L_4 R_4 g_m s + L_4 s + R_4)}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_1 L_4 R_4 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_4 R_4 s^3 + 2C_1 L_1 L_4 g_m s^3 + 2C_1 L_1 R_4 g_m s^2 + C_1 L_4}$$

10.521 INVALID-ORDER-521 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_L L_1 L_4 R_4 R_L g_m s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_4 R_4 R_L s^3 +$$

10.522 INVALID-ORDER-522 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_4s^5 + C_1C_4C_LL_4R_4R_Ls^4 + 2C_1C_4L_1L_4R_4g_ms^4 + C_1C_4L_4R_4s^3 + C_1C_LL_1L_4R_4g_ms^4 + 2C_1C_LL_1L_4R_Lg_ms^4 + C_1C_LL_1L_4s^4}{2C_1C_4C_LL_1L_4R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_4s^5 + C_1C_4C_LL_4R_4R_Ls^4 + 2C_1C_4L_1L_4R_4g_ms^4 + C_1C_4L_4R_4s^3 + C_1C_LL_1L_4R_4g_ms^4 + 2C_1C_LL_1L_4R_Lg_ms^4 + C_1C_LL_1L_4s^4}.$$

10.523 INVALID-ORDER-523 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_L L_1 L_4 L_L g_m s^5 + C_1 C_L L_1 L_4 R_4 g_m s^4 + C_1 C_L L_1 L_4 s^4 + \dots}{\dots}$$

10.524 INVALID-ORDER-524 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_L L_1 L_4 L_L R_4 g_m s^5 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_4 L_L R_4 s^4 + \dots}{\dots}$$

10.525 INVALID-ORDER-525 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_4 R_4 s^3 + 2C_1 C_L L_1 L_4 L_L R_4 g_m s^5 + \dots}{\dots}$$

10.526 INVALID-ORDER-526 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 R_L g_m s^5 + C_1 C_L L_1 L_4 L_L R_L s^5 + \dots}{\dots}$$

10.527 INVALID-ORDER-527 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + 2C_1 C_4 L_1 L_4 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_4 L_L R_4 s^4 + \dots}{\dots}$$

10.528 INVALID-ORDER-528 $Z(s) = \left(L_1 s, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_4R_Ls^5 + C_1C_4C_LL_4L_LR_4R_Ls^5 + 2C_1C_4L_1L_4R_4R_Lg_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_4L_4R_4R_Ls^3 + C_1C_4L_4R_4s^3 + C_1C_4L_4s^3 + C_1C_4s^3}{2C_1C_4C_LL_1L_4L_LR_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_4R_Ls^5 + C_1C_4C_LL_4L_LR_4R_Ls^5 + 2C_1C_4L_1L_4R_4R_Lg_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_4L_4R_4R_Ls^3 + C_1C_4L_4R_4s^3 + C_1C_4L_4s^3 + C_1C_4s^3}.$$

10.529 INVALID-ORDER-529 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + 1) (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + C_1 L_1 R_4 g_m s^2 + 2C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_4 s^2 + C_1 R_4 s + 1}$$

10.530 INVALID-ORDER-530 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)(C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L L_4 s^3 + C_1 C_L R_4 s^2 -$$

10.531 **INVALID-ORDER-531** $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_1}{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_1}$$

10.532 INVALID-ORDER-532 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + C_1 C_L L_1 R_4 g_m}$$

10.533 INVALID-ORDER-533 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 L_4 R_4 s^3 + C_1 C_L L_1 L_L s^3 + C_1 C_L L_1 L_4 R_4 s^2 + C_1 C_L L_1 L_L s^2 + C_1 C_L L_1 L_4 R_4 s + C_1 C_L L_1 L_L s + C_1 C_L L_1 L_4 R_4 + C_1 C_L L_1 L_L}$$

10.534 INVALID-ORDER-534 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + 2C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 L_4 R_4 s^3 + C_1 C_L L_1 L_L s^3 + C_1 C_L L_1 L_4 R_4 s^2 + C_1 C_L L_1 L_L s^2 + C_1 C_L L_1 L_4 R_4 s + C_1 C_L L_1 L_L s + C_1 C_L L_1 L_4 R_4 + C_1 C_L L_1 L_L}$$

10.535 INVALID-ORDER-535 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^3 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 R_4 s^2 + C_1 C_4 L_1 L_4 R_L s^2 + C_1 C_4 L_1 L_4 R_4 s + C_1 C_4 L_1 L_4 R_L s + C_1 C_4 L_1 L_4 R_4 + C_1 C_4 L_1 L_4 R_L}$$

10.536 INVALID-ORDER-536 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + 2C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^3 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 R_4 s^2 + C_1 C_4 L_1 L_4 R_L s^2 + C_1 C_4 L_1 L_4 R_4 s + C_1 C_4 L_1 L_4 R_L s + C_1 C_4 L_1 L_4 R_4 + C_1 C_4 L_1 L_4 R_L}$$

10.537 INVALID-ORDER-537 $Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + 2C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^3 + C_1 C_4 L_1 L_4 R_L s^3 + C_1 C_4 L_1 L_4 R_4 s^2 + C_1 C_4 L_1 L_4 R_L s^2 + C_1 C_4 L_1 L_4 R_4 s + C_1 C_4 L_1 L_4 R_L s + C_1 C_4 L_1 L_4 R_4 + C_1 C_4 L_1 L_4 R_L}$$

$$10.538 \quad \text{INVALID-ORDER-538} \quad Z(s) = \left(L_1 s, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 +$$

$$10.539 \quad \text{INVALID-ORDER-539} \quad Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = - \frac{R_L (C_1 L_1 s^2 + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s^2)}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 R_4 R_L g_m s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2 C_1 L_1 R_4 s^2 +$$

$$10.540 \quad \text{INVALID-ORDER-540} \quad Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{(C_1 L_1 s^2 + 1) (-C_4 L_4 R_4 g_m s^2 + C_4 L_4 s^2 + C_4 R_4 s^2)}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2 C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_4 s^2 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 R_4 s^3 +$$

$$10.541 \quad \text{INVALID-ORDER-541} \quad Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 R_4 s^3 +$$

$$10.542 \quad \text{INVALID-ORDER-542} \quad Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2 C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 R_4 s^3 +$$

10.543 INVALID-ORDER-543 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_Lq_ms^6 + C_1C_4C_LL_1L_4R_4q_ms^5 + C_1C_4C_LL_1L_4s^5 + 2C_1C_4C_LL_1L_LR_4q_ms^5 + C_1C_4C_LL_1R_4s^4 + C_1C_4C_LL_4L_Ls^5 + C_1C_4C_LL_4R_4s^4 + C_1C_4C_LL_LR_4s^4 +$$

10.544 INVALID-ORDER-544 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 L_L R_4 g_m}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 L_L R_4 g_m}$$

10.545 INVALID-ORDER-545 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C$$

10.546 INVALID-ORDER-546 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + 2C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + 2C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L}.$$

10.547 INVALID-ORDER-547 $Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}$$

$$10.548 \quad \text{INVALID-ORDER-548} \quad Z(s) = \left(L_1 s, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5}.$$

10.549 INVALID-ORDER-549 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (R_4 g_m - 1)}{C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + C_L L_1 R_4 g_m s^2 + C_L L_1 s^2 + C_L R_4 s + 2L_1 g_m s + 1}$$

10.550 INVALID-ORDER-550 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (R_4 g_m - 1)}{C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_L L_1 R_4 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_4 R_L s + L_1 R_4 g_m s + 2 L_1 R_L g_m s + L_1 s + R_4 + R_L}$$

10.551 INVALID-ORDER-551 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (R_4 g_m - 1) (C_L R_L s + 1)}{C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_L L_1 R_4 g_m s^2 + 2 C_L L_1 R_L g_m s^2 + C_L L_1 s^2 + C_L R_4 s + C_L R_L s + 2 L_1 g_m s + 1}$$

10.552 INVALID-ORDER-552 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (R_4 g_m - 1) (C_L L_L s^2 + 1)}{C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + 2 C_L L_1 L_L g_m s^3 + C_L L_1 R_4 g_m s^2 + C_L L_1 s^2 + C_L L_L s^2 + C_L R_4 s + 2 L_1 g_m s + 1}$$

10.553 INVALID-ORDER-553 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (R_4 g_m - 1)}{C_1 C_L L_1 L_L R_4 s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_L L_1 L_L R_4 g_m s^3 + C_L L_1 L_L s^3 + C_L L_L R_4 s^2 + 2L_1 L_L g_m s^2 + L_1 R_4 g_m s + L_1 s + L_L s + R_4}$$

10.554 INVALID-ORDER-554 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (R_4 g_m - 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_L L_1 L_L g_m s^3 + C_L L_1 R_4 g_m s^2 + 2 C_L L_1 R_L g_m s^2 + C_L L_1 s^2 + C_L L_L s^2 + C_L R_4 s + C_L R_L s + 2 L_1 g_m s + 1}$$

10.555 INVALID-ORDER-555 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L s^2 (R_4 g_m - 1)}{C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 R_4 R_L s^2 + C_L L_1 L_L R_4 R_L g_m s^3 + C_L L_1 L_L R_L s^3 + C_L L_L R_4 R_L s^2 + L_1 L_L R_4 g_m s^2 + 2 L_1 L_L R_L g_m s^2 + L_1 L_L s^2 +}$$

10.556 INVALID-ORDER-556 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 s (R_4 g_m - 1) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_L L_1 L_L R_4 g_m s^3 + 2 C_L L_1 L_L R_L g_m s^3 + C_L L_1 L_L s^3 + C_L L_L R_4 s^2 + C_L L_L R_L s^2 + 2 L_1 L_L g_m s +}$$

10.557 INVALID-ORDER-557 $Z(s) = \left(L_1 s, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{L_1 R_L s (R_4 g_m - 1) (C_L L_L s^2 + 1)}{C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_L L_1 L_L R_4 g_m s^3 + 2 C_L L_1 L_L R_L g_m s^3 + C_L L_1 L_L s^3 + C_L L_1 R_4 R_L g_m s^2 + C_L L_1 R_L s^2 +}$$

10.558 INVALID-ORDER-558 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (-C_4 s + g_m)}{C_1 C_4 L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + C_4 R_L s + L_1 g_m s + 1}$$

10.559 INVALID-ORDER-559 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (-C_4 s + g_m)}{C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 R_L s^3 + 2C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + C_4 R_L s + C_L L_1 R_L g_m s^2 + C_L R_L s + L_1 g_m s + 1}$$

10.560 INVALID-ORDER-560 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 (C_4 s - g_m) (C_L R_L s + 1)}{C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + 2C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L R_L s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.561 INVALID-ORDER-561 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 (C_4 s - g_m) (C_L L_L s^2 + 1)}{C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + 2C_4 C_L L_1 L_L g_m s^3 + C_4 C_L L_1 s^2 + C_4 C_L L_L s^2 + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.562 INVALID-ORDER-562 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (-C_4 s + g_m)}{C_1 C_4 L_1 L_L s^4 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_L s^4 + 2C_4 L_1 L_L g_m s^3 + C_4 L_1 s^2 + C_4 L_L s^2 + C_L L_1 L_L g_m s^3 + C_L L_L s^2 + L_1 g_m s + 1}$$

10.563 INVALID-ORDER-563 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 (C_4 s - g_m) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + 2C_4 C_L L_1 L_L g_m s^3 + 2C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_L s^2 + C_4 C_L R_L s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.564 INVALID-ORDER-564 $Z(s) = \left(L_1 s, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L s^2 (-C_4 s + g_m)}{C_1 C_4 L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_L R_L s^4 + 2C_4 L_1 L_L R_L g_m s^3 + C_4 L_1 L_L s^3 + C_4 L_1 R_L s^2 + C_4 L_L R_L s^2 + C_L L_1 L_L R_L g_m s^3 + C_L L_L s^2 + L_1 g_m s + 1}$$

$$10.565 \quad \text{INVALID-ORDER-565} \quad Z(s) = \left(L_1 s, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = - \frac{L_1 s (C_4 s - g_m) (C_L L_L R_L s^2 + L_L s + R_L)}{C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_L R_L g_m s^4 + C_4 C_L L_1 L_L s^4 + C_4 C_L L_L R_L s^3 + 2 C_4 L_1 L_L g_m s^3 + 2 C_4 L_1 R_L g_m s^2}$$

$$10.566 \quad \text{INVALID-ORDER-566} \quad Z(s) = \left(L_1 s, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{L_1 R_L s (C_4 s - g_m) (C_L L_L s^2 + 1)}{C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_L R_L g_m s^4 + C_4 C_L L_1 L_L s^4 + C_4 C_L L_1 R_L s^3 + C_4 C_L L_L R_L s^3 + 2 C_4 L_1 R_L g_m s^2}$$

$$10.567 \quad \text{INVALID-ORDER-567} \quad Z(s) = \left(L_1 s, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{L_1 R_L s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + 2 C_4 L_1 R_4 R_L g_m s^2 + C_4 L_1 R_4 s^2 + C_4 R_4 R_L s + L_1 R_4 g_m s + 2 L_1 R_L g_m s + L_1 s + R_4 + R_L}$$

$$10.568 \quad \text{INVALID-ORDER-568} \quad Z(s) = \left(L_1 s, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + C_4 C_L L_1 R_4 s^3 + 2 C_4 L_1 R_4 g_m s^2 + C_4 R_4 s + C_L L_1 R_4 g_m s^2 + C_L L_1 s^2 + C_L R_4 s + 2 L_1 g_m s + 1}$$

$$10.569 \quad \text{INVALID-ORDER-569} \quad Z(s) = \left(L_1 s, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_4 C_L L_1 R_4 R_L s^3 + 2 C_4 L_1 R_4 R_L g_m s^2 + C_4 L_1 R_4 s^2 + C_4 R_4 R_L s + C_L L_1 R_4 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_4 R_L s}$$

$$10.570 \quad \text{INVALID-ORDER-570} \quad Z(s) = \left(L_1 s, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{L_1 s (C_L R_L s + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 R_4 R_L g_m s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L R_4 R_L s^2 + 2 C_4 L_1 R_4 g_m s^2 + C_4 R_4 s + C_L L_1 R_4 s}$$

10.571 INVALID-ORDER-571 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_L R_4 g_m s^4 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_L R_4 s^3 + 2 C_4 L_1 R_4 g_m s^2 + C_4 R_4 s + 2 C_L L_1 R_4 s}$$

10.572 INVALID-ORDER-572 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_4 C_L L_1 L_L R_4 s^4 + 2 C_4 L_1 L_L R_4 g_m s^3 + C_4 L_1 R_4 s^2 + C_4 L_L R_4 s^2 + C_L L_1 L_L R_4 g_m s^3 + C_L L_1 L_L s^3 + C_L L_L R_4 s}$$

10.573 INVALID-ORDER-573 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 s (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_L R_4 g_m s^4 + 2 C_4 C_L L_1 R_4 R_L g_m s^3 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_L R_4 s^3 + 2 C_4 L_1 R_4 g_m s^2 + C_4 R_4 s + 2 C_L L_1 R_4 s}$$

10.574 INVALID-ORDER-574 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_L s^2 (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_4 R_L s^4 + 2 C_4 L_1 L_L R_4 R_L g_m s^3 + C_4 L_1 L_L R_4 s^3 + C_4 L_1 R_4 R_L s^2 + C_4 R_4 s + 2 C_L L_1 R_4 s}$$

10.575 INVALID-ORDER-575 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + 2 C_4 C_L L_1 L_L R_4 R_L g_m s^4 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L L_L R_4 R_L s^3 + 2 C_4 L_1 R_4 g_m s^2 + C_4 R_4 s + 2 C_L L_1 R_4 s}$$

10.576 INVALID-ORDER-576 $Z(s) = \left(L_1 s, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + 2C_4 C_L L_1 L_L R_4 R_L g_m s^4 + C_4 C_L L_1 L_L R_4 s^4}{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + 2C_4 C_L L_1 L_L R_4 R_L g_m s^4 + C_4 C_L L_1 L_L R_4 s^4}.$$

10.577 INVALID-ORDER-577 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 s^2 + C_4 L_1 R_4 q_m s^2 + 2 C_4 L_1 R_L q_m s^2 + C_4 L_1 s^2 + C_4 R_4 s + C_4 R_L s + L_1 q_m s + 1}$$

10.578 INVALID-ORDER-578 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 R_4 g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.579 INVALID-ORDER-579 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 R_4 R_L g_m s^3 + C_4 C_L L_1 R_L s^3 + C_4 C_L R_4 R_L s^2 + C_4 L_1 R_4 g_m s^2 + 2 C_4 L_1 R_L g_m s^2 + C_4 g_m}$$

10.580 INVALID-ORDER-580 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 R_4 g_m s^2 + 2 C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L R_4 s + C_4 C_L R_L s + 2 C_4 L_1 g_m s + C_4 + C_L L_1 g_m s}$$

10.581 INVALID-ORDER-581 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L L_L s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + 2 C_4 C_L L_1 L_L g_m s^3 + C_4 C_L L_1 R_4 g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_L s^2 + C_4 C_L R_4 s + 2 C_4 L_1 g_m s + C_4 + C_L L_1 g_m s}$$

10.582 INVALID-ORDER-582 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_L R_4 g_m s^4 + C_4 C_L L_1 L_L s^4 + C_4 C_L L_L R_4 s^3 + 2 C_4 L_1 L_L g_m s^3 + C_4 L_1 R_4 g_m s^2 + C_4}$$

10.583 INVALID-ORDER-583 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + 2 C_4 C_L L_1 L_L g_m s^3 + C_4 C_L L_1 R_4 g_m s^2 + 2 C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_L s^2 + C_4 C_L R_L s + g_m}$$

10.584 INVALID-ORDER-584 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_I s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_L R_4 R_L g_m s^4 + C_4 C_L L_1 L_L R_L s^4 -$$

10.585 INVALID-ORDER-585 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 s (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_L L_R R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_L R_4 g_m s^4 + 2 C_4 C_L L_1 L_L R_L g_m s^4 + C_4 C_L L$$

10.586 INVALID-ORDER-586 $Z(s) = \left(L_1 s, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L L_L R_4 s^5 + C_1 C_4 C_L L_L L_L R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_L R_4 q_m s^4 + 2 C_4 C_L L_1 L_L R_4 q_m s^3 + C_4 C_L L_1 L_L R_4 q_m s^2 + C_4 C_L L_1 L_L R_4 q_m s + C_4 C_L L_1 L_L R_4 q_m}{C_1 C_4 C_L L_L L_L R_4 s^5 + C_1 C_4 C_L L_L L_L R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_L R_4 q_m s^4 + 2 C_4 C_L L_1 L_L R_4 q_m s^3 + C_4 C_L L_1 L_L R_4 q_m s^2 + C_4 C_L L_1 L_L R_4 q_m s + C_4 C_L L_1 L_L R_4 q_m}$$

$$10.587 \quad \text{INVALID-ORDER-587} \quad Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_L s (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 s^2 + C_4 L_1 L_4 g_m s^3 + 2 C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + C_4 L_4 s^2 + C_4 R_L s + L_1 g_m s + 1}$$

$$10.588 \quad \text{INVALID-ORDER-588} \quad Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + 2 C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

$$10.589 \quad \text{INVALID-ORDER-589} \quad Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_L s (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1 R_L s^3 + C_4 C_L L_4 R_L s^3 + C_4 L_1 L_4 g_m s^3 + 2 C_4 L_1 R_L g_m s^2 + C_4}$$

$$10.590 \quad \text{INVALID-ORDER-590} \quad Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 (C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + 2 C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_L s + 2 C_4 L_1 g_m s + C_4 + C_L L_1 g_m s}$$

$$10.591 \quad \text{INVALID-ORDER-591} \quad Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + 2 C_4 C_L L_1 L_L g_m s^3 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L L_L s^2 + 2 C_4 L_1 g_m s + C_4 + C_L L_1 g_m s}$$

10.592 INVALID-ORDER-592 $Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_L s^4 + C_4 C_L L_4 L_L s^4 + C_4 L_1 L_4 g_m s^3 + 2 C_4 L_1 L_L g_m s^3 + C_4 L_1 L_4 L_L g_m s^3}$$

10.593 INVALID-ORDER-593 $Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + 2 C_4 C_L L_1 L_L g_m s^3 + 2 C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L g_m s + g_m}$$

10.594 INVALID-ORDER-594 $Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_4 L_L R_L g_m s^5 + C_4 C_L L_1 L_L R_L s^4 +$$

10.595 INVALID-ORDER-595 $Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{L_1 s (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L g_m s^5 + 2 C_4 C_L L_1 L_L R_L g_m s^4 + C_4 C_L L_1 L_4 L_L g_m s^3 + C_4 C_L L_1 L_L R_L g_m s^2 + C_4 C_L L_1 L_4 L_L g_m s + C_4 C_L L_1 L_L R_L g_m}$$

$$10.596 \quad \text{INVALID-ORDER-596} \quad Z(s) = \left(L_1 s, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^4}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^4}$$

10.597 INVALID-ORDER-597 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 R_L s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 R_L s^2 + 2C_4 L_1 L_4 R_L g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_4 R_L s^2 + L_1 L_4 g_m s^2 + 2L_1 R_L g_m s + L_1 s + L_4 s + R_L}$$

