# Filter Summary Report: CG,TIA,simple,Z2,Z4,Z5

### Generated by MacAnalog-Symbolix

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10.61INVALID-ORDER-61 $Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$
$10.62 \text{INVALID-ORDER-} 62 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right) $
$10.63 \text{INVALID-ORDER-} 63 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right) $
$10.64 \text{INVALID-ORDER-} 64 \ Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.65 \text{INVALID-ORDER-} 65 \ Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) $
10.66INVALID-ORDER-66 $Z(s) = (\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{1}{C_5s}, \infty)$
10.67INVALID-ORDER-67 $Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty \right)$
10.68INVALID-ORDER-68 $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, R_5 + \frac{1}{C_5s}, \infty\right)$
10.69INVALID-ORDER-69 $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, L_5s + \frac{1}{C_5s}, \infty\right)$
$10.70 \text{INVALID-ORDER-} 70 \ Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 \overline{L}_5 s^2 + 1}, \ \infty \right) \ \dots $
10.71INVALID-ORDER-71 $Z(s) = \left(\infty, R_2, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$
$10.72 \text{INVALID-ORDER-72 } Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $
$10.73 \text{INVALID-ORDER-} 73 \ Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.74 \text{INVALID-ORDER-} 74 \ Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) $
10.75INVALID-ORDER-75 $Z(s) = \left(\infty, R_2, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \frac{1}{C_5s}, \infty\right)$
$10.76 \text{INVALID-ORDER-} 76 \ Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) $
10.77INVALID-ORDER-77 $Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right)$
10.78INVALID-ORDER-78 $Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right)$
$10.79 \text{INVALID-ORDER-79 } Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.80 \text{INVALID-ORDER-80 } Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right) $
$10.81 \text{INVALID-ORDER-81 } Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $
$10.82 \text{INVALID-ORDER-82 } Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.83 \text{INVALID-ORDER-83 } Z(s) = \left( \infty, \ R_2, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right) $
$10.84 \text{INVALID-ORDER-84 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4, \ R_5, \ \infty\right) \ \dots $
$10.85 \text{INVALID-ORDER-85 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right) $
10.86INVALID-ORDER-86 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty \right)'$
$10.87 \text{INVALID-ORDER-87 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right) \qquad . \qquad \qquad \qquad \qquad . \qquad \qquad \qquad \qquad . \qquad \qquad \qquad \qquad \qquad \qquad \qquad . \qquad \qquad \qquad \qquad \qquad . \qquad \qquad$
10.88INVALID-ORDER-88 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$
10.89INVALID-ORDER-89 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, R_4, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty \right)$
$10.90 \text{INVALID-ORDER-90 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) $
$10.91\text{INVALID-ORDER-91 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_5 s}, \ \infty \right) \ \dots $
$10.92 \text{INVALID-ORDER-92 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right) $
$10.93\text{INVALID-ORDER-93 } Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right) $

10.94INVALID-ORDER-94 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$
$10.95 \text{INVALID-ORDER-95} \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)  \dots $
10.96INVALID-ORDER-96 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_5 L_5 R_5 s^2}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + \bar{L}_5 s + R_5}, \infty\right)$
10.97INVALID-ORDER-97 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty \right)$
10.98INVALID-ORDER-98 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$
10.99INVALID-ORDER-99 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$
10.10 <b>0</b> NVALID-ORDER-100 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.10INVALID-ORDER-101 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$
10.102NVALID-ORDER-102 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$
10.10 INVALID-ORDER-103 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty \right)$
10.104NVALID-ORDER-104 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty \right)$
$10.10 \text{INVALID-ORDER-} 105 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) $
10.106NVALID-ORDER-106 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty \right)$
$10.10 \text{INVALID-ORDER-} 107 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) \qquad . \qquad $
10.10\text{\text{8}NVALID-ORDER-108} $Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$
10.10 <b>9</b> NVALID-ORDER-109 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.11 <b>0</b> NVALID-ORDER-110 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$
10.11INVALID-ORDER-111 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$
10.112NVALID-ORDER-112 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$
10.11 <b>2</b> NVALID-ORDER-113 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty \right)$
$10.11 \text{ 1 NVALID-ORDER-114 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)  \dots $
10.11 INVALID-ORDER-115 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)$
$10.11 \text{ 6NVALID-ORDER-116 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right) \qquad \dots \qquad $
10.11 <b>T</b> NVALID-ORDER-117 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$
$10.11 \text{\&NVALID-ORDER-} 118 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right) $
10.119NVALID-ORDER-119 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
$10.120 \text{NVALID-ORDER-} 120 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) $
10.12INVALID-ORDER-121 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty \right)$
$10.122\text{NVALID-ORDER-}122\ Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \infty,\ L_4 s + \frac{1}{C_4 s},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right) \ \dots \ $
$10.12 \text{ INVALID-ORDER-} 123 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.12 \text{ INVALID-ORDER-} 124 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $
$10.12 \text{5NVALID-ORDER-} 125 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5, \ \infty \right) $
10.126NVALID-ORDER-126 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$
$10.12\text{INVALID-ORDER-}127 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right) $
10.12\( \text{NVALID-ORDER-128} \( Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \infty \right) \] \tag{31}
10.12 <b>9</b> NVALID-ORDER-129 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty \right)$
$10.13 \text{ INVALID-ORDER-} 130 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)' \ \dots \ $
$10.13\text{INVALID-ORDER-}131 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right) $ $10.13\text{INVALID-ORDER-}132 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right) $ $310.13\text{INVALID-ORDER-}132 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right) $
$10.132 \text{NVALID-ORDER-} 132 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right) $

$10.13 \text{BNVALID-ORDER-} 133 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $	31
$10.134\text{NVALID-ORDER-}134\ Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \infty,\ \frac{L_4 s}{C_4 L_4 s^2 + 1},\ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)\ \dots$	31
10.13 INVALID-ORDER-135 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$	31
10.136NVALID-ORDER-136 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$	31
10.13 INVALID-ORDER-137 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$	32
10.13\( \text{NVALID-ORDER-138} \( Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{1}{L_4 s} + R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \infty \right)  \qua	32
10.139NVALID-ORDER-139 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$	32
10.140NVALID-ORDER-140 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$	32
10.14INVALID-ORDER-141 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$	32
$10.142 \text{NVALID-ORDER-} 142 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right) \ \dots $	32
$10.14 \text{ 2NVALID-ORDER-} 143 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) \ \dots $	32
$10.14 \text{INVALID-ORDER-} 144 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)  \dots $	32
10.14 INVALID-ORDER-145 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty \right)$	32
$10.14 \text{ (6NVALID-ORDER-146 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{1}{C_5 s}, \ \infty\right) $	33
$10.14 \text{TNVALID-ORDER-} 147 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) \ \dots $	33
$10.14 \$NVALID-ORDER-148 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right) $	33
10.149NVALID-ORDER-149 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)$	33
$10.15 \text{ @NVALID-ORDER-} 150 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)^{-1} $	33
10.15INVALID-ORDER-151 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$	33
$10.15 \text{2NVALID-ORDER-} 152 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)  \dots $	33
$10.15 \text{2NVALID-ORDER-} 153 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)  \dots $	33
$10.154\text{NVALID-ORDER-}154\ Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \infty,\ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4},\ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$	33
10.15 INVALID-ORDER-155 $Z(s) = \left(\infty, \frac{1}{3}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{3}, R_5, \infty\right)$	34
10.156NVALID-ORDER-156 $Z(s) = \left( \infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty \right)$	34
$10.15 \text{INVALID-ORDER-} 157 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) $ $10.15 \text{INVALID-ORDER-} 158 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right) $	34
10.15 NVALID-ORDER-158 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$	34
10.15 <b>9</b> NVALID-ORDER-159 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$	34
$10.16 \text{ @NVALID-ORDER-160 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)' \qquad \dots $	34
$10.16 \text{INVALID-ORDER-} 161 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right) \ \dots $	34
$10.16 \text{ 2NVALID-ORDER-} 162 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) \ \dots $	34
$10.16 \text{ENVALID-ORDER-} 162 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $ $10.16 \text{ENVALID-ORDER-} 163 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $ $10.16 \text{ENVALID-ORDER-} 163 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $	34
$10.16 \text{ 1 NVALID-ORDER-164 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)^{\prime}  \dots $	34
$10.16 \text{INVALID-ORDER-} 165 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right) $	35
$10.16 \text{ @NVALID-ORDER-166 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right) $	35
$10.16 \text{INVALID-ORDER-} 167 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) $	35
$10.16 \text{\&NVALID-ORDER-} 168 \ Z(s) = \left( \infty, \ \frac{1}{C_s}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_s\left(C_4L_4s^2+1\right)}, \ R_5 + \frac{1}{C_s}, \ \infty \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	35
$10.16 \mathfrak{P} \text{NVALID-ORDER-} 169 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + C_4 R_4 s + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right) $	~
$10.16 \text{ 9N VALID-ORDER-} 169 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)  \dots $	. 35

$10.170 \text{NVALID-ORDER-} 170 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) \ \dots $	. 35
10.17INVALID-ORDER-171 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$	. 35
$10.172\text{NVALID-ORDER-}172\ Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \infty,\ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1},\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$	. 35
$10.17 \text{ 2NVALID-ORDER-} 173 \ Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $	. 35
$10.17 \text{INVALID-ORDER-174 } Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)  \dots $	. 36
$10.17 \text{INVALID-ORDER-} 175 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4, \ R_5, \ \infty\right)  \dots $	. 36
10.176NVALID-ORDER-176 $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ R_4, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$	. 36
$10.17 \text{INVALID-ORDER-} 177 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) \ \dots $	. 36
10.17\text{\text{\text{NVALID-ORDER-178}}} $Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$	. 36
$10.17 \text{ 9NVALID-ORDER-} 179 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $	. 36
$10.18 \text{ @NVALID-ORDER-} 180 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) \qquad . \qquad $	. 36
10.18INVALID-ORDER-181 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty \right)$	. 36
$10.182\text{NVALID-ORDER-}182\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \infty,\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \infty\right)$	. 36
10.18 INVALID-ORDER-183 $Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$	. 37
10.184NVALID-ORDER-184 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$	. 37
10.18 INVALID-ORDER-185 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty \right)$	. 37
10.186NVALID-ORDER-186 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$	. 37
10.18TNVALID-ORDER-187 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty \right)$	. 37
10.18\( \text{NVALID-ORDER-188} \( Z(s) = \int \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty \infty \right) \qquad \qqqqq \qqqqqq	. 37
10.18 <b>9</b> NVALID-ORDER-189 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty \right)'$	. 37
10.19 <b>0</b> NVALID-ORDER-190 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty \right)^{-1}$	. 37
10.19INVALID-ORDER-191 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty \right)$	. 37
$10.19 \text{ 2NVALID-ORDER-} 192 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)^{'} \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	. 38
10.19 INVALID-ORDER-193 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty \right)$	. 38
$10.194\text{NVALID-ORDER-}194\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \infty,\ \frac{R_4}{C_4R_4s+1},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$	. 38
$10.19 \text{ INVALID-ORDER-195 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$	. 38
$10.19 \text{ 6NVALID-ORDER-196 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s+1}, \ \infty, \ \frac{R_4}{C_4 R_4 s+1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s+1}, \ \infty \right)^{\prime} \right) $	
10.19TNVALID-ORDER-197 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty \right)$	. 38
10.19 NVALID-ORDER-198 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$	. 38
10.19 <b>9</b> NVALID-ORDER-199 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)$	. 38
10.20 <b>0</b> NVALID-ORDER-200 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$	. 38
10.20INVALID-ORDER-201 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)'$	. 39
10.202NVALID-ORDER-202 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty \right)$	
10.20 INVALID-ORDER-203 $Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty \right)$	. 39
$10.204\text{NVALID-ORDER-}204\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \infty,\ R_4 + \frac{1}{C_4s},\ \frac{C_5L_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)\ \dots \dots$	
$10.205 \text{NVALID-ORDER-} 205 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) $	
$10.206 \text{NVALID-ORDER-} 206 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty \right) \qquad . \qquad $	. 39
$10.20 \text{TNVALID-ORDER-} 207 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty \right) \ \dots $	. 39

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10.20\( \text{NVALID-ORDER-208} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_5 R_5 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty \right) \)
10.20 INVALID-ORDER-209 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty \right).
10.210NVALID-ORDER-210 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right) . . . . . .
10.21INVALID-ORDER-211 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right) \dots \dots
10.212NVALID-ORDER-212 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right) . . .
10.21\( \text{NVALID-ORDER-213} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty \)
10.214NVALID-ORDER-214 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)
10.215NVALID-ORDER-215 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.216NVALID-ORDER-216 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right) . . . . . . . . .
10.21 INVALID-ORDER-217 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty \right) . . .
10.21\( \text{NVALID-ORDER-218} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty \right) \\ \tag{10.21} \( \text{NVALID-ORDER-218} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty \right) \\ \tag{10.21} \]
10.219NVALID-ORDER-219 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.220NVALID-ORDER-220 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.22INVALID-ORDER-221 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty \right) . . . . . .
10.222NVALID-ORDER-222 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)
10.22\ \text{NVALID-ORDER-223} Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)
10.224NVALID-ORDER-224 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)
10.22 INVALID-ORDER-225 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.226NVALID-ORDER-226 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right) . . . . . . .
10.22TNVALID-ORDER-227 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty \right) \dots
10.22\( \text{NVALID-ORDER-228} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{L_4 s} + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty \) \quad \tag{.}
10.229NVALID-ORDER-229 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.230NVALID-ORDER-230 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.23INVALID-ORDER-231 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty \right) \dots
10.232NVALID-ORDER-232 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right) \dots
10.23\(\text{NVALID-ORDER-233}\(Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \left(L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.234NVALID-ORDER-234 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.23 INVALID-ORDER-235 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.236NVALID-ORDER-236 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, R_5, \infty\right) . . .
10.23 INVALID-ORDER-237 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_2 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right) . . . .
10.23\( \text{NVALID-ORDER-238} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty \)
10.239NVALID-ORDER-239 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.240NVALID-ORDER-240 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, L_5s + \frac{1}{C_5s}, \infty\right)
10.24INVALID-ORDER-241 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.242NVALID-ORDER-242 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, L_5s+R_5+\frac{1}{C_5s}, \infty\right)
10.24 \text{BNVALID-ORDER-} 243 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)
10.24 \text{ INVALID-ORDER-} 244 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)
10.245 \text{NVALID-ORDER-} 245 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
10.246NVALID-ORDER-246 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
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$10.24 \text{INVALID-ORDER-} 247 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty \right) \ \dots $	44
$10.24 \$NVALID-ORDER-248 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right) $	44
$10.24 \text{ 9NVALID-ORDER-} 249 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right) $	44
$10.25 \text{ @NVALID-ORDER-} 250 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right) $	44
$10.25 \text{INVALID-ORDER-} 251 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)  \dots $	44
$10.25 \text{2NVALID-ORDER-} 252 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)_{\text{constraints}} $	44
$10.25 \text{ INVALID-ORDER-} 253 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) \qquad . \ldots $	44
$10.254\text{NVALID-ORDER-}254\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \infty,\ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right)  \dots $	44
$10.25 \text{INVALID-ORDER-} 255 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) \ \dots $	44
$10.256 \text{NVALID-ORDER-} 256 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right) \ \dots $	45
$10.25\text{TNVALID-ORDER-}257 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty \right)  \dots $	45
$10.25 \&NVALID-ORDER-258 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s+1}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2+1\right)}{C_4 L_4 s^2 + C_4 R_4 s+1}, \ \frac{R_5}{C_5 R_5 s+1}, \ \infty\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	45
$10.25 \text{ @NVALID-ORDER-259 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right) $	45
$10.26 \text{ @NVALID-ORDER-260 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right) \ \dots $	45
$10.26 \text{INVALID-ORDER-} 261 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) $	45
$10.26 \text{2NVALID-ORDER-} 262 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right) $	45
$10.26 \text{ INVALID-ORDER-} 263 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) \ \dots $	45
$10.26 \text{INVALID-ORDER-} 264 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)  \dots $	45
$10.26 \text{INVALID-ORDER-} 265 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)  \dots $	46
$10.26 \text{ (INVALID-ORDER-266 } Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ R_5, \ \infty\right)  \dots $	46
$10.26 \text{INVALID-ORDER-} 267 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right) \ \dots $	
10.26\( \text{NVALID-ORDER-268} \( Z(s) = \int \) \( \infty, \ R_2 + \frac{1}{C_2 s}, \infty, R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty \) \( \text{ \text{.}} \)	46
10.26 <b>Q</b> NVALID-ORDER-269 $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$	
$10.27 \text{ @NVALID-ORDER-270 } Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)  \dots $	46
$10.27 \text{INVALID-ORDER-} 271 \ Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) \ \dots $	
$10.272\text{NVALID-ORDER-}272\ Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \infty,\ R_4,\ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$	
$10.27$ 3NVALID-ORDER-273 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right) \dots$	46
10.274NVALID-ORDER-274 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$	
10.27\foregin{align*} \text{ID-ORDER-275} & Z(s) = \left( \infty, & R_2 + \frac{1}{C_2 s}, & \infty, & \frac{1}{C_4 s}, & R_5 + \frac{1}{C_5 s}, & \infty \right) \\ \tag{\text{.}} & \text{.} & \tex	
10.276NVALID-ORDER-276 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$	
10.27 INVALID-ORDER-277 $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)'$	
10.27\text{\text{8}NVALID-ORDER-278} $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right)$	47
$10.279 \text{NVALID-ORDER-} 279 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)  \dots $	
$10.28 \text{ @NVALID-ORDER-280 } Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $	
10.28INVALID-ORDER-281 $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)$	47
$10.28 \text{ 2NVALID-ORDER-} 282 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty\right) \qquad . \qquad $	47