10.598 INVALID-ORDER-598 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 s^4 + 2C_4 L_1 L_4 g_m s^3 + C_4 L_4 s^2 + C_L L_1 L_4 g_m s^3 + C_L L_1 s^2 + C_L L_4 s^2 + 2L_1 g_m s + 1}$$

10.599 INVALID-ORDER-599 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_4 R_L s^4 + 2C_4 L_1 L_4 R_L g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_4 R_L s^2 + C_L L_1 L_4 R_L g_m s^3 + C_L L_1 R_L s^2 + C_L L_4 R_L s}$$

10.600 INVALID-ORDER-600 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 s (C_L R_L s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 R_L s^3 + 2C_4 L_1 L_4 g_m s^3 + C_4 L_4 s^2 + C_L L_1 L_4 s}$$

10.601 INVALID-ORDER-601 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 s (C_L L_L s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + 2C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 L_L s^4 + 2C_4 L_1 L_4 g_m s^3 + C_4 L_4 s^2 + C_L L_1 L_4 s}$$

10.602 INVALID-ORDER-602 $Z(s) = \left(\frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 L_L s^4 + C_1 C_L L_1 L_4 L_L s^4 + C_1 L_1 L_4 s^2 + C_1 L_1 L_L s^2 + C_4 C_L L_1 L_4 L_L s^4 + 2C_4 L_1 L_4 L_L g_m s^3 + C_4 L_1 L_4 s^2 + C_4 L_4 L_L s^2 + C_L L_1 L_4 L_L g_m s^3 + C_L L_1 L_L s^2 + C_L L_4 L_L s}$$

$$\mathbf{10.603 \quad INVALID-ORDER-603} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{L_1 s (C_4 L_4 s^2 - L_4 g_m s)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_4 L_L g_m s^5 + 2 C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1 L_4 L_L s^3 + C_4 C_L L_1 L_4 R_L s^2 + C_4 C_L L_1 L_4 L_L s + C_4 C_L L_1 L_4 R_L s + C_4 C_L L_1 L_4 L_L}$$

$$\mathbf{10.604 \quad INVALID-ORDER-604} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_L s (-C_4 L_4 s^2 + C_4 L_4 g_m s)}{C_1 C_4 L_1 L_4 L_L R_L s^4 + C_1 C_L L_1 L_4 L_L R_L s^4 + C_1 L_1 L_4 L_L s^3 + C_1 L_1 L_4 R_L s^2 + C_1 L_1 L_L R_L s^2 + C_4 C_L L_1 L_4 L_L R_L s^4 + 2 C_4 L_1 L_4 L_L R_L g_m s^3 + C_4 L_1 L_4 L_L s^3 + C_4 L_1 L_4 R_L s^2 + C_4 C_L L_1 L_4 L_L s + C_4 C_L L_1 L_4 R_L s + C_4 C_L L_1 L_4 L_L}$$

$$\mathbf{10.605 \quad INVALID-ORDER-605} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = - \frac{L_1 L_L R_L s (C_4 L_4 s^2 - L_4 g_m s)}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_L s^2 + 2 C_4 C_L L_1 L_4 L_L R_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^3 + C_4 C_L L_1 L_4 R_L s^2 + C_4 C_L L_1 L_4 L_L s + C_4 C_L L_1 L_4 R_L s + C_4 C_L L_1 L_4 L_L}$$

$$\mathbf{10.606 \quad INVALID-ORDER-606} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{L_1 L_L R_L s (C_4 L_4 s^2 - L_4 g_m s)}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 R_L s^2 + 2 C_4 C_L L_1 L_4 L_L R_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^3 + C_4 C_L L_1 L_4 R_L s^2 + C_4 C_L L_1 L_4 L_L s + C_4 C_L L_1 L_4 R_L s + C_4 C_L L_1 L_4 L_L}$$

$$\mathbf{10.607 \quad INVALID-ORDER-607} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{L_1 R_L s (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 s^2 + C_4 L_1 L_4 g_m s^3 + C_4 L_1 R_4 g_m s^2 + 2 C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + C_4 L_4 s^2 + C_4 R_4 s + C_4 R_L s + L_1 g_m s + 1}$$

10.608 INVALID-ORDER-608 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + C_4 C_L L_1 R_4 g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.609 INVALID-ORDER-609 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1 R_4 R_L g_m s^3 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.610 INVALID-ORDER-610 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L R_L s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + C_4 C_L L_1 R_4 g_m s^2 + 2C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.611 INVALID-ORDER-611 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + 2C_4 C_L L_1 L_L g_m s^3 + C_4 C_L L_1 R_4 g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.612 INVALID-ORDER-612 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s^2 (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_L R_4 g_m s^4 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

10.613 INVALID-ORDER-613 $Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + 2C_4 C_L L_1 L_L g_m s^3 + C_4 C_L L_1 R_4 g_m s^2 + 2C_4 C_L L_1 R_L g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s^2 + C_4 C_L R_4 s + 2C_4 L_1 g_m s + C_4 + C_L L_1 g_m s + C_L}$$

$$\mathbf{10.614 \quad INVALID-ORDER-614} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L R_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L s^4}$$

$$\mathbf{10.615 \quad INVALID-ORDER-615} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L s^4}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L s^4}$$

$$\mathbf{10.616 \quad INVALID-ORDER-616} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L s^4}$$

$$\mathbf{10.617 \quad INVALID-ORDER-617} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_L s (-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s - L_4 s - R_4)}{C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 R_4 R_L s^2 + 2 C_4 L_1 L_4 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_4 R_4 R_L s^2 + L_1 L_4 R_4 g_m s^2 + 2 L_1 L_4 R_L g_m s^2 + L_1 L_4 s^2 + 2 L_1 R_4 s^2}$$

$$\mathbf{10.618 \quad INVALID-ORDER-618} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s - L_4 s - R_4)}{C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + C_4 C_L L_1 L_4 R_4 s^4 + 2 C_4 L_1 L_4 R_4 g_m s^3 + C_4 L_4 R_4 s^2 + C_L L_1 L_4 R_4 g_m s^3 + C_L L_1 L_4 s^3 + C_L L_1 R_4 s^2 + C_L L_4 R_4 s^2}$$

10.619 INVALID-ORDER-619 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_L s (-C_4 L_4 R_4 s^2 + L_4 I_4)}{C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_4 R_4 R_L s^4 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 R_4 R_L s^2 + C_4 C_L L_1 L_4 R_4 R_L s^4 + 2C_4 L_1 L_4 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_4 R_4 R_L s^2 + C_L}$$

10.620 INVALID-ORDER-620 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1}{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + 2C_4 C_L L_1 L_4 R_4 R_L g_m s^4 + C_4 C_L L_1 L_4 R_4 s^4 -}$$

10.621 INVALID-ORDER-621 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 s}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + 2 C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 R_4 s^4 +}$$

10.622 INVALID-ORDER-622 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L s \left(-C_4 L_4 R_4 s^2 + L_4 R_4 g_r \right)}{C_1 C_4 L_1 L_4 L_L R_4 s^4 + C_1 C_L L_1 L_4 L_L R_4 s^4 + C_1 L_1 L_4 L_L s^3 + C_1 L_1 L_4 R_4 s^2 + C_1 L_1 L_L R_4 s^2 + C_4 C_L L_1 L_4 L_L R_4 s^4 + 2 C_4 L_1 L_4 L_L R_4 g_m s^3 + C_4 L_1 L_4 R_4 s^2 + C_4 L_4 L_L R_4 s^2 + C_L L_1 L_4 L_L R_4 s^2}$$

10.623 INVALID-ORDER-623 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 L_4 R_4 R_L s^2 + C_1 L_1 L_4 R_4 s^2 + C_1 L_1 L_4 R_L s^2 + C_1 L_1 L_L R_4 s^2 + C_1 L_1 L_L R_L s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_L s^2 + C_1 R_4 R_L s^2 + C_1 R_4 s^2 + C_1 R_L s^2 + C_1 L_L s^2 + C_1 L s^2 + C_1 R s^2 + C_1 s^2}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 L_4 R_4 R_L s^2 + C_1 L_1 L_4 R_4 s^2 + C_1 L_1 L_4 R_L s^2 + C_1 L_1 L_L R_4 s^2 + C_1 L_1 L_L R_L s^2 + C_1 L_1 R_4 R_L s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_L s^2 + C_1 R_4 R_L s^2 + C_1 R_4 s^2 + C_1 R_L s^2 + C_1 L_L s^2 + C_1 L s^2 + C_1 R s^2 + C_1 s^2}.$$

10.624 INVALID-ORDER-624 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 L_L R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 R_L s^4 + C_1 L_1 L_4 L_L R_4 s^3 + C_1 L_1 L_4 L_L R_L s^3 + C_1 L_1 L_4 R_4 R_L s^2 + C_1 L_1 L_L R_4 R_L s^2 + C_4 C_L L_1 L_4 L_L R_4 R_L s^4 + 2 C_4 L_1 L_4 L_L R_4 R_L g_m}{\dots}$$

10.625 INVALID-ORDER-625 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 s^5 + C_1 C_L L_1 L_4 L_L R_L s^5 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_4 L_L s^4 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_L R_4 R_L s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_L s^2 + C_1 R_4 R_L s^2 + C_1 R_4 s^2 + C_1 R_L s^2 + C_1 s^2}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 s^5 + C_1 C_L L_1 L_4 L_L R_L s^5 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_4 L_L s^4 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_L R_4 R_L s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_L s^2 + C_1 R_4 R_L s^2 + C_1 R_4 s^2 + C_1 R_L s^2 + C_1 s^2}$$

10.626 INVALID-ORDER-626 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_4 s^5 + C_1 C_L L_1 L_4 L_L R_L s^5 + C_1 C_L L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 L_4 R_L s^3 +$$

10.627 INVALID-ORDER-627 $Z(s) = \left(\frac{1}{C_{1s}}, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_L s (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_4 L_1 L_4 R_4 g_m s^3 + 2 C_4 L_1 L_4 R_L g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_4 R_4 s^2 + C_4 L_4 R_L s^2 + L_1 L_4 g_m s^2 + L_1 L_4 R_4 s^2 + L_1 L_4 R_L s^2 + L_1 L_4 s^2 + L_1 R_4 s^2 + L_1 R_L s^2 + L_1 s^2 + R_4 s^2 + R_L s^2 + s^2 + 1}$$

10.628 INVALID-ORDER-628 $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + L_4 g_m s + R_4 g_m - 1)}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 R_4 s^3 + 2 C_4 L_1 L_4 g_m s^3 + C_4 L_4 s^2 + C_L L_1 L_4 g_m}$$

10.629 INVALID-ORDER-629 $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_4 R_4 R_L g_m s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 L_4 s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_4 R_4 R_L g_m s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}$$

10.630 INVALID-ORDER-630 $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 s (C_L R_L s + 1) (C_4 L_4 R_4 g_m s^2 + C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_L g_m s^4 + C_4 C_L L_1$$

10.631 INVALID-ORDER-631 $Z(s) = \left(\frac{1}{C_{1s}}, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, L_{Ls} + \frac{1}{C_{Ls}} \right)$

$$H(s) = \frac{L_1 s (C_L L_L s^2 + 1) (C_4 L_4 R_4 g_m s^2}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 R_4 g_m s^4 + C_4 C_L L_1 L_4 L_L s^3 + C_4 C_L L_1 L_4 s^2 + C_4 C_L L_1 R_4 s + C_4 L_1}$$

10.632 INVALID-ORDER-632 $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_4 s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 L_L R_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_4 s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 L_L R_4 s^4}$$

10.633 INVALID-ORDER-633 $Z(s) = \left(\frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_4 L_L}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_4 L_L}$$

$$\mathbf{10.634 \quad INVALID-ORDER-634} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_L s^5 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_4 L_L s^4 + C_1 L_1 L_4 R_L s^3 + C_1 L_1 L_4 s^2 + C_1 L_1 s + C_1}$$

$$\mathbf{10.635 \quad INVALID-ORDER-635} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_4 s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 L_4 s^2 + C_1 L_1 s + C_1}$$

$$\mathbf{10.636 \quad INVALID-ORDER-636} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_4 s^4 + C_1 L_1 L_4 s^3 + C_1 L_1 L_4 s^2 + C_1 L_1 s + C_1}$$

$$\mathbf{10.637 \quad INVALID-ORDER-637} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{L_1 R_L s (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 - C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_4 L_1 L_4 R_4 g_m s^3 + 2C_4 L_1 L_4 R_L g_m s^3 + C_4 L_1 L_4 s^3 + 2C_4 L_1 R_4 R_L g_m s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 s + C_1}$$

$$\mathbf{10.638 \quad INVALID-ORDER-638} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 s (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 - C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_1 R_4 s^3 + C_4 C_L L_4 R_4 s^3 + 2C_4 L_1 L_4 g_m s^3 + 2C_4 L_1 s + C_1}$$

10.639 INVALID-ORDER-639 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_4 C_L L_1 L_4 R_4 R_L g_m s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}$$

10.640 INVALID-ORDER-640 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}$$

10.641 INVALID-ORDER-641 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + 2 C_4 C_L L_1 L_4 L_L g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}$$

10.642 INVALID-ORDER-642 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 L_1 L_L s^3 + C_1 L_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}$$

10.643 INVALID-ORDER-643 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 L_L R_4 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5 + C_4 C_L L_1 L_4 L_L R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 R_4 g_m s^4 + 2 C_4 C_L L_1 L_4 R_4 R_L s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 L_4 R_4 R_L s^4}$$

10.644 INVALID-ORDER-644 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1}{\dots}$$

10.645 INVALID-ORDER-645 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L R_4 s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L R_4 s^3 + C_1 C_4 L_1 L_L R_L s^3}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L R_4 s^3 + C_1 C_4 L_1 L_L R_L s^3 + C_1 C_4 L_1 L_L R_4 s^3 + C_1 C_4 L_1 L_L R_L s^3}$$

$$10.646 \quad \text{INVALID-ORDER-646} \quad Z(s) = \left(\frac{1}{C_{1s}}, L_2s + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{R_L \left(L_Ls + \frac{1}{C_{Ls}} \right)}{L_Ls + R_L + \frac{1}{C_{Ls}}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_4}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_4}$$

10.647 INVALID-ORDER-647 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + 2C_1 L_1 g_m s^2 + 2C_1 R_1 g_m s + C_1 s + C_L R_4 g_m s + C_L s + 2g_m}$$

10.648 INVALID-ORDER-648 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L(R_4 g_m - 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_1 R_4 R_L g_m s^2 + C_1 C_L R_1 R_L s^2 + C_1 C_L R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 R_1 R_4 g_m s + 2C_1 R_1 R_L g_m s + C_1 R_1 s + 1}$$

10.649 INVALID-ORDER-649 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_L R_L s + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_L L_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + 2C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L R_L s^2 + 2C_1 L_1 g_m s^2 + 2C_1 R_1 g_m s + C_1 s + C_L}$$

10.650 INVALID-ORDER-650 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_L L_L s^2 + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{2C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + 2C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + 2C_1 L_1 g_m s^2 + 2C_1 R_1 g_m s + C_1 s + 2C_L}$$

10.651 INVALID-ORDER-651 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (R_4 g_m - 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_L L_1 L_L R_4 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_1 R_4 g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + 2C_1 L_1 L_L g_m s^3 + C_1 L_1 R_4 g_m s^2 + C_1 L_1 s^2 + 2C_1 L_L R_1 g_m s^2 + C_1 L_L s^2 + C_1 R_1}$$

10.652 INVALID-ORDER-652 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_L L_L s^2 + C_L R_L s + 1)}{2C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_L g_m s^3 + C_1 C_L L_1 s^3 + 2C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 + C_1 C_L R_1 R_4 g_m s^2 + 2C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2}$$

10.653 INVALID-ORDER-653 $Z(s) = \left(\frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_4 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_1 R_4 R_L g_m s^3 + C_1 C_L L_L R_1 R_L s^3 + C_1 C_L L_L R_4 R_L s^3 + C_1 L_1 L_L R_4 g_m s^3 + 2C_1 L_1 L_L R_L g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_4}$$

$$10.654 \quad \text{INVALID-ORDER-654} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{(R_4 g_m - 1)}{C_1 C_L L_1 L_L R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_L g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_1 R_4 g_m s^3 + 2C_1 C_L L_L R_1 R_L g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + C_1 C_L L_L R_L s^3 + 2C_1 L_1 L_L g_m s^2 + C_1 L_1 L_L s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_1 s + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.655 \quad \text{INVALID-ORDER-655} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{(R_4 g_m - 1)}{C_1 C_L L_1 L_L R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_L g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_L R_1 R_4 g_m s^3 + 2C_1 C_L L_L R_1 R_L g_m s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_4 s^3 + C_1 C_L L_L R_L s^3 + 2C_1 L_1 L_L g_m s^2 + C_1 L_1 L_L s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_1 s + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.656 \quad \text{INVALID-ORDER-656} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = -\frac{R_L (C_4 s - g_m) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + 2C_4 R_L g_m s + C_4 s + g_m}$$

$$10.657 \quad \text{INVALID-ORDER-657} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{(C_4 s - g_m) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{s (C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s + C_1 C_L s + C_4 C_L s + 2C_4 g_m + C_L g_m)}$$

$$10.658 \quad \text{INVALID-ORDER-658} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = -\frac{R_L (C_4 s - g_m) (C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 C_L L_1 R_L g_m s^3 + C_1 C_L R_1 R_L g_m s^2 + C_1 C_L R_L s^2 + 2C_1 L_1 L_L g_m s^2 + C_1 L_1 L_L s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_1 s + 2C_4 R_L g_m s + C_4 s + g_m}$$

10.659 INVALID-ORDER-659 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_L R_L s + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{s(2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s}$$

10.660 INVALID-ORDER-660 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_L L_L s^2 + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s}$$

10.661 INVALID-ORDER-661 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L s(C_4 s - g_m)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_L R_1 s^4 + 2C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 s^3 + 2C_1 C_4 L_L R_1 g_m s^3 + C_1 C_4 L_L s^3 + C_1 C_4 R_1 s^2 + C_1 C_L L_1 L_L g_m s^4 + C_1 C_L L_L R_1 g_m s^3 + C_1 C_L L_L s^3 +$$

10.662 INVALID-ORDER-662 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 s - g_m)(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_L L_L s^2 + 1)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s}$$

10.663 INVALID-ORDER-663 $Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{1}{C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 L_1 L_L R_L g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_L s^3 + 2C_1 C_4 L_L R_1 R_L g_m s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_L s^3 + C_1 C_4 R_1 R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s}$$

$$10.664 \quad \text{INVALID-ORDER-664} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + 2C_1 C_4 L_1 L_L g_m s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + 2C_1 C_L L_1 R_L g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_L g_m s + C_1 C_L R_1 s}{2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + 2C_1 C_4 L_1 L_L g_m s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + 2C_1 C_L L_1 R_L g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_L g_m s + C_1 C_L R_1 s}$$

$$10.665 \quad \text{INVALID-ORDER-665} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_L s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + 2C_1 C_L L_1 R_L g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_L g_m s + C_1 C_L R_1 s}{2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_L s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + 2C_1 C_L L_1 R_L g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_L g_m s + C_1 C_L R_1 s}$$

$$10.666 \quad \text{INVALID-ORDER-666} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = -\frac{R_L (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L s^2 + C_1 L_1 R_4 g_m s^2 + 2C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 R_1 R_4 g_m s + 2C_1 R_1 R_L g_m s + C_1 R_1 s}$$

$$10.667 \quad \text{INVALID-ORDER-667} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{(C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L s}$$

$$10.668 \quad \text{INVALID-ORDER-668} \quad Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L s}{C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_L L_1 R_4 R_L g_m s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L s}$$

$$10.669 \quad \text{INVALID-ORDER-669} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + C_1 C_L R_4 s}{2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L s^3 + 2C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + C_1 C_L R_4 s}$$

$$10.670 \quad \text{INVALID-ORDER-670} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{2C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + 2C_1 C_L R_4 s}{2C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2C_1 C_4 L_1 R_4 g_m s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_4 s^2 + 2C_1 C_L R_4 s}$$

$$10.671 \quad \text{INVALID-ORDER-671} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_4 g_m s^4 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_L R_1 R_4 g_m s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_1 L_L R_4 g_m s^4 + C_1 C_L L_1 L_L R_4 s}{C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_4 g_m s^4 + C_1 C_4 L_1 R_4 s^3 + 2C_1 C_4 L_L R_1 R_4 g_m s^3 + C_1 C_4 L_L R_4 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_1 L_L R_4 g_m s^4 + C_1 C_L L_1 L_L R_4 s}$$

$$10.672 \quad \text{INVALID-ORDER-672} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{2C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + 2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 s^3}{2C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_4 s^4 + 2C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 s^3}$$

$$10.673 \quad \text{INVALID-ORDER-673} \quad Z(s) = \left(\frac{1}{C_1 s}, \quad \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_L R_4 R_L g_m s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + 2C_1 C_4 L_L R_1 R_4 R_L g_m s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 L_L R_4 s^3}{C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_L R_4 R_L g_m s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_4 R_L s^3 + 2C_1 C_4 L_L R_1 R_4 R_L g_m s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_4 L_L R_4 s^3}$$