$10.28 \text{BNVALID-ORDER-} 283 \ Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) \ \dots \ $
10.284NVALID-ORDER-284 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$
10.28 INVALID-ORDER-285 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.28 INVALID-ORDER-286 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$
10.28INVALID-ORDER-287 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$
$10.28 \text{NVALID-ORDER-} 288 \ Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) \ \dots $
10.28 INVALID-ORDER-289 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$
$10.29 \text{@NVALID-ORDER-} 290 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right) $
10.29INVALID-ORDER-291 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$
10.29 <b>2</b> NVALID-ORDER-292 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$
10.29 <b>ENVALID-ORDER-293</b> $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$
10.29 INVALID-ORDER-294 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.29 INVALID-ORDER-295 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$
10.296NVALID-ORDER-296 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$
$10.29 \text{INVALID-ORDER-} 297 \ Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  \dots  $
10.29 NVALID-ORDER-298 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$
$10.29 \text{ (NVALID-ORDER-299 } Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right) $
10.30 <b>0</b> NVALID-ORDER-300 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$
$10.30 \text{INVALID-ORDER-301 } Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{1}{C_5 s}, \ \infty\right) $
10.30 2NVALID-ORDER-302 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$
10.30 28NVALID-ORDER-303 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$
10.304NVALID-ORDER-304 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.30 INVALID-ORDER-305 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$
10.30 <b>6</b> NVALID-ORDER-306 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$
$10.30 \text{INVALID-ORDER-307 } Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $
10.30 NVALID-ORDER-308 $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)$
10.30 NVALID-ORDER-309 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$
10.310NVALID-ORDER-310 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$
10.31INVALID-ORDER-311 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$
10.31 <b>2</b> NVALID-ORDER-312 $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right)$ 5 10.31 <b>2</b> NVALID-ORDER-313 $Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$ 5
10.31 BNVALID-ORDER-313 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$
10.31 INVALID-ORDER-314 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.31 INVALID-ORDER-315 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$
10.31 <b>6</b> NVALID-ORDER-316 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$
$10.31\text{INVALID-ORDER-}317 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right) $ $10.31\text{INVALID-ORDER-}318 \ Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right) $ $5$
$10.31 \text{ NVALID-ORDER-318 } Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right) $
10.31 <b>9</b> NVALID-ORDER-319 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$
10.32 <b>0</b> NVALID-ORDER-320 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$
10.32INVALID-ORDER-321 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$

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10.322NVALID-ORDER-322 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.32 INVALID-ORDER-323 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.324NVALID-ORDER-324 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.32 INVALID-ORDER-325 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.326NVALID-ORDER-326 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.32TNVALID-ORDER-327 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.32\text{NVALID-ORDER-328} Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.32 INVALID-ORDER-329 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.33@NVALID-ORDER-330 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right) \dots \dots
10.33INVALID-ORDER-331 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
10.332NVALID-ORDER-332 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.33 NVALID-ORDER-333 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.33\(\text{INVALID-ORDER-334}\(Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\)
10.33 INVALID-ORDER-335 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.336NVALID-ORDER-336 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.33TNVALID-ORDER-337 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.33\(\text{NVALID-ORDER-338}\(Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\)
10.339NVALID-ORDER-339 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.340NVALID-ORDER-340 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
10.34INVALID-ORDER-341 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)
10.342NVALID-ORDER-342 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.34 INVALID-ORDER-343 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.34 INVALID-ORDER-344 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.34 INVALID-ORDER-345 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.346NVALID-ORDER-346 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.34TNVALID-ORDER-347 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.34\(\text{NVALID-ORDER-348}\) Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \right)
10.349NVALID-ORDER-349 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}\right)
10.350NVALID-ORDER-350 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5, \infty\right)
10.35INVALID-ORDER-351 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
                                                                       \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.35 ENVALID-ORDER-353 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.35\(\text{4NVALID-ORDER-354}\) Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.35 INVALID-ORDER-355 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                         \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.35 INVALID-ORDER-357 Z(s) = \left( \infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty \right)
10.35\( \) NVALID-ORDER-358 Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right)
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10.359NVALID-ORDER-359 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5(C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \right)
10.36 INVALID-ORDER-360 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)...
10.36INVALID-ORDER-361 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{R_5}{C_5 R_5 s + 1}, \infty\right) . . .
10.362NVALID-ORDER-362 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, R_5 + \frac{1}{C_5 s}, \infty\right).
10.362NVALID-ORDER-363 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{28}}, \infty, R_4, L_5 s + \frac{1}{C_{58}}, \infty\right)
10.364NVALID-ORDER-364 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . .
10.36 INVALID-ORDER-365 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.36 INVALID-ORDER-366 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.36TNVALID-ORDER-367 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.36\( \text{NVALID-ORDER-368} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \)
10.369NVALID-ORDER-369 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5, \infty\right) \dots
10.370NVALID-ORDER-370 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right) . . .
10.37INVALID-ORDER-371 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.372NVALID-ORDER-372 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right).
10.378NVALID-ORDER-373 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)...
10.374NVALID-ORDER-374 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.37 INVALID-ORDER-375 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.376NVALID-ORDER-376 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.37 INVALID-ORDER-377 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \frac{1}{C_{4s}}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.378NVALID-ORDER-378 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.379NVALID-ORDER-379 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right) . . .
10.38@NVALID-ORDER-380 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right).
10.38INVALID-ORDER-381 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.382NVALID-ORDER-382 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.38 INVALID-ORDER-383 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.384NVALID-ORDER-384 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right).
10.38 INVALID-ORDER-385 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.386NVALID-ORDER-386 Z(s) = (\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty)
10.38TNVALID-ORDER-387 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.38\text{NVALID-ORDER-388} Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \right)
10.389NVALID-ORDER-389 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right).
10.39@NVALID-ORDER-390 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, R_4 + \frac{1}{C_{4s}}, \frac{1}{C_{5s}}, \infty\right) . . .
10.39INVALID-ORDER-391 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{28}}, \infty, R_4 + \frac{1}{C_{48}}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.392NVALID-ORDER-392 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.39 INVALID-ORDER-393 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.394NVALID-ORDER-394 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . .
10.39 INVALID-ORDER-395 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, R_4 + \frac{1}{C_{4s}}, L_5 s + R_5 + \frac{1}{C_{5s}}, \infty\right)
10.396NVALID-ORDER-396 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.39TNVALID-ORDER-397 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
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10.39\( \text{NVALID-ORDER-398} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)
10.39 NVALID-ORDER-399 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right) \dots
10.400NVALID-ORDER-400 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right) \dots
10.40INVALID-ORDER-401 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.402NVALID-ORDER-402 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.40 INVALID-ORDER-403 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.404NVALID-ORDER-404 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, L_4 s + \frac{1}{C_{4s}}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . .
10.40 INVALID-ORDER-405 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.406NVALID-ORDER-406 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.40 TNVALID-ORDER-407 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 R_5 s^2 + 1}, \infty\right)
10.40\( \) NVALID-ORDER-408 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)
10.409NVALID-ORDER-409 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right) \dots
10.410NVALID-ORDER-410 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)
10.41INVALID-ORDER-411 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.412NVALID-ORDER-412 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.41 INVALID-ORDER-413 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.41 INVALID-ORDER-414 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . . .
10.41 INVALID-ORDER-415 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right).
10.416NVALID-ORDER-416 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.41 INVALID-ORDER-417 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2} s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.41\( \text{NVALID-ORDER-418} \( Z(s) = \int(\infty), \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \end{array}
10.419NVALID-ORDER-419 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right) . . . .
10.420NVALID-ORDER-420 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right).
10.42INVALID-ORDER-421 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.422NVALID-ORDER-422 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, L_4 s + R_4 + \frac{1}{C_{4s}}, R_5 + \frac{1}{C_{5s}}, \infty\right)
10.42 INVALID-ORDER-423 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.424NVALID-ORDER-424 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)...
10.42 INVALID-ORDER-425 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0.8}}, \infty, L_4 s + R_4 + \frac{1}{C_{0.8}}, L_5 s + R_5 + \frac{1}{C_{0.8}}, \infty\right)
10.426NVALID-ORDER-426 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)
10.42 INVALID-ORDER-427 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.42\( \text{NVALID-ORDER-428} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \)
10.429NVALID-ORDER-429 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right)
10.430NVALID-ORDER-430 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0s}}, \infty, \frac{L_4 R_4 s}{C_{04} L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_{0s}}, \infty\right) . . .
10.43INVALID-ORDER-431 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.432NVALID-ORDER-432 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)
10.43\text{2NVALID-ORDER-433} Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_{28}}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right)
10.434NVALID-ORDER-434 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.43 INVALID-ORDER-435 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.436NVALID-ORDER-436 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)
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$10.43 \text{INVALID-ORDER-} 437 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)  \dots $
$10.43 \$NVALID-ORDER-438 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right) \ \dots $
10.43 <b>9</b> NVALID-ORDER-439 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$
$10.440 \text{NVALID-ORDER-} 440 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right) $
$10.44 \text{INVALID-ORDER-} 441 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right) $
$10.442\text{NVALID-ORDER-}442\ Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \infty,\ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1},\ R_5 + \frac{1}{C_5 s},\ \infty\right)\ \dots \qquad $
$10.44 \text{ENVALID-ORDER-} 443 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right) $
$10.44 \text{INVALID-ORDER-} 444 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.445\text{NVALID-ORDER-}445 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right) $
$10.44 \text{ ENVALID-ORDER-446 } Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $
$10.44\text{INVALID-ORDER-}447 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.44 \$NVALID-ORDER-448 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.44 \text{ @NVALID-ORDER-} 449 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
$10.45 \text{ (INVALID-ORDER-450 } Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty\right) $
$10.45 \text{INVALID-ORDER-} 451 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right) \ . $
$10.452\text{NVALID-ORDER-}452\ Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \infty,\ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1},\ R_5 + \frac{1}{C_5 s},\ \infty\right) $
$10.45 \text{RNVALID-ORDER-} 453 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty \right) \ \dots $
$10.45 \text{INVALID-ORDER-} 454 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.45 \text{INVALID-ORDER-} 455 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty \right) $
$10.45 \text{ ENVALID-ORDER-} 456 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $
$10.45\text{INVALID-ORDER-}457 \ Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.45 \$NVALID-ORDER-458 \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right) $
10.45 <b>Q</b> NVALID-ORDER-459 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{1}{C_5 s}, \ \infty\right)$
$10.46 \text{ @NVALID-ORDER-} 460 \ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right) $
10.46INVALID-ORDER-461 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, R_5 + \frac{1}{C_5 s}, \infty\right)$
10.462NVALID-ORDER-462 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)$
10.46\( \mathbb{R}\) NVALID-ORDER-463 $Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right)$
10.46\(\text{4NVALID-ORDER-464}\(Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, R_4, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)\right). \qquad \qqqq \qqq \qqqq \qq
$10.465 \text{NVALID-ORDER-} 465 \ Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) $
$10.46 \text{ (ENVALID-ORDER-466 } Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty \right) $
$10.46\text{TNVALID-ORDER-}467 \ Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) \ \dots $
10.46 NVALID-ORDER-468 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$ 67
10.46 <b>9</b> NVALID-ORDER-469 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$
$10.47 \text{ @NVALID-ORDER-470 } Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty \right) $
10.47INVALID-ORDER-471 $Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ R_5 + \frac{1}{C_5 s}, \ \infty \right)$
10.472NVALID-ORDER-472 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)$

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10.478NVALID-ORDER-473 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . . . . . .
 10.47 INVALID-ORDER-474 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.47 INVALID-ORDER-475 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.476NVALID-ORDER-476 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.47 INVALID-ORDER-477 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
10.478NVALID-ORDER-478 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right) . . . .
10.479NVALID-ORDER-479 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right).
10.48 INVALID-ORDER-480 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)
10.48INVALID-ORDER-481 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.482NVALID-ORDER-482 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.48\ \text{NVALID-ORDER-483} Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) \ \dots
10.484NVALID-ORDER-484 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.48 INVALID-ORDER-485 Z(s) = (\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty)
10.486NVALID-ORDER-486 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty \right)
10.48 INVALID-ORDER-487 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.489NVALID-ORDER-489 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right) . . .
10.49@NVALID-ORDER-490 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.49INVALID-ORDER-491 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.492NVALID-ORDER-492 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.49ENVALID-ORDER-493 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.494NVALID-ORDER-494 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.49 INVALID-ORDER-495 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.496NVALID-ORDER-496 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.49 INVALID-ORDER-497 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.49 NVALID-ORDER-498 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right).
10.499NVALID-ORDER-499 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right) \dots
10.50 INVALID-ORDER-500 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{0.8}}, \infty, L_4 s + \frac{1}{C_{4.8}}, \frac{R_5}{C_6 R_5 s + 1}, \infty\right)
10.50INVALID-ORDER-501 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.502NVALID-ORDER-502 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.50BNVALID-ORDER-503 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right).
10.504NVALID-ORDER-504 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.50 INVALID-ORDER-505 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.506NVALID-ORDER-506 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.50TNVALID-ORDER-507 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.50\( \text{NVALID-ORDER-508} \( Z(s) = \left( \infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty \right) \] \qquad \qqqq \qqq \qqqq \qqq \qqqq \qqqqq
10.509NVALID-ORDER-509 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right) . . .
10.510NVALID-ORDER-510 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.51INVALID-ORDER-511 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_3 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
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10.518NVALID-ORDER-513 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . . . .
10.51\(\text{INVALID-ORDER-514}\(Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\\)
10.51 INVALID-ORDER-515 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)
10.516NVALID-ORDER-516 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.51TNVALID-ORDER-517 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
10.519NVALID-ORDER-519 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
10.520NVALID-ORDER-520 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
 10.52INVALID-ORDER-521 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{28}}, \infty, L_4 s + R_4 + \frac{1}{C_{48}}, R_5 + \frac{1}{C_{58}}, \infty\right) . . .
 10.522NVALID-ORDER-522 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.528NVALID-ORDER-523 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right) . . . . .
10.524NVALID-ORDER-524 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.52 INVALID-ORDER-525 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.526NVALID-ORDER-526 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.52TNVALID-ORDER-527 Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{R_5(C_5L_5s^2 + 1)}{C_5L_5s^2 + C_5R_5s + 1}, \infty\right)
10.52\( \text{NVALID-ORDER-528} \( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ R_5, \ \infty \right) \quad \qua
10.529NVALID-ORDER-529 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right).
10.530NVALID-ORDER-530 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.53INVALID-ORDER-531 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.532NVALID-ORDER-532 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.53\(\text{SNVALID-ORDER-533}\(Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\)
10.534NVALID-ORDER-534 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.53 INVALID-ORDER-535 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.536NVALID-ORDER-536 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.53 \text{INVALID-ORDER-} 537 \ Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)
10.53\( \text{NVALID-ORDER-538} \( Z(s) = \left( \infty, L_2 s + R_2 + \frac{1}{C_{2}s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty \)
10.539NVALID-ORDER-539 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right) \dots
10.540 \text{NVALID-ORDER-}540 \ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)
10.54INVALID-ORDER-541 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.542NVALID-ORDER-542 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.548NVALID-ORDER-543 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.54\(\text{INVALID-ORDER-544}\(Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\)
10.54\( \text{NVALID-ORDER-545}\( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \)
10.546NVALID-ORDER-546 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.54 \text{INVALID-ORDER-} 547 \ Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
10.54\( \text{NVALID-ORDER-548} \( Z(s) = \left( \infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5, \infty \right) \end{argma} \)
10.549NVALID-ORDER-549 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
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\left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty\right)
                                                                                           \stackrel{'}{\propto}, L_2s + R_2 + \frac{1}{C_2s}, \propto, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1}, R_5 + \frac{1}{C_5s}, \propto
                                                                                                                                             \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, L_5s+\frac{1}{C_5s}, \infty
                                                                                            (\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty) 
                                                                                           (\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1}, L_5s + R_5 + \frac{1}{C_5s}, \infty)
                                                                                            \stackrel{\triangleright}{\propto}, L_{2}s + R_{2} + \frac{1}{C_{2}s}, \propto, \frac{R_{4}(C_{4}L_{4}s^{2} + 1)}{C_{4}L_{4}s^{2} + C_{4}R_{4}s + 1}, \frac{L_{5}R_{5}s}{C_{5}L_{5}R_{5}s^{2} + L_{5}s + R_{5}}, \propto 
                                                                                           \stackrel{?}{\propto}, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty
                                                                                          (\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1}, \frac{R_5(C_5L_5s^2 + 1)}{C_5L_5s^2 + C_5R_5s + 1}, \infty)
                                                                                         \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, R_4, \frac{1}{C_5s}, \infty\right).
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ R_4, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)
                                                                                        \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, R_4, R_5 + \frac{1}{C_5s}, \infty\right)
10.56INVALID-ORDER-561 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ R_4, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)
10.56BNVALID-ORDER-563 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                        \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, R_4, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ R_4, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right)
                                                                                           \stackrel{\prime}{\propto}, \stackrel{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \stackrel{\phantom{\prime}}{\propto}, \stackrel{\phantom{\prime}}{R_4}, \stackrel{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \stackrel{\phantom{\prime}}{\propto}
                                                                                        \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{1}{C_4s}, R_5, \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{1}{C_4s}, \ R_5+\frac{1}{C_5s}, \ \infty\right)
10.57INVALID-ORDER-571 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.572NVALID-ORDER-572 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{1}{C_4s}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)
                                                                                          \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)
                                                                                           (\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{1}{C_4s}, \frac{R_5(C_5L_5s^2 + 1)}{C_5L_5s^2 + C_5R_5s + 1}, 
10.57 INVALID-ORDER-577 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty\right)
10.579NVALID-ORDER-579 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4}{C_4R_4s + 1}, \frac{R_5}{C_5R_5s + 1}, \infty\right)
10.580NVALID-ORDER-580 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                         \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)
                                                                                        \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)
10.58 INVALID-ORDER-583 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                          \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right)
                                                                                        \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4}{C_4R_4s + 1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)
10.58 INVALID-ORDER-586 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4}{C_4R_4s + 1}, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \infty\right)
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10.58 \text{INVALID-ORDER-} 587 \ Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty \right) \ \dots 
                                                             \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, R_4 + \frac{1}{C_4s}, \frac{1}{C_5s}, \infty\right) . . .
10.58 NVALID-ORDER-589 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
10.59@NVALID-ORDER-590 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4 + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right) . . . .
10.59INVALID-ORDER-591 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_3 s^2 + 1}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.59 2NVALID-ORDER-592 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.59 INVALID-ORDER-593 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_3 L_2 s^2 + 1}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.594NVALID-ORDER-594 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
10.59 INVALID-ORDER-595 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4 + \frac{1}{C_{4s}}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
                                                              \stackrel{\prime}{\propto}, \, rac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \, \, \infty, \, \, R_4 + rac{1}{C_4 s}, \, \, rac{R_5 \left(C_5 L_5 s^2 + 1
ight)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \, \, \infty
10.59TNVALID-ORDER-597 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right) . . . . . . . . . . . .
10.59 NVALID-ORDER-598 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
10.599NVALID-ORDER-599 Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty \right)
10.600NVALID-ORDER-600 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.60INVALID-ORDER-601 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.602NVALID-ORDER-602 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.60ENVALID-ORDER-603 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
10.604NVALID-ORDER-604 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \infty\right)
10.60 INVALID-ORDER-605 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_7 L_7 s^2 + 1}, \infty\right)
10.60©NVALID-ORDER-606 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \infty\right)
10.60 TNVALID-ORDER-607 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right) . . .
10.60\text{NVALID-ORDER-608} Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty \right) \quad \dots \quad \dots
10.609NVALID-ORDER-609 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right) . . .
10.61 INVALID-ORDER-610 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.61INVALID-ORDER-611 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
10.612NVALID-ORDER-612 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
10.61 NVALID-ORDER-613 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                             \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)
10.61 INVALID-ORDER-615 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
10.616NVALID-ORDER-616 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.61TNVALID-ORDER-617 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)
10.61 NVALID-ORDER-618 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right).
10.619NVALID-ORDER-619 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right).
10.62 INVALID-ORDER-620 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_3 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
10.62INVALID-ORDER-621 Z(s) = \left( \infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty \right)
10.62 \text{BNVALID-ORDER-} 623 \ Z(s) = \left(\infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)
10.62 \text{INVALID-ORDER-} 624 \ Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right) \quad \dots 
10.62 INVALID-ORDER-625 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
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10.62 INVALID-ORDER-626 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
                                                                     \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, R_5, \infty\right)
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \frac{1}{C_5s}, \infty
                                                                      \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty\right)
10.62 NVALID-ORDER-629 Z(s) =
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5 + \frac{1}{C_5s}, \ \infty
10.63 ONVALID-ORDER-630 Z(s) =
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s+\frac{1}{C_5s}, \ \infty
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \frac{L_5s}{C_5L_5s^2+1}, \infty
10.632NVALID-ORDER-632 Z(s) =
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty
10.63BNVALID-ORDER-633 Z(s) =
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty
10.634NVALID-ORDER-634 Z(s) = (\infty,
10.63 INVALID-ORDER-635 Z(s) =
                                                                                                                                                               R_5(C_5L_5s^2+1)
                                                                       \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \right)
10.63 6NVALID-ORDER-636 Z(s) =
                                                                      \left(\infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5, \ \infty\right)
10.63TNVALID-ORDER-637 Z(s) =
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},
                                                                                                                        \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, R_5 + \frac{1}{C_5s},
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{2}, \infty,
                                                                                                                        \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ L_5s + \frac{1}{C_5s},
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty,
10.64INVALID-ORDER-641 Z(s) =
                                                                                                                        \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty
                                                                              \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty,
                                                                                                                        \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \; \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \; \infty
                                                                      \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \right)
10.645NVALID-ORDER-645 Z(s) =
                                                                       (\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}
                                                                                                                                                               R_5(C_5L_5s^2+1)
10.64 6NVALID-ORDER-646 Z(s) =
                                                                                                                             R_4(C_4L_4s^2+1)
                                                                       \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, R_5, \infty\right)
10.64TNVALID-ORDER-647 Z(s) =
                                                                                                                            R_4(C_4L_4s^2+1)
10.64NVALID-ORDER-648 Z(s) =
                                                                                                                 \infty, \frac{164(64246+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{1}{C_5s}, \infty
                                                                                                                            R_4(C_4L_4s^2+1)
                                                                       \infty, \ \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty
10.649NVALID-ORDER-649 Z(s) =
                                                                                                                            R_4(C_4L_4s^2+1)
                                                                       \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, R_5 + \frac{1}{C_5s}, \infty\right)
10.65 ONVALID-ORDER-650 Z(s) =
                                                                                                                            R_4(C_4L_4s^2+1)
                                                                       \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, L_5s + \frac{1}{C_5s}, \right)
10.65INVALID-ORDER-651 Z(s) =
                                                                                                                            R_4(C_4L_4s^2+1)
                                                                               \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \infty
10.652NVALID-ORDER-652 Z(s) =
                                                                        \infty,
                                                                                                                            R_4(C_4L_4s^2+1)
                                                                       \infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty,
                                                                                                                                                        L_5s + R_5 + \frac{1}{C_5s}, \infty
10.65BNVALID-ORDER-653 Z(s) =
                                                                                                                         \overline{C_4L_4s^2+C_4R_4s+1},
                                                                                                                            R_4(C_4L_4s^2+1)
                                                                       (\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty)
10.654NVALID-ORDER-654 Z(s) =