10.674 INVALID-ORDER-674 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_LR_4R_Lg_ms^5 + C_1C_4C_LL_1L_LR_4s^5 + 2C_1C_4C_LL_R_1R_4R_Lg_ms^4 + C_1C_4C_LL_R_1R_4s^4 + C_1C_4C_LL_R_4R_Ls^4 + 2C_1C_4L_1L_LR_4g_ms^4 + 2C_1C_4L_1R_4R_Lg_ms^3 +$$

10.675 INVALID-ORDER-675 $Z(s) = \left(\frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + 2C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + 2$$

10.676 INVALID-ORDER-676 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2 C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_4 R_4 g_m}$$

10.677 INVALID-ORDER-677 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_4 R_4 g_m s - C_4 s + g_m)}{s(C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s + C_1 C_L R_4 g_m s + C_1 C_L s + C_4 C_L L_1 g_m s^2 + C_4 C_L R_1 g_m s + C_4 C_L R_4 g_m s + C_4 C_L s + g_m)}$$

10.678 INVALID-ORDER-678 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 L_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_1 R_4}{C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 L_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 R_1 R_4}$$

10.679 INVALID-ORDER-679 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L R_L s + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_4 R_4 g_m s - C_4 R_4)}{s(C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s + C_1 C_4 L_1)}$$

10.680 INVALID-ORDER-680 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L L_L s^2 + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_4 R_4 g_m s - C_4 R_4 g_m)}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 L_L s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 g_m s^2 + C_1 C_4 s^2 + C_1 C_L s^2 + C_1 R_1 s + C_1)}$$

10.681 INVALID-ORDER-681 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_4 g_m s^5 + C_1 C_4 C_L L_L L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_1 s^3 + 2 C_1 C_4 L_L R_1}{C_1 C_4 C_L L_L R_4 g_m s^5 + C_1 C_4 C_L L_L L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + C_1 C_4 L_1 s^3 + 2 C_1 C_4 L_L R_1}.$$

10.682 INVALID-ORDER-682 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + C_1 R_1}{s(2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + 2C_1 C_4 C_L R_1 R_L g_m s^2 +$$

10.683 INVALID-ORDER-683 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 g_m s^4 + 2 C_1 C_4 L_1 L_L R_L g_m s^4 + C_1 C_4 L_1 L_L R_L s^4}{C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 g_m s^4 + 2 C_1 C_4 L_1 L_L R_L g_m s^4 + C_1 C_4 L_1 L_L R_L s^4}$$

$$10.684 \quad \text{INVALID-ORDER-684} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L}{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L}$$

$$10.685 \quad \text{INVALID-ORDER-685} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L}{C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L}$$

$$10.686 \quad \text{INVALID-ORDER-686} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 - C_4 s + g_m}$$

$$10.687 \quad \text{INVALID-ORDER-687} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{(C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 L_1 g_m s^2 + 2C_1 C_4 R_1 g_m s + C_1 C_4 s + C_1 C_L L_1 g_m s^2 + C_1 C_L R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 - C_4 s + g_m)}$$

$$10.688 \quad \text{INVALID-ORDER-688} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 - C_4 s + g_m}{C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + 2C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_L s^2 + C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + C_4 L_4 g_m s^2 - C_4 s + g_m}$$

10.689 INVALID-ORDER-689 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L R_L s + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_4 L_4 g_m s^2 - C_4 R_4 g_m s + 1)}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + 2C_1 C_4 L_1 g_m s^2 + C_1 C_4 L_1 R_L s + C_1 C_4 R_1 + C_4 L_4 g_m)}$$

10.690 INVALID-ORDER-690 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L L_L s^2 + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_4 L_4 g_m s^2 - s(C_1 C_4 C_L L_1 L_4 g_m s^4 + 2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L R_1 s^2 + 2C_1 C_4 L_1 g_m s^2$$

10.691 INVALID-ORDER-691 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 g_m s^3}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_L g_m s^4 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 g_m s^3}$$

10.692 INVALID-ORDER-692 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + C_1 R_1)}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + 2C_1 C_4 C_L L_1 L_L g_m s^4 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + 2C_1 C_4 C_L R_1 g_m s^2 + 2C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_1)}.$$

10.693 INVALID-ORDER-693 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_L g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_L g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L s^4}$$

10.694 INVALID-ORDER-694 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L s^4}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + 2C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + 2C_1 C_4 C_L L_L R_1 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L s^4}$$

10.695 INVALID-ORDER-695 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L q_m s^6 + C_1 C_4 C_L L_1 L_4 R_L q_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L q_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 L_L R_1 q_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1$$

10.696 INVALID-ORDER-696 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_L (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + 2C_1 L_1 R_L g_m s^2 + C_1 L_1 s^2 + C_1 L_4 R_1 g_m s^2 + C_1 L_4 s^2 + 2C_1 R_1}$$

10.697 INVALID-ORDER-697 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_1 L_1 s^2 + C_1 R_1 s + 1)(C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_1 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^4 + C_1 C_L L_1 s^3 + C_1 C_L L_4 R_1 g_m s^3 + C_1 C_L L_4 s^3 + C_1 C_L R_1 s^2 + 2}$$

10.698 INVALID-ORDER-698 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_L L_1 L_4 R_L g_m s^4 + C_1 C_L L_1 R$$

10.699 INVALID-ORDER-699 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1}{2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_L s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1}$$

10.700 INVALID-ORDER-700 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1}{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1}$$

10.701 INVALID-ORDER-701 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 L_L g_m s^5 + C_1 C_L L_1 L_L}{C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_4 L_L R_1 g_m s^4 + C_1 C_4 L_4 L_L s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 L_L g_m s^5 + C_1 C_L L_1 L_L}$$

10.702 INVALID-ORDER-702 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 L_L}{2C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 L_L}$$

10.703 INVALID-ORDER-703 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 L_L R_1 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_4 L_L R_1 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_4 L_4 L_L}$$

10.704 INVALID-ORDER-704 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_Lg_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_4L_LR_1R_Lg_ms^5 + C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4L_LR_Ls^5 + 2C_1C_4L_1L_4L_Lg_ms^5 + 2C_1C_4L_1L_4R_Lg_ms^4 + \dots}{\dots}$$

10.705 INVALID-ORDER-705 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L s^4 + 2C_1 C_4 C_L L_1 L_4 R_L s^4 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^4 + 2C_1 C_4 C_L L_1 L_4 R_L s^4 + 2C_1 C_4 C_L L_1 L_4 R_L s^4}{(s^2 + \gamma_1)(s^2 + \gamma_2)(s^2 + \gamma_3)(s^2 + \gamma_4)(s^2 + \gamma_5)}.$$

10.706 INVALID-ORDER-706 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 L_4 g_m s^4 + C_1 C_4 L_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_L g_m s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 g_m s^2 + 2 C_1 C_4 R_1 R_L g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 g_m s + C_1 g_m}$$

10.707 INVALID-ORDER-707 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 s^2 + C_1 R_1 s + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s}{s (C_1 C_4 C_L L_1 L_4 g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_4 s^2 + 2 C_1 C_4 L_1 g_m s^2 +$$

10.708 INVALID-ORDER-708 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3}{C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L g_m s^3 + C_1 C_4 C_L R_1 R_L s^3 + C_1 C_4 C_L R_4 R_L s^3}$$

10.709 INVALID-ORDER-709 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L R_L s + 1)(C_1 L_1 s + 1)}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m s^2 + 2C_1 C_4 C_L R_1 R_L g_m s^2 + C_1 C_4 C_L R_1 s^2 + C_1 C_4 C_L R_L s^2 + C_1 C_4 C_L s^2)}$$

10.710 INVALID-ORDER-710 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L L_L s^2 + 1)(C_1 L_1 s + 1)}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + 2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L s^3)}$$

10.711 INVALID-ORDER-711 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L s^4}$$

10.712 INVALID-ORDER-712 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(C_1 C_4 C_L L_1 L_4 g_m s^4 + 2C_1 C_4 C_L L_1 L_L g_m s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_L g_m s^3 + C_1 C_4 C_L L_1 s^3 + C_1 C_4 C_L L_4 R_1 g_m s^3 + C_1 C_4 C_L L_4 s^3 + 2C_1 C_4 C_L L_L R_1 g_m s^3 + C_1 C_4 C_L L_L s^3 + C_1 C_4 C_L s^3)}$$

10.713 INVALID-ORDER-713 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_L R_1 s^4 + C_1 C_4 C_L L_L R_4 s^4 + C_1 C_4 C_L L_L s^4}$$

10.714 INVALID-ORDER-714 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4}$$

10.715 INVALID-ORDER-715 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L g_m s^3 + C_1 C_4 C_L L_1 R_4 R_L s^3 + C_1 C_4 C_L L_1 R_4 R_L g_m s^2 + C_1 C_4 C_L L_1 R_4 R_L s^2 + C_1 C_4 C_L L_1 R_4 R_L g_m s + C_1 C_4 C_L L_1 R_4 R_L s + C_1 C_4 C_L L_1 R_4 R_L g_m + C_1 C_4 C_L L_1 R_4 R_L}{C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L g_m s^3 + C_1 C_4 C_L L_1 R_4 R_L s^3 + C_1 C_4 C_L L_1 R_4 R_L g_m s^2 + C_1 C_4 C_L L_1 R_4 R_L s^2 + C_1 C_4 C_L L_1 R_4 R_L g_m s + C_1 C_4 C_L L_1 R_4 R_L s + C_1 C_4 C_L L_1 R_4 R_L g_m + C_1 C_4 C_L L_1 R_4 R_L}$$

10.716 INVALID-ORDER-716 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_L}{2C_1C_4L_1L_4R_4R_Lg_ms^4 + C_1C_4L_1L_4R_4s^4 + 2C_1C_4L_4R_1R_4R_Lg_ms^3 + C_1C_4L_4R_1R_4s^3 + C_1C_4L_4R_4R_Ls^3 + C_1L_1L_4R_4g_ms^3 + 2C_1L_1L_4R_Lg_ms^3 + C_1L_1L_4s^3 + 2C_1L_1R_4I}$$

10.717 INVALID-ORDER-717 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_1 L_4 R_4 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_4 R_1}{C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_L L_1 L_4 R_4 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_4 R_1}$$

10.718 INVALID-ORDER-718 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_L L_1 L_4 R_1 R_4 s^2 + C_1 C_L L_1 L_4 R_4 R_L s^2 + C_1 C_L L_1 L_4 R_1 s^2 + C_1 C_L L_1 L_4 R_4 s^2 + C_1 C_L L_1 L_4 s^2 + C_1 C_L L_1 R_1 R_4 s^2 + C_1 C_L L_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L s^2 + C_1 C R_1 R_4 s^2 + C_1 C R_4 R_L s^2 + C_1 C R_1 s^2 + C_1 C R_4 s^2 + C_1 C s^2 + C_1 R_1 R_4 s^2 + C_1 R_4 R_L s^2 + C_1 R_1 s^2 + C_1 R_4 s^2 + C_1 s^2}{C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 L_4 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_L L_1 L_4 R_1 R_4 s^2 + C_1 C_L L_1 L_4 R_4 R_L s^2 + C_1 C_L L_1 L_4 R_1 s^2 + C_1 C_L L_1 L_4 R_4 s^2 + C_1 C_L L_1 L_4 s^2 + C_1 C_L L_1 R_1 R_4 s^2 + C_1 C_L L_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_4 R_L s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L s^2 + C_1 C R_1 R_4 s^2 + C_1 C R_4 R_L s^2 + C_1 C R_1 s^2 + C_1 C R_4 s^2 + C_1 C s^2 + C_1 R_1 R_4 s^2 + C_1 R_4 R_L s^2 + C_1 R_1 s^2 + C_1 R_4 s^2 + C_1 s^2}.$$

10.719 INVALID-ORDER-719 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_4s^5 + 2C_1C_4C_LL_4R_1R_4R_Lg_ms^4 + C_1C_4C_LL_4R_1R_4s^4 + C_1C_4C_LL_4R_4R_Ls^4 + 2C_1C_4L_1L_4R_4g_ms^4 + 2C_1C_4L_4R_1R_4g_ms^3 + C_1C_4L_4R_4R_Lg_ms^2 + C_1C_4L_4R_4s^2 + C_1C_4L_1L_4R_4g_ms + C_1C_4L_1L_4s + C_1C_4L_4R_1R_4 + C_1C_4L_4R_4R_L + C_1C_4L_4R_4}{2C_1C_4C_LL_1L_4R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_4s^5 + 2C_1C_4C_LL_4R_1R_4R_Lg_ms^4 + C_1C_4C_LL_4R_1R_4s^4 + C_1C_4C_LL_4R_4R_Ls^4 + 2C_1C_4L_1L_4R_4g_ms^4 + 2C_1C_4L_4R_1R_4g_ms^3 + C_1C_4L_4R_4R_Lg_ms^2 + C_1C_4L_4R_4s^2 + C_1C_4L_1L_4R_4g_ms + C_1C_4L_1L_4s + C_1C_4L_4R_1R_4 + C_1C_4L_4R_4R_L + C_1C_4L_4R_4}.$$

10.720 INVALID-ORDER-720 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2C_1 C_4 L_4 R_1 R_4 g_m s^3 + C_1}{...}$$

10.721 INVALID-ORDER-721 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_1 L_4 L_L}{C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + C_1 C_4 L_1 L_4 R_4 s^4 + 2 C_1 C_4 L_4 L_L R_1 R_4 g_m s^4 + C_1 C_4 L_4 L_L R_4 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_1 L_4 L_L}$$

10.722 INVALID-ORDER-722 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4}{...}$$

10.723 INVALID-ORDER-723 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + 2C_1 C_4 L_4 L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4}$$

10.724 INVALID-ORDER-724 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_4L_LR_1R_4s^5 + C_1C_4C_LL_4L_LR_4R_Ls^5 + 2C_1C_4L_1L_4L_LR_4g_ms^5 + 2C_1C_4L_1L_4L_LR_4s^5 + 2C_1C_4L_1L_4L_LR_4g_ms^4 + 2C_1C_4L_1L_4L_LR_4s^4 + 2C_1C_4L_1L_4L_LR_4g_ms^3 + 2C_1C_4L_1L_4L_LR_4s^3 + 2C_1C_4L_1L_4L_LR_4g_ms^2 + 2C_1C_4L_1L_4L_LR_4s^2 + 2C_1C_4L_1L_4L_LR_4g_ms + 2C_1C_4L_1L_4L_LR_4s + 2C_1C_4L_1L_4L_LR_4}{2C_1C_4C_LL_1L_4L_LR_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_4L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_4L_LR_1R_4s^5 + C_1C_4C_LL_4L_LR_4R_Ls^5 + 2C_1C_4L_1L_4L_LR_4g_ms^5 + 2C_1C_4L_1L_4L_LR_4s^5 + 2C_1C_4L_1L_4L_LR_4g_ms^4 + 2C_1C_4L_1L_4L_LR_4s^4 + 2C_1C_4L_1L_4L_LR_4g_ms^3 + 2C_1C_4L_1L_4L_LR_4s^3 + 2C_1C_4L_1L_4L_LR_4g_ms^2 + 2C_1C_4L_1L_4L_LR_4s^2 + 2C_1C_4L_1L_4L_LR_4g_ms + 2C_1C_4L_1L_4L_LR_4s + 2C_1C_4L_1L_4L_LR_4}.$$

10.725 INVALID-ORDER-725 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_4R_Ls^5 + 2C_1C_4C_LL_4L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_4L_LR_1R_4s^5 + C_1C_4C_LL_4L_LR_4R_Ls^5 + C_1C_4C$$

10.726 INVALID-ORDER-726 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 s^2 + C_1 R_1 s - C_1 L_1 R_1)}{C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 L_1 L_4 g_m s^3 + C_1 L_1 R_1 s}.$$

10.727 INVALID-ORDER-727 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 C_4 C_L L_1 L_4 R_{4g_m} s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_1 R_{4g_m} s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^2 + C_1 C_L L_1 L_4 s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + C_1 C_L L_1 R_4 g_m s + C_1 C_L L_1 R_4 s + C_1 C_L L_1 R_4 g_m)}{C_1 C_4 C_L L_1 L_4 R_{4g_m} s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_1 R_{4g_m} s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + 2C_1 C_4 L_1 L_4 g_m s^4 + 2C_1 C_4 L_4 R_1 g_m s^3 + C_1 C_4 L_4 s^3 + C_1 C_L L_1 L_4 g_m s^2 + C_1 C_L L_1 L_4 s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + C_1 C_L L_1 R_4 g_m s + C_1 C_L L_1 R_4 s + C_1 C_L L_1 R_4 g_m}$$

10.728 INVALID-ORDER-728 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4}$$

10.729 INVALID-ORDER-729 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L L_4 R_L s^4}$$

10.730 INVALID-ORDER-730 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4}{2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4}$$

10.731 INVALID-ORDER-731 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L g_m s^5 + C_1 C_4 L_1 L_4 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4}$$

10.732 INVALID-ORDER-732 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4}{2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 g_m s^5 + C_1 C_4 C_L L_4 L_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4}$$

10.733 INVALID-ORDER-733 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + 2 C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + 2 C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_4 s^4}$$

$$\mathbf{10.734 \quad INVALID-ORDER-734} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}$$

$$\mathbf{10.735 \quad INVALID-ORDER-735} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}$$

$$\mathbf{10.736 \quad INVALID-ORDER-736} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$$

$$H(s) = -\frac{C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3}{C_1 C_4 L_1 L_4 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_4 R_1 R_L g_m s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_L s^3}$$

$$\mathbf{10.737 \quad INVALID-ORDER-737} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2 C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 s^4}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_4 R_1 s^4 + C_1 C_4 C_L L_4 R_4 s^4 + C_1 C_4 C_L R_1 R_4 s^3 + 2 C_1 C_4 L_1 L_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 s^4}$$

$$\mathbf{10.738 \quad INVALID-ORDER-738} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 s^3}{C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 s^3}$$

10.739 INVALID-ORDER-739 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 C_L L_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_4 s^4 + 2C_1 C_4 C_L R_1 R_4 g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L g_m s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 C_L R_4 s^3 + C_1 C_4 C_L R_L g_m s^3 + C_1 C_4 C_L R_L s^3 + C_1 C_4 C_L s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L g_m s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L g_m s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2 + 2C_1 C_4 g_m s + C_1 C_4 s}{C_1 C_4 C_L L_1 L_4 R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 C_L L_4 R_1 R_L g_m s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2C_1 C_4 C_L L_4 R_L g_m s^4 + C_1 C_4 C_L L_4 R_L s^4 + C_1 C_4 C_L L_4 s^4 + 2C_1 C_4 C_L R_1 R_4 g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 R_L g_m s^3 + C_1 C_4 C_L R_4 R_L s^3 + C_1 C_4 C_L R_4 s^3 + C_1 C_4 C_L R_L g_m s^3 + C_1 C_4 C_L R_L s^3 + C_1 C_4 C_L s^3 + 2C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_4 R_L g_m s^2 + C_1 C_4 R_4 R_L s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L g_m s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2 + 2C_1 C_4 g_m s + C_1 C_4 s}.$$

10.740 INVALID-ORDER-740 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_Lq_ms^6 + C_1C_4C_LL_1L_4R_4q_ms^5 + C_1C_4C_LL_1L_4s^5 + 2C_1C_4C_LL_1L_LR_4q_ms^5 + C_1C_4C_LL_1R_4s^4 + 2C_1C_4C_LL_4L_LR_1q_ms^5 + C_1C_4C_LL_4L_Ls^5 + C_1C_4C_LL_4}{2C_1C_4C_LL_1L_4L_Lq_ms^6 + C_1C_4C_LL_1L_4R_4q_ms^5 + C_1C_4C_LL_1L_4s^5 + 2C_1C_4C_LL_1L_LR_4q_ms^5 + C_1C_4C_LL_1R_4s^4 + 2C_1C_4C_LL_4L_LR_1q_ms^5 + C_1C_4C_LL_4L_Ls^5 + C_1C_4C_LL_4}$$

10.741 INVALID-ORDER-741 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^4 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^3 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^2 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^4 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^3 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^2 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4}$$

10.742 INVALID-ORDER-742 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L q_m s^6 + C_1 C_4 C_L L_1 L_4 R_4 q_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_L q_m s^5 + C_1 C_4 C_L L_1 L_4 s^5 + 2C_1 C_4 C_L L_1 L_L R_4 q_m s^5 + 2C_1 C_4 C_L L_1 R_4 R_L q_m s^4 + C_1 C_4 C_L L_1 R_4 s^4 + 2C_1$$