\stackrel{\frown}{\infty}, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1},

                                                                                                                            R_4(C_4L_4s^2+1)
10.65 NVALID-ORDER-655 Z(s) =
                                                                       \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \right)\right)
                                                                                                                            R_4(C_4L_4s^2+1)
10.65 6NVALID-ORDER-656 Z(s) =
                                                                       \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \frac{1}{C_5s}, \infty\right)
10.65TNVALID-ORDER-657 Z(s) =
                                                                                  R_2(C_2L_2s^2+1)
                                                                       \infty, \frac{R_2(C_2L_2s+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \frac{R_5}{C_5R_5s+1}, \infty
10.658NVALID-ORDER-658 Z(s) =
                                                                        (\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, R_5 + \frac{1}{C_5s}, \infty) 
10.659NVALID-ORDER-659 Z(s) =
10.660NVALID-ORDER-660 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, L_5s + \frac{1}{C_5s}, \infty\right)
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$10.692\text{NVALID-ORDER-}692\ Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \infty,\ R_4 + \frac{1}{C_4s},\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right) \ \dots \ 9$
$10.69 \text{\&NVALID-ORDER-}693 \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right) \qquad . \qquad 9$
$10.694\text{NVALID-ORDER-}694\ Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \infty,\ R_4 + \frac{1}{C_4s},\ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},\ \infty\right) \qquad 9$
$10.69 \text{ INVALID-ORDER-} 695 \ Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right) $
$10.69 \text{ 6NVALID-ORDER-} 696 \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+\frac{1}{C_4s}, \ R_5, \ \infty\right) \ \dots $
$10.69 \text{INVALID-ORDER-} 697 \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right) $
$10.69 \$NVALID-ORDER-698 \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+\frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right) \ \dots \qquad 9$
$10.69 \text{ @NVALID-ORDER-699 } Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right) $
$10.700 \text{NVALID-ORDER-700 } Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right) \ \dots $
$10.70 \text{INVALID-ORDER-701 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right) $
$10.702\text{NVALID-ORDER-702} \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right) $
$10.70 \text{RNVALID-ORDER-703} \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right) \ \dots $
$10.704\text{NVALID-ORDER-704} \ Z(s) = \left( \infty, \ \frac{R_2\left( C_2L_2s^2 + 1 \right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty \right) \ \dots $
$10.70 \text{INVALID-ORDER-705} \ Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right) $
$10.70 \text{ ENVALID-ORDER-706 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5, \ \infty \right) $
$10.70 \text{ INVALID-ORDER-707 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{1}{C_5s}, \ \infty \right) $
$10.70 \$NVALID-ORDER-708 \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right) $
$10.70 \text{ (PNVALID-ORDER-709 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right) $
$10.71 \text{@NVALID-ORDER-710 } Z(s) = \left( \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right) $
$10.71 \text{INVALID-ORDER-711 } Z(s) = \left( \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_5L_5s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right) $
$10.712\text{NVALID-ORDER-712} \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right) $
$10.71 \text{ ENVALID-ORDER-713 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty \right) $
$10.71 \text{INVALID-ORDER-714} \ Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty \right) $
$10.71 \text{ INVALID-ORDER-715 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty \right) $
$10.71 \text{ 6NVALID-ORDER-716 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ R_5, \ \infty \right) $
$10.71 \text{ INVALID-ORDER-717 } Z(s) = \left( \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty \right) $
$10.71 \text{\&NVALID-ORDER-718 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty \right) $
10.71 <b>9</b> NVALID-ORDER-719 $Z(s) = \left( \infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty \right)$
$10.72 \text{ INVALID-ORDER-720 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ L_5s+\frac{1}{C_5s}, \ \infty \right) $
$10.72 \text{INVALID-ORDER-721 } Z(s) = \left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \infty \right) $
$10.722\text{NVALID-ORDER-722} \ Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right) \qquad . \qquad $

10.72 <b>B</b> NVALID-ORDER-723 $Z(s) =$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right) \ \dots $	94
10.72#NVALID-ORDER-724 $Z(s) =$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right) \ \dots \ $	94
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right) \right) \ \dots $	94
10.72 <b>6</b> NVALID-ORDER-726 $Z(s) =$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5, \ \infty\right) \ \dots \right)$	9
10.72 <b>T</b> NVALID-ORDER-727 $Z(s) =$	$\left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \infty,\ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4},\ \frac{1}{C_5s},\ \infty\right)  \dots \\ \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \infty,\ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4},\ \frac{1}{C_5s},\ \infty\right) \\ \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \infty,\ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4},\ \frac{1}{C_5s},\ \infty\right) \\ \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_4L_4R_4s^2+L_4s+R_4},\ \frac{1}{C_5s},\ \infty\right) \\ \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_4L_4R_4s^2+L_4s+R_4s^2+R_4s+R_4s+R_4s+R_4s+R_4s+R_4s+R_4s+R_4s$	9
10.72\&NVALID-ORDER-728 $Z(s) =$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right) \ \dots $	9
10.72 <b>9</b> NVALID-ORDER-729 $Z(s) =$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5+\frac{1}{C_5s}, \ \infty\right)  \dots $	9
	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	9
10.73INVALID-ORDER-731 $Z(s) =$	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)  \dots $	9
10.732NVALID-ORDER-732 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	9
10.73 <b>B</b> NVALID-ORDER-733 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	9.
10.73#NVALID-ORDER-734 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	9.
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)  \dots $	9.
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5, \ \infty\right) \ \dots $	90
	$\left( \infty, \ \frac{R_2\left( C_2L_2s^2 + 1 \right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{1}{C_5s}, \ \infty \right)  \dots $	90
	$\left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},  \infty,  \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},  \frac{R_5}{C_5R_5s+1},  \infty\right)  \dots $	90
	$\left( \infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5+\frac{1}{C_5s}, \ \infty \right)  \dots $	90
10.740NVALID-ORDER-740 $Z(s) =$	$\left( \infty, \ \frac{R_2\left( C_2L_2s^2 + 1 \right)}{C_2L_2s^2 + C_2R_2s + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ L_5s + \frac{1}{C_5s}, \ \infty \right) \ \dots $	90
10.74INVALID-ORDER-741 $Z(s) =$	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	90
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right) \ \dots $	90
	$\left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right) \dots \dots$	9
	$\left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},  \infty,  \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1},  \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1},  \infty\right)  \dots $	9
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right) \dots \dots$	9'
	$\left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ R_5, \ \infty\right)  \dots $	9'
	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	9'
	$\left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right) \dots \dots$	9'
10.75 <b>2</b> NVALID-ORDER-752 $Z(s) =$		9'
10.75 <b>B</b> NVALID-ORDER-753 $Z(s) =$	$\left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \infty,\ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1},\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)  \dots $	9'

10.75#NVALID-ORDER-754 $Z(s) =$	$= \left( \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1} \right)$	$\left(\frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$	 	 	 
10.75 NVALID-ORDER-755 $Z(s) =$	$= \left( \infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1} \right)$	$\frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty$	 	 	 

1 Examined H(z) for CG TIA simple Z2 Z4 Z5:  $\frac{Z_2Z_4Z_5g_m-Z_2Z_4+Z_4Z_5}{2Z_2Z_4g_m+2Z_2Z_5g_m+2Z_2+4Z_4+2Z_5}$ 

$$H(z) = \frac{Z_2 Z_4 Z_5 g_m - Z_2 Z_4 + Z_4 Z_5}{2 Z_2 Z_4 g_m + 2 Z_2 Z_5 g_m + 2 Z_2 + 4 Z_4 + 2 Z_5}$$

- 2 HP
- 3 BP
- **3.1** BP-1  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$

$$H(s) = \frac{s \left( L_4 R_2 R_5 g_m - L_4 R_2 + L_4 R_5 \right)}{2 R_2 R_5 g_m + 2 R_2 + 2 R_5 + s^2 \left( 2 C_4 L_4 R_2 R_5 g_m + 2 C_4 L_4 R_2 + 2 C_4 L_4 R_5 \right) + s \left( 2 L_4 R_2 g_m + 4 L_4 \right)}$$

Parameters:

Q: 
$$\frac{C_4R_2R_5g_m\sqrt{\frac{1}{C_4L_4}}+C_4R_2\sqrt{\frac{1}{C_4L_4}}+C_4R_5\sqrt{\frac{1}{C_4L_4}}}{R_2g_m+2}$$
 wo: 
$$\sqrt{\frac{1}{C_4L_4}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_4L_4}}(R_2g_m+2)}{C_4R_2R_5g_m\sqrt{\frac{1}{C_4L_4}}+C_4R_2\sqrt{\frac{1}{C_4L_4}}+C_4R_5\sqrt{\frac{1}{C_4L_4}}}$$
 K-LP: 0 K-HP: 0 K-BP: 
$$\frac{R_2R_5g_m-R_2+R_5}{2R_2g_m+4}$$
 Qz: None Wz: None

**3.2** BP-2  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right)$ 

$$H(s) = \frac{s \left( L_4 R_2 R_4 R_5 g_m - L_4 R_2 R_4 + L_4 R_4 R_5 \right)}{2 R_2 R_4 R_5 g_m + 2 R_2 R_4 + 2 R_4 R_5 + s^2 \left( 2 C_4 L_4 R_2 R_4 R_5 g_m + 2 C_4 L_4 R_2 R_4 + 2 C_4 L_4 R_4 R_5 \right) + s \left( 2 L_4 R_2 R_4 g_m + 2 L_4 R_2 R_5 g_m + 2 L_4 R_2 + 4 L_4 R_4 + 2 L_4 R_5 \right)}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_4R_2R_4R_5g_m\sqrt{\frac{1}{C_4L_4}}+C_4R_2R_4\sqrt{\frac{1}{C_4L_4}}+C_4R_4R_5\sqrt{\frac{1}{C_4L_4}}}{R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5} \\ \text{wo:} \ \sqrt{\frac{1}{C_4L_4}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_4L_4}}(R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5)}{C_4R_2R_4R_5g_m\sqrt{\frac{1}{C_4L_4}}+C_4R_2R_4\sqrt{\frac{1}{C_4L_4}}+C_4R_4R_5\sqrt{\frac{1}{C_4L_4}}} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_2R_4R_5g_m-R_2R_4+R_4R_5}{2R_2R_4g_m+2R_2R_5g_m+2R_2+4R_4+2R_5} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$$

- 4 LP
- 5 BS

**5.1** BS-1 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)$$

$$H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^2 \left( C_4 L_4 R_2 R_5 g_m - C_4 L_4 R_2 + C_4 L_4 R_5 \right)}{2 R_2 g_m + s^2 \left( 2 C_4 L_4 R_2 g_m + 4 C_4 L_4 \right) + s \left( 2 C_4 R_2 R_5 g_m + 2 C_4 R_2 + 2 C_4 R_5 \right) + 4}$$

$$\begin{array}{l} \text{Q:} \ \frac{L_4R_2g_m\sqrt{\frac{1}{C_4L_4}}+2L_4\sqrt{\frac{1}{C_4L_4}}}{R_2R_5g_m+R_2+R_5} \\ \text{wo:} \ \sqrt{\frac{1}{C_4L_4}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_4L_4}}(R_2R_5g_m+R_2+R_5)}{L_4R_2g_m\sqrt{\frac{1}{C_4L_4}}+2L_4\sqrt{\frac{1}{C_4L_4}}} \\ \text{K-LP:} \ \frac{R_2R_5g_m-R_2+R_5}{2R_2g_m+4} \\ \text{K-HP:} \ \frac{R_2R_5g_m-R_2+R_5}{2R_2g_m+4} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_4L_4}} \end{array}$$

**5.2** BS-2 
$$Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, R_5, \infty\right)$$

$$H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_4L_4R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_4L_4R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5\right)}$$

### Parameters:

$$Q\colon \frac{L_4R_2R_4g_m\sqrt{\frac{1}{C_4L_4}} + L_4R_2R_5g_m\sqrt{\frac{1}{C_4L_4}} + L_4R_2\sqrt{\frac{1}{C_4L_4}} + 2L_4R_4\sqrt{\frac{1}{C_4L_4}} + L_4R_5\sqrt{\frac{1}{C_4L_4}}}{R_2R_4R_5g_m + R_2R_4 + R_4R_5}$$
 wo: 
$$\sqrt{\frac{1}{C_4L_4}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_4L_4}}(R_2R_4R_5g_m + R_2R_4 + R_4R_5)}{L_4R_2R_4g_m\sqrt{\frac{1}{C_4L_4}} + L_4R_2R_5g_m\sqrt{\frac{1}{C_4L_4}} + L_4R_2\sqrt{\frac{1}{C_4L_4}} + 2L_4R_4\sqrt{\frac{1}{C_4L_4}} + L_4R_5\sqrt{\frac{1}{C_4L_4}}}$$
 K-LP: 
$$\frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5}$$
 K-HP: 
$$\frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5}$$
 K-BP: 0 Qz: None Wz: 
$$\sqrt{\frac{1}{C_4L_4}}$$

### 6 GE

**6.1** GE-1 
$$Z(s) = \left(\infty, R_2, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_5R_2R_4s + R_2R_4g_m + R_4 + s^2\left(C_5L_5R_2R_4g_m + C_5L_5R_4\right)}{2R_2g_m + s^2\left(2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + 2}$$

$$\begin{aligned} & \text{Q:} \ \frac{L_5 R_2 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 \sqrt{\frac{1}{C_5 L_5}}}{R_2 R_4 g_m + R_2 + 2 R_4} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5 L_5}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5 L_5}} (R_2 R_4 g_m + R_2 + 2 R_4)}{L_5 R_2 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 \sqrt{\frac{1}{C_5 L_5}}} \\ & \text{K-LP:} \ \frac{R_4}{2} \\ & \text{K-HP:} \ \frac{R_4}{2} \\ & \text{K-BP:} \ -\frac{R_2 R_4}{2 R_2 R_4 g_m + 2 R_2 + 4 R_4} \\ & \text{Qz:} \ \frac{-L_5 R_2 g_m \sqrt{\frac{1}{C_5 L_5}} - L_5 \sqrt{\frac{1}{C_5 L_5}}}{R_2} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

**6.2** GE-2 
$$Z(s) = \left(\infty, R_2, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_5L_5R_2R_4s^2 - R_2R_4 + s\left(L_5R_2R_4g_m + L_5R_4\right)}{2R_2R_4g_m + 2R_2 + 4R_4 + s^2\left(2C_5L_5R_2R_4g_m + 2C_5L_5R_2 + 4C_5L_5R_4\right) + s\left(2L_5R_2g_m + 2L_5\right)}$$

$$\begin{aligned} &\text{Q:} \ \frac{C_5R_2R_4g_m\sqrt{\frac{1}{C_5L_5}} + C_5R_2\sqrt{\frac{1}{C_5L_5}} + 2C_5R_4\sqrt{\frac{1}{C_5L_5}}}{R_2g_m + 1} \\ &\text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5L_5}}(R_2g_m + 1)}{C_5R_2R_4g_m\sqrt{\frac{1}{C_5L_5}} + C_5R_2\sqrt{\frac{1}{C_5L_5}} + 2C_5R_4\sqrt{\frac{1}{C_5L_5}}} \\ &\text{K-LP:} \ -\frac{R_2R_4}{2R_2R_4g_m + 2R_2 + 4R_4} \\ &\text{K-HP:} \ -\frac{R_2R_4}{2R_2R_4g_m + 2R_2 + 4R_4} \\ &\text{K-BP:} \ \frac{R_4}{2} \\ &\text{Qz:} \ -\frac{C_5R_2\sqrt{\frac{1}{C_5L_5}}}{R_2g_m + 1} \\ &\text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