10.743 INVALID-ORDER-743 $Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 L s^5 + C_1 C_4 C_L L_1 s^5 + C_1 C_4 C_L L s^5 + C_1 C_4 C_L s^5 + C_1 C_4 C s^5 + C_1 C_4 s^5 + C_1 C s^5 + C_1 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 L s^5 + C_1 C_4 C_L L_1 s^5 + C_1 C_4 C_L L s^5 + C_1 C_4 C_L s^5 + C_1 C_4 C s^5 + C_1 C_4 s^5 + C_1 C s^5 + C_1 s^5}.$$

$$10.744 \quad \text{INVALID-ORDER-744} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^4 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^3 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^2 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^2 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s + C_1 C_4 C_L L_4 L_L R_1 R_4}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^4 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^3 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^2 + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s^2 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s + 2 C_1 C_4 C_L L_4 L_L R_1 R_4 s + C_1 C_4 C_L L_4 L_L R_1 R_4}$$

$$10.745 \quad \text{INVALID-ORDER-745} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = - \frac{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^4 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^4 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^3 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^3 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^2 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^2 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s + C_1 C_4 C_L L_1 L_L R_4 R_L}{C_1 C_4 C_L L_1 L_4 L_L R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^4 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^4 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^3 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^3 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^2 + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s^2 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s + 2 C_1 C_4 C_L L_1 L_L R_4 R_L s + C_1 C_4 C_L L_1 L_L R_4 R_L}$$

$$10.746 \quad \text{INVALID-ORDER-746} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (R_4 g_m - 1)}{C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_L L_1 R_1 R_4 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_4 s^2 + C_L R_1 R_4 s + 2 L_1 R_1 g_m s + L_1 s + R_1}$$

$$10.747 \quad \text{INVALID-ORDER-747} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (R_4 g_m - 1)}{C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_L L_1 R_1 R_4 R_L g_m s^2 + C_L L_1 R_1 R_L s^2 + C_L L_1 R_4 R_L s^2 + C_L R_1 R_4 R_L s + L_1 R_1 R_4 g_m s + 2 L_1 R_1 R_L g_m s + L_1 R_1 s + L_1 R_1}$$

$$10.748 \quad \text{INVALID-ORDER-748} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 (L_2 s + \frac{1}{C_2 s})}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (R_4 g_m - 1) (C_L R_L s + 1)}{C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_L L_1 R_1 R_4 g_m s^2 + 2 C_L L_1 R_1 R_L g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_4 s^2 + C_L L_1 R_L s^2 + C_L R_1 R_4 s + C_L R_1 R_L s + 2 L_1 R_1 g_m s + L_1 s + R_1}$$

$$\mathbf{10.749 \quad INVALID-ORDER-749} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (R_4 g_m - 1) (C_L L_L s^2 + 1)}{C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + 2 C_L L_1 L_L R_1 g_m s^3 + C_L L_1 L_L s^3 + C_L L_1 R_1 R_4 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_4 s^2 + C_L L_L R_1 s^2 + C_L R_1 R_4 s + 2 L_1 R_1 g_m s + L_1 L_1}$$

$$\mathbf{10.750 \quad INVALID-ORDER-750} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 s^2 (R_4 g_m - 1)}{C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_L L_1 L_L R_1 R_4 g_m s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_4 s^3 + C_L L_L R_1 R_4 s^2 + 2 L_1 L_L R_1 g_m s^2 + L_1 L_L s^2 + L_1 R_1 R_4 g_m s + L_1 L_1}$$

$$\mathbf{10.751 \quad INVALID-ORDER-751} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (R_4 g_m - 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_L L_1 L_L R_1 g_m s^3 + C_L L_1 L_L s^3 + C_L L_1 R_1 R_4 g_m s^2 + 2 C_L L_1 R_1 R_L g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_4 s^2 + L_1 L_1}$$

$$\mathbf{10.752 \quad INVALID-ORDER-752} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_1 R_L s^2 (R_4 g_m - 1)}{C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_L R_1 R_4 s^3 + C_1 L_1 L_L R_1 R_L s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_L L_1 L_L R_1 R_4 R_L g_m s^3 + C_L L_1 L_L R_1 R_L s^3 + C_L L_1 L_L R_4 R_L s^3 + C_L L_L R_1 R_4 R_L s^2 + L_1 L_1}$$

$$\mathbf{10.753 \quad INVALID-ORDER-753} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = \frac{L_1 R_1 s (R_4 g_m - 1) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_L L_1 L_L R_1 R_4 g_m s^3 + 2 C_L L_1 L_L R_1 R_L g_m s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_4 s^3 + L_1 L_1}$$

$$\mathbf{10.754 \quad INVALID-ORDER-754} \quad Z(s) = \left(\frac{R_1}{C_1 R_1 s + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{L_1}{C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_L L_1 L_L R_1 R_4 g_m s^3 + 2 C_L L_1 L_L R_1 R_L g_m s^3 + C_L L_1 L_L R_1 s^3 + C_L L_1 L_L R_1 s^2 + C_L L_1 L_L R_1 s + C_L L_1 L_L R_1}$$

$$\mathbf{10.755 \quad INVALID-ORDER-755} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 s + g_m)}{C_1 C_4 L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 L_1 R_1 R_L g_m s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_L s^2 + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s + R_1}$$

$$\mathbf{10.756 \quad INVALID-ORDER-756} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 s + g_m)}{C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_L s^3 + 2 C_4 L_1 R_1 R_L g_m s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_L s^2 + C_4 R_1 R_L s + C_L L_1 R_1 R_L g_m s^2 + C_L L_1 R_L s^2 + C_L R_1 R_L s + C_L L_1 R_1 R_L}$$

$$\mathbf{10.757 \quad INVALID-ORDER-757} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{L_1 R_1 (C_4 s - g_m) (C_L R_L s + 1)}{C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + 2 C_4 C_L L_1 R_1 R_L g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_L s^2 + C_4 C_L R_1 R_L s + 2 C_4 L_1 R_1 g_m s + C_4 L_1 s + C_4 R_1 + C_L L_1 R_1 g_m s + C_L L_1 R_1 s + C_L L_1 R_1}$$

$$\mathbf{10.758 \quad INVALID-ORDER-758} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{L_1 R_1 (C_4 s - g_m) (C_L L_L s^2 + 1)}{C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_L R_1 s^2 + 2 C_4 L_1 R_1 g_m s + C_4 L_1 s + C_4 R_1 + C_L L_1 R_1 g_m s + C_L L_1 R_1 s + C_L L_1 R_1}$$

$$\mathbf{10.759 \quad INVALID-ORDER-759} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 s^2 (-C_4 s + g_m)}{C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_L R_1 s^4 + 2 C_4 L_1 L_L R_1 g_m s^3 + C_4 L_1 L_L s^3 + C_4 L_1 R_1 s^2 + C_4 L_L R_1 s^2 + C_L L_1 L_L R_1 g_m s^3 + C_L L_1 L_L s^3 + C_L L_L R_1 s^2 + C_L L_L R_1 s + C_L L_L R_1}$$

10.760 INVALID-ORDER-760 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 R_1 (C_4 s - g_m) (C_L L_L s^2 + C_L R_L s + 1)}{C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3 + 2 C_4 C_L L_1 R_1 R_L g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_L s^2}.$$

10.761 INVALID-ORDER-761 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{L_1 L_L R_1 R_L s^2 (-C_4 s + g_m)}{C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_L R_1 R_L s^4 + 2 C_4 L_1 L_L R_1 R_L g_m s^3 + C_4 L_1 L_L R_1 s^3 + C_4 L_1 L_L R_L s^3 + C_4 L_1 R_1 R_L s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 s^2 + C_4 s^2}$$

10.762 INVALID-ORDER-762 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{L_1 R_1 s(C_4 s + C_5)}{C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 L_L R_1 R_L g_m s^4 + C_4 C_L L_1 L_L R_1 s^4 + C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_L R_1 s^4}$$

10.763 INVALID-ORDER-763 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{L}{C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 L_L R_1 R_L g_m s^4 + C_4 C_L L_1 L_L R_1 s^4 + C_4 C_L L_1 L_L R_L s^4 + C_4 C_L L_1 L_L s^4}$$

10.764 INVALID-ORDER-764 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, \frac{1}{C_{2s}}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + 2 C_4 L_1 R_1 R_4 R_L g_m s^2 + C_4 L_1 R_1 R_4 s^2 + C_4 L_1 R_4 R_L s^2 + C_4 R_1 R_4 R_L s + L_1 R_1 R_4 g_m s + 2 L_1 R_1 R_L g_m s + L_1 R_1 s + L_1 R_4}$$

10.765 INVALID-ORDER-765 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_4 s^3 + 2C_4 L_1 R_1 R_4 g_m s^2 + C_4 L_1 R_4 s^2 + C_4 R_1 R_4 s + C_L L_1 R_1 R_4 g_m s^2 + C_L L_1 R_1 s^2 + C_L L_1 R_4 s^2 + C_L R_1 R_4 s}$$

10.766 INVALID-ORDER-766 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 R_1 R_4 R_L s^3 + 2C_4 L_1 R_1 R_4 R_L g_m s^2 + C_4 L_1 R_1 R_4 s^2 + C_4 L_1 R_4 R_L s^2 + C_4 R_1 R_4 R_L s + C_L L_1 R_1 R_4 R_L s^2 + C_L L_1 R_1 R_4 s^2 + C_L R_1 R_4 R_L s}$$

10.767 INVALID-ORDER-767 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 R_1 s (C_L R_L s + 1)}{C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 R_1 R_4 R_L g_m s^3 + C_4 C_L L_1 R_1 R_4 s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L R_1 R_4 s^3}$$

10.768 INVALID-ORDER-768 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 R_1 s (C_L L_L s + 1)}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 L_L R_1 R_4 g_m s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_1 R_1 R_4 s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L L_L R_1 R_4 s^3}$$

10.769 INVALID-ORDER-769 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 s^2 (-C_4 R_4 s + R_4 g_m - 1)}{C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_4 C_L L_1 L_L R_1 R_4 s^4 + 2C_4 L_1 L_L R_1 R_4 g_m s^3 + C_4 L_1 L_L R_4 s^3 + C_4 L_1 R_1 R_4 s^2 + C_4 L_L R_1 R_4 s^2 + C_L L_1 R_1 R_4 s^2 + C_L R_1 R_4 s^2}$$

10.770 INVALID-ORDER-770 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{L_1 R_1 s (C_L L_L s + 1)}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2C_4 C_L L_1 L_L R_1 R_4 g_m s^4 + C_4 C_L L_1 L_L R_1 R_4 s^4 + C_4 C_L L_1 R_1 R_4 s^3 + C_4 C_L L_L R_1 R_4 s^3 + C_4 C_L R_1 R_4 s^3}$$

$$10.771 \quad \text{INVALID-ORDER-771} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_L R_1 R_4 s^3 + C_1 L_1 L_L R_1 R_L s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L s^4 + 2C_4 L_1 L_L R_1 R_4 R_L g_m s^3 + C_4 L_1 L_L R_1 R_4 R_L s^2}{C_1 C_4 L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 s + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}$$

$$10.772 \quad \text{INVALID-ORDER-772} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 s + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 s + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}$$

$$10.773 \quad \text{INVALID-ORDER-773} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 s + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L s^2 + C_4 L_1 R_1 R_4 s + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}$$

$$10.774 \quad \text{INVALID-ORDER-774} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 L_1 R_1 R_4 g_m s^2 + 2C_4 L_1 R_1 R_L g_m s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_L s^2 + C_4 R_1 R_4 s + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}$$

$$10.775 \quad \text{INVALID-ORDER-775} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_4 g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^2 + C_4 C_L R_1 R_4 s + 2C_4 L_1 R_1 g_m s + C_4 L_1 s + C_4 R_1 + C_L L_1 R_1 g_m s + L_1 s}$$

$$10.776 \quad \text{INVALID-ORDER-776} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_4 R_L g_m s^3 + C_4 C_L L_1 R_1 R_L s^3 + C_4 C_L L_1 R_4 R_L s^3 + C_4 C_L R_1 R_4 s^3}$$

$$10.777 \quad \text{INVALID-ORDER-777} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 (C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_1 R_4 g_m s^2 + 2 C_4 C_L L_1 R_1 R_L g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^2 + C_4 C_L L_1 R_L s^2 + C_4 C_L R_1 R_4 s^2}$$

$$10.778 \quad \text{INVALID-ORDER-778} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 (C_L L_L s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3 + C_4 C_L L_1 R_1 R_4 g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^2 + C_4 C_L L_1 R_L s^2}$$

$$10.779 \quad \text{INVALID-ORDER-779} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 s^2 (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_L R_1 R_4 g_m s^4 + C_4 C_L L_1 L_L R_1 s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_L R_1 R_4 s^4}$$

$$10.780 \quad \text{INVALID-ORDER-780} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3 + C_4 C_L L_1 R_1 R_4 g_m s^2 + 2 C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^2 + C_4 C_L L_1 R_L s^2}$$

$$10.781 \quad \text{INVALID-ORDER-781} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 R_1 (C_L L_L s^2 + C_L R_L s + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^4 + C_4 C_L L_1 L_L R_1 s^4 + C_4 C_L L_1 L_L R_4 s^4 + C_4 C_L L_L R_1 R_4 s^4}$$

10.782 INVALID-ORDER-782 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_L R_1 R_4 g_m s^4 + 2 C_4 C_L L_1 L_L R_1 R_4 s^4}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_L R_1 R_4 g_m s^4 + 2 C_4 C_L L_1 L_L R_1 R_4 s^4}$$

10.783 INVALID-ORDER-783 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_L R_1 R_4 s^5}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_L R_1 R_4 s^5}$$

10.784 INVALID-ORDER-784 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 L_1 L_4 R_1 g_m s^3 + C_4 L_1 L_4 s^3 + 2 C_4 L_1 R_1 R_L g_m s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_L s^2 + C_4 L_4 R_1 s^2 + C_4 R_1 R_L s + L_1 R_1 g_m s + L_1 s}$$

10.785 INVALID-ORDER-785 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_1 R_1 (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_4 R_1 s^2 + 2C_4 L_1 R_1 g_m s + C_4 L_1 s + C_4 R_1 + C_L L_1 R_1 g_m s +}$$

10.786 INVALID-ORDER-786 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 R_1 R_L s^3 + C_4 C_L L_4 R_1 R_L s^2)}{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_1 R_1 R_L s^3 + C_4 C_L L_4 R_1 R_L s^2}$$

10.787 INVALID-ORDER-787 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, R_L + \frac{1}{C_{Ls}} \right)$

$$H(s) = \frac{L_1 R_1 (C_L R_L s + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + 2 C_4 C_L L_1 R_1 R_L g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_L s^2 + C_4}$$

10.788 INVALID-ORDER-788 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 (C_L L_L s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_L s^2}$$

10.789 INVALID-ORDER-789 $Z(s) = \left(R_1 + \frac{1}{C_{1s}}, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_1 L_L R_1 s^2 (C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_L R_1 s^4 + C_4 C_L L_4 L_L R_1 s^4)}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_L R_1 s^4 + C_4 C_L L_4 L_L R_1 s^4}$$

10.790 INVALID-ORDER-790 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 (C_L L_L s^2 + C_L R_L s + C_L L_L R_1)}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3}$$

10.791 INVALID-ORDER-791 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 L_L R_1 R_L g_m s}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 L_L R_1 R_L g_m s}$$

10.792 INVALID-ORDER-792 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1}$$

10.793 INVALID-ORDER-793 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1}$$

10.794 INVALID-ORDER-794 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_L s^2 + 2 C_4 L_1 L_4 R_1 R_L g_m s^3 + C_4 L_1 L_4 R_1 s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_4 R_1 R_L s^2 + L_1 L_4 R_1 g_m s^2 + L_1 L_4 s^2 + 2 L_1 R_1 R_L g_m s + L_1 R_1}$$

10.795 INVALID-ORDER-795 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 s^4 + 2 C_4 L_1 L_4 R_1 g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_4 R_1 s^2 + C_L L_1 L_4 R_1 g_m s^3 + C_L L_1 L_4 s^3 + C_L L_1 R_1 s^2 + C_L L_4 R_1 s^2}$$

10.796 INVALID-ORDER-796 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 L_4 s^2 + L_4 g_m s)}{C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_L s^4 + 2 C_4 L_1 L_4 R_1 R_L g_m s^3 + C_4 L_1 L_4 R_1 s^3 + C_4 L_1 L_4 R_L s^3 + C_4 L_4 R_1 R_L s^2 + C_L L_1 L_4 R_1 g_m s^3 + C_L L_1 L_4 s^3 + C_L L_1 R_1 s^2 + C_L L_4 R_1 s^2}$$

$$10.797 \quad \text{INVALID-ORDER-797} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{L_1 R_1 s (C_L R_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_1 s^4)}{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_1 s^4}$$

$$10.798 \quad \text{INVALID-ORDER-798} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{L_1 R_1 s (C_L L_L s^5 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_4 L_L s^5)}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L s^5 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_4 L_L s^5}$$

$$10.799 \quad \text{INVALID-ORDER-799} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = \frac{L_1 L_L R_1 s (-C_4 L_4 s^2 + L_4 g_m s - 1)}{C_1 C_4 L_1 L_4 L_L R_1 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^4 + C_1 L_1 L_4 R_1 s^2 + C_1 L_1 L_L R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 s^4 + 2 C_4 L_1 L_4 L_L R_1 g_m s^3 + C_4 L_1 L_4 L_L s^3 + C_4 L_1 L_4 R_1 s^2 + C_4 L_4 L_L R_1 s^2 + C_L L_4 R_1 s^2}$$

$$10.800 \quad \text{INVALID-ORDER-800} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = - \frac{L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_1 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_1 s^4}$$

$$10.801 \quad \text{INVALID-ORDER-801} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = \frac{L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_1 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_L s^4 + C_4 C_L L_4 R_1 s^4}$$

10.802 INVALID-ORDER-802 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L}$$

10.803 INVALID-ORDER-803 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_L s^2 + 2C_4 C_L L_1 L_4 L_L R_1 R_L g}{\dots}$$

10.804 INVALID-ORDER-804 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 L_1 L_4 R_1 g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_1 R_1 R_4 g_m s^2 + 2 C_4 L_1 R_1 R_L g_m s^2 + C_4 L_1 R_1 s^2 + C_4 L_1 R_4 s^2 + C_4 L_1}$$

10.805 INVALID-ORDER-805 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 (C_4 L_4 g_m s^2 + C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + C_4 C_L L_1 R_1 R_4 g_m s^2 + C_4 C_L L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^2 + C_4 C_L L_1 R_4 s + C_4 C_L L_1 g_m s + C_4 C_L L_1 s + C_4 C_L R_4 s + C_4 C_L g_m + C_4 C_L}$$

10.806 INVALID-ORDER-806 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_4 C_L L_1 L_4 R_1 R_L s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_4 C_L L_1 L_4 R_1 R_L s^4}$$

10.807 **INVALID-ORDER-807** $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 (C_L R_L s + 1) (C_4 L_4 g_m s}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + C_4 C_L L_1 R_1 R_4 g_m s^2 + 2 C_4 C_L L_1 R_1 R_4}$$

10.808 INVALID-ORDER-808 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 (C_L L_L s^2 + 1) (C_4 L_4 g_m}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + 2 C_4 C_L L_1 L_L R_1 g_m s^3 + C_4 C_L L_1 L_L s^3}$$

10.809 INVALID-ORDER-809 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 L_L R_1 s^3 + C_4 C_L L_1 L_4 L_L R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 s}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1 L_4 L_L R_1 s^4 + C_4 C_L L_1 L_4 L_L R_1 s^3 + C_4 C_L L_1 L_4 L_L R_1 s^2 + C_4 C_L L_1 L_4 L_L R_1 s}$$

10.810 INVALID-ORDER-810 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + 2 C_4 C_L L_1 L_L R_1}{C_1 C_4 C_L L_1 L_4 R_1 s^4 + C_1 C_4 C_L L_1 L_L R_1 s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^3 + C_1 C_4 C_L L_1 R_1 R_L s^3 + C_1 C_4 L_1 R_1 s^2 + C_1 C_L L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 g_m s^3 + C_4 C_L L_1 L_4 s^3 + 2 C_4 C_L L_1 L_L R_1}$$

10.811 INVALID-ORDER-811 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L$$

10.812 INVALID-ORDER-812 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1}{\dots}$$

10.813 INVALID-ORDER-813 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_R R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1}{C_1 C_4 C_L L_1 L_4 L_R R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_1}$$

10.814 INVALID-ORDER-814 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s}{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 L_1 L_4 R_1 R_4 s^3 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 R_1 R_4 R_L s^2 + 2 C_4 L_1 L_4 R_1 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_1 R_4 s^3 + C_4 L_1 L_4 R_4 R_L s^3 + C_4 L_4 R_1 R_4 R_L s^2 + L_1 L_4 R_1}$$

10.815 INVALID-ORDER-815 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 s \left(-C_4 L_4 R_4 s^2 + L_4 R_4 g_m s - L_4 s - \right)}{C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_4 C_L L_1 L_4 R_1 R_4 s^4 + 2 C_4 L_1 L_4 R_1 R_4 g_m s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_4 R_1 R_4 s^2 + C_L L_1 L_4 R_1 R_4 g_m s^3 +}$$

10.816 INVALID-ORDER-816 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_4 R_L s^4 + C_1 L_1 L_4 R_1 R_4 s^3 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_4 R_L s^4 + 2 C_4 L_1 L_4 R_1 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_1 R_4 s^2}{C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_4 R_L s^4 + C_1 L_1 L_4 R_1 R_4 s^3 + C_1 L_1 L_4 R_1 R_L s^3 + C_1 L_1 R_1 R_4 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_4 R_L s^4 + 2 C_4 L_1 L_4 R_1 R_4 R_L g_m s^3 + C_4 L_1 L_4 R_1 R_4 s^2}$$