## **6.3** GE-3 $Z(s) = \left(\infty, R_2, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$

$$I(s) = \frac{R_2 R_4 g_m + R_4 + s^2 \left( C_5 L_5 R_2 R_4 g_m + C_5 L_5 R_4 \right) + s \left( C_5 R_2 R_4 R_5 g_m - C_5 R_2 R_4 + C_5 R_4 R_5 \right)}{2 R_2 g_m + s^2 \left( 2 C_5 L_5 R_2 g_m + 2 C_5 L_5 \right) + s \left( 2 C_5 R_2 R_4 g_m + 2 C_5 R_2 R_5 g_m + 2 C_5 R_2 + 4 C_5 R_4 + 2 C_5 R_5 \right) + 2}$$

### Parameters:

$$\begin{aligned} &\text{Q: } \frac{L_5 R_2 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 \sqrt{\frac{1}{C_5 L_5}}}{R_2 R_4 g_m + R_2 R_5 g_m + R_2 + 2 R_4 + R_5} \\ &\text{wo: } \sqrt{\frac{1}{C_5 L_5}} \\ &\text{bandwidth: } \frac{\sqrt{\frac{1}{C_5 L_5}} (R_2 R_4 g_m + R_2 R_5 g_m + R_2 + 2 R_4 + R_5)}{L_5 R_2 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 \sqrt{\frac{1}{C_5 L_5}}} \\ &\text{K-LP: } \frac{R_4}{2} \\ &\text{K-HP: } \frac{R_4}{2} \\ &\text{K-BP: } \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5}{2 R_2 R_4 g_m + 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5} \\ &\text{Qz: } \frac{L_5 R_2 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 \sqrt{\frac{1}{C_5 L_5}}}{R_2 R_5 g_m - R_2 + R_5} \\ &\text{Wz: } \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

**6.4** GE-4 
$$Z(s) = \left(\infty, R_2, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_5L_5R_2R_4R_5s^2 - R_2R_4R_5 + s\left(L_5R_2R_4R_5g_m - L_5R_2R_4 + L_5R_4R_5\right)}{2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^2\left(2C_5L_5R_2R_4R_5g_m + 2C_5L_5R_2R_5 + 4C_5L_5R_4R_5\right) + s\left(2L_5R_2R_4g_m + 2L_5R_2R_5g_m + 2L_5R_2 + 4L_5R_4 + 2L_5R_5\right)}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_5R_2R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}}{R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5} \\ \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5L_5}}}{C_5R_2R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}} (R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5) \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5L_5}}}{C_5R_2R_4R_5g_m\sqrt{\frac{1}{C_5L_5}}} + C_5R_2R_5\sqrt{\frac{1}{C_5L_5}} + 2C_5R_4R_5\sqrt{\frac{1}{C_5L_5}} \\ \text{K-LP:} \ -\frac{R_2R_4}{2R_2R_4g_m+2R_2+4R_4} \\ \text{K-HP:} \ -\frac{R_2R_4}{2R_2R_4g_m+2R_2+4R_4} \\ \text{K-BP:} \ \frac{R_2R_4R_5g_m-R_2R_4+R_4R_5}{2R_2R_4g_m+2R_2R_5g_m+2R_2+4R_4+2R_5} \\ \text{Qz:} \ -\frac{C_5R_2R_5\sqrt{\frac{1}{C_5L_5}}}{R_2R_5g_m-R_2+R_5} \\ \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{array}$$

**6.5** GE-5 
$$Z(s) = \left(\infty, R_2, \infty, R_4, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$$

$$H(s) = \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5 + s^2 \left(C_5 L_5 R_2 R_4 R_5 g_m - C_5 L_5 R_2 R_4 + C_5 L_5 R_4 R_5\right) + s \left(L_5 R_2 R_4 g_m + L_5 R_4\right)}{2 R_2 R_4 g_m + 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5 + s^2 \left(2 C_5 L_5 R_2 R_4 g_m + 2 C_5 L_5 R_2 R_5 g_m + 2 C_5 L_5 R_2 + 4 C_5 L_5 R_4 + 2 C_5 L_5 R_5\right) + s \left(2 L_5 R_2 g_m + 2 L_5\right)}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_5R_2R_4g_m\sqrt{\frac{1}{C_5L_5}} + C_5R_2R_5g_m\sqrt{\frac{1}{C_5L_5}} + C_5R_2\sqrt{\frac{1}{C_5L_5}} + 2C_5R_4\sqrt{\frac{1}{C_5L_5}} + C_5R_5\sqrt{\frac{1}{C_5L_5}}}{R_2g_m + 1} \\ \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_5L_5}}(R_2g_m + 1)}{C_5R_2R_4g_m\sqrt{\frac{1}{C_5L_5}} + C_5R_2R_5g_m\sqrt{\frac{1}{C_5L_5}} + C_5R_2\sqrt{\frac{1}{C_5L_5}} + 2C_5R_4\sqrt{\frac{1}{C_5L_5}} + C_5R_5\sqrt{\frac{1}{C_5L_5}}} \\ \text{K-LP:} \ \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5} \\ \text{K-HP:} \ \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5} \\ \text{K-BP:} \ \frac{R_2}{2} \\ \text{C_5} R_2R_5g_m\sqrt{\frac{1}{C_5L_5}} - C_5R_2\sqrt{\frac{1}{C_5L_5}} + C_5R_5\sqrt{\frac{1}{C_5L_5}} \\ \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \\ \end{array}$$

**6.6 GE-6** 
$$Z(s) = \left(\infty, R_2, \infty, R_4, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

$$H(s) = \frac{-C_5R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_5L_5R_2R_4R_5g_m - C_5L_5R_2R_4 + C_5L_5R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^2\left(2C_5L_5R_2R_4g_m + 2C_5L_5R_2R_5g_m + 2C_5L_5R_2 + 4C_5L_5R_4 + 2C_5L_5R_5\right) + s\left(2C_5R_2R_4R_5g_m + 2C_5R_2R_5 + 4C_5R_4R_5\right)}$$

### Parameters:

$$Q \colon \frac{L_5 R_2 R_4 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_2 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_2 \sqrt{\frac{1}{C_5 L_5}} + 2 L_5 R_4 \sqrt{\frac{1}{C_5 L_5}} + L_5 R_5 \sqrt{\frac{1}{C_5 L_5}}}{R_2 R_4 R_5 g_m + R_2 R_5 + 2 R_4 R_5}$$

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

$$\text{bandwidth: } \frac{\sqrt{\frac{1}{C_5 L_5}} (R_2 R_4 R_5 g_m + R_2 R_5 + 2 R_4 R_5)}{L_5 R_2 R_4 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_2 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_2 \sqrt{\frac{1}{C_5 L_5}} + 2 L_5 R_4 \sqrt{\frac{1}{C_5 L_5}} + L_5 R_5 \sqrt{\frac{1}{C_5 L_5}}}$$

$$\text{K-LP: } \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5}{2 R_2 R_4 g_m + 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5}}$$

$$\text{K-HP: } \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5}{2 R_2 R_4 g_m + 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5}}$$

$$\text{K-BP: } -\frac{R_2 R_4}{2 R_2 R_4 g_m + 2 R_2 + 4 R_4}$$

$$\text{Qz: } \frac{-L_5 R_2 R_5 g_m \sqrt{\frac{1}{C_5 L_5}} + L_5 R_2 \sqrt{\frac{1}{C_5 L_5}} - L_5 R_5 \sqrt{\frac{1}{C_5 L_5}}}}{R_2 R_5}$$

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

**6.7** GE-7 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$$

$$\begin{array}{l} \text{Q:} \ \frac{L_4R_2g_m\sqrt{\frac{1}{C_4L_4}}+2L_4\sqrt{\frac{1}{C_4L_4}}}{R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5}\\ \text{wo:} \ \sqrt{\frac{1}{C_4L_4}}\\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_4L_4}}(R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5)}{L_4R_2g_m\sqrt{\frac{1}{C_4L_4}}+2L_4\sqrt{\frac{1}{C_4L_4}}}\\ \text{K-LP:} \ \frac{R_2R_5g_m-R_2+R_5}{2R_2g_m+4}\\ \text{K-HP:} \ \frac{R_2R_5g_m-R_2+R_5}{2R_2g_m+4}\\ \text{K-BP:} \ \frac{R_2R_4R_5g_m-R_2R_4+R_4R_5}{2R_2R_4g_m+2R_2R_5g_m+2R_2+4R_4+2R_5}\\ \text{Qz:} \ \frac{L_4\sqrt{\frac{1}{C_4L_4}}}{R_4}\\ \text{Wz:} \ \sqrt{\frac{1}{C_4L_4}}\\ \end{array}$$

**6.8** GE-8 
$$Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, R_5, \infty\right)$$

$$H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_4L_4R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5\right) + s\left(L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_4L_4R_5\right) + s\left(2L_4R_2g_m + 4L_4\right)}$$

$$Q \colon \frac{C_4 R_2 R_4 g_m \sqrt{\frac{1}{C_4 L_4}} + C_4 R_2 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + C_4 R_2 \sqrt{\frac{1}{C_4 L_4}} + 2 C_4 R_4 \sqrt{\frac{1}{C_4 L_4}} + C_4 R_5 \sqrt{\frac{1}{C_4 L_4}}}{R_2 g_m + 2}$$

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

$$\text{bandwidth: } \frac{\sqrt{\frac{1}{C_4 L_4}} (R_2 g_m + 2)}{C_4 R_2 R_4 g_m \sqrt{\frac{1}{C_4 L_4}} + C_4 R_2 R_5 g_m \sqrt{\frac{1}{C_4 L_4}} + C_4 R_2 \sqrt{\frac{1}{C_4 L_4}} + 2 C_4 R_4 \sqrt{\frac{1}{C_4 L_4}} + C_4 R_5 \sqrt{\frac{1}{C_4 L_4}}}{K_- LP: \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5}{2R_2 R_4 g_m + 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5}}{K_- HP: \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5}{2R_2 R_4 g_m - 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5}}{2R_2 g_m + 4}}$$

$$\text{K-BP: } \frac{R_2 R_5 g_m - R_2 + R_5}{2R_2 g_m + 4}$$

$$\text{Qz: } C_4 R_4 \sqrt{\frac{1}{C_4 L_4}}$$

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

**6.9** GE-9 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, R_5, \infty\right)$$

$$I(s) = \frac{C_2 R_4 R_5 s + R_4 R_5 g_m - R_4 + s^2 \left( C_2 L_2 R_4 R_5 g_m - C_2 L_2 R_4 \right)}{2R_4 g_m + 2R_5 g_m + s^2 \left( 2C_2 L_2 R_4 g_m + 2C_2 L_2 R_5 g_m + 2C_2 L_2 \right) + s \left( 4C_2 R_4 + 2C_2 R_5 \right) + 2}$$

### Parameters:

$$\begin{array}{l} \text{Q:} \ \ \frac{L_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + L_2\sqrt{\frac{1}{C_2L_2}}}{2R_4 + R_5} \\ \text{wo:} \ \ \sqrt{\frac{1}{C_2L_2}} \\ \text{bandwidth:} \ \ \frac{\sqrt{\frac{1}{C_2L_2}}(2R_4 + R_5)}{L_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + L_2\sqrt{\frac{1}{C_2L_2}}} \\ \text{K-LP:} \ \ \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + 2} \\ \text{K-HP:} \ \ \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + 2} \\ \text{K-BP:} \ \ \frac{R_4R_5}{4R_4 + 2R_5} \\ \text{Qz:} \ \ \frac{L_2R_5g_m\sqrt{\frac{1}{C_2L_2}} - L_2\sqrt{\frac{1}{C_2L_2}}}{R_5} \\ \text{Wz:} \ \ \sqrt{\frac{1}{C_2L_2}} \end{array}$$

**6.10 GE-10** 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, R_5, \infty\right)$$

$$\begin{array}{l} \text{Q:} \ \frac{L_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + L_2\sqrt{\frac{1}{C_2L_2}}}{R_2R_4g_m + R_2R_5g_m + R_2 + 2R_4 + R_5} \\ \text{wo:} \ \sqrt{\frac{1}{C_2L_2}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{1}{C_2L_2}}(R_2R_4g_m + R_2R_5g_m + R_2 + 2R_4 + R_5)}{L_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + L_2\sqrt{\frac{1}{C_2L_2}}} \\ \text{K-LP:} \ \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + 2} \\ \text{K-HP:} \ \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m - R_2} \\ \text{K-BP:} \ \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_5g_m + 2R_2 + 4R_4 + 2R_5} \\ \text{Qz:} \ \frac{L_2R_5g_m\sqrt{\frac{1}{C_2L_2}} - L_2\sqrt{\frac{1}{C_2L_2}}}{R_2R_5g_m - R_2 + R_5} \\ \text{Wz:} \ \sqrt{\frac{1}{C_2L_2}} \end{array}$$

**6.11 GE-11** 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, R_4, R_5, \infty\right)$$

$$H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4 + C_2L_2R_4R_5\right) + s\left(L_2R_4R_5g_m - L_2R_4\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^2\left(2C_2L_2R_2R_4g_m + 2C_2L_2R_2R_5g_m + 2C_2L_2R_2 + 4C_2L_2R_4 + 2C_2L_2R_5\right) + s\left(2L_2R_4g_m + 2L_2R_5g_m + 2$$

$$Q\colon \frac{C_2R_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + C_2R_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + C_2R_2\sqrt{\frac{1}{C_2L_2}} + 2C_2R_4\sqrt{\frac{1}{C_2L_2}} + C_2R_5\sqrt{\frac{1}{C_2L_2}}}{R_4g_m + R_5g_m + 1}$$
 wo: 
$$\sqrt{\frac{1}{C_2L_2}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_2L_2}}(R_4g_m + R_5g_m + 1)}{C_2R_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + C_2R_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + C_2R_2\sqrt{\frac{1}{C_2L_2}} + 2C_2R_4\sqrt{\frac{1}{C_2L_2}} + C_2R_5\sqrt{\frac{1}{C_2L_2}}}$$
 K-LP: 
$$\frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5}$$
 K-HP: 
$$\frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5}$$
 K-BP: 
$$\frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + 2}$$
 Qz: 
$$\frac{C_2R_2R_5g_m\sqrt{\frac{1}{C_2L_2}} - C_2R_2\sqrt{\frac{1}{C_2L_2}} + C_2R_5\sqrt{\frac{1}{C_2L_2}}}{R_5g_m - 1}$$
 Wz: 
$$\sqrt{\frac{1}{C_2L_2}}$$

**6.12 GE-12** 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, R_5, \infty\right)$$

$$H(s) = \frac{C_2R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4 + C_2L_2R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^2\left(2C_2L_2R_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2R_2 + 4C_2L_2R_4 + 2C_2L_2R_5\right) + s\left(4C_2R_2R_4 + 2C_2R_2R_5\right)}$$

### Parameters:

$$Q\colon \frac{L_2R_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_2\sqrt{\frac{1}{C_2L_2}} + 2L_2R_4\sqrt{\frac{1}{C_2L_2}} + L_2R_5\sqrt{\frac{1}{C_2L_2}}}{2R_2R_4 + R_2R_5}$$
 wo: 
$$\sqrt{\frac{1}{C_2L_2}}$$
 bandwidth: 
$$\frac{\sqrt{\frac{1}{C_2L_2}}(2R_2R_4 + R_2R_5)}{L_2R_2R_4g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_2R_5g_m\sqrt{\frac{1}{C_2L_2}} + L_2R_2\sqrt{\frac{1}{C_2L_2}} + 2L_2R_4\sqrt{\frac{1}{C_2L_2}} + L_2R_5\sqrt{\frac{1}{C_2L_2}}}{4R_2R_4g_m + 2R_2R_5g_m + 2R_2R_4R_4R_5}$$
 K-HP: 
$$\frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2A_4R_5}$$
 K-BP: 
$$\frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{4R_4 + 2R_5}$$
 Qz: 
$$\frac{L_2R_2R_5g_m\sqrt{\frac{1}{C_2L_2}} - L_2R_2\sqrt{\frac{1}{C_2L_2}} + L_2R_5\sqrt{\frac{1}{C_2L_2}}}{R_2R_5}$$
 Wz: 
$$\sqrt{\frac{1}{C_2L_2}}$$

### 7 AP

### 8 INVALID-NUMER

8.1 INVALID-NUMER-1 
$$Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{2C_4C_5R_2R_5s^2 + 2R_2g_m + s\left(2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_5R_2R_5g_m + 4C_5R_5\right) + 4}$$

$$\begin{aligned} &\text{Q: } \frac{C_4C_5R_2R_5\sqrt{\frac{g_m}{C_4C_5R_5}} + \frac{2}{C_4C_5R_2}}{C_4R_2R_5g_m + C_4R_2 + C_4R_5 + C_5R_2R_5g_m + 2C_5R_5} \\ &\text{wo: } \sqrt{\frac{R_2g_m + 2}{C_4C_5R_2R_5}} \\ &\text{bandwidth: } \frac{\sqrt{\frac{R_2g_m + 2}{C_4C_5R_2R_5}}(C_4R_2R_5g_m + C_4R_2 + C_4R_5 + C_5R_2R_5g_m + 2C_5R_5)}{C_4C_5R_2R_5\sqrt{\frac{g_m}{C_4C_5R_5}} + \frac{2}{C_4C_5R_2R_5}} \\ &\text{K-LP: } \frac{R_2R_5g_m - R_2 + R_5}{2R_2g_m + 4} \end{aligned}$$

K-HP: 0

K-BP:  $-\frac{C_5R_2R_5}{2C_4R_2R_5g_m+2C_4R_2+2C_4R_5+2C_5R_2R_5g_m+4C_5R_5}$ 

Qz: None Wz: None

## 8.2 INVALID-NUMER-2 $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4R_4s+1}, \frac{1}{C_5s}, \infty\right)$

$$H(s) = \frac{-C_5R_2R_4s + R_2R_4g_m + R_4}{2C_4C_5R_2R_4s^2 + 2R_2g_m + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + 2C_5R_4s^2 + 2C_5R_5s^2 + 2C_5R_5s^2$$

#### Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_4C_5R_2R_4\sqrt{\frac{g_m}{C_4C_5R_4}+\frac{1}{C_4C_5R_2}R_4}}{C_4R_2R_4g_m+C_4R_4+C_5R_2R_4g_m+C_5R_2+2C_5R_4} \\ \text{wo:} \ \sqrt{\frac{R_2g_m+1}{C_4C_5R_2R_4}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_2g_m+1}{C_4C_5R_2R_4}}(C_4R_2R_4g_m+C_4R_4+C_5R_2R_4g_m+C_5R_2+2C_5R_4)}{C_4C_5R_2R_4\sqrt{\frac{g_m}{C_4C_5R_4}}+\frac{1}{C_4C_5R_2R_4}} \\ \text{K-LP:} \ \frac{R_4}{2} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_2R_4}{2C_4R_2R_4g_m+2C_4R_4+2C_5R_2R_4g_m+2C_5R_2+4C_5R_4} \\ \text{Qz:} \ \text{None} \end{array}$ 

## **8.3** INVALID-NUMER-3 $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$

$$H(s) = \frac{-C_5R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2C_4C_5R_2R_4R_5s^2 + 2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s\left(2C_4R_2R_4R_5g_m + 2C_4R_2R_4 + 2C_4R_4R_5 + 2C_5R_2R_4R_5g_m + 2C_5R_2R_5 + 4C_5R_4R_5\right)}$$

#### Parameters:

Wz: None

 $\begin{array}{l} \text{Q:} \ \frac{C_4C_5R_2R_4R_5\sqrt{\frac{g_m}{C_4C_5R_5}} + \frac{g_m}{C_4C_5R_4} + \frac{1}{C_4C_5R_4R_5} + \frac{2}{C_4C_5R_2R_5} + \frac{1}{C_4C_5R_2R_4}}{C_4R_2R_4R_5g_m + C_4R_2R_4 + C_4R_4R_5 + C_5R_2R_4R_5g_m + C_5R_2R_5 + 2C_5R_4R_5}}\\ \text{wo:} \ \sqrt{\frac{R_2R_4g_m + R_2R_5g_m + R_2 + 2R_4 + R_5}{C_4C_5R_2R_4R_5}}}\\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_2R_4g_m + R_2R_5g_m + R_2 + 2R_4 + R_5}{C_4C_5R_2R_4R_5}} (C_4R_2R_4R_5g_m + C_4R_2R_4 + C_4R_4R_5 + C_5R_2R_4R_5g_m + C_5R_2R_5 + 2C_5R_4R_5)}{C_4C_5R_2R_4R_5}}\\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_2R_4g_m + R_2R_5g_m + R_2 + 2R_4 + R_5}{C_4C_5R_2R_4R_5}} (C_4R_2R_4R_5g_m + C_4R_2R_4 + C_4R_4R_5 + C_5R_2R_4R_5g_m + C_5R_2R_5 + 2C_5R_4R_5)}{C_4C_5R_2R_4R_5}}\\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_2R_4g_m + R_2R_5g_m + R_2 + 2R_4 + R_5}{C_4C_5R_2R_4R_5}} (C_4R_2R_4R_5g_m + C_4R_2R_4 + C_4R_4R_5 + C_5R_2R_4R_5g_m + C_5R_2R$ 

# 8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{R_2R_4g_m + R_4 + s\left(C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5\right)}{2R_2g_m + s^2\left(2C_4C_5R_2R_4R_5g_m + 2C_4C_5R_2R_4 + 2C_4C_5R_4R_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5R_5g_m$$

#### Parameters:

 $\begin{array}{c} \text{Q:} & \frac{C_4C_5R_2R_4R_5g_m\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_4R_5} + \frac{1}{C_4C_5R_2R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4} + C_4C_5R_4R_5} \\ \text{wo:} & \sqrt{\frac{R_2g_m+1}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5}} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5} + \frac{1}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m+1}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m+1}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5} + C_4C_5R_4R_5G_m+C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_4+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4R_2R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4R_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4R_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} \\ \text{bandwidth:} & \frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_4R_5} + C_4C_5R_4R_5} {C_4C_5R_4R_5g_m+C_4C_$ 

Qz: None Wz: None

### 8.5 INVALID-NUMER-5 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{R_4 g_m + s (C_2 R_4 - C_5 R_4)}{4C_2 C_5 R_4 s^2 + 2g_m + s (2C_2 + 2C_5 R_4 g_m + 2C_5)}$$

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_2C_5R_4\sqrt{\frac{g_m}{C_2C_5R_4}}}{C_2+C_5R_4g_m+C_5} \\ \text{wo:} \ \frac{\sqrt{2}\sqrt{\frac{g_m}{C_2C_5R_4}}}{2} \\ \text{bandwidth:} \ \frac{C_2+C_5R_4g_m+C_5}{2C_2C_5R_4} \\ \text{K-LP:} \ \frac{R_4}{2} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_4-C_5R_4}{2C_2+2C_5R_4g_m+2C_5} \\ \text{Qz:} \ \text{None} \end{array}$ 

8.6 INVALID-NUMER-6  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s \left(C_2 R_4 R_5 - C_5 R_4 R_5\right)}{4 C_2 C_5 R_4 R_5 s^2 + 2 R_4 g_m + 2 R_5 g_m + s \left(4 C_2 R_4 + 2 C_2 R_5 + 2 C_5 R_4 R_5 g_m + 2 C_5 R_5\right) + 2}$$

Parameters:

Wz: None

 $\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_2C_5R_4R_5\sqrt{\frac{g_m}{C_2C_5R_5}} + \frac{g_m}{C_2C_5R_4} + \frac{1}{C_2C_5R_4R_5}}{2C_2R_4 + C_2R_5 + C_5R_4R_5g_m + C_5R_5} \\ \text{wo:} \ \frac{\sqrt{2}\sqrt{\frac{R_4g_m + R_5g_m + 1}{C_2C_5R_4R_5}}}{2} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_4g_m + R_5g_m + 1}{C_2C_5R_4R_5}}}{2C_2C_5R_4R_5}(2C_2R_4 + C_2R_5 + C_5R_4R_5g_m + C_5R_5)} \\ \text{K-LP:} \ \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + 2} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_4R_5 - C_5R_4R_5}{4C_2R_4 + 2C_2R_5 + 2C_5R_4R_5g_m + 2C_5R_5} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \text{None} \end{array}$ 

8.7 INVALID-NUMER-7  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$ 

$$H(s) = \frac{C_2 R_5 s + R_5 g_m - 1}{2C_2 C_4 R_5 s^2 + 2g_m + s \left(4C_2 + 2C_4 R_5 g_m + 2C_4\right)}$$

Parameters:

 $\begin{array}{l} \text{Q: } \frac{C_2C_4R_5\sqrt{\frac{g_m}{C_2C_4R_5}}}{2C_2+C_4R_5g_m+C_4}\\ \text{wo: } \sqrt{\frac{g_m}{C_2C_4R_5}}\\ \text{bandwidth: } \frac{2C_2+C_4R_5g_m+C_4}{C_2C_4R_5}\\ \text{K-LP: } \frac{R_5g_m-1}{2g_m}\\ \text{K-HP: 0}\\ \text{K-BP: } \frac{C_2R_5}{4C_2+2C_4R_5g_m+2C_4}\\ \text{Qz: None}\\ \text{Wz: None} \end{array}$ 

8.8 INVALID-NUMER-8  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{R_5g_m + s\left(C_2R_5 - C_5R_5\right) - 1}{2g_m + s^2\left(2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4 + 2C_5R_5g_m\right)}$$

```
 Q \colon \frac{C_2C_4R_5\sqrt{\frac{g_m}{C_2C_4R_5+2C_2C_5R_5+C_4C_5R_5}} + 2C_2C_5R_5\sqrt{\frac{g_m}{C_2C_4R_5+2C_2C_5R_5+C_4C_5R_5}} + C_4C_5R_5\sqrt{\frac{g_m}{C_2C_4R_5+2C_2C_5R_5+C_4C_5R_5}} }{2C_2+C_4R_5g_m+C_4+C_5R_5g_m} \\ \text{wo: } \sqrt{\frac{g_m}{C_2C_4R_5+2C_2C_5R_5+C_4C_5R_5}} \\ \text{bandwidth: } \frac{\sqrt{\frac{g_m}{C_2C_4R_5+2C_2C_5R_5+C_4C_5R_5}} (2C_2+C_4R_5g_m+C_4+C_5R_5g_m)}{C_2C_4R_5+2C_2C_5R_5+C_4C_5R_5} \\ \text{K-LP: } \frac{R_5g_m-1}{2g_m} \\ \text{K-HP: 0} \\ \text{K-BP: } \frac{C_2R_5-C_5R_5}{4C_2+2C_4R_5g_m+2C_4+2C_5R_5g_m} \\ \text{Qz: None} \\ \text{Wz: None}
```

# 8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right)$

$$H(s) = \frac{C_2R_4R_5s + R_4R_5g_m - R_4}{2C_2C_4R_4R_5s^2 + 2R_4g_m + 2R_5g_m + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + 2}$$

### Parameters:

```
\begin{aligned} & \text{Q:} \ \frac{C_2C_4R_4R_5\sqrt{\frac{g_m}{C_2C_4R_5}+\frac{g_m}{C_2C_4R_4}+\frac{1}{C_2C_4R_4R_5}}}{2C_2R_4+C_2R_5+C_4R_4R_5g_m+C_4R_4} \\ & \text{wo:} \ \sqrt{\frac{R_4g_m+R_5g_m+1}{C_2C_4R_4R_5}} \\ & \text{bandwidth:} \ \frac{\sqrt{\frac{R_4g_m+R_5g_m+1}{C_2C_4R_4R_5}}(2C_2R_4+C_2R_5+C_4R_4R_5g_m+C_4R_4)}{C_2C_4R_4R_5\sqrt{\frac{g_m}{C_2C_4R_5}+\frac{g_m}{C_2C_4R_4}+\frac{1}{C_2C_4R_4R_5}}} \\ & \text{K-LP:} \ \frac{R_4R_5g_m-R_4}{2R_4g_m+2R_5g_m+2} \\ & \text{K-HP:} \ 0 \\ & \text{K-BP:} \ \frac{C_2R_4R_5}{4C_2R_4+2C_2R_5+2C_4R_4R_5g_m+2C_4R_4} \\ & \text{Qz:} \ \text{None} \\ & \text{Wz:} \ \text{None} \end{aligned}
```

# **8.10** INVALID-NUMER-10 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{R_4 g_m + s \left(C_2 R_4 - C_5 R_4\right)}{2 g_m + s^2 \left(2 C_2 C_4 R_4 + 4 C_2 C_5 R_4 + 2 C_4 C_5 R_4\right) + s \left(2 C_2 + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5\right)}$$

#### Parameters:

$$Q \colon \frac{C_2C_4R_4\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} + 2C_2C_5R_4\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} + C_4C_5R_4\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} } \\ \text{wo: } \sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} \\ \text{bandwidth: } \frac{\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} (C_2+C_4R_4g_m+C_5R_4g_m+C_5)} \\ \frac{g_m}{C_2C_4R_4\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} + 2C_2C_5R_4\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} + C_4C_5R_4\sqrt{\frac{g_m}{C_2C_4R_4+2C_2C_5R_4+C_4C_5R_4}} \\ \text{K-LP: } \frac{R_4}{2} \\ \text{K-HP: 0} \\ \text{K-BP: } \frac{C_2R_4-C_5R_4}{2C_2+2C_4R_4g_m+2C_5R_4g_m+2C_5} \\ \text{Qz: None} \\ \text{Wz: None}$$

## 8.11 INVALID-NUMER-11 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$

### Parameters:

 $Q: \frac{C_{2}C_{4}R_{4}R_{5}\sqrt{\frac{R_{4}g_{m}}{C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}}{2C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}} + \frac{R_{5}g_{m}}{C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}} + 2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}} + \frac{R_{5}g_{m}}{C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}} + 2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}} + \frac{R_{5}g_{m}}{C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}} + 2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}} + \frac{R_{5}g_{m}}{C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + \frac{R_{5}g_{m}}{C_{2}C_{4}R_{4}R_{5}+2C_{2}C_{5}R_{4}R_{5}+C_{4}C_{5}R_{4}R_{5}}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5} + C_{4}C_{5}R_{4}R_{5}} + C_{4}C_{5}R_{4}R_{5} +$ 

```
K-LP: \frac{R_4R_5g_m - R_4}{2R_4g_m + 2R_5g_m + 2}
K-HP: 0
```

 $\text{K-BP:} \frac{1}{4C_2R_4\sqrt{\frac{R_4g_m}{C_2C_4R_4R_5+2C_2C_5R_4R_5+C_4C_5R_4R_5}} + \frac{R_5g_m}{C_2C_4R_4R_5+2C_2C_5R_4R_5+C_4C_5R_4R_5} + \frac{R_5g_m}{C_2C_4R_4R_5+C_4C_5R_4R_5} + \frac{R_5g_m}{C_2C_4R_4R_5+C_4C_5R_4R_5} + \frac{R_5g_m}{C_2C_4R_4R_5+C_4C_5R_4R_5} + \frac{R_5g_m}{C_2C_4R_4R_5+C_4C_5R_4R_5} + \frac{R_5g_m}{C_2C_4R_4R_5+C_4C_5R_4R_5} + \frac{R_5g_m}{C_2C_4R_4R_5$ 

Qz: None Wz: None

## **8.12** INVALID-NUMER-12 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{R_2 R_4 g_m + R_4 + s \left(C_2 R_2 R_4 - C_5 R_2 R_4\right)}{4 C_2 C_5 R_2 R_4 s^2 + 2 R_2 g_m + s \left(2 C_2 R_2 + 2 C_5 R_2 R_4 g_m + 2 C_5 R_2 + 4 C_5 R_4\right) + 2}$$

#### Parameters:

```
\begin{aligned} &\text{Q: } \frac{\sqrt{2}C_2C_5R_2R_4\sqrt{\frac{g_m}{C_2C_5R_4}} + \frac{1}{C_2C_5R_2R_4}}{C_2R_2 + C_5R_2R_4g_m + C_5R_2 + 2C_5R_4} \\ &\text{Wo: } \frac{\sqrt{2}\sqrt{\frac{R_2g_m + 1}{C_2C_5R_2R_4}}}{2} \end{aligned}
 bandwidth: \frac{\sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_4}}(C_2R_2+C_5R_2R_4g_m+C_5R_2+2C_5R_4)}{2C_2C_5R_2R_4\sqrt{\frac{g_m}{C_2C_5R_4}+\frac{1}{C_2C_5R_2R_4}}}
 K-LP: \frac{R_4}{2}
 K-HP: 0
K-BP: \frac{C_2R_2R_4 - C_5R_2R_4}{2C_2R_2 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4} Qz: None
```

**8.13** INVALID-NUMER-13  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, R_4, \frac{R_5}{C_5R_5s+1}, \infty\right)$ 

$$H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s\left(C_2R_2R_4R_5 - C_5R_2R_4R_5\right)}{4C_2C_5R_2R_4R_5s^2 + 2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s\left(4C_2R_2R_4 + 2C_2R_2R_5 + 2C_5R_2R_4R_5g_m + 2C_5R_2R_5 + 4C_5R_4R_5\right)}$$

#### Parameters:

Wz: None

$$\begin{array}{l} Q\colon \frac{\sqrt{2}C_{2}C_{5}R_{2}R_{4}R_{5}\sqrt{\frac{g_{m}}{C_{2}C_{5}R_{5}}}+\frac{g_{m}}{C_{2}C_{5}R_{4}}+\frac{1}{C_{2}C_{5}R_{4}R_{5}}+\frac{2}{C_{2}C_{5}R_{2}R_{5}}+\frac{1}{C_{2}C_{5}R_{2}R_{4}}}{2C_{2}R_{2}R_{4}+C_{2}R_{2}R_{5}+C_{5}R_{2}R_{4}R_{5}g_{m}+C_{5}R_{2}R_{5}+2C_{5}R_{4}R_{5}}}\\ \text{wo:} \ \frac{\sqrt{2}\sqrt{\frac{R_{2}R_{4}g_{m}+R_{2}R_{5}g_{m}+R_{2}+2R_{4}+R_{5}}{C_{2}C_{5}R_{2}R_{4}R_{5}}}}{2}}{2}\\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_{2}R_{4}g_{m}+R_{2}R_{5}g_{m}+R_{2}+2R_{4}+R_{5}}{C_{2}C_{5}R_{2}R_{4}R_{5}}}}(2C_{2}R_{2}R_{4}+C_{2}R_{2}R_{5}+C_{5}R_{2}R_{4}R_{5}g_{m}+C_{5}R_{2}R_{5}+2C_{5}R_{4}R_{5})}}{2C_{2}C_{5}R_{2}R_{4}R_{5}}\sqrt{\frac{g_{m}}{C_{2}C_{5}R_{5}}+\frac{g_{m}}{C_{2}C_{5}R_{4}}+\frac{1}{C_{2}C_{5}R_{4}R_{5}}+\frac{2}{C_{2}C_{5}R_{2}R_{5}}+\frac{1}{C_{2}C_{5}R_{2}R_{4}}}}\\ \text{K-LP:} \ \frac{R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}}{2R_{2}R_{4}g_{m}+2R_{2}R_{5}g_{m}+2R_{2}+4R_{4}+2R_{5}}}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}}{4C_{2}R_{2}R_{5}+2C_{5}R_{2}R_{4}R_{5}g_{m}+2C_{5}R_{2}R_{5}+4C_{5}R_{4}R_{5}}}\\ \text{Qz:} \ \text{None}\\ \text{Wz:} \ \text{None} \end{array}$$

## 8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$

$$H(s) = \frac{C_2R_2R_5s + R_2R_5g_m - R_2 + R_5}{2C_2C_4R_2R_5s^2 + 2R_2g_m + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + 4}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_2C_4R_2R_5\sqrt{\frac{g_m}{2C_4R_5}+\frac{2}{C_2C_4R_2R_5}}}{2C_2R_2+C_4R_2R_5g_m+C_4R_2+C_4R_5}\\ \text{wo:} \ \sqrt{\frac{R_2g_m+2}{C_2C_4R_2R_5}}\\ \text{bandwidth:} \ \frac{\sqrt{\frac{R_2g_m+2}{C_2C_4R_2R_5}}(2C_2R_2+C_4R_2R_5g_m+C_4R_2+C_4R_5)}{C_2C_4R_2R_5\sqrt{\frac{g_m}{C_2C_4R_5}+\frac{2}{C_2C_4R_2R_5}}}\\ \text{K-LP:} \ \frac{R_2R_5g_m-R_2+R_5}{2R_2g_m+4}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_2R_2R_5}{4C_2R_2+2C_4R_2R_5g_m+2C_4R_2+2C_4R_5}\\ \text{Qz:} \ \text{None} \end{array}$$