10.817 INVALID-ORDER-817 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + 2C_4 C_L L_1 L_4 R_1 R_4 R_L g_m}{\dots}$$

10.818 INVALID-ORDER-818 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m}.$$

10.819 INVALID-ORDER-819 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 s^4 + C_1 L_1 L_4 L_L R_1 s^3 + C_1 L_1 L_4 R_1 R_4 s^2 + C_1 L_1 L_L R_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 s^4 + 2 C_4 L_1 L_4 L_L R_1 R_4 g_m s^3 + C_4 L_1 L_4 L_L R_4 s^3}{C_1 C_4 L_1 L_4 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 s^4 + C_1 L_1 L_4 L_L R_1 s^3 + C_1 L_1 L_4 R_1 R_4 s^2 + C_1 L_1 L_L R_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 s^4 + 2 C_4 L_1 L_4 L_L R_1 R_4 g_m s^3 + C_4 L_1 L_4 L_L R_4 s^3}$$

10.820 INVALID-ORDER-820 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_1 R_L s^4}$$

10.821 INVALID-ORDER-821 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_4 L_L R_1 R_4 s^3 + C_1 L_1 L_4 L_L R_1 R_L s^3 + C_1 L_1 L_4 R_1 R_4 R_L s^2 + C_1 L_1 L_L R_1 R_4 R_L s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^4 + 2}{1}$$

$$10.822 \quad \text{INVALID-ORDER-822} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_L L_1 L_4 L_L R_1 R_L s^5 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_4 L_L R_1 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_L L_1 L_4 L_L R_1 R_L s^5 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_4 L_L R_1 s^4}$$

$$10.823 \quad \text{INVALID-ORDER-823} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_L L_1 L_4 L_L R_1 R_L s^5 + C_1 C_L L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_4 R_1 R_4 s^3}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_L L_1 L_4 L_L R_1 R_L s^5 + C_1 C_L L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_4 R_1 R_4 s^3}$$

$$10.824 \quad \text{INVALID-ORDER-824} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + C_4 L_4 R_4 s) + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 L_1 L_4 R_1 R_4 g_m s^3 + 2 C_4 L_1 L_4 R_1 R_L g_m s^3 + C_4 L_1 L_4 R_1 s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_1 L_4 R_4 s^3}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_1 R_4 s^3}$$

$$10.825 \quad \text{INVALID-ORDER-825} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_1 R_1 s (C_4 L_4 R_4 g_m s^2 - C_4 L_4 s^2 + C_4 L_4 R_4 s) + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_1 R_4 s^3}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_1 R_4 s^3}$$

$$10.826 \quad \text{INVALID-ORDER-826} \quad Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_4 s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_1 R_4 s^3}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_4 s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_4 R_1 R_4 s^3}$$

10.827 INVALID-ORDER-827 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + 2 C_4 C_L L_1}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + 2 C_4 C_L L_1}$$

10.828 INVALID-ORDER-828 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L L_1 L_4 L_L R_1 g_m s^5 + C_4 C_L L_1}$$

10.829 INVALID-ORDER-829 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 s^6}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 s^6}$$

10.830 INVALID-ORDER-830 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_1 s + C_1 C_L L_1 s^2 + C_1 C_L L_1 s + C_1 C_L s^2 + C_1 C_L s + C_1 C s^2 + C_1 C s + C_1 s^2 + C_1 s}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_1 s + C_1 C_L L_1 s^2 + C_1 C_L L_1 s + C_1 C_L s^2 + C_1 C_L s + C_1 C s^2 + C_1 C s + C_1 s^2 + C_1 s}$$

10.831 INVALID-ORDER-831 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L s^5 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_4 L_L R_1 s^4 +$$

10.832 INVALID-ORDER-832 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1}$$

10.833 INVALID-ORDER-833 $Z(s) = \left(R_1 + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1}$$

10.834 INVALID-ORDER-834 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{L_1 R_1 R_L s (C_4 L_4 s^4 + C_4 L_4 R_1 s^3 + C_4 L_4 R_1 R_L s^2 + C_4 L_4 R_1 R_L R_L s + C_4 L_4 R_1 R_L R_L R_L)}{C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^3 + C_1 C_4 L_1 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 L_1 L_4 R_1 R_4 g_m s^3 + 2 C_4 L_1 L_4 R_1 R_L g_m s^3 + C_4 L_1 L_4 R_1 s^3 + C_4 L_1 L_4 R_4 s^3 + C_4 L_1 L_4 R_1 R_L s^3 + C_4 L_1 L_4 R_1 R_L R_L s^2 + C_4 L_1 L_4 R_1 R_L R_L R_L s + C_4 L_1 L_4 R_1 R_L R_L R_L R_L}$$

10.835 INVALID-ORDER-835 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{L_1 R_1 s (C_4 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_1 R_1 R_4 s^3)}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_4 C_L L_1 L_4 R_1 s^4 + C_4 C_L L_1 L_4 R_4 s^4 + C_4 C_L L_1 R_1 R_4 s^3}$$

10.836 INVALID-ORDER-836 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 s^2 + C_1 L_1 R_1 R_L s^2 + C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^4}$$

10.837 **INVALID-ORDER-837** $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 s^5}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 L_4 R_1 R_4 s^5}$$

10.838 INVALID-ORDER-838 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^2 + 2 C_4 C_L}$$

10.839 INVALID-ORDER-839 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_L R_1 R_4 s^4 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 R_1 R_4 s^2 + C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^5}.$$

10.840 INVALID-ORDER-840 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_L L_1 L$$

10.841 INVALID-ORDER-841 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_L R_1 R_4 R_L s^4 + C_1 L_1 L_L R_1 R_4 s^3 +$$

10.842 INVALID-ORDER-842 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_1 R_4 s^4 + C_1 C_4 L_1 R_1 R_L s^4 + C_1 C_4 L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 s^4 + C_1 C_4 R_1 R_4 s^4 + C_1 C_4 R_1 R_L s^4 + C_1 C_4 R_4 R_L s^4 + C_1 C_4 R_4 s^4 + C_1 C_4 s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_1 R_L s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_1 R_4 s^4 + C_1 C_4 L_1 R_1 R_L s^4 + C_1 C_4 L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_4 s^4 + C_1 C_4 L_1 s^4 + C_1 C_4 R_1 R_4 s^4 + C_1 C_4 R_1 R_L s^4 + C_1 C_4 R_4 R_L s^4 + C_1 C_4 R_4 s^4 + C_1 C_4 s^4}.$$

10.843 INVALID-ORDER-843 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^7 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^7 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^6 + C_1 C_4 L_1 L_4 R_1 R_4 s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^5 + C_1 C_4 L_1 R_1 R_4 R_L s^5 + C_1 C_4 R_1 R_4 R_L s^4}.$$

10.844 INVALID-ORDER-844 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_L L_1 R_4 g_m s^2 + C_L L_1 s^2 + C_L R_1 R_4 g_m s + C_L R_1 s + C_L R_4 s + 2L_1 g_m s + 2R_1 g_m + 1}$$

10.845 INVALID-ORDER-845 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_L (R_4 g_m - 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + 2 C_1 L_1 R_1 R_L g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_L L_1 R_4 R_L g_m s^2 + C_L L_1 R_L s^2}$$

10.846 INVALID-ORDER-846 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1)(C_L R_L s + 1)(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_L L_1 R_4 g_m s^2 + 2C_L L_1 R_L g_m s^2 + C_L L_1 s^2 + C_L R_1 s + R_1}$$

10.847 INVALID-ORDER-847 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1) (C_L L_L s^2 + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + 2C_L L_1 L_L g_m s^3 + C_L L_1 R_4 g_m s^2 + C_L L_1 s^2 + 2C_L L_1 L_L s^3}$$

10.848 INVALID-ORDER-848 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L s (R_4 g_m - 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + 2C_1 L_1 L_L R_1 g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_L L_1 L_L R_4 g_m s^3 + C_L L_1 L_L s^3}$$

10.849 INVALID-ORDER-849 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(R_4 g_m - 1) (C_L L_L s^2 + C_L R_L s + 1)}{2C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + 2C_L L_1 L_L s^3}$$

10.850 INVALID-ORDER-850 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_4 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 L_1 L_L R_1 R_4 g_m s^3 + 2C_1 L_1 L_L R_1 R_L g_m s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + C_1 L_1 R_1 s^2 + 2C_L L_1 L_L s^3}$$

10.851 INVALID-ORDER-851 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + 2C_1 L_1 L_L R_1 g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + 2C_1 L_1 R_1 s^2 + 2C_L L_1 L_L s^3}$$

10.852 INVALID-ORDER-852 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + 2 C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 +$$

10.853 INVALID-ORDER-853 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_L (C_4 s - g_m) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + 2C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + 2C_4 R_1 R_L g_m s + C_4 R_1 s + C_4 R_L s + L_1 g_m s + R_1 g_m + 1}$$

10.854 INVALID-ORDER-854 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4s - g_m)(C_1L_1R_1s^2 + L_1s + R_1)}{s(C_1C_4C_LL_1R_1s^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2 + C_4C_LL_1s^2 + C_4C_LR_1s + 2C_4L_1g_ms + 2C_4R_1g_m + C_4 + C_LL_1g_ms + C_LR_1g_m + C)}$$

10.855 INVALID-ORDER-855 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{R_L(C_4s - g_m)(C_1L_1R_1s^2 + L_1s + R_1)}{C_1C_4C_LL_1R_1R_Ls^4 + 2C_1C_4L_1R_1R_Lg_ms^3 + C_1C_4L_1R_1s^3 + C_1C_4L_1R_Ls^3 + C_1C_LL_1R_1R_Lg_ms^3 + C_1C_LL_1R_Ls^3 + C_1L_1R_1g_ms^2 + C_1L_1s^2 + C_4C_LL_1R_Ls^3 + C_4C_LL_1R_1R_Ls^2 + C_4C_LL_1R_1s + C_4C_LL_1R_L}.$$

10.856 INVALID-ORDER-856 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4s - g_m)(C_LR_Ls + 1)(C_1L_1R_1s^2 + L_1s + R_1)}{s(2C_1C_4C_L L_1R_1R_Lg_ms^3 + C_1C_4C_L L_1R_1s^3 + C_1C_4C_L L_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2 + 2C_4C_LL_1R_Lg_ms^2 + C_4C_LL_1s^2 + 2C_4C_L L_1R_1g_ms + C_4C_L L_1s + C_4C_L R_1)}$$

10.857 INVALID-ORDER-857 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4s - g_m)(C_LLs^2 + 1)(C_1L_1R_1s^2 + L_1s + R_1)}{s(2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1s^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2 + 2C_4C_LL_1L_Lg_ms^3 + C_4C_LL_1s^2 + 2C_4L_1R_1g_ms + C_4L_1R_1s + C_4R_1)}$$

10.858 INVALID-ORDER-858 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L s (C_4 s - g_m) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 L_1 L_L R_1 g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_1 s^3 + C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_4 C_L L_1 L_L s^4 + C_4 C_L L_L R_1 s^3}$$

10.859 INVALID-ORDER-859 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4s - g_m)(C_L}{s(2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2 + C_1C_LL_1R_1g_ms^2 + C_1C_L$$

10.860 INVALID-ORDER-860 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2 C_1 C_4 L_1 L_L R_1 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L R_1 g_m s^3}{C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2 C_1 C_4 L_1 L_L R_1 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 L_1 L_L R_1 g_m s^3}$$

10.861 INVALID-ORDER-861 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_L L_1 L_L R_1 R_L g_m s^5 + C_1C_4C_L L_1 L_L R_1 s^5 + C_1C_4C_L L_1 L_L R_L s^5 + 2C_1C_4L_1 L_L R_1 g_m s^4 + C_1C_4L_1 L_L s^4 + 2C_1C_4L_1 R_1 R_L g_m s^3 + C_1C_4L_1 R_1 s^3 + C_1C_4L_1 R_L s^3 + C_1C_4L_1 s^3 + C_1C_4L_L R_1 R_L g_m s^3 + C_1C_4L_L R_1 s^3 + C_1C_4L_L R_L s^3 + C_1C_4L_L s^3 + C_1C_4R_1 R_L g_m s^2 + C_1C_4R_1 s^2 + C_1C_4R_L s^2 + C_1C_4 s^2 + C_1C_L R_1 R_L g_m s^2 + C_1C_L R_1 s^2 + C_1C_L R_L s^2 + C_1C_L s^2 + C_1R_1 R_L g_m s + C_1R_1 s + C_1R_L s + C_1}{2C_1C_4C_L L_1 L_L R_1 R_L g_m s^5 + C_1C_4C_L L_1 L_L R_1 s^5 + C_1C_4C_L L_1 L_L R_L s^5 + 2C_1C_4L_1 L_L R_1 g_m s^4 + C_1C_4L_1 L_L s^4 + 2C_1C_4L_1 R_1 R_L g_m s^3 + C_1C_4L_1 R_1 s^3 + C_1C_4L_1 R_L s^3 + C_1C_4L_1 s^3 + C_1C_4L_L R_1 R_L g_m s^3 + C_1C_4L_L R_1 s^3 + C_1C_4L_L R_L s^3 + C_1C_4L_L s^3 + C_1C_4R_1 R_L g_m s^2 + C_1C_4R_1 s^2 + C_1C_4R_L s^2 + C_1C_4 s^2 + C_1C_L R_1 R_L g_m s^2 + C_1C_L R_1 s^2 + C_1C_L R_L s^2 + C_1C_L s^2 + C_1R_1 R_L g_m s + C_1R_1 s + C_1R_L s + C_1}.$$

$$\mathbf{10.862 \quad INVALID-ORDER-862} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L R_1 g_m s^4}{2C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 L_L R_1 g_m s^4}$$

$$\mathbf{10.863 \quad INVALID-ORDER-863} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$$

$$H(s) = -\frac{R_L (C_4 R_4 s - R_4 g_m + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + 2C_1 L_1 R_1 R_L g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + 2C_4 L_1 R_4 R_L g_m s^2 + C_4 L_1 R_4 s^2}$$

$$\mathbf{10.864 \quad INVALID-ORDER-864} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{(C_4 R_4 s - R_4 g_m + 1) (C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_4 C_L L_1 R_4 s^3 + C_4 C_L R_1 R_4 s^3}$$

$$\mathbf{10.865 \quad INVALID-ORDER-865} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^3 + C_4 C_L R_1 R_4 s^3}{C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + C_1 L_1 R_1 s^2 + C_4 C_L L_1 R_4 s^3 + C_4 C_L R_1 R_4 s^3}$$

$$\mathbf{10.866 \quad INVALID-ORDER-866} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 s^3}{2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 s^3}$$

10.867 INVALID-ORDER-867 $Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_LR_1R_4g_ms^5 + C_1C_4C_LL_1L_LR_4s^5 + C_1C_4C_LL_1R_1R_4s^4 + 2C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_4s^3 + 2C_1C_LL_1L_LR_1g_ms^4 + C_1C_LL_1L_Ls^4 + C_1C_LL_1R_1R_4g_ms^3}{2C_1C_4C_LL_1L_LR_1R_4g_ms^5 + C_1C_4C_LL_1L_LR_4s^5 + C_1C_4C_LL_1R_1R_4s^4 + 2C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_4s^3 + 2C_1C_LL_1L_LR_1g_ms^4 + C_1C_LL_1L_Ls^4 + C_1C_LL_1R_1R_4g_ms^3}$$

10.868 INVALID-ORDER-868 $Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = -\frac{C_1C_4C_LL_1L_LR_1R_4s^5 + 2C_1C_4L_1L_LR_1R_4g_ms^4 + C_1C_4L_1L_LR_4s^4 + C_1C_4L_1R_1R_4s^3 + C_1C_LL_1L_LR_1R_4g_ms^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_4s^4 + 2C_1L_1L_LR_1g_ms^3}{C_1C_4C_LL_1L_LR_1R_4s^5 + 2C_1C_4L_1L_LR_1R_4g_ms^4 + C_1C_4L_1L_LR_4s^4 + C_1C_4L_1R_1R_4s^3 + C_1C_LL_1L_LR_1R_4g_ms^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_4s^4 + 2C_1L_1L_LR_1g_ms^3}$$

10.869 INVALID-ORDER-869 $Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_LR_1R_4g_ms^5 + C_1C_4C_LL_1L_LR_4s^5 + 2C_1C_4C_LL_1R_1R_4R_Lg_ms^4 + C_1C_4C_LL_1R_1R_4s^4 + C_1C_4C_LL_1R_4R_Ls^4 + 2C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_4s^3 + 2C_1C_LL_1L_LR_1R_4g_ms^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_4s^4 + 2C_1L_1L_LR_1g_ms^3}{2C_1C_4C_LL_1L_LR_1R_4g_ms^5 + C_1C_4C_LL_1L_LR_4s^5 + 2C_1C_4C_LL_1R_1R_4R_Lg_ms^4 + C_1C_4C_LL_1R_1R_4s^4 + C_1C_4C_LL_1R_4R_Ls^4 + 2C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_4s^3 + 2C_1C_LL_1L_LR_1R_4g_ms^4 + C_1C_LL_1L_LR_1s^4 + C_1C_LL_1L_LR_4s^4 + 2C_1L_1L_LR_1g_ms^3}$$

10.870 INVALID-ORDER-870 $Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = -\frac{C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4L_1L_LR_1R_4R_Lg_ms^4 + C_1C_4L_1L_LR_1R_4s^4 + C_1C_4L_1L_LR_4R_Ls^4 + C_1C_4L_1R_1R_4R_Ls^3 + C_1C_LL_1L_LR_1R_4R_Lg_ms^4 + C_1C_LL_1L_LR_1R_Ls^4}{C_1C_4C_LL_1L_LR_1R_4R_Ls^5 + 2C_1C_4L_1L_LR_1R_4R_Lg_ms^4 + C_1C_4L_1L_LR_1R_4s^4 + C_1C_4L_1L_LR_4R_Ls^4 + C_1C_4L_1R_1R_4R_Ls^3 + C_1C_LL_1L_LR_1R_4R_Lg_ms^4 + C_1C_LL_1L_LR_1R_Ls^4}$$

10.871 INVALID-ORDER-871 $Z(s) = \left(L_1s + \frac{1}{C_1s}, R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1R_4s^5 + C_1C_4C_LL_1L_LR_4R_Ls^5 + 2C_1C_4L_1L_LR_1R_4g_ms^4 + C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4s^3 + 2C_1C_LL_1L_LR_1R_4R_Lg_ms^4 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_4R_Ls^4 + 2C_1L_1L_LR_1g_ms^3}{2C_1C_4C_LL_1L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1R_4s^5 + C_1C_4C_LL_1L_LR_4R_Ls^5 + 2C_1C_4L_1L_LR_1R_4g_ms^4 + C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4s^3 + 2C_1C_LL_1L_LR_1R_4R_Lg_ms^4 + C_1C_LL_1L_LR_1R_Ls^4 + C_1C_LL_1L_LR_4R_Ls^4 + 2C_1L_1L_LR_1g_ms^3}$$

10.872 INVALID-ORDER-872 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_LL_LR_1R_4s^5 + C_1C_4C_LL_LL_R4R_Ls^5 + C_1C_4C_LL_LR_1R_4R_Ls^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4s^3 + C_1C_4L_1R_4R_Ls^3 +$$

10.873 INVALID-ORDER-873 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_4 L_1 R_4 g_m s^2 + 2 C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + C_4 R_1 R_4}$$

10.874 INVALID-ORDER-874 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 R_1 s^2 + L_1 s + R_1)(C_4 R_4 g_m s - C_4 s + g_m)}{s(C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 R_4 g_m s^2 + C_4 C_L L_1 s^2 + C_4 C_L R_1 s^2 + C_4 C_L R_1 s + C_4 R_1)}$$

10.875 INVALID-ORDER-875 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 R_L s^2 + C_1 C_L L_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + C_1 C_L L_1 R_L s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_4 R_L s + C_1 C_L R_1 R_L s + C_1 C_L R_4 R_L s + C_1 C_L R_1 s + C_1 C_L R_4 s + C_1 C_L R_L s + C_1 C_L s + C_1 L_1 R_1 R_4 R_L s + C_1 L_1 R_1 R_L s + C_1 L_1 R_4 R_L s + C_1 L_1 R_1 s + C_1 L_1 R_4 s + C_1 L_1 R_L s + C_1 L_1 s + C_1 R_1 R_4 R_L s + C_1 R_1 R_L s + C_1 R_4 R_L s + C_1 R_1 s + C_1 R_4 s + C_1 R_L s + C_1 s}{C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 R_L s^2 + C_1 C_L L_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_4 s^2 + C_1 C_L L_1 R_L s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 R_4 R_L s + C_1 C_L R_1 R_L s + C_1 C_L R_4 R_L s + C_1 C_L R_1 s + C_1 C_L R_4 s + C_1 C_L R_L s + C_1 C_L s + C_1 L_1 R_1 R_4 R_L s + C_1 L_1 R_1 R_L s + C_1 L_1 R_4 R_L s + C_1 L_1 R_1 s + C_1 L_1 R_4 s + C_1 L_1 R_L s + C_1 L_1 s + C_1 R_1 R_4 R_L s + C_1 R_1 R_L s + C_1 R_4 R_L s + C_1 R_1 s + C_1 R_4 s + C_1 R_L s + C_1 s}$$