### **8.15** INVALID-NUMER-15 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$

### Parameters:

 $Q: \frac{C_2C_4R_2R_5\sqrt{\frac{R_2g_m}{C_2C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5}} + \frac{2}{C_2C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5}}{2C_2R_4C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5} + \frac{2}{C_2C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5} + \frac{2}{C_2C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5} + \frac{2}{C_2C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5}} + \frac{2}{C_2C_4R_2R_5+2C_2C_5R_2R_5+C_4C_5R_2R_5} + \frac{2}{C_2C_4R_2R_5+2C_2C_5R_2R_5} + \frac{2}{C_4C_4R_2R_5+2C_4C_5R_2R_5} + \frac{2$ 

wo:  $\sqrt{\frac{R_2 g_m + 2}{C_2 C_4 R_2 R_5 + 2 C_2 C_5 R_2 R_5 + C_4 C_5 R_2 R_5}}$ 

 $\frac{R_{2}g_{m}+2}{C_{2}C_{4}R_{2}R_{5}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}(2C_{2}R_{2}+C_{4}R_{2}R_{5}g_{m}+C_{4}R_{2}+C_{4}R_{5}+C_{5}R_{2}R_{5}g_{m}+2C_{5}R_{5})}\\ \frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{5}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{2}C_{4}R_{2}R_{5}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{2}C_{4}R_{2}R_{5}+C_{2}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{4}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{4}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}+C_{4}C_{5}R_{2}R_{5}+C_{$ 

K-HP: 0

 $\frac{C_{2}R_{2}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{5}+2C_{2}C_{5}R_{5}+C_{4}C_{5}R_{5}}}-C_{5}R_{2}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{5}+2C_{2}C_{5}R_{5}+C_{4}C_{5}R_{5}}}-C_{5}R_{2}R_{5}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{5}+2C_{2}C_{5}R_{5}+C_{4}C_{5}R_{5}}}-C_{5}R_{2}R_{5}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{5}+2C_{2}C_{5}R_{5}+C_{4}C_{5}R_{5}}}-C_{5}R_{2}R_{5}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{5}+2C_{2}C_{5}R_{5}+C_{4}C_{5}R_{5}}}-C_{5}R_{2}R_{5}+C_{4}C_{5}R_{2}R_{5}}$ K-BP:

Wz: None

# **8.16** INVALID-NUMER-16 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right)$

$$H(s) = \frac{C_2R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2C_2C_4R_2R_4R_5s^2 + 2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s\left(4C_2R_2R_4 + 2C_2R_2R_5 + 2C_4R_2R_4R_5g_m + 2C_4R_2R_4 + 2C_4R_4R_5\right)}$$

### Parameters:

Q:  $\frac{C_2C_4R_2R_4R_5\sqrt{\frac{g_m}{C_2C_4R_5} + \frac{g_m}{C_2C_4R_4} + \frac{1}{C_2C_4R_4R_5} + \frac{2}{C_2C_4R_2R_5} + \frac{1}{C_2C_4R_2R_4}}{2C_2R_2R_4 + C_2R_2R_5 + C_4R_2R_4R_5g_m + C_4R_2R_4 + C_4R_4R_5}$ 

bandwidth:  $\frac{\sqrt{\frac{R_2R_4g_m+R_2R_5g_m+R_2+2R_4+R_5}{C_2C_4R_2R_4R_5}}(2C_2R_2R_4+C_2R_2R_5+C_4R_2R_4R_5g_m+C_4R_2R_4+C_4R_4R_5)}{C_2C_4R_2R_4R_5\sqrt{\frac{g_m}{C_2C_4R_5}+\frac{g_m}{C_2C_4R_5}+\frac{1}{C_2C_4R_4R_5}+\frac{2}{C_2C_4R_4R_5}+\frac{1}{C_2C_4R_4R_5}+\frac{1}{C_2C_4R_2R_5}+\frac{1}{C_2C_4R_2R_4}}}$  K-LP:  $\frac{R_2R_4R_5g_m-R_2R_4+R_4R_5}{2R_2R_4g_m+2R_2R_5g_m+2R_2+4R_4+2R_5}$  K-HP: 0

K-BP:  $\frac{C_2R_2R_4R_5}{4C_2R_2R_4+2C_2R_2R_5+2C_4R_2R_4R_5g_m+2C_4R_2R_4+2C_4R_4R_5}$ 

Qz: None Wz: None

# **8.17** INVALID-NUMER-17 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{R_2R_4g_m + R_4 + s\left(C_2R_2R_4 - C_5R_2R_4\right)}{2R_2g_m + s^2\left(2C_2C_4R_2R_4 + 4C_2C_5R_2R_4 + 2C_4C_5R_2R_4\right) + s\left(2C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s\left(2C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s\left(2C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s\left(2C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m +$$

### Parameters:

 $Q: \frac{C_2C_4R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}} + C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}} + C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+C_4C_5R_2R_4}} + C_4$ 

wo:  $\sqrt{\frac{R_2g_m+1}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}$ 

 $\sqrt{\frac{_{R_{2}g_{m}+1}}{_{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}(C_{2}R_{2}+C_{4}R_{2}R_{4}g_{m}+C_{4}R_{4}+C_{5}R_{2}R_{4}g_{m}+C_{5}R_{2}+2C_{5}R_{4})$ 

 $\frac{\sqrt{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}{C_2C_4R_2R_4\sqrt{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}+2C_2C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+2C_2C_5R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4\sqrt{\frac{R_2g_m}{C_2C_4R_2R_4+C_4C_5R_2R_4}}+C_4C_5R_2R_4}$ 

K-LP:  $\frac{R_4}{2}$ K-HP: 0

 $\frac{C_{2}R_{2}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{4}+2C_{2}C_{5}R_{4}+C_{4}C_{5}R_{4}}}-C_{5}R_{2}R_{4}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{4}+2C_{2}C_{5}R_{4}+C_{4}C_{5}R_{4}}}-C_{5}R_{2}R_{4}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{4}+2C_{2}C_{5}R_{4}+C_{4}C_{5}R_{4}}}-C_{5}R_{2}R_{4}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{4}+2C_{2}C_{5}R_{4}+C_{4}C_{5}R_{4}}}+C_{2}R_{4}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}+C_{4}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{2}g_{m}}{C_{2}C_{4}R_{2}R_{4}+2C_{2}C_{5}R_{2}R_{4}}}+C_{2}R_{4}\sqrt{\frac{R_{$ 

Qz: None Wz: None

## **8.18** INVALID-NUMER-18 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$

$$H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s\left(C_2R_2R_4R_5 - C_5R_2R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^2\left(2C_2C_4R_2R_4R_5 + 4C_2C_5R_2R_4R_5 + 2C_4C_5R_2R_4R_5\right) + s\left(4C_2R_2R_4 + 2C_2R_2R_5 + 2C_4R_2R_4R_5g_m + 2C_4R_2R_4 + 2C_5R_2R_4R_5 + 2C_5R_2R_4R_5\right)}$$

#### Parameters:

 $\begin{array}{c} Q: \frac{C_2C_4R_2R_4R_5\sqrt{c_2C_4R_2R_4R_5+c_2C_5R_3R_4R_5+c_4C_5R_2R_4R_5+c_2C_5R_2R_4R_5+$ 

Qz: None Wz: None

# **8.19** INVALID-NUMER-19 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$

$$H(s) = \frac{R_5 g_m + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5\right) - 1}{2 g_m + s^2 \left(2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_2 + 2 C_2 C_4 R_5\right) + s \left(2 C_2 R_2 g_m + 4 C_2 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

#### Parameters:

 $Q\colon \frac{C_{2}C_{4}R_{2}R_{5}g_{m}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}}}+C_{2}C_{4}R_{2}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}+C_{2}C_{4}R_{5}\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}}$   $Wo: \sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{2}+C_{2}C_{4}R_{5}}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4}R_{5}}}}}}$   $\sqrt{\frac{g_{m}}{C_{2}C_{4}R_{2}R_{5}g_{m}+C_{2}C_{4$ 

8.20 INVALID-NUMER-20  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right)$ 

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5\right)}{2 R_4 g_m + 2 R_5 g_m + s^2 \left(2 C_2 C_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 R_2 R_4 + 2 C_2 C_4 R_4 R_5\right) + s \left(2 C_2 R_2 R_4 g_m + 2 C_2 R_2 R_5 g_m + 2 C_2 R_2 + 4 C_2 R_4 + 2 C_2 R_5 + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4\right) + 2 C_4 R_5 g_m + 2 C_5 R_5 g_m + 2$$

#### Parameters:

Wz: None

 $Q: \frac{C_2C_4R_2R_4R_5g_m\sqrt{C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4}+C_2C_4R_4R_5}{C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4}+C_2C_4R_4R_5}{C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4}+C_2C_4R_4R_5} + C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_2R_4g_5g_m+C_2C_4R_4R$ 

9 INVALID-WZ

## **9.1** INVALID-WZ-1 $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$

$$H(s) = \frac{-C_4C_5R_2R_4R_5s^2 + R_2R_5g_m - R_2 + R_5 + s\left(C_4R_2R_4R_5g_m - C_4R_2R_4 + C_4R_4R_5 - C_5R_2R_5\right)}{2R_2g_m + s^2\left(2C_4C_5R_2R_4R_5g_m + 2C_4C_5R_2R_5 + 4C_4C_5R_4R_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5 + 2C_5R_2R_5g_m + 4C_5R_5\right) + 4C_5R_5}$$

### Parameters:

$$Q: \frac{C_4C_5R_2R_4R_5g_m\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5+2C_4C_5R_4R_5} + C_4C_5R_2R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5+2C_4C_5R_4R_5}} + C_4C_5R_2R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5+2C_4C_5R_4R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5+2C_4C_5R_4R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_2R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R_4R_5g_m+C_4C_5R_2R_5}} + 2C_4C_5R_4R_5\sqrt{\frac{R_2g_m}{C_4C_5R$$

Wz:  $\sqrt{\frac{-R_2R_5g_m+R_2-R_5}{C_4C_5R_2R_4R_5}}$ 

### **9.2** INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, R_5 + \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{C_2C_5R_4R_5s^2 + R_4g_m + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2g_m + s^2\left(4C_2C_5R_4 + 2C_2C_5R_5\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5\right)}$$

#### Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{2C_2C_5R_4\sqrt{\frac{g_m}{2C_2C_5R_4+C_2C_5R_5}} + C_2C_5R_5\sqrt{\frac{g_m}{2C_2C_5R_4+C_2C_5R_5}}}{C_2+C_5R_4g_m+C_5R_5g_m+C_5} \\ \text{wo:} \ \sqrt{\frac{g_m}{2C_2C_5R_4+C_2C_5R_5}} \\ \text{bandwidth:} \ \frac{\sqrt{\frac{g_m}{2C_2C_5R_4+C_2C_5R_5}} (C_2+C_5R_4g_m+C_5R_5g_m+C_5)}{2C_2C_5R_4\sqrt{\frac{g_m}{2C_2C_5R_4+C_2C_5R_5}} + C_2C_5R_5\sqrt{\frac{g_m}{2C_2C_5R_4+C_2C_5R_5}}} \\ \text{K-LP:} \ \frac{R_4}{2} \\ \text{K-HP:} \ \frac{R_4R_5}{4R_4+2R_5} \\ \text{K-BP:} \ \frac{C_2R_4+C_5R_4R_5g_m-C_5R_4}{2C_2+2C_5R_4g_m+2C_5R_5} \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{g_m}{C_2C_5R_5}} \end{array}$$

# **9.3** INVALID-WZ-3 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$

# $H(s) = \frac{C_2C_4R_4R_5s^2 + R_5g_m + s\left(C_2R_5 + C_4R_4R_5g_m - C_4R_4\right) - 1}{2g_m + s^2\left(4C_2C_4R_4 + 2C_2C_4R_5\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4\right)}$

$$\begin{array}{l} \mathrm{Q:} \ \, \frac{2C_2C_4R_4\sqrt{\frac{g_m}{2C_2C_4R_4+C_2C_4R_5}} + C_2C_4R_5\sqrt{\frac{g_m}{2C_2C_4R_4+C_2C_4R_5}}}{2C_2+C_4R_4g_m+C_4R_5g_m+C_4} \\ \mathrm{wo:} \ \, \sqrt{\frac{g_m}{2C_2C_4R_4+C_2C_4R_5}} \\ \mathrm{bandwidth:} \ \, \frac{\sqrt{\frac{g_m}{2C_2C_4R_4+C_2C_4R_5}} (2C_2+C_4R_4g_m+C_4R_5g_m+C_4)}{2C_2C_4R_4\sqrt{\frac{g_m}{2C_2C_4R_4+C_2C_4R_5}} + C_2C_4R_5\sqrt{\frac{g_m}{2C_2C_4R_4+C_2C_4R_5}}} \\ \mathrm{K-LP:} \ \, \frac{R_5g_m-1}{2g_m} \\ \mathrm{K-HP:} \ \, \frac{R_4R_5}{4R_4+2R_5} \\ \mathrm{K-BP:} \ \, \frac{C_2R_5+C_4R_4R_5g_m-C_4R_4}{4C_2+2C_4R_4g_m+2C_4R_5g_m+2C_4} \\ \mathrm{Qz:} \ \, \mathrm{None} \\ \mathrm{Wz:} \ \, \sqrt{\frac{R_5g_m-1}{C_2C_4R_4R_5}} \end{array}$$

### **9.4** INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, R_4, R_5 + \frac{1}{C_5s}, \infty\right)$

$$H(s) = \frac{C_2C_5R_2R_4R_5s^2 + R_2R_4g_m + R_4 + s\left(C_2R_2R_4 + C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5\right)}{2R_2g_m + s^2\left(4C_2C_5R_2R_4 + 2C_2C_5R_2R_5\right) + s\left(2C_2R_2 + 2C_5R_2R_4g_m + 2C_5R_2R_5g_m + 2C_5R_2 + 4C_5R_4 + 2C_5R_5\right) + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m + 2C_$$

### Parameters:

 $Q: \frac{2C_{3}C_{5}R_{2}R_{4}\sqrt{\frac{g_{2}g_{3}}{3c_{2}c_{5}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{5}\sqrt{\frac{g_{2}g_{2}c_{5}R_{3}R_{4}+c_{2}c_{5}R_{2}R_{5}}{2c_{2}c_{5}R_{3}R_{4}+c_{2}c_{5}R_{2}R_{5}}} + C_{2}C_{5}R_{2}R_{5}\sqrt{\frac{g_{2}g_{3}R_{4}+c_{2}c_{5}R_{2}R_{5}}{2c_{2}c_{5}R_{3}R_{4}+c_{2}c_{5}R_{2}R_{5}}}}$   $wo: \sqrt{\frac{R_{2}g_{3}h_{4}+1}{2c_{2}c_{5}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}}}}$   $bandwidth: \frac{\sqrt{\frac{g_{2}g_{3}h_{4}+c_{2}c_{5}R_{2}R_{5}}{2c_{2}c_{5}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}}}} (C_{2}R_{2}+C_{5}R_{2}R_{3}g_{m}+C_{5}R_{2}+2C_{5}R_{4}+C_{5}C_{5}R_{2}R_{5}} + C_{2}c_{5}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}}}$   $E.P: \frac{R_{2}g_{3}}{4R_{4}+2R_{5}}$   $K-IP: \frac{R_{4}R_{5}}{4R_{4}+2R_{5}}$   $K-BP: \frac{C_{2}R_{2}R_{4}\sqrt{\frac{g_{2}g_{3}R_{4}+c_{2}c_{5}R_{2}R_{5}}} + C_{2}C_{2}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}c_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5} + C_{2}C_{5}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{2}C_{2}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{4}+c_{2}C_{5}R_{2}R_{5}} + C_{2}C_{2}R_{2}R_{$ 

# **9.5** INVALID-WZ-5 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$

$$H(s) = \frac{C_2C_4R_2R_4R_5s^2 + R_2R_5g_m - R_2 + R_5 + s\left(C_2R_2R_5 + C_4R_2R_4R_5g_m - C_4R_2R_4 + C_4R_4R_5\right)}{2R_2g_m + s^2\left(4C_2C_4R_2R_4 + 2C_2C_4R_2R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2R_5 + 4C_4R_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_5g_m + 2C_4R_5g_$$

### Parameters:

```
 Q: \frac{2C_2C_4R_2R_4\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}+2c_2C_4R_2R_5}+2c_2C_4R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}+2c_2C_4R_2R_4}}{2C_3R_3+C_4R_2R_4g_m+C_4R_2R_5g_m+C_4R_2+2C_4R_4R_5} \\ wo: \sqrt{\frac{R_2g_m+2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}} \\ bandwidth: \frac{\sqrt{\frac{R_2g_m+2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}}{\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}}(2C_2R_2+C_4R_2R_4g_m+C_4R_2R_5g_m+C_4R_2+2C_4R_4R_5)}}{2C_2C_4R_2R_4+C_2C_4R_2R_5} \\ EX_-LP: \frac{R_2R_3g_m-R_2+R_5}{2R_2g_m+4} \\ K_-HP: \frac{R_4R_5}{4R_4+2R_5} \\ K_-HP: \frac{R_4R_5}{4R_4+2R_5} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5}}{2C_2C_4R_2R_4+C_2C_4R_2R_5} +2c_2C_4R_2R_4+c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4+c_2C_4R_2R_5}}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4R_5}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4R_5} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{2}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_4R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5}} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_2R_5}}+2c_2C_4R_2R_5} \\ C_2R_2R_2R_4+C_2C_4R_2R_5} \\ C_2R_2R_5\sqrt{\frac{R_2g_m}{2C_2C_4R_2R_4+C_2C_4R_
```

# **9.6** INVALID-WZ-6 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{-C_2C_5R_2R_4s^2 + R_4g_m + s\left(C_2R_2R_4g_m + C_2R_4 - C_5R_4\right)}{2g_m + s^2\left(2C_2C_5R_2R_4g_m + 2C_2C_5R_2 + 4C_2C_5R_4\right) + s\left(2C_2R_2g_m + 2C_2 + 2C_5R_4g_m + 2C_5\right)}$$

### Parameters:

## **9.7** INVALID-WZ-7 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$

$$H(s) = \frac{-C_2C_5R_2R_4R_5s^2 + R_4R_5g_m - R_4 + s\left(C_2R_2R_4R_5g_m - C_2R_2R_4 + C_2R_4R_5 - C_5R_4R_5\right)}{2R_4g_m + 2R_5g_m + s^2\left(2C_2C_5R_2R_4R_5g_m + 2C_2C_5R_2R_5 + 4C_2C_5R_4R_5\right) + s\left(2C_2R_2R_4g_m + 2C_2R_2R_5g_m + 2C_2R_2 + 4C_2R_4 + 2C_2R_5 + 2C_5R_4R_5g_m + 2C_5R_5\right) + 2C_3R_4R_5g_m + 2C_3R_5g_m + 2C_3R$$