10.876 INVALID-ORDER-876 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L R_L s + 1)(C_1 L_1 l}{s(C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_1 R_L g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_1 R_L s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s$$

10.877 INVALID-ORDER-877 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(C_LL_Ls^2 + 1)(C_1L_1s^2 + 1)}{s(2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2)}$$

10.878 INVALID-ORDER-878 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{1}{C_1C_4C_LL_1L_LR_1R_4g_ms^5 + C_1C_4C_LL_1L_LR_1s^5 + C_1C_4C_LL_1L_LR_4s^5 + 2C_1C_4L_1L_LR_1g_ms^4 + C_1C_4L_1L_Ls^4 + C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_1s^3 + C_1C_4L_1R_4s^3 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2}$$

10.879 INVALID-ORDER-879 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{1}{s(2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + C_1C_4C_LL_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2)}$$

10.880 INVALID-ORDER-880 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{1}{C_1C_4C_LL_1L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1R_Ls^5 + C_1C_4C_LL_1L_LR_4R_Ls^5 + C_1C_4L_1L_LR_1R_4g_ms^4 + 2C_1C_4L_1L_LR_1R_Lg_ms^4 + C_1C_4L_1L_LR_1s^4 + C_1C_4L_1L_LR_4s^4 + C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_1s^3 + C_1C_4L_1R_4s^3 + C_1C_4L_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2}$$

10.881 INVALID-ORDER-881 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{1}{C_1C_4C_LL_1L_LR_1R_4g_ms^5 + 2C_1C_4C_LL_1L_LR_1R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1s^5 + C_1C_4C_LL_1L_LR_4s^5 + C_1C_4C_LL_1L_LR_Ls^5 + 2C_1C_4L_1L_LR_1g_ms^4 + C_1C_4L_1L_Ls^4 + C_1C_4L_1R_1R_4g_ms^3 + C_1C_4L_1R_1s^3 + C_1C_4L_1R_4s^3 + C_1C_4L_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2}$$

10.882 INVALID-ORDER-882 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 +$$

10.883 INVALID-ORDER-883 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_4 L_1 L_4 g_m s^3 + 2 C_4 L_1 R_L g_m s^2 + C_4 L_1 s^2 + C_4 L_4 R_1 g}$$

10.884 INVALID-ORDER-884 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 R_1 s^2 + L_1 s + R_1)(C_4 L_4 g_m s^2 - C_4 s + g_m)}{s(C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_1 s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_4 C_L L_1 L_4 g_m s^3 + C_4 C_L L_1 s^2 + C_4 C_L L_4 s + g_m)}$$

10.885 INVALID-ORDER-885 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_1 R_L g_m s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_L s^2 + C_1 C_L R_1 R_L g_m s + C_1 C_L R_1 s + C_1 C_L R_L s}{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_L L_1 R_1 R_L g_m s^2 + C_1 C_L L_1 R_1 s^2 + C_1 C_L L_1 R_L s^2 + C_1 C_L R_1 R_L g_m s + C_1 C_L R_1 s + C_1 C_L R_L s}.$$

10.886 INVALID-ORDER-886 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_L R_L s + 1)(C_1 L_1 I)}{s(C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2C_1 C_4 C_L L_1 R_1 R_L g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_L s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2)}$$

10.887 INVALID-ORDER-887 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(C_LL_Ls^2 + 1)(C_1L_1s^2 + R_1s + \frac{1}{C_1})}{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1s^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2)}$$

10.888 INVALID-ORDER-888 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} \right)$

$$H(s) = \frac{(C_LL_Ls^2 + 1)(C_1L_1s^2 + R_1s + \frac{1}{C_1})}{C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_LR_1s^5 + C_1C_4L_1L_4R_1g_ms^4 + C_1C_4L_1L_4s^4 + 2C_1C_4L_1L_LR_1g_ms^4 + C_1C_4L_1L_Ls^4 + C_1C_4L_1R_1s^3 + C_1C_LL_1R_1g_ms^2 + C_1C_LL_1s^2}$$

10.889 INVALID-ORDER-889 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls} \right)$

$$H(s) = \frac{(C_1L_1s^2 + R_1s + \frac{1}{C_1})(C_LL_Ls^2 + 1)}{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2)}$$

10.890 INVALID-ORDER-890 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)$

$$H(s) = \frac{(C_1L_1s^2 + R_1s + \frac{1}{C_1})(C_LL_Ls^2 + 1)}{C_1C_4C_LL_1L_4L_LR_1R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_Ls^6 + C_1C_4C_LL_1L_LR_1R_Ls^5 + C_1C_4L_1L_4L_LR_1g_ms^5 + C_1C_4L_1L_4L_Ls^5 + C_1C_4L_1L_4R_1R_Lg_ms^4 + C_1C_4L_1L_4R_Ls^4 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2}$$

10.891 INVALID-ORDER-891 $Z(s) = \left(L_1s + \frac{1}{C_1s}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L \right)$

$$H(s) = \frac{(C_1L_1s^2 + R_1s + \frac{1}{C_1})(C_LL_Ls^2 + 1)}{C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_1L_LR_1R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1s^5 + C_1C_4C_LL_1L_LR_Ls^5 + C_1C_4L_1L_4R_1g_ms^4 + C_1C_4L_1L_4s^4 + 2C_1C_4L_1R_1g_ms^2 + C_1C_4L_1s^2}$$

$$\mathbf{10.892} \quad \mathbf{INVALID-ORDER-892} \quad Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \quad L_2 s + R_2 + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 +$$

10.893 INVALID-ORDER-893 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_L (C_4 L_4 s^2 - L_4 g_m s + 1) (C_1 L_1 R_1 s^2 + L_1 s + 1)}{2C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 L_1 L_4 R_1 g_m s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 R_1 R_L g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_L s^2 + 2C_4 L_1 L_4 R_L g_m s^3 + C_4 L_1 L_4}$$

10.894 INVALID-ORDER-894 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{(C_4 L_4 s^2 - L_4 g_m s + 1)(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_1 C_4 C_L L_1 L_4 R_1 s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_1 s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_4 C_L L_1 L_4 s^4 + C_4 C_L L_4 R_1 s^3}$$

10.895 INVALID-ORDER-895 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_L g_m s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 R_1 R_L s^3 + C_1 L_1 L_4 R_1 g_m s^3 +$$

10.896 INVALID-ORDER-896 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4R_1R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4L_1L_4R_1g_ms^4 + C_1C_4L_1L_4s^4 + C_1C_LL_1L_4R_1g_ms^4 + C_1C_LL_1L_4s^4 + 2C_1C_LL_1R_1R_Lg_ms^3 -$$

10.897 INVALID-ORDER-897 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_1s^5 + 2C_1C_4L_1L_4R_1g_ms^4 + C_1C_4L_1L_4s^4 + C_1C_LL_1L_4R_1g_ms^4 + C_1C_LL_1L_4s^4 + 2C_1C_LL_1L_LR_1g_ms^4 +$$

10.898 INVALID-ORDER-898 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 q_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 L_L R_1 q_m s^5 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 L_4 R_1 q_m s^3 + C_1 L_1 L_4 L_L s^3 + C_1 L_1 L_L R_1 s^2 + C_1 L_1 L_L s^2 + C_1 L_1 R_1 s + C_1 R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 q_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 L_L R_1 q_m s^5 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_1 s^4 + C_1 L_1 L_4 R_1 q_m s^3 + C_1 L_1 L_4 L_L s^3 + C_1 L_1 L_L R_1 s^2 + C_1 L_1 L_L s^2 + C_1 L_1 R_1 s + C_1 R_1}$$

10.899 INVALID-ORDER-899 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1q_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_1L_4R_1R_Lq_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4L_1L_4R_1q_ms^4 + C_1C_4L_1L_4s^4 + C_1C_LL_1L_4s^4}{2C_1C_4C_LL_1L_4L_LR_1q_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + 2C_1C_4C_LL_1L_4R_1R_Lq_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_Ls^5 + 2C_1C_4L_1L_4R_1q_ms^4 + C_1C_4L_1L_4s^4 + C_1C_LL_1L_4s^4}.$$

10.900 INVALID-ORDER-900 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L g_m s^5 + C_1 C_L L_1 L_4 L_L R_L s^5 +$$

10.901 INVALID-ORDER-901 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_Ls^6 + 2C_1C_4L_1L_4L_LR_1g_ms^5 + C_1C_4L_1L_4L_LR_Ls^5 + 2C_1C_4L_1L_4R_1R_Lg_ms^4 + C_1C_4L_1L_4R_1s^4 + C_1C_4L_1L_4R_Lg_ms^4 + C_1C_4L_1L_4R_Ls^4 + C_1C_4L_1R_1R_Lg_ms^4 + C_1C_4L_1R_1R_Ls^4 + C_1C_4R_1R_Lg_ms^4 + C_1C_4R_1R_Ls^4 + C_1C_4L_1R_1g_ms^4 + C_1C_4L_1R_1s^4 + C_1C_4R_1g_ms^4 + C_1C_4R_1s^4 + C_1C_4L_1g_ms^4 + C_1C_4L_1s^4 + C_1C_4g_ms^4 + C_1C_4s^4}{2C_1C_4C_LL_1L_4L_LR_1R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_Ls^6 + 2C_1C_4L_1L_4L_LR_1g_ms^5 + C_1C_4L_1L_4L_LR_Ls^5 + 2C_1C_4L_1L_4R_1R_Lg_ms^4 + C_1C_4L_1L_4R_1s^4 + C_1C_4L_1L_4R_Lg_ms^4 + C_1C_4L_1L_4R_Ls^4 + C_1C_4L_1R_1R_Lg_ms^4 + C_1C_4L_1R_1R_Ls^4 + C_1C_4L_1R_1g_ms^4 + C_1C_4L_1R_1s^4 + C_1C_4R_1R_Lg_ms^4 + C_1C_4R_1R_Ls^4 + C_1C_4R_1g_ms^4 + C_1C_4R_1s^4 + C_1C_4L_1R_1g_ms^4 + C_1C_4L_1R_1s^4 + C_1C_4R_1g_ms^4 + C_1C_4R_1s^4 + C_1C_4L_1g_ms^4 + C_1C_4L_1s^4 + C_1C_4g_ms^4 + C_1C_4s^4}.$$

10.902 INVALID-ORDER-902 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_Ls^6 + C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4L_1L_4R_1R_Lg_ms^4 + C_1C_4L_1L_4R_1s^4 + C_1C_4L_1L_4R_Ls^4 + C_1C_4L_1L_4R_Lg_ms^3 + C_1C_4L_1L_4R_Ls^3 + C_1C_4L_1L_4R_Lg_ms^2 + C_1C_4L_1L_4R_Ls^2 + C_1C_4L_1L_4R_Lg_ms + C_1C_4L_1L_4R_Ls + C_1C_4L_1L_4R_L}{2C_1C_4C_LL_1L_4L_LR_1R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1s^6 + C_1C_4C_LL_1L_4L_LR_Ls^6 + C_1C_4C_LL_1L_4R_1R_Ls^5 + 2C_1C_4L_1L_4R_1R_Lg_ms^4 + C_1C_4L_1L_4R_1s^4 + C_1C_4L_1L_4R_Ls^4 + C_1C_4L_1L_4R_Lg_ms^3 + C_1C_4L_1L_4R_Ls^3 + C_1C_4L_1L_4R_Lg_ms^2 + C_1C_4L_1L_4R_Ls^2 + C_1C_4L_1L_4R_Lg_ms + C_1C_4L_1L_4R_Ls + C_1C_4L_1L_4R_L}.$$

10.903 INVALID-ORDER-903 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_L (C_1 L_1 R_1 s^2 + L_1 s + R_1) (C_4 L_4 g_m s^2 + C_4 L_4 s + R_4)}{C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_4 L_1 L_4 g_m s^3 + C_4 L_1 L_4 s^3 + C_4 L_1 R_1 s^2 + C_4 L_1 R_4 s^2 + C_4 L_1 R_L s^2 + C_4 L_1 s^2 + R_1 R_4 g_m s^2 + R_1 R_4 s^2 + R_1 R_L s^2 + R_1 s^2 + R_4 R_L s^2 + R_4 s^2 + R_L s^2 + s^2 + 1}$$

10.904 INVALID-ORDER-904 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{s(C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2}$$

10.905 INVALID-ORDER-905 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L q_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L q_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 q_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_1 R_4}{C_1 C_4 C_L L_1 L_4 R_1 R_L q_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L q_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 q_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_1 R_4}$$

10.906 INVALID-ORDER-906 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + C_1C_4C_LL_1R_Ls^3 + 2C_1C_4L_1R_1g_ms^2 -$$

10.907 INVALID-ORDER-907 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + 2C_1C_4L_1R_1g_ms^2 +$$

10.908 INVALID-ORDER-908 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 L_L R_1}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 L_L R_1}$$

10.909 INVALID-ORDER-909 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{s(C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2C_1 C_4 C_L L_1 L_L R_1 g_m s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_4 C_L L_1 R_1 R_L g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1$$

10.910 INVALID-ORDER-910 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4$$

10.911 INVALID-ORDER-911 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 +$$

10.912 INVALID-ORDER-912 $Z(s) = \left(L_1 s + \frac{1}{C_1 s}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5}$$

10.913 INVALID-ORDER-913 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{2C_1 C_4 L_1 L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 L_1 L_4 R_1 R_4 g_m s^3 + 2C_1 L_1 L_4 R_1 R_L g_m s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 L_4 R_L s^3 + 2C_1 L_1}{...}$$

10.914 INVALID-ORDER-914 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + 2C_1 L_1 L_4 R_1 g_m s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^3 + C_1 L_1 R_4 s^3 + C_1 L_4 R_1 R_4 s^3 + C_1 L_4 R_1 s^3 + C_1 L_4 R_4 s^3 + C_1 R_1 R_4 s^3 + C_1 R_1 s^3 + C_1 R_4 s^3}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + 2C_1 L_1 L_4 R_1 g_m s^3 + C_1 L_1 L_4 R_1 s^3 + C_1 L_1 L_4 R_4 s^3 + C_1 L_1 R_1 R_4 s^3 + C_1 L_1 R_1 s^3 + C_1 L_1 R_4 s^3 + C_1 L_4 R_1 R_4 s^3 + C_1 L_4 R_1 s^3 + C_1 L_4 R_4 s^3 + C_1 R_1 R_4 s^3 + C_1 R_1 s^3 + C_1 R_4 s^3}$$

10.915 INVALID-ORDER-915 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_L L_1 L_4 R_1 R_4 R_L g_m s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 + C_1 C_L L_1 L_4 R_4 R_L s^4 +$$

10.916 INVALID-ORDER-916 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4R_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_4R_Ls^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_LL_1L_4R_1R_4g_ms^4 + 2C_1C_LL_1L_4R_1R_Lg_m}{2C_1C_4C_LL_1L_4R_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_4R_Ls^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_LL_1L_4R_1R_4g_ms^4 + 2C_1C_LL_1L_4R_1R_Lg_m}$$

10.917 INVALID-ORDER-917 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_4g_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_1R_4s^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + 2C_1C_LL_1L_4L_LR_1g_ms^5 + C_1C_LL_1L_4L_Ls^5 + C_1C_LL_1L_4L_LR_1s^5 + C_1C_LL_1L_4L_LR_4s^5 + C_1C_LL_1L_4L_LR_4g_ms^4 + C_1C_LL_1L_4L_LR_4s^4 + C_1C_LL_1L_4L_LR_4g_ms^3 + C_1C_LL_1L_4L_LR_4g_ms^2 + C_1C_LL_1L_4L_LR_4g_ms + C_1C_LL_1L_4L_LR_4}{2C_1C_4C_LL_1L_4L_LR_1R_4g_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_1R_4s^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + 2C_1C_LL_1L_4L_LR_1g_ms^5 + C_1C_LL_1L_4L_Ls^5 + C_1C_LL_1L_4L_LR_1s^5 + C_1C_LL_1L_4L_LR_4s^5 + C_1C_LL_1L_4L_LR_4g_ms^4 + C_1C_LL_1L_4L_LR_4s^4 + C_1C_LL_1L_4L_LR_4g_ms^3 + C_1C_LL_1L_4L_LR_4g_ms^2 + C_1C_LL_1L_4L_LR_4g_ms + C_1C_LL_1L_4L_LR_4}$$

10.918 INVALID-ORDER-918 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 g_m s^5 + C_1 C_L L_1 L_4 L_L R_1 s^5 + C_1 C_L L_1 L_4 L_L R_4 s^5 +$$

10.919 INVALID-ORDER-919 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_4g_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + 2C_1C_4C_LL_1L_4R_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_4R_Ls^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1$$

10.920 INVALID-ORDER-920 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4}$$

10.921 INVALID-ORDER-921 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1R_4s^6 + C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4L_1L_4L_LR_1R_4g_ms^5 + C_1C_4L_1L_4L_LR_4s^5 + 2C_1C_4L_1L_4R_1R_4R_Lg_ms^4 + C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + C_1C_4L_1L_4R_4s^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4s^3 + 2C_1C_4L_1R_4R_Ls^3 + C_1C_4L_1R_4s^3 + 2C_1C_4R_1R_4R_Lg_ms^2 + C_1C_4R_1R_4s^2 + 2C_1C_4R_4R_Ls^2 + C_1C_4R_4s^2 + 2C_1C_4L_1R_1R_4g_ms + C_1C_4L_1R_1R_4s + 2C_1C_4L_1R_4R_Ls + C_1C_4L_1R_4s + 2C_1C_4R_1R_4g_ms + C_1C_4R_1R_4s + 2C_1C_4R_4R_Ls + C_1C_4R_4s}{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1R_4s^6 + C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + 2C_1C_4L_1L_4L_LR_1R_4g_ms^5 + C_1C_4L_1L_4L_LR_4s^5 + 2C_1C_4L_1L_4R_1R_4R_Lg_ms^4 + C_1C_4L_1L_4R_1R_4s^4 + 2C_1C_4L_1L_4R_4R_Ls^4 + C_1C_4L_1L_4R_4s^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4s^3 + 2C_1C_4L_1R_4R_Ls^3 + C_1C_4L_1R_4s^3 + 2C_1C_4R_1R_4R_Lg_ms^2 + C_1C_4R_1R_4s^2 + 2C_1C_4R_4R_Ls^2 + C_1C_4R_4s^2 + 2C_1C_4L_1R_1R_4g_ms + C_1C_4L_1R_1R_4s + 2C_1C_4L_1R_4R_Ls + C_1C_4L_1R_4s + 2C_1C_4R_1R_4g_ms + C_1C_4R_1R_4s + 2C_1C_4R_4R_Ls + C_1C_4R_4s}.$$

10.922 INVALID-ORDER-922 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1$$

10.923 INVALID-ORDER-923 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 L_1 L_4 R_1 g_m s^3 + C_1 L_1 L_4 s^3 + C_1 L_1 R_1 R_4 g_m s^2 + 2 C_1 L_1 R_1 R_L g_m}$$

10.924 INVALID-ORDER-924 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 g_m s^2 + C_1 C_L R_4 s^2 + C_1 C_L s^2 + C_1 R_1 R_4 g_m s + C_1 R_1 R_4 s + C_1 R_1 s + C_1 R_4 g_m s + C_1 R_4 s + C_1 s}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 g_m s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 s^3 + C_1 C_L R_1 R_4 g_m s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 g_m s^2 + C_1 C_L R_4 s^2 + C_1 C_L s^2 + C_1 R_1 R_4 g_m s + C_1 R_1 R_4 s + C_1 R_1 s + C_1 R_4 g_m s + C_1 R_4 s + C_1 s}$$

10.925 INVALID-ORDER-925 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4}$$

10.926 INVALID-ORDER-926 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 L_4 s^4}$$

10.927 INVALID-ORDER-927 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_L L_1 L_4 R_1}{\dots}$$

10.928 INVALID-ORDER-928 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4$$

10.929 INVALID-ORDER-929 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_{1g_m} s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_{4g_m} s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_L s^5}{(s^2 + \omega_p^2)(s^2 + \omega_{L1}^2)(s^2 + \omega_{L2}^2)(s^2 + \omega_{L3}^2)}$$

10.930 INVALID-ORDER-930 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4$$

10.931 INVALID-ORDER-931 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_4 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5}$$

10.932 INVALID-ORDER-932 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4$$

10.933 INVALID-ORDER-933 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 R_4 s^4 + C_1 C_4 L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 R_1 R_4 s^3 + C_1 C_4 R_1 R_L s^3 + C_1 C_4 R_1 s^3 + C_1 C_4 R_4 R_L g_m s^3 + C_1 C_4 R_4 R_L s^3 + C_1 C_4 R_4 s^3 + C_1 C_4 R_L s^3 + C_1 C_4 s^3}{C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 R_4 g_m s^4 + 2C_1 C_4 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_4 R_1 s^4 + C_1 C_4 L_4 R_4 s^4 + C_1 C_4 L_4 R_L s^4 + 2C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_4 R_L s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 R_1 R_4 s^3 + C_1 C_4 R_1 R_L s^3 + C_1 C_4 R_1 s^3 + C_1 C_4 R_4 R_L g_m s^3 + C_1 C_4 R_4 R_L s^3 + C_1 C_4 R_4 s^3 + C_1 C_4 R_L s^3 + C_1 C_4 s^3}.$$

10.934 INVALID-ORDER-934 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 s^2}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_1 R_4 g_m s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 s^2}.$$

10.935 INVALID-ORDER-935 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4}$$

10.936 INVALID-ORDER-936 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

[illegible]

10.937 INVALID-ORDER-937 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_1R_4g_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_4s^5 + 2C_1C_4C_LL_1L_LR_1R_4g_ms^5 + C_1C_4C_LL_1L_LR_4s^5 +$$

10.938 INVALID-ORDER-938 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4}$$

10.939 INVALID-ORDER-939 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_1R_4g_ms^5 + 2C_1C_4C_LL_1L_4R_1R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_4s^5 + C_1C_4C_LL_1L_4R_Ls^5 +$$

10.940 INVALID-ORDER-940 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_T s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_m s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_m s^5}$$

10.941 INVALID-ORDER-941 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 s^5 + C_1 C_4 C_L s^5 + C_1 C_4 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 L_L s^5 + C_1 C_4 C_L L_1 s^5 + C_1 C_4 C_L s^5 + C_1 C_4 s^5}.$$

10.942 INVALID-ORDER-942 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m 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_4 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 R_1 R_4 R_L g_m 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_1 R_4 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_4 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 s^5 + C_1 C_4 C_L L_1 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 R_1 R_4 s^5 + C_1 C_4 C_L L_1 R_1 s^5 + C_1 C_4 C_L L_1 R_4 s^5 + C_1 C_4 C_L L_1 R_L s^5 + C_1 C_4 C_L L_1 s^5 + C_1 C_4 C_L R_1 R_4 g_m s^5 + C_1 C_4 C_L R_1 R_4 s^5 + C_1 C_4 C_L R_1 s^5 + C_1 C_4 C_L R_4 s^5 + C_1 C_4 C_L R_L s^5 + C_1 C_4 C_L s^5 + C_1 C_4 R_1 R_4 g_m s^5 + C_1 C_4 R_1 R_4 s^5 + C_1 C_4 R_1 s^5 + C_1 C_4 R_4 s^5 + C_1 C_4 R_L s^5 + C_1 C_4 s^5 + C_1 R_1 R_4 g_m s^5 + C_1 R_1 R_4 s^5 + C_1 R_1 s^5 + C_1 R_4 s^5 + C_1 R_L s^5 + C_1 s^5 + C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_4 C_L L_1 L_4 L_L R_1 s^6 + C_4 C_L L_1 L_4 L_L R_4 s^6 + C_4 C_L L_1 L_4 L_L R_L s^6 + C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + C_4 C_L L_1 L_4 R_1 R_4 s^5 + C_4 C_L L_1 L_4 R_1 s^5 + C_4 C_L L_1 L_4 R_4 s^5 + C_4 C_L L_1 L_4 R_L s^5 + C_4 C_L L_1 L_4 s^5 + C_4 C_L L_1 R_1 R_4 g_m s^5 + C_4 C_L L_1 R_1 R_4 s^5 + C_4 C_L L_1 R_1 s^5 + C_4 C_L L_1 R_4 s^5 + C_4 C_L L_1 R_L s^5 + C_4 C_L L_1 s^5 + C_4 C_L R_1 R_4 g_m s^5 + C_4 C_L R_1 R_4 s^5 + C_4 C_L R_1 s^5 + C_4 C_L R_4 s^5 + C_4 C_L R_L s^5 + C_4 C_L s^5 + C_4 R_1 R_4 g_m s^5 + C_4 R_1 R_4 s^5 + C_4 R_1 s^5 + C_4 R_4 s^5 + C_4 R_L s^5 + C_4 s^5 + C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_L L_1 L_4 L_L R_1 s^6 + C_L L_1 L_4 L_L R_4 s^6 + C_L L_1 L_4 L_L R_L s^6 + C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_L L_1 L_4 R_1 R_4 R_L s^5 + C_L L_1 L_4 R_1 R_4 s^5 + C_L L_1 L_4 R_1 s^5 + C_L L_1 L_4 R_4 s^5 + C_L L_1 L_4 R_L s^5 + C_L L_1 L_4 s^5 + C_L L_1 R_1 R_4 g_m s^5 + C_L L_1 R_1 R_4 s^5 + C_L L_1 R_1 s^5 + C_L L_1 R_4 s^5 + C_L L_1 R_L s^5 + C_L L_1 s^5 + C_L R_1 R_4 g_m s^5 + C_L R_1 R_4 s^5 + C_L R_1 s^5 + C_L R_4 s^5 + C_L R_L s^5 + C_L s^5 + L_1 L_4 L_L R_1 R_4 g_m s^6 + L_1 L_4 L_L R_1 R_L g_m s^6 + L_1 L_4 L_L R_1 s^6 + L_1 L_4 L_L R_4 s^6 + L_1 L_4 L_L R_L s^6 + L_1 L_4 R_1 R_4 R_L g_m s^5 + L_1 L_4 R_1 R_4 R_L s^5 + L_1 L_4 R_1 R_4 s^5 + L_1 L_4 R_1 s^5 + L_1 L_4 R_4 s^5 + L_1 L_4 R_L s^5 + L_1 L_4 s^5 + L_1 R_1 R_4 g_m s^5 + L_1 R_1 R_4 s^5 + L_1 R_1 s^5 + L_1 R_4 s^5 + L_1 R_L s^5 + L_1 s^5 + L_4 L_L R_1 R_4 g_m s^6 + L_4 L_L R_1 R_L g_m s^6 + L_4 L_L R_1 s^6 + L_4 L_L R_4 s^6 + L_4 L_L R_L s^6 + L_4 L_R_1 R_4 R_L g_m s^5 + L_4 L_R_1 R_4 R_L s^5 + L_4 L_R_1 R_4 s^5 + L_4 L_R_1 s^5 + L_4 L_R_4 s^5 + L_4 L_R_L s^5 + L_4 L s^5 + L_4 R_1 R_4 g_m s^5 + L_4 R_1 R_4 s^5 + L_4 R_1 s^5 + L_4 R_4 s^5 + L_4 R_L s^5 + L_4 s^5 + L_L R_1 R_4 g_m s^5 + L_L R_1 R_4 s^5 + L_L R_1 s^5 + L_L R_4 s^5 + L_L R_L s^5 + L_L s^5 + R_1 R_4 g_m s^5 + R_1 R_4 s^5 + R_1 s^5 + R_4 s^5 + R_L s^5 + s^5}.$$

10.943 INVALID-ORDER-943 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L R_1 R_4 s^2 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_L R_1 R_4 g_m s + C_L R_1 s + C_L R_4 s + 2R_1 g_m + 1}$$

10.944 INVALID-ORDER-944 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{R_1 R_L (R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 g_m s^2 + 2 C_1 L_1 R_1 R_L g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_1 R_1 R_4 s}$$

10.945 INVALID-ORDER-945 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{C_1 C_L L_1 R_1 R_4 g_m s^3 + 2 C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_L s^2 + 2 C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_L R_1 R_4}$$

10.946 INVALID-ORDER-946 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{2C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + 2C_L L_L}$$

10.947 INVALID-ORDER-947 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{L_L R_1 s (R_4 g_m - 1) (C_1 L_1 s^2 + 1)}{C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_L R_1 R_4 s^3 + 2C_1 L_1 L_L R_1 g_m s^3 + C_1 L_1 L_L s^3 + C_1 L_1 R_1 R_4 g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_4 s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_4 s^2}$$

10.948 INVALID-ORDER-948 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (R_4 g_m - 1) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{2C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_1 R_1 R_4 g_m s^3 + 2C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L L_L R_1 s^3 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2 + C_1 C_L R_1 R_4 s^2}$$

10.949 INVALID-ORDER-949 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_4 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 R_L s^4 + C_1 C_L L_1 L_L R_4 R_L s^4 + C_1 C_L L_L R_1 R_4 R_L s^3 + C_1 L_1 L_L R_1 R_4 g_m s^3 + 2C_1 L_1 L_L R_1 R_L g_m s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_4 s^3}$$

10.950 INVALID-ORDER-950 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_L R_1 R_4 s^3 + C_1 C_L L_L R_1 R_L s^3 + 2C_1 L_1 L_L R_1 g_m s^3 + C_1 L_1 L_L R_1 s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_4 s^3 + C_1 L_1 L_L R_L s^3 + C_1 L_1 L_L R_4 s^3}$$

10.951 INVALID-ORDER-951 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{1}{C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + 2C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 + C_1 C_L L_1 L_L R_L s^4 + C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L L_1 R_L s^3}$$

10.952 INVALID-ORDER-952 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_1 R_L (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_1 R_L s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + 2C_4 R_1 R_L g_m s + C_4 R_1 s + C_4 R_L s + R_1 g_m + 1}$$

10.953 INVALID-ORDER-953 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{s (C_1 C_4 C_L L_1 R_1 s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s + C_4 C_L R_1 s + 2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L)}$$

10.954 INVALID-ORDER-954 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{R_1 R_L (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 R_1 R_L s^4 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_1 R_L s^2 + C_1 C_L L_1 R_1 R_L g_m s^3 + C_1 C_L L_1 R_L s^3 + C_1 C_L R_1 R_L s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + 2C_4 R_1 R_L g_m s + C_4 R_1 s + C_4 R_L s + R_1 g_m + 1}$$

10.955 INVALID-ORDER-955 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{s (2C_1 C_4 C_L L_1 R_1 R_L g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L R_1 R_L s^2 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s + C_4 C_L R_1 s + 2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L)}$$

10.956 INVALID-ORDER-956 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{s (2C_1 C_4 C_L L_1 L_L R_1 g_m s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_L R_1 s^3 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s + C_4 C_L R_1 s + 2C_4 R_1 g_m + C_4 + C_L R_1 g_m + C_L)}$$

10.957 INVALID-ORDER-957 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{L_L R_1 s (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_L R_1 s^5 + 2C_1 C_4 L_1 L_L R_1 g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_L L_1 L_L R_1 g_m s^4 + C_1 C_L L_1 L_L s^4 + C_1 C_L L_L R_1 s^3 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + 2C_4 R_1 R_L g_m s + C_4 R_1 s + C_4 R_L s + R_1 g_m + 1}$$

10.958 INVALID-ORDER-958 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{s (2C_1 C_4 C_L L_1 L_L R_1 g_m s^4 + C_1 C_4 C_L L_1 L_L s^4 + 2C_1 C_4 C_L L_1 R_1 R_L g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_L s^2 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 L_L R_1 s^2 + C_1 C_4 L_L R_L s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 L_L R_1 s^2 + C_1 C_4 L_L R_L s^2)}$$

10.959 INVALID-ORDER-959 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + 2C_1 C_4 L_1 L_L R_1 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 s^4 + C_1 C_4 L_1 L_L R_L s^4 + C_1 C_4 L_1 R_1 R_L s^3 + C_1 C_4 L_L R_1 R_L s^3 + C_1 C_L L_1 L_L R_1 R_L g_m s^4 + C_1 C_L L_1 L_L R_L s^4}$$

10.960 INVALID-ORDER-960 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 L_1 L_L R_1 g_m s^4 + C_1 C_4 L_1 L_L s^4 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_L s^3}$$

10.961 INVALID-ORDER-961 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L (L_L s + \frac{1}{C_L s})}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{R_1 (C_4 s - g_m) (C_1 L_1 s^2 + 1)}{2C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_L R_1 s^3 + C_1 C_4 L_L R_L s^3}$$

10.962 INVALID-ORDER-962 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_1 R_L (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 L_1 R_1 R_4 g_m s^2 + 2C_1 L_1 R_1 R_L g_m s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 R_L s^2 + C_1 R_1 R_4 s^2 + C_1 R_1 R_L s^2}$$

10.963 INVALID-ORDER-963 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 R_1 R_4 s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_1 R_4 s^3 + C_1 C_L R_1 R_4 s^2 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1}$$

10.964 INVALID-ORDER-964 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + 2C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 R_1 R_4 R_L s^2 + C_1 C_L L_1 R_1 R_4 R_L g_m s^3 + C_1 C_L L_1 R_1 R_L s^3 + C_1 C_L L_1 R_4 R_L s^3 -}$$

10.965 INVALID-ORDER-965 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_L L_1 R_1 R_4 g_m s^3 -}$$

10.966 INVALID-ORDER-966 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 R_1 R_4 s^2 + 2C_1 C_L L_1 L_L R_1 g_m s^4 -}$$

10.967 INVALID-ORDER-967 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + 2C_1 C_4 L_1 L_L R_1 R_4 g_m s^4 + C_1 C_4 L_1 L_L R_4 s^4 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_L R_1 R_4 s^3 + C_1 C_L L_1 L_L R_1 R_4 g_m s^4 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L R_4 s^4 +}$$

10.968 INVALID-ORDER-968 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 s - R_4 g_m + 1)}{2C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + 2C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + 2C_1 C_L L_1 L_L R_1 g_m s^4 -}$$

10.969 INVALID-ORDER-969 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + 2 C_1 C_4 L_1 L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 R_L g_m s^4}{C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + 2 C_1 C_4 L_1 L_L R_1 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 R_4 s^4 + C_1 C_4 L_1 L_L R_4 R_L s^4 + C_1 C_4 L_1 R_1 R_4 R_L s^3 + C_1 C_4 L_L R_1 R_4 R_L s^3 + C_1 C_L L_1 L_L R_1 R_4 R_L g_m s^4}$$

10.970 INVALID-ORDER-970 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1C_4C_LL_LL_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_LL_LR_1R_4s^5 + C_1C_4C_LL_LL_LR_4R_Ls^5 + C_1C_4C_LL_LR_1R_4R_Ls^4 + 2C_1C_4L_1L_LR_1R_4g_ms^4 + C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_1R_1R_4R_L}{2C_1C_4C_LL_LL_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_LL_LR_1R_4s^5 + C_1C_4C_LL_LL_LR_4R_Ls^5 + C_1C_4C_LL_LR_1R_4R_Ls^4 + 2C_1C_4L_1L_LR_1R_4g_ms^4 + C_1C_4L_1L_LR_4s^4 + 2C_1C_4L_1R_1R_4R_L}$$

10.971 INVALID-ORDER-971 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1R_4s^5 + C_1C_4C_LL_1L_LR_4R_Ls^5 + C_1C_4C_LL_1R_1R_4R_Ls^4 + C_1C_4C_LL_R_1R_4R_Ls^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4R_Ls^3}{2C_1C_4C_LL_1L_LR_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_LR_1R_4s^5 + C_1C_4C_LL_1L_LR_4R_Ls^5 + C_1C_4C_LL_1R_1R_4R_Ls^4 + C_1C_4C_LL_R_1R_4R_Ls^4 + 2C_1C_4L_1R_1R_4R_Lg_ms^3 + C_1C_4L_1R_1R_4R_Ls^3}.$$

10.972 INVALID-ORDER-972 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (C_1 L_1 s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_4 R_1 R_4 g_m}$$

10.973 INVALID-ORDER-973 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_1 L_1 s^2 + 1) (C_4 R_4 g_m s - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + 2 C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s}$$

10.974 INVALID-ORDER-974 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3}{C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3}$$

10.975 INVALID-ORDER-975 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_1 L_1 s^2 + 1) (C_L R_L s + 1)}{s (C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + 2 C_1 C_4 C_L L_1 R_1 R_L g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_1 R_L s^3 + C_1 C_4 C_L R_1 R_4 s^2 + C_1 C_4 C_L R_1 R_L s^2 + 2 C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 R_4 s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 R_1 R_4 s + C_1 C_4 R_1 R_L s + C_1 C_4 R_4 s + C_1 C_4 R_L s + C_1 C_4 s + C_1 C_L R_1 R_4 s + C_1 C_L R_1 R_L s + C_1 C_L R_4 s + C_1 C_L R_L s + C_1 C_L s + C_1 R_1 R_4 s + C_1 R_1 R_L s + C_1 R_4 s + C_1 R_L s + C_1 s + C_L R_1 R_4 s + C_L R_1 R_L s + C_L R_4 s + C_L R_L s + C_L s + R_1 R_4 s + R_1 R_L s + R_4 s + R_L s + s)}$$

10.976 INVALID-ORDER-976 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1)}{s (2C_1 C_4 C_L L_1 L_L R_1 g_m s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_L R_1 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 R_4 s^2 + C_1 C_4 L_L R_1 s^2 + C_1 C_4 L_L R_4 s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 s^2 + C_1 C_L L_1 s^2 + C_1 C_L L_L s^2 + C_1 C_L R_1 s^2 + C_1 C_L R_4 s^2 + C_1 C_L s^2 + C_1 L_1 R_1 s^2 + C_1 L_1 R_4 s^2 + C_1 L_1 s^2 + C_1 L_L R_1 s^2 + C_1 L_L R_4 s^2 + C_1 L_L s^2 + C_1 R_1 R_4 s^2 + C_1 R_1 s^2 + C_1 R_4 s^2 + C_1 s^2 + R_1 (C_1 L_1 s^2 + 1) (C_L L_L s^2 + 1))}$$

10.977 INVALID-ORDER-977 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_1 g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 R_1 R_4 s^3}{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + 2C_1 C_4 L_1 L_L R_1 g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 R_1 R_4 s^3}.$$

10.978 INVALID-ORDER-978 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_1R_1s^3)}$$

10.979 INVALID-ORDER-979 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_L R_1 R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 s^4}{C_1 C_4 C_L L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_L R_1 R_L s^5 + C_1 C_4 C_L L_L R_4 R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_L R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_L R_1 R_L g_m s^4 + C_1 C_4 L_1 L_L R_1 s^4}$$

10.980 INVALID-ORDER-980 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + 2 C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4 + 2 C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 C_L L_L R_1 R_L s^4}{\dots}$$

10.981 INVALID-ORDER-981 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 +$$

10.982 INVALID-ORDER-982 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{R_1 R_L (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_L s^2 + C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + C_4 L_4 R_1 g_m}$$

10.983 INVALID-ORDER-983 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 - C_4 s + g_m)}{s (C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_4 R_1 s^3 + 2 C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 R_1 s + C_1 C_L L_1 R_1 g_m s^2 + C_1 C_L L_1 s^2 + C_1 C_L R_1 s}$$

10.984 INVALID-ORDER-984 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 R_1 s^3}{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 R_1 s^3}.$$

10.985 INVALID-ORDER-985 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

[illegible]

10.986 INVALID-ORDER-986 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{R_1 (C_1 L_1 s^2 + 1) (C_L L_L)}{s (C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + 2 C_1 C_4 C_L L_1 L_L R_1 g_m s^4 + C_1 C_4 C_L L_1 L_L s^4 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L L_L R_1 s^3 + 2 C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 L_1)}$$

10.987 INVALID-ORDER-987 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 L_L R_1 g_m s^4 + C_1 C_4 L_1 L_L s^4 + C_1$$

10.988 INVALID-ORDER-988 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4R_1s^3)}$$

10.989 INVALID-ORDER-989 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 +$$

10.990 INVALID-ORDER-990 $Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_1 L_L R_1 R_L s^4 + C_1 C_4 C_L L_1 L_L R_1 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_L R_1 R_L s^4 + C_1 C_4 C_L L_1 L_L R_1 R_L s^4 + C_1 C_4 C_L L_1 L_L R_1 R_L s^4}$$

$$\text{10.991} \quad \text{INVALID-ORDER-991} \quad Z(s) = \left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 +$$

10.992 INVALID-ORDER-992 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{R_L R_L (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{2C_1 C_4 L_1 L_4 R_L R_L g_m s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 R_L R_L s^3 + C_1 L_1 L_4 R_L g_m s^3 + C_1 L_1 L_4 s^3 + 2C_1 L_1 R_L R_L g_m s^2 + C_1 L_1 R_L s^2 + C_1 L_1 R_L s^2 + C_1 L_4 R_L s}$$

10.993 INVALID-ORDER-993 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{R_1 (C_1 L_1 s^2 + 1) (C_4 L_4 s^2 - L_4 g_m s + 1)}{C_1 C_4 C_L L_1 L_4 R_1 s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_1 R_1 s^3 + C_1 C_L L_4 R_1 s^3 + 2C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2}$$

10.994 INVALID-ORDER-994 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 C_L L_1 L_4 R_1 R_L g_m s^4 + C_1 C_L L_1 L_4 R_L s^4 + C_1 C_L L_1 R_1 R_L s^3 +$$

10.995 INVALID-ORDER-995 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4R_1R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_Ls^5 + C_1C_4C_LL_4R_1R_Ls^4 + 2C_1C_4L_1L_4R_1g_ms^4 + C_1C_4L_1L_4s^4 + C_1C_4L_4R_1s^3 + C_1C_LL_1L_4R_1g_ms^4 +$$

10.996 INVALID-ORDER-996 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_4 s^3}{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + 2C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 s^4 + C_1 C_L L_4 R_1 s^3 + C_1 C_L L_4 s^3}.$$