### Parameters:

 $Q: \frac{C_2C_3R_2R_4R_5gm\sqrt{c_2C_5R_2R_4R_5gm+c_2C_5R_2R_5} + c_2C_5R_2R_4R_5gm+c_2C_5R_2R_5 + c_2C_5R_2R_4R_5gm+c_2C_5R_2R_5 + c_2C_5R_2R_4R_5gm+c_2C_5R_2R_5 + c_2C_5R_2R_4R_5gm+c_2C_5R_2R_5 + c_2C_5R_2R_4R_5gm+c_2C_5R_2R_5 + c_2C_5R_2R_4R_5gm+c_2$ 

# **9.8** INVALID-WZ-8 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, R_5 + \frac{1}{C_5 s}, \infty\right)$

$$H(s) = \frac{R_4 g_m + s^2 \left(C_2 C_5 R_2 R_4 R_5 g_m - C_2 C_5 R_2 R_4 + C_2 C_5 R_4 R_5\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^2 \left(2 C_2 C_5 R_2 R_4 g_m + 2 C_2 C_5 R_2 R_5 g_m + 2 C_2 C_5 R_2 + 4 C_2 C_5 R_4 + 2 C_2 C_5 R_5\right) + s \left(2 C_2 R_2 g_m + 2 C_2 + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

#### **Parameters:**

```
Q: \frac{C_2C_5R_2R_4g_m\sqrt{C_2C_5R_2R_4g_m+C_2C_5R_2R_5g_m+C_2C_5R_4+C_2C_5R_5} + C_2C_5R_2\sqrt{C_2C_5R_2R_4g_m+C_2C_5R_2S_5g_m+C_2C_5R_4+C_2C_5R_5} + C_2C_5R_2\sqrt{C_2C_5R_2R_4g_m+C_2C_5R_2S_5g_m+C_2C_5R_4+C_2C_5R_5} + C_2C_5R_2\sqrt{C_2C_5R_2R_4g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_4+C_2C_5R_5} + C_2C_5R_2\sqrt{C_2C_5R_2R_4g_m+C_2C_5R_2S_5g_m+C_2C_5R_4+C_2C_5R_5} + C_2C_5R_2\sqrt{C_2C_5R_2R_4g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5g_m+C_2C_5R_2S_5
```

# **9.9** INVALID-WZ-9 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$

$$H(s) = \frac{R_5 g_m + s^2 \left(C_2 C_4 R_2 R_4 R_5 g_m - C_2 C_4 R_2 R_4 + C_2 C_4 R_4 R_5\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5 + C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2 g_m + s^2 \left(2 C_2 C_4 R_2 R_4 g_m + 2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_2 + 4 C_2 C_4 R_4 + 2 C_2 C_4 R_5\right) + s \left(2 C_2 R_2 g_m + 4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5\right)}$$

#### Parameters

```
Q: \frac{C_2C_4R_2R_4g_m\sqrt{\frac{g_m}{C_2C_4R_2R_3g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m+C_2C_4R_2g_5g_m
```

### 10 INVALID-ORDER

Wz:  $\sqrt{\frac{R_5 g_m - 1}{C_2 C_4 R_2 R_4 R_5 g_m - C_2 C_4 R_2 R_4 + C_2 C_4 R_4 R_5}}$ 

Wz:  $\sqrt{\frac{g_m}{C_2C_5R_2R_5g_m-C_2C_5R_2+C_2C_5R_5}}$ 

10.1 INVALID-ORDER-1  $Z(s) = (\infty, R_2, \infty, R_4, R_5, \infty)$ 

$$H(s) = \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5}{2R_2 R_4 g_m + 2R_2 R_5 g_m + 2R_2 + 4R_4 + 2R_5}$$

10.2 INVALID-ORDER-2  $Z(s) = \left(\infty, R_2, \infty, R_4, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_5 R_2 R_4 s + R_2 R_4 g_m + R_4}{2R_2 g_m + s \left(2C_5 R_2 R_4 g_m + 2C_5 R_2 + 4C_5 R_4\right) + 2}$$

10.3 INVALID-ORDER-3  $Z(s) = \left(\infty, R_2, \infty, R_4, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{-C_5R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s\left(2C_5R_2R_4R_5g_m + 2C_5R_2R_5 + 4C_5R_4R_5\right)}$$

**10.4** INVALID-ORDER-4  $Z(s) = \left(\infty, R_2, \infty, R_4, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 R_4 g_m + R_4 + s \left( C_5 R_2 R_4 R_5 g_m - C_5 R_2 R_4 + C_5 R_4 R_5 \right)}{2 R_2 g_m + s \left( 2 C_5 R_2 R_4 g_m + 2 C_5 R_2 R_5 g_m + 2 C_5 R_2 + 4 C_5 R_4 + 2 C_5 R_5 \right) + 2}$$

10.5 INVALID-ORDER-5  $Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$ 

$$H(s) = \frac{R_2 R_5 g_m - R_2 + R_5}{2R_2 g_m + s \left(2C_4 R_2 R_5 g_m + 2C_4 R_2 + 2C_4 R_5\right) + 4}$$

10.6 INVALID-ORDER-6  $Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_5 R_2 s + R_2 g_m + 1}{2C_4 C_5 R_2 s^2 + s \left(2C_4 R_2 g_m + 2C_4 + 2C_5 R_2 g_m + 4C_5\right)}$$

10.7 INVALID-ORDER-7  $Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s \left( C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5 \right) + 1}{s^2 \left( 2 C_4 C_5 R_2 R_5 g_m + 2 C_4 C_5 R_2 + 2 C_4 C_5 R_5 \right) + s \left( 2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5 \right)}$$

10.8 INVALID-ORDER-8  $Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_5R_2s + R_2g_m + s^2\left(C_5L_5R_2g_m + C_5L_5\right) + 1}{2C_4C_5R_2s^2 + s^3\left(2C_4C_5L_5R_2g_m + 2C_4C_5L_5\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

10.9 INVALID-ORDER-9  $Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{-C_5L_5R_2s^2 - R_2 + s\left(L_5R_2g_m + L_5\right)}{2C_4C_5L_5R_2s^3 + 2C_4R_2s + 2R_2g_m + s^2\left(2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + 4}$$

**10.10** INVALID-ORDER-10  $Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^2 \left(C_5 L_5 R_2 g_m + C_5 L_5\right) + s \left(C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5\right) + 1}{s^3 \left(2 C_4 C_5 L_5 R_2 g_m + 2 C_4 C_5 L_5\right) + s^2 \left(2 C_4 C_5 R_2 R_5 g_m + 2 C_4 C_5 R_2 + 2 C_4 C_5 R_5\right) + s \left(2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5\right)}$$

10.11 INVALID-ORDER-11 
$$Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_5L_5R_2R_5s^2 - R_2R_5 + s\left(L_5R_2R_5g_m - L_5R_2 + L_5R_5\right)}{2C_4C_5L_5R_2R_5s^3 + 2R_2R_5g_m + 4R_5 + s^2\left(2C_4L_5R_2R_5g_m + 2C_4L_5R_2 + 2C_4L_5R_5 + 2C_5L_5R_2R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_5 + 2L_5R_2g_m + 4L_5\right)}$$

10.12 INVALID-ORDER-12 
$$Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{R_2R_5g_m - R_2 + R_5 + s^2\left(C_5L_5R_2R_5g_m - C_5L_5R_2 + C_5L_5R_5\right) + s\left(L_5R_2g_m + L_5\right)}{2R_2g_m + s^3\left(2C_4C_5L_5R_2R_5g_m + 2C_4C_5L_5R_2 + 2C_4C_5L_5R_5\right) + s^2\left(2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5\right) + s\left$$

**10.13** INVALID-ORDER-13 
$$Z(s) = \left(\infty, R_2, \infty, \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_5R_2R_5s + R_2R_5g_m - R_2 + R_5 + s^2\left(C_5L_5R_2R_5g_m - C_5L_5R_2 + C_5L_5R_5\right)}{2R_2g_m + s^3\left(2C_4C_5L_5R_2R_5g_m + 2C_4C_5L_5R_2 + 2C_4C_5L_5R_5\right) + s^2\left(2C_4C_5R_2R_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_5R_2g_m + 4C_5R_5\right) + s^2\left(2C_4R_5R_5g_m + 4C_5R_5\right) + s^2\left(2C_5R_5R_5g_m + 4C_5R_5\right) + s^2\left(2C_5R_5R_5g$$

**10.14** INVALID-ORDER-14  $Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5, \ \infty\right)$ 

$$H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s\left(2C_4R_2R_4R_5g_m + 2C_4R_2R_4 + 2C_4R_4R_5\right)}$$

**10.15** INVALID-ORDER-15  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_5R_2R_4s + R_2R_4g_m + R_4 + s^2\left(C_5L_5R_2R_4g_m + C_5L_5R_4\right)}{2R_2g_m + s^3\left(2C_4C_5L_5R_2R_4g_m + 2C_4C_5L_5R_4\right) + s^2\left(2C_4C_5R_2R_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4 + 2C_5L_5R_2g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4C_5R_2R_4 + 2C_5R_2g_m + 2C_5R_5\right) + s^2\left(2C_4R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4R_2R_4g_m + 2C_4R_4\right) + s^2\left(2C_4R_4R_4 + 2C_5R_4R_4\right) + s^2\left(2C_4R_4R_4R_4 + 2C_5R_4R_4\right) + s^2\left(2C_4R_4R_4 + 2C_5R_$$

**10.16** INVALID-ORDER-16  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{-C_5L_5R_2R_4s^2 - R_2R_4 + s\left(L_5R_2R_4g_m + L_5R_4\right)}{2C_4C_5L_5R_2R_4s^3 + 2R_2R_4g_m + 2R_2 + 4R_4 + s^2\left(2C_4L_5R_2R_4g_m + 2C_4L_5R_4 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_2 + 4C_5L_5R_4\right) + s\left(2C_4R_2R_4 + 2L_5R_2g_m + 2L_5\right)}{2C_4C_5L_5R_2R_4g_m + 2R_4R_4 + s^2\left(2C_4L_5R_2R_4g_m + 2C_4L_5R_4 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_2 + 4C_5L_5R_4\right) + s\left(2C_4R_2R_4 + 2L_5R_2g_m + 2L_5\right)}$$

10.17 INVALID-ORDER-17  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2R_4g_m + R_4 + s^2\left(C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s\left(C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5\right)}{2R_2g_m + s^3\left(2C_4C_5L_5R_2R_4g_m + 2C_4C_5L_5R_4\right) + s^2\left(2C_4C_5R_2R_4R_5g_m + 2C_4C_5R_2R_4 + 2C_4C_5R_2R_4 + 2C_5C_5R_2R_4 + 2C_5C_5R_4 + 2C_5C_5R_4 + 2C_5C_5R_4 + 2C_5C_5R_4 + 2C_5C_5R_5 + 2C_5C_5C_5R_5 + 2$$

10.18 INVALID-ORDER-18  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4R_4s+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

$$H(s) = \frac{-C_5L_5R_2R_4R_5s^2 - R_2R_4R_5s + s\left(L_5R_2R_4R_5g_m - L_5R_2R_4 + L_5R_4R_5\right)}{2C_4C_5L_5R_2R_4R_5s^3 + 2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^2\left(2C_4L_5R_2R_4R_5g_m + 2C_4L_5R_4R_5 + 2C_5L_5R_2R_4R_5g_m + 2C_5L_5R_2R_4R_5\right) + s\left(2C_4R_2R_4R_5s + 2L_5R_2R_4g_m + 2L_5R_2g_m + 2L_5R_2g_m$$

10.19 INVALID-ORDER-19  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4}{C_4R_4s+1}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$ 

$$H(s) = \frac{R_2 R_4 R_5 g_m - R_2 R_4 + R_4 R_5 + s^2 \left(C_5 L_5 R_2 R_4 R_5 g_m - C_5 L_5 R_2 R_4 + C_5 L_5 R_4 R_5\right) + s \left(L_5 R_2 R_4 g_m + L_5 R_4\right)}{2 R_2 R_4 g_m + 2 R_2 R_5 g_m + 2 R_2 + 4 R_4 + 2 R_5 + s^3 \left(2 C_4 C_5 L_5 R_2 R_4 R_5 g_m + 2 C_4 C_5 L_5 R_2 R_4 g_m + 2 C_4 L_5 R_4 + 2 C_5 L_5 R_2 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5 R_$$

10.20 INVALID-ORDER-20 
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

 $H(s) = \frac{-C_5R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_5L_5R_2R_4R_5g_m - C_5L_5R_2R_4 + C_5L_5R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(2C_4C_5L_5R_2R_4R_5g_m + 2C_4C_5L_5R_2R_4R_5\right) + s^2\left(2C_4C_5R_2R_4R_5g_m + 2C_5L_5R_2R_4g_m + 2C_5L_5R_2g_m + 2$ 

10.21 INVALID-ORDER-21  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$ 

$$H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s \left( C_4 R_2 R_4 R_5 g_m - C_4 R_2 R_4 + C_4 R_4 R_5 \right)}{2 R_2 g_m + s \left( 2 C_4 R_2 R_4 g_m + 2 C_4 R_2 R_5 g_m + 2 C_4 R_2 + 4 C_4 R_4 + 2 C_4 R_5 \right) + 4}$$

**10.22** INVALID-ORDER-22  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_4C_5R_2R_4s^2 + R_2g_m + s\left(C_4R_2R_4g_m + C_4R_4 - C_5R_2\right) + 1}{s^2\left(2C_4C_5R_2R_4g_m + 2C_4C_5R_2 + 4C_4C_5R_4\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

**10.23** INVALID-ORDER-23  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^2 \left( C_4 C_5 R_2 R_4 R_5 g_m - C_4 C_5 R_2 R_4 + C_4 C_5 R_4 R_5 \right) + s \left( C_4 R_2 R_4 g_m + C_4 R_4 + C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5 \right) + 1}{s^2 \left( 2 C_4 C_5 R_2 R_4 g_m + 2 C_4 C_5 R_2 R_5 g_m + 2 C_4 C_5 R_2 + 4 C_4 C_5 R_4 + 2 C_4 C_5 R_5 \right) + s \left( 2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5 \right)}$$

**10.24** INVALID-ORDER-24  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^3 \left(C_4 C_5 L_5 R_2 R_4 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(-C_4 C_5 R_2 R_4 + C_5 L_5 R_2 g_m + C_5 L_5\right) + s \left(C_4 R_2 R_4 g_m + C_4 R_4 - C_5 R_2\right) + 1}{s^3 \left(2C_4 C_5 L_5 R_2 g_m + 2C_4 C_5 L_5\right) + s^2 \left(2C_4 C_5 R_2 R_4 g_m + 2C_4 C_5 R_2 + 4C_4 C_5 R_4\right) + s \left(2C_4 R_2 g_m + 2C_4 + 2C_5 R_2 g_m + 4C_5\right)}$$

10.25 INVALID-ORDER-25  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

10.26 INVALID-ORDER-26  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^3 \left(C_4 C_5 L_5 R_2 R_4 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(C_4 C_5 R_2 R_4 R_5 g_m - C_4 C_5 R_2 R_4 + C_4 C_5 R_4 R_5 + C_5 L_5 R_2 g_m + C_5 L_5\right) + s \left(C_4 R_2 R_4 g_m + C_4 R_4 + C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5\right) + 1}{s^3 \left(2 C_4 C_5 L_5 R_2 g_m + 2 C_4 C_5 L_5\right) + s^2 \left(2 C_4 C_5 R_2 R_4 g_m + 2 C_4 C_5 R_2 R_5 g_m + 2 C_4 C_5 R_2 + 4 C_4 C_5 R_2 + 4 C_4 C_5 R_4 + 2 C_4 C_5 R_5\right) + s \left(2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5\right)}$$

10.27 INVALID-ORDER-27  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-C_4C_5L_5R_2R_4R_5s^3 - R_2R_5 + s^2\left(C_4L_5R_2R_4R_5g_m - C_4L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_5\right) + s\left(-C_4R_2R_4R_5 + L_5R_2R_5g_m - L_5R_2 + L_5R_5\right)}{2R_2R_5g_m + 4R_5 + s^3\left(2C_4C_5L_5R_2R_4R_5g_m + 2C_4L_5R_2R_4g_m + 2C_4L_5R_2R_5g_m + 2C_4L_5R_2R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_2R_4R_5g_m + 2C_4R_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_5R_5g_m + 4C_5L_5R_5g_m + 4C_5L_5R_5\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 4C_5R_5g_m + 4C_5R_5g_m\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 4C_5R_5g_m + 4C_5R_5g_m\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 4C_5R_5g_m\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_5R_5g_m + 2C_4R_5g_m + 2C$$

10.28 INVALID-ORDER-28  $Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

10.29 INVALID-ORDER-29 
$$Z(s) = \left(\infty, R_2, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

**10.30** INVALID-ORDER-30 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_4C_5L_4R_2s^3 - C_5R_2s + R_2g_m + s^2\left(C_4L_4R_2g_m + C_4L_4\right) + 1}{2C_4C_5R_2s^2 + s^3\left(2C_4C_5L_4R_2g_m + 4C_4C_5L_4\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

10.31 INVALID-ORDER-31 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

10.32 INVALID-ORDER-32 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{R_2 g_m + s^3 \left(C_4 C_5 L_4 R_2 R_5 g_m - C_4 C_5 L_4 R_2 + C_4 C_5 L_4 R_5\right) + s^2 \left(C_4 L_4 R_2 g_m + C_4 L_4\right) + s \left(C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5\right) + 1}{s^3 \left(2 C_4 C_5 L_4 R_2 g_m + 4 C_4 C_5 L_4\right) + s^2 \left(2 C_4 C_5 R_2 R_5 g_m + 2 C_4 C_5 R_2 + 2 C_4 C_5 R_5\right) + s \left(2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5\right)}$$

10.33 INVALID-ORDER-33 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_4C_5L_4R_2s^3 - C_5R_2s + R_2g_m + s^4\left(C_4C_5L_4L_5R_2g_m + C_4C_5L_4L_5\right) + s^2\left(C_4L_4R_2g_m + C_4L_4 + C_5L_5R_2g_m + C_5L_5\right) + 1}{2C_4C_5R_2s^2 + s^3\left(2C_4C_5L_4R_2g_m + 4C_4C_5L_4 + 2C_4C_5L_5R_2g_m + 2C_4C_5L_5\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