10.997 INVALID-ORDER-997 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_4 L_L R_1 s^4 + C_1 C_L L_1 L_4 L_L R_1 g_m s^5 + C_1 C_L L_1 L_4 L_L s^5 + C_1 C_L L_1 L_L R_1 s^4 + C_1 C_L L_1 L_L g_m s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 s^7 + 2 C_1 C_4 C_L L_1 L_4 L_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 L_L s^5 + C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 L_L g_m s^4 + C_1 C_4 C_L L_1 L_L R_1 s^3 + C_1 C_4 C_L L_1 L_L g_m s^3 + C_1 C_4 C_L L_1 L_L s^3 + C_1 C_4 C_L L_4 L_L R_1 s^2 + C_1 C_4 C_L L_4 L_L g_m s^2 + C_1 C_4 C_L L_4 L_L s^2 + C_1 C_4 C_L L_L R_1 s + C_1 C_4 C_L L_L g_m s + C_1 C_4 C_L L_L s + C_1 C_4 C_L R_1 + C_1 C_4 C_L g_m + C_1 C_4 C_L}$$

10.998 INVALID-ORDER-998 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 R_1 R_L s^4 + 2C_1$$

$$\mathbf{10.999 \quad INVALID-ORDER-999} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 s^5 + C_1 C_4 L_1 L_4 L_L R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_L g_m s^5 + \dots}{\dots}$$

$$\mathbf{10.1000 \quad INVALID-ORDER-1000} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m s^5 + \dots}{\dots}$$

$$\mathbf{10.1001 \quad INVALID-ORDER-1001} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad R_2, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + 2C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_L s^4 + \dots}{\dots}$$

$$\mathbf{10.1002 \quad INVALID-ORDER-1002} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L \right)$$

$$H(s) = \frac{R_1 R_L (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s + \dots)}{C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_1 R_1 R_4 g_m s^3 + 2C_1 C_4 L_1 R_1 R_L g_m s^3 + C_1 C_4 L_1 R_1 s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 R_L s^2 + \dots}$$

$$\mathbf{10.1003 \quad INVALID-ORDER-1003} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s} \right)$$

$$H(s) = \frac{R_1 (C_1 L_1 s^2 + 1) (C_4 L_4 g_m s^2 + C_4 R_4 g_m s + \dots)}{s (C_1 C_4 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_4 C_L L_1 L_4 s^4 + C_1 C_4 C_L L_1 R_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 R_1 s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L L_4 R_1 s^3 + C_1 C_4 C_L R_1 R_4 s^2 + 2C_1 C_4 L_1 R_1 g_m s^2 + C_1 C_4 L_1 R_1 R_4 s^2 + \dots)}$$

10.1004 INVALID-ORDER-1004 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 R_L s^2 + C_1 C_4 C_L R_1 R_4 R_L s + C_1 C_4 C_L R_1 R_4 R_L}{C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_L s^4 + C_1 C_4 C_L L_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + C_1 C_4 C_L R_1 R_4 R_L s^3 + C_1 C_4 C_L R_1 R_4 R_L s^2 + C_1 C_4 C_L R_1 R_4 R_L s + C_1 C_4 C_L R_1 R_4 R_L}$$

10.1005 INVALID-ORDER-1005 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{1}{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + 2C_1C_4C_LL_1R_1R_Lg_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + C_1C_4C_LL_1R_Ls^3 + C_1C_4C_LL_4R_1s^3 +$$

10.1006 INVALID-ORDER-1006 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{s(C_1C_4C_LL_1L_4R_1g_ms^4 + C_1C_4C_LL_1L_4s^4 + 2C_1C_4C_LL_1L_LR_1g_ms^4 + C_1C_4C_LL_1L_Ls^4 + C_1C_4C_LL_1R_1R_4g_ms^3 + C_1C_4C_LL_1R_1s^3 + C_1C_4C_LL_1R_4s^3 + C_1C_4C_LL_4R_1s^3 +$$

10.1007 INVALID-ORDER-1007 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^{2+1}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_L R_1 R_4 s^4 + C_1 C_4 L$$

10.1008 INVALID-ORDER-1008 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

[illegible]

10.1009 INVALID-ORDER-1009 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L$$

10.1010 INVALID-ORDER-1010 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 +$$

10.1011 INVALID-ORDER-1011 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5}$$

10.1012 INVALID-ORDER-1012 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{2C_1C_4L_1L_4R_1R_4R_Lg_ms^4 + C_1C_4L_1L_4R_1R_4s^4 + C_1C_4L_1L_4R_4R_Ls^4 + C_1C_4L_4R_1R_4R_Ls^3 + C_1L_1L_4R_1R_4g_ms^3 + 2C_1L_1L_4R_1R_Lg_ms^3 + C_1L_1L_4R_1s^3 + C_1L_1L_4R_4s^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Lg_ms^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Ls^3}{2C_1C_4L_1L_4R_1R_4R_Lg_ms^4 + C_1C_4L_1L_4R_1R_4s^4 + C_1C_4L_1L_4R_4R_Ls^4 + C_1C_4L_4R_1R_4R_Ls^3 + C_1L_1L_4R_1R_4g_ms^3 + 2C_1L_1L_4R_1R_Lg_ms^3 + C_1L_1L_4R_1s^3 + C_1L_1L_4R_4s^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Lg_ms^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Ls^3 + C_1L_1L_4R_4R_Ls^3}.$$

10.1013 INVALID-ORDER-1013 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^5 + 2C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_L L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_L L_1 L_4 R_1 s^4 + C_1 C_L L_1 L_4 R_4 s^4 + C_1 C_L L_1 R_1 R_4 s^3 + C_1 C_L L_1 R_1 R_4 s^2}{C_1 C_4 C_L L_1 L_4 R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 g_m s^4 + C_1 C_4 C_L L_1 L_4 R_4 s^4 + C_1 C_4 C_L L_1 R_1 R_4 g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_1 R_4 g_m s^3 + C_1 C_4 C_L L_1 R_4 s^3 + C_1 C_4 C_L R_1 R_4 g_m s^3 + C_1 C_4 C_L R_1 R_4 s^3 + C_1 C_4 C_L R_4 g_m s^2 + C_1 C_4 C_L R_4 s^2 + C_1 C_4 C_R L_1 L_4 R_1 R_4 g_m s^4 + C_1 C_4 C_R L_1 L_4 R_1 R_4 s^4 + C_1 C_4 C_R L_1 L_4 R_4 g_m s^3 + C_1 C_4 C_R L_1 L_4 R_4 s^3 + C_1 C_4 C_R L_1 R_1 R_4 g_m s^3 + C_1 C_4 C_R L_1 R_1 R_4 s^3 + C_1 C_4 C_R L_1 R_4 g_m s^2 + C_1 C_4 C_R L_1 R_4 s^2 + C_1 C_4 C_R R_1 R_4 g_m s^2 + C_1 C_4 C_R R_1 R_4 s^2 + C_1 C_4 C_R R_4 g_m s + C_1 C_4 C_R R_4 s}.$$

10.1014 INVALID-ORDER-1014 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 R_1 R_4 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_1 L_4 R_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 R_L s^3 + C_1 C_L L_1 L_4 R_1 R_4 R_L g_m s^4 + C_1 C_L L_1 L_4 R_1 R_L s^4 +$$

10.1015 INVALID-ORDER-1015 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4R_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_4R_Ls^5 + C_1C_4C_LL_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_4L_4R_1R_4s^3 + C_1C_4L_4R_1R_4s^2 + C_1C_4L_4R_1R_4s + C_1C_4L_4R_1R_4}{2C_1C_4C_LL_1L_4R_1R_4R_Lg_ms^5 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_1L_4R_4R_Ls^5 + C_1C_4C_LL_4R_1R_4R_Ls^4 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_4L_4R_1R_4s^3 + C_1C_4L_4R_1R_4s^2 + C_1C_4L_4R_1R_4s + C_1C_4L_4R_1R_4}.$$

10.1016 INVALID-ORDER-1016 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_4g_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_4L_LR_1R_4s^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_4L_4R_1R_4s^3 + 2C_1C_4L_4R_4s^2 + 2C_1C_4L_1L_4R_1R_4s + 2C_1C_4L_1L_4R_4}{2C_1C_4C_LL_1L_4L_LR_1R_4g_ms^6 + C_1C_4C_LL_1L_4L_LR_4s^6 + C_1C_4C_LL_1L_4R_1R_4s^5 + C_1C_4C_LL_4L_LR_1R_4s^5 + 2C_1C_4L_1L_4R_1R_4g_ms^4 + C_1C_4L_1L_4R_4s^4 + C_1C_4L_4R_1R_4s^3 + 2C_1C_4L_4R_4s^2 + 2C_1C_4L_1L_4R_1R_4s + 2C_1C_4L_1L_4R_4}$$

10.1017 **INVALID-ORDER-1017** $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + C_1 C_4 L_1 L_4 R_1 R_4 s^4 + C_1 C_4 L_4 L_L R_1 R_4 s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 g_m s^5 + C_1 C_L L_1 L_4 L_L R_1 s^5 + \dots}{\dots}$$

10.1018 INVALID-ORDER-1018 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = -\frac{2C_1C_4C_L L_1L_4L_LR_1R_4g_ms^6 + C_1C_4C_L L_1L_4L_LR_4s^6 + 2C_1C_4C_L L_1L_4R_1R_4R_Lg_ms^5 + C_1C_4C_L L_1L_4R_1R_4s^5 + C_1C_4C_L L_1L_4R_4R_Ls^5 + C_1C_4C_L L_4L_LR_1R_4s^5 + C_1C_4C_L$$

10.1019 INVALID-ORDER-1019 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L s^6 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 s^5 + C_1 C_4 L_1 L_4 L_L R_4 R_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_4 L_L R_1 R_4 R_L s^4 + C_1 C_L L_1 L_4 L_L R_1 R_4 R_L s^4}$$

10.1020 INVALID-ORDER-1020 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = -\frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + 2C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 L_1 L_4 L_L R_4 s^5 + 2C$$

10.1021 INVALID-ORDER-1021 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = -\frac{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1R_4s^6 + C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + C_1C_4C_LL_1L_4R_1R_4R_Ls^5 + C_1C_4C_LL_4L_LR_1R_4R_Ls^5 + 2C_1C_4L_1L_4R_1R_4R_Lg_ms^5}{2C_1C_4C_LL_1L_4L_LR_1R_4R_Lg_ms^6 + C_1C_4C_LL_1L_4L_LR_1R_4s^6 + C_1C_4C_LL_1L_4L_LR_4R_Ls^6 + C_1C_4C_LL_1L_4R_1R_4R_Ls^5 + C_1C_4C_LL_4L_LR_1R_4R_Ls^5 + 2C_1C_4L_1L_4R_1R_4R_Lg_ms^5}$$

10.1022 INVALID-ORDER-1022 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L \right)$

$$H(s) = \frac{1}{C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 R_L s^3 + C_1 L_1 L_4 R_1 g_m s^3 + C_1 L_1 L_4 s^2}$$

10.1023 INVALID-ORDER-1023 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 R_1 s^3}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + C_1 C_4 L_4 R_1 s^3 + C_1 C_L L_1 L_4 R_1 g_m s^4 + C_1 C_L L_1 L_4 R_1 s^3}$$

10.1024 INVALID-ORDER-1024 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 +$$

10.1025 INVALID-ORDER-1025 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_L s^4 + 2 C_1 C_4}{...}$$

10.1026 ~~INVALID-ORDER-1026~~ $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_1R_4g_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_4s^5 + C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4R_1R_4s^4 + 2C_1C_4L_1L_4L_LR_1R_4s^4 + 2C_1C_4L_1L_4L_LR_1R_4s^3 + 2C_1C_4L_1L_4L_LR_1R_4s^2 + 2C_1C_4L_1L_4L_LR_1R_4s + 2C_1C_4L_1L_4L_LR_1R_4}{2C_1C_4C_LL_1L_4L_LR_1g_ms^6 + C_1C_4C_LL_1L_4L_Ls^6 + C_1C_4C_LL_1L_4R_1R_4g_ms^5 + C_1C_4C_LL_1L_4R_1s^5 + C_1C_4C_LL_1L_4R_4s^5 + C_1C_4C_LL_4L_LR_1s^5 + C_1C_4C_LL_4R_1R_4s^4 + 2C_1C_4L_1L_4L_LR_1R_4s^4 + 2C_1C_4L_1L_4L_LR_1R_4s^3 + 2C_1C_4L_1L_4L_LR_1R_4s^2 + 2C_1C_4L_1L_4L_LR_1R_4s + 2C_1C_4L_1L_4L_LR_1R_4}.$$

10.1027 INVALID-ORDER-1027 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 +$$

10.1028 INVALID-ORDER-1028 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s} \right)$

$$H(s) = \frac{2C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + C_1 C_4 C_L L_1 L_4 s^5}{(s^2 + \omega_{L_1}^2)(s^2 + \omega_{L_4}^2)(s^2 + \omega_{L_L}^2)(s^2 + \omega_{R_1}^2)(s^2 + \omega_{R_4}^2)(s^2 + \omega_{R_L}^2)}$$

10.1029 INVALID-ORDER-1029 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L + \frac{1}{L_L s}}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 R_L g_m s^5 +$$

10.1030 INVALID-ORDER-1030 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L s^5}$$

10.1031 INVALID-ORDER-1031 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

$$H(s) = \frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4}{\dots}$$

10.1032 INVALID-ORDER-1032 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_{1s}}, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, \infty, R_L \right)$

$$H(s) = -\frac{C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2 C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2 + C_1 C_4 L_1 R_1 R_4 R_L g_m s^2 + C_1 C_4 L_1 R_1 R_4 s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 R_4 s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 L_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 L_4 R_1 R_4 s^2 + C_1 C_4 L_4 R_1 s^2 + C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_L s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2}{C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_L g_m s^4 + C_1 C_4 L_1 L_4 R_1 s^4 + C_1 C_4 L_1 L_4 R_4 s^4 + C_1 C_4 L_1 L_4 R_L s^4 + 2 C_1 C_4 L_1 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_1 R_1 R_4 s^3 + C_1 C_4 L_1 R_4 R_L s^3 + C_1 C_4 L_1 R_4 s^3 + C_1 C_4 L_1 R_L s^3 + C_1 C_4 L_1 s^3 + C_1 C_4 L_4 R_1 R_4 R_L g_m s^3 + C_1 C_4 L_4 R_1 R_4 s^3 + C_1 C_4 L_4 R_1 s^3 + C_1 C_4 L_4 R_4 s^3 + C_1 C_4 L_4 R_L s^3 + C_1 C_4 L_4 s^3 + C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2 + C_1 C_4 L_1 R_1 R_4 R_L g_m s^2 + C_1 C_4 L_1 R_1 R_4 s^2 + C_1 C_4 L_1 R_1 s^2 + C_1 C_4 L_1 R_4 s^2 + C_1 C_4 L_1 R_L s^2 + C_1 C_4 L_1 s^2 + C_1 C_4 L_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 L_4 R_1 R_4 s^2 + C_1 C_4 L_4 R_1 s^2 + C_1 C_4 L_4 R_4 s^2 + C_1 C_4 L_4 R_L s^2 + C_1 C_4 L_4 s^2 + C_1 C_4 R_1 R_4 R_L g_m s^2 + C_1 C_4 R_1 R_4 s^2 + C_1 C_4 R_1 s^2 + C_1 C_4 R_4 s^2 + C_1 C_4 R_L s^2 + C_1 C_4 s^2}.$$

10.1033 INVALID-ORDER-1033 $Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_L s} \right)$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_4 g_m}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 R_1 R_4 s^4 + C_1 C_4 C_L L_4 R_1 R_4 s^4 + 2 C_1 C_4 L_1 L_4 R_1 g_m s^4 + C_1 C_4 L_1 L_4 s^4 + 2 C_1 C_4 L_1 R_1 R_4 g_m}$$

$$10.1034 \quad \text{INVALID-ORDER-1034} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L}{C_L R_L s + 1} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 R_L s^5 + C_1 C_4 C_L L_1 L_4 R_4 R_L s^5 + C_1 C_4 C_L L_1 R_1 R_4 R_L s^4 + C_1 C_4 C_L L_4 R_1 R_4 R_L s^4 + C_1 C_4 L_1 L_4 R_1 R_4 g_m s^4 + 2 C_1 C_4 L_1 L_4 R_1 R_4 s^4}$$

$$10.1035 \quad \text{INVALID-ORDER-1035} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4}{C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5 + 2 C_1 C_4 C_L L_1 R_1 R_4 R_L g_m s^4 + C_1 C_4 C_L L_1 R_1 R_4 s^4}$$

$$10.1036 \quad \text{INVALID-ORDER-1036} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{2 C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5}{2 C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 s^5}$$

$$10.1037 \quad \text{INVALID-ORDER-1037} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + 2 C_1 C_4 L_1 L_4 L_L R_1 g_m s^5 + C_1 C_4 L_1 L_4 L_L s^5}$$

$$10.1038 \quad \text{INVALID-ORDER-1038} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad L_L s + R_L + \frac{1}{C_L s} \right)$$

$$H(s) = -\frac{2 C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5}{2 C_1 C_4 C_L L_1 L_4 L_L R_1 g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L s^6 + C_1 C_4 C_L L_1 L_4 R_1 R_4 g_m s^5 + 2 C_1 C_4 C_L L_1 L_4 R_1 R_L g_m s^5 + C_1 C_4 C_L L_1 L_4 R_1 s^5 + C_1 C_4 C_L L_1 L_4 R_4 s^5 + C_1 C_4 C_L L_1 L_4 R_L s^5}$$

$$\mathbf{10.1039 \quad INVALID-ORDER-1039} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 R_L s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 R_L s^5 + C_1 C_4 L_1 L_4 L_L R_1 R_4 g_m s^5}{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_L R_1 R_4 s^5 + C_1 C_4 C_L L_L R_4 g_m s^5 + C_1 C_4 C_L L_L R_4 s^5 + C_1 C_4 C_L L_L R_L g_m s^5 + C_1 C_4 C_L L_L R_L s^5 + C_1 C_4 C_L R_1 R_4 g_m s^5 + C_1 C_4 C_L R_1 R_4 s^5 + C_1 C_4 C_L R_4 g_m s^5 + C_1 C_4 C_L R_4 s^5 + C_1 C_4 C_L R_L g_m s^5 + C_1 C_4 C_L R_L s^5 + C_1 C_4 C_L g_m s^5 + C_1 C_4 C_L s^5 + C_1 C_4 C_L}$$

$$\mathbf{10.1040 \quad INVALID-ORDER-1040} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + 2 C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_L R_1 R_4 s^5 + C_1 C_4 C_L L_L R_4 g_m s^5 + C_1 C_4 C_L L_L R_4 s^5 + C_1 C_4 C_L L_L R_L g_m s^5 + C_1 C_4 C_L L_L R_L s^5 + C_1 C_4 C_L R_1 R_4 g_m s^5 + C_1 C_4 C_L R_1 R_4 s^5 + C_1 C_4 C_L R_4 g_m s^5 + C_1 C_4 C_L R_4 s^5 + C_1 C_4 C_L R_L g_m s^5 + C_1 C_4 C_L R_L s^5 + C_1 C_4 C_L g_m s^5 + C_1 C_4 C_L s^5 + C_1 C_4 C_L}$$

$$\mathbf{10.1041 \quad INVALID-ORDER-1041} \quad Z(s) = \left(L_1 s + R_1 + \frac{1}{C_1 s}, \quad L_2 s + \frac{1}{C_2 s}, \quad \infty, \quad \infty, \quad \infty, \quad \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = -\frac{C_1 C_4 C_L L_1 L_4 L_L R_1 R_4 g_m s^6 + 2 C_1 C_4 C_L L_1 L_4 L_L R_1 R_L g_m s^6 + C_1 C_4 C_L L_1 L_4 L_L R_1 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_4 s^6 + C_1 C_4 C_L L_1 L_4 L_L R_L s^6 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_1 R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_4 R_L s^5 + C_1 C_4 C_L L_1 L_L R_L g_m s^5 + C_1 C_4 C_L L_1 L_L R_L s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_4 L_L R_1 R_4 s^5 + C_1 C_4 C_L L_4 L_L R_L g_m s^5 + C_1 C_4 C_L L_4 L_L R_L s^5 + C_1 C_4 C_L L_L R_1 R_4 g_m s^5 + C_1 C_4 C_L L_L R_1 R_4 s^5 + C_1 C_4 C_L L_L R_4 g_m s^5 + C_1 C_4 C_L L_L R_4 s^5 + C_1 C_4 C_L L_L R_L g_m s^5 + C_1 C_4 C_L L_L R_L s^5 + C_1 C_4 C_L R_1 R_4 g_m s^5 + C_1 C_4 C_L R_1 R_4 s^5 + C_1 C_4 C_L R_4 g_m s^5 + C_1 C_4 C_L R_4 s^5 + C_1 C_4 C_L R_L g_m s^5 + C_1 C_4 C_L R_L s^5 + C_1 C_4 C_L g_m s^5 + C_1 C_4 C_L s^5 + C_1 C_4 C_L}$$