10.34 INVALID-ORDER-34 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_4C_5L_4L_5R_2s^4 - R_2 + s^3\left(C_4L_4L_5R_2g_m + C_4L_4L_5\right) + s^2\left(-C_4L_4R_2 - C_5L_5R_2\right) + s\left(L_5R_2g_m + L_5\right)}{2C_4C_5L_5R_2s^3 + 2C_4R_2s + 2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 4C_4L_5\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5R_2g_m + 4C_5L_5\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_5R_2g_m + 4C_4L_5R_$$

10.35 INVALID-ORDER-35 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

10.36 INVALID-ORDER-36 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_4C_5L_4L_5R_2R_5s^4 - R_2R_5 + s^3\left(C_4L_4L_5R_2R_5g_m - C_4L_4L_5R_2 + C_4L_4L_5R_5\right) + s^2\left(-C_4L_4R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - L_5R_2 + L_5R_5\right)}{2R_2R_5g_m + 4R_5 + s^4\left(2C_4C_5L_4L_5R_2g_m + 4C_4L_5R_5\right) + s^3\left(2C_4C_5L_5R_2R_5 + 2C_4L_4L_5R_2g_m + 4C_4L_4L_5\right) + s^2\left(2C_4L_4R_2R_5g_m + 4C_4L_4R_5 + 2C_4L_5R_2R_5g_m + 4C_4L_5R_5\right) + s\left(L_5R_2R_5g_m - L_5R_2 + L_5R_5\right)}$$

10.37 INVALID-ORDER-37 
$$Z(s) = \left(\infty, R_2, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^4 \left(C_4 C_5 L_4 L_5 R_2 g_m - C_4 C_5 L_4 L_5 R_2 + C_4 C_5 L_4 L_5 R_2 + C_4 C_5 L_4 L_5 R_2 g_m + C_4 L_4 L_5\right) + s^3 \left(C_4 L_4 L_5 R_2 g_m + C_4 L_4 L_5\right) + s^2 \left(C_4 L_4 R_2 R_5 g_m - C_4 L_4 R_2 + C_4 L_4 R_5 + C_5 L_5 R_2 R_5 g_m - C_5 L_5 R_2 + C_5 L_5 R_5\right) + s \left(L_5 R_2 g_m + L_5\right)}{2 R_2 g_m + s^4 \left(2 C_4 C_5 L_4 L_5 R_2 g_m + 4 C_4 C_5 L_4 L_5\right) + s^3 \left(2 C_4 C_5 L_5 R_2 R_5 g_m + 2 C_4 C_5 L_5 R_5\right) + s^2 \left(2 C_4 L_4 R_2 g_m + 4 C_4 L_4 + 2 C_4 L_5 R_2 g_m + 4 C_5 L_5\right) + s \left(2 C_4 R_2 R_5 g_m + 2 C_4 R_5 + 2 C_4 R_5\right) + s^2 \left(2 C_4 L_4 R_2 g_m + 4 C_4 L_4 + 2 C_4 L_5 R_2 g_m + 4 C_5 L_5\right) + s \left(2 C_4 R_2 R_5 g_m + 2 C_4 R_5 + 2 C_4 R_5\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 R_5 g_m + 2 C_4 R_5\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 R_5 g_m + 2 C_4 R_5\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 R_5 g_m + 2 C_4 R_5\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 R_5 g_m + 2 C_4 R_5\right) + s \left(2 C_4 R_$$

10.38 INVALID-ORDER-38 
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

 $H(s) = \frac{-C_4C_5L_4R_2R_5s^3 - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5 + s^4\left(C_4C_5L_4L_5R_2R_5g_m - C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_5\right) + s^2\left(C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5 + C_5L_5R_2R_5g_m - C_5L_5R_2 + C_5L_5R_5\right)}{2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 4C_4C_5L_4R_5\right) + s^3\left(2C_4C_5L_4R_2R_5g_m + 4C_4C_5L_4R_5 + 2C_4C_5L_5R_2\right) + s^2\left(2C_4C_5R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5 + 2C_4R_5 + 2C_4C_5L_5R_5\right) + s^2\left(2C_4C_5R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5 + 2C_4R_5 + 2C_4R_5 + 2C_4R_5\right) + s^2\left(2C_4C_5R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4 + 2C_5L_5R_2g_m + 4C_4L_4\right) + s^2\left(2C_4C_5R_2R_5g_m + 2C_4C_5L_5R_5\right) + s^2\left(2C_4C_5R_2R_5g_m + 4C_4L_4R_5 + 2C_4R_5g_m + 4C_4L_4\right) + s^2\left(2C_4C_5R_2R_5g_m + 4C_4C_5L_4R_5\right) + s^2\left(2C_4C_5R_2R_5g_m + 4C_4L_4R_5 + 2C_4R_5g_m + 4C_4L_4\right) + s^2\left(2C_4C_5R_2R_5g_m + 4C_4C_5L_4R_5\right) + s^2\left(2C_4C_5R_5R_5g_m + 4C_4C_5L_4R_5\right) + s^2\left(2C_4C_5R_5R_5$ 

**10.39** INVALID-ORDER-39 
$$Z(s) = \left(\infty, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{1}{C_5s}, \infty\right)$$

**10.40** INVALID-ORDER-40 
$$Z(s) = \left(\infty, R_2, \infty, \frac{L_{4s}}{C_4L_4s^2+1}, \frac{R_5}{C_5R_5s+1}, \infty\right)$$

$$H(s) = \frac{-C_5L_4R_2R_5s^2 + s\left(L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)}{2C_4C_5L_4R_2R_5s^3 + 2R_2R_5g_m + 2R_2 + 2R_5 + s^2\left(2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 2C_4L_4R_5 + 2C_5L_4R_2R_5g_m + 4C_5L_4R_5\right) + s\left(2C_5R_2R_5 + 2L_4R_2g_m + 4L_4\right)}{2C_4C_5L_4R_2R_5g_m + 2R_4R_5 + s^2\left(2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 2C_4L_4R_5 + 2C_5L_4R_2R_5g_m + 4C_5L_4R_5\right) + s\left(2C_5R_2R_5 + 2L_4R_2g_m + 4L_4\right)}$$

10.41 INVALID-ORDER-41 
$$Z(s) = \left(\infty, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, R_5 + \frac{1}{C_5s}, \infty\right)$$

**10.42** INVALID-ORDER-42 
$$Z(s) = \left(\infty, R_2, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_5L_4R_2s^2 + s^3\left(C_5L_4L_5R_2g_m + C_5L_4L_5\right) + s\left(L_4R_2g_m + L_4\right)}{2C_4C_5L_4R_2s^3 + 2C_5R_2s + 2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 4C_5L_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + 2C_4C_5L_4R_2g_m + 2C_5C_5L_4R_2g_m + 2C_5C_5L_4R_2g_m + 2C_5C_5L_4R_2g_m + 2C_5C_5L_4R_2g_m + 2C_5$$

10.43 INVALID-ORDER-43  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)$ 

$$H(s) = \frac{-C_5L_4L_5R_2s^3 - L_4R_2s + s^2\left(L_4L_5R_2g_m + L_4L_5\right)}{2C_4C_5L_4L_5R_2s^4 + 2R_2 + s^3\left(2C_4L_4L_5R_2g_m + 2C_4L_4L_5 + 2C_5L_4L_5R_2g_m + 4C_5L_4L_5\right) + s^2\left(2C_4L_4R_2 + 2C_5L_5R_2\right) + s\left(2L_4R_2g_m + 4L_4 + 2L_5R_2g_m + 2L_5\right)}$$

10.44 INVALID-ORDER-44  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

10.45 INVALID-ORDER-45  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

$$H(s) = \frac{-C_5L_4L_5R_2R_5s^3 - L_4R_2R_5s + s^2\left(L_4L_5R_2R_5g_m - L_4L_5R_2 + L_4L_5R_5\right)}{2C_4C_5L_4L_5R_2R_5s^4 + 2R_2R_5 + s^3\left(2C_4L_4L_5R_2R_5g_m + 2C_4L_4L_5R_2 + 2C_5L_4L_5R_5\right) + s^2\left(2C_4L_4R_2R_5 + 2C_5L_5R_2R_5 + 2L_4L_5R_2g_m + 4L_4L_5\right) + s\left(2L_4R_2R_5g_m + 4L_4R_5 + 2L_5R_2g_m + 4L_4R_5 + 2L_5R_2g_m + 4L_4R_5\right)}$$

10.46 INVALID-ORDER-46  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$ 

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10.47 INVALID-ORDER-47 Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)
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 $H(s) = \frac{-C_5L_4R_2R_5s^2 + s^3\left(C_5L_4L_5R_2R_5g_m - C_5L_4L_5R_2 + C_5L_4L_5R_2 + C_5L_4L_5R_5\right) + s\left(L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)}{2R_2R_5g_m + 2R_2 + 2R_5 + s^4\left(2C_4C_5L_4L_5R_2 + 2C_4C_5L_4L_5R_2 + 2C_5L_4L_5R_2\right) + s^3\left(2C_4C_5L_4L_5R_2g_m + 4C_5L_4L_5\right) + s^2\left(2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 2C_4L_4R_5 + 2C_5L_4R_2R_5g_m + 4C_5L_4R_5 + 2C_5L_5R_2R_5g_m + 2C_5L_5R_5\right) + s\left(2C_4C_5L_4R_2R_5g_m + 2C_4L_4R_5 + 2C_5L_4R_2R_5g_m + 2C_4L_4R_5 + 2C_5L_4R_5R_5g_m + 2C_5L_5R_5\right) + s\left(2C_4C_5L_4R_5R_5g_m + 2C_4L_4R_5 + 2C_5L_4R_5R_5g_m + 2C_4L_4R_5 + 2C_5L_4R_5R_5g_m + 2C_4L_4R_5\right) + s\left(2C_4C_5L_4R_5R_5g_m + 2C_4L_5R_5\right) + s\left(2C_4C_5L_4R_5R_5 + 2C_5L_4R_5\right) + s\left(2C_4C_5L_4R_5R_5\right) + s\left(2C_4C_5L_4R_5R_5\right) +$ 

**10.48** INVALID-ORDER-48  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_4C_5L_4R_2s^3 + R_2g_m + s^2\left(-C_4C_5R_2R_4 + C_4L_4R_2g_m + C_4L_4\right) + s\left(C_4R_2R_4g_m + C_4R_4 - C_5R_2\right) + 1}{s^3\left(2C_4C_5L_4R_2g_m + 4C_4C_5L_4\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4C_5R_2 + 4C_4C_5R_4\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

**10.49** INVALID-ORDER-49  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{-C_4C_5L_4R_2R_5s^3 + R_2R_5g_m - R_2 + R_5 + s^2\left(-C_4C_5R_2R_4R_5 + C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5\right) + s\left(C_4R_2R_4R_5g_m - C_4R_2R_4 + C_4R_4R_5 - C_5R_2R_5\right)}{2R_2g_m + s^3\left(2C_4C_5L_4R_2R_5g_m + 4C_4C_5L_4R_5\right) + s^2\left(2C_4C_5R_2R_4R_5g_m + 2C_4C_5R_2R_5 + 4C_4C_5R_4R_5 + 2C_4L_4R_2g_m + 4C_4L_4\right) + s\left(2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5 + 2C_5R_2R_5g_m + 4C_5R_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_5g_m + 2C$$

10.50 INVALID-ORDER-50  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^3 \left(C_4 C_5 L_4 R_2 R_5 g_m - C_4 C_5 L_4 R_2 + C_4 C_5 L_4 R_5\right) + s^2 \left(C_4 C_5 R_2 R_4 R_5 g_m - C_4 C_5 R_2 R_4 + C_4 C_5 R_4 R_5 + C_4 L_4 R_2 g_m + C_4 L_4\right) + s \left(C_4 R_2 R_4 g_m + C_4 R_4 + C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5\right) + 1}{s^3 \left(2 C_4 C_5 L_4 R_2 g_m + 4 C_4 C_5 L_4\right) + s^2 \left(2 C_4 C_5 R_2 R_4 g_m + 2 C_4 C_5 R_2 R_5 g_m + 2 C_4 C_5 R_2 + 4 C_4 C_5 R_4 + 2 C_4 C_5 R_5\right) + s \left(2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5\right)}$$

**10.51** INVALID-ORDER-51  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^4 \left(C_4 C_5 L_4 L_5 R_2 g_m + C_4 C_5 L_4 L_5\right) + s^3 \left(-C_4 C_5 L_4 R_2 + C_4 C_5 L_5 R_2 R_4 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(-C_4 C_5 R_2 R_4 + C_4 L_4 R_2 g_m + C_4 L_4 + C_5 L_5 R_2 g_m + C_5 L_5\right) + s \left(C_4 R_2 R_4 g_m + C_4 R_4 - C_5 R_2\right) + 1}{s^3 \left(2C_4 C_5 L_4 R_2 g_m + 4C_4 C_5 L_4 + 2C_4 C_5 L_5 R_2 g_m + 2C_4 C_5 L_5\right) + s^2 \left(2C_4 C_5 R_2 R_4 g_m + 2C_4 C_5 R_2 + 4C_4 C_5 R_4\right) + s \left(2C_4 R_2 g_m + 2C_4 + 2C_5 R_2 g_m + 4C_5\right)}$$

**10.52** INVALID-ORDER-52  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{-C_4C_5L_4L_5R_2s^4 - R_2 + s^3\left(-C_4C_5L_5R_2R_4 + C_4L_4L_5R_2g_m + C_4L_4L_5\right) + s^2\left(-C_4L_4R_2 + C_4L_5R_2R_4g_m + C_4L_5R_4 - C_5L_5R_2\right) + s\left(-C_4R_2R_4 + L_5R_2g_m + L_5\right)}{2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 4C_4C_5L_5R_2R_4g_m + 2C_4C_5L_5R_2 + 4C_4C_5L_5R_4\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_2 + 4C_4R_4\right) + s^2\left(2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(2C_4R_2R_4g_m + 2C_4R_2 + 4C_4R_4\right) + s^2\left(2C_4R_2R_4g_m + 2C_4R_5R_4g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_5R_5g_m + 2C_5R$$

10.53 INVALID-ORDER-53  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_2 g_m + s^4 \left(C_4 C_5 L_4 L_5 R_2 g_m + C_4 C_5 L_4 L_5\right) + s^3 \left(C_4 C_5 L_4 R_2 R_5 g_m - C_4 C_5 L_4 R_2 + C_4 C_5 L_4 R_5 + C_4 C_5 L_5 R_2 R_4 g_m + C_4 C_5 L_5 R_4\right) + s^2 \left(C_4 C_5 R_2 R_4 R_5 g_m - C_4 C_5 R_2 R_4 R_5 - C_4 C_5 R_2 R_4 R_5 - C_4 C_5 R_2 R_4 R_5 + C_4 L_4 R_2 g_m + C_4 L_4 + C_5 L_5 R_2 g_m + C_5 L_5\right) + s \left(C_4 R_2 R_4 g_m + C_4 R_4 + C_5 R_2 R_5 g_m + C_4 C_5 R_2 R_4 R_5 - C_4 C_5 R_5 - C_5 R_5 -$$

**10.54** INVALID-ORDER-54  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-C_4C_5L_4L_5R_2R_5s^4 - R_2R_5 + s^3\left(-C_4C_5L_5R_2R_4R_5 + C_4L_4L_5R_2R_5g_m - C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4R_5R_2 + C_4L_4R_5R_2 + C_4L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_4 + C_4L_5R_2R_4 + C_4L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_4 + C_4L_5R_2R_4 + C_4L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_4 + C_4L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_2R_4 + C_4L_5R_4R_5 - C_5L_5R_4R_5 - C_5L_5R_5R_5 - C_5$$

10.55 INVALID-ORDER-55  $Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

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10.56 INVALID-ORDER-56 Z(s) = \left(\infty, R_2, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
10.57 INVALID-ORDER-57 Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                             H(s) = \frac{-C_5L_4R_2R_4s^2 + s\left(L_4R_2R_4g_m + L_4R_4\right)}{2C_4C_5L_4R_2R_4s^3 + 2R_2R_4g_m + 2R_4 + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4 + 2C_5L_4R_2R_4g_m + 2C_5L_4R_2 + 4C_5L_4R_4\right) + s\left(2C_5R_2R_4 + 2L_4R_2g_m + 2L_4\right)}
10.58 INVALID-ORDER-58 Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                         H(s) = \frac{-C_5L_4R_2R_4R_5s^2 + s\left(L_4R_2R_4R_5g_m - L_4R_2R_4 + L_4R_4R_5\right)}{2C_4C_5L_4R_2R_4R_5s^3 + 2R_2R_4R_5g_m + 2R_2R_4 + 2R_4R_5 + s^2\left(2C_4L_4R_2R_4R_5g_m + 2C_4L_4R_4R_5 + 2C_5L_4R_2R_4R_5g_m + 2C_5L_4R_2R_4 + 2C_4L_4R_4R_5\right) + s\left(2C_5R_2R_4R_5 + 2L_4R_2R_4g_m + 2L_4R_2R_4g_m + 2L_4R_2R_4g_m + 2L_4R_2R_4g_m + 2L_4R_4g_m + 2L_4R_4g
                                                                                                                                                                                                                                                                                                                                                           -C_5L_4R_2R_4R_5s^2 + s\left(L_4R_2R_4R_5g_m - L_4R_2R_4 + L_4R_4R_5\right)
10.59 INVALID-ORDER-59 Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
  H(s) = \frac{s^2 \left( C_5 L_4 R_2 R_4 R_5 g_m - C_5 L_4 R_2 R_4 + C_5 L_4 R_4 R_5 \right) + s \left( L_4 R_2 R_4 g_m + L_4 R_4 \right)}{2 R_2 R_4 g_m + 2 R_4 + s^3 \left( 2 C_4 C_5 L_4 R_2 R_4 R_5 g_m + 2 C_4 C_5 L_4 R_2 R_4 g_m + 2 C_4 L_4 R_4 + 2 C_5 L_4 R_2 R_4 g_m + 2 C_5 L_4 R_2 R_4 g_m
10.60 INVALID-ORDER-60 Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                           \frac{-C_5L_4R_2R_4s^2 + s^3\left(C_5L_4L_5R_2R_4g_m + C_5L_4L_5R_4\right) + s\left(L_4R_2R_4g_m + L_4R_4\right)}{2R_2R_4g_m + 2R_4 + s^4\left(2C_4C_5L_4L_5R_2R_4g_m + 2C_4L_4L_5R_4\right) + s^3\left(2C_4C_5L_4R_2R_4 + 2C_5L_4L_5R_2g_m + 2C_5L_4L_5\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4 + 2C_5L_4R_2 + 4C_5L_4R_4 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_4\right) + s\left(2C_5R_2R_4 + 2L_4R_2g_m + 2L_4R_4\right)}
10.61 INVALID-ORDER-61 Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                      H(s) = \frac{-C_5L_4L_5R_2R_4s^3 - L_4R_2R_4s + s^2\left(L_4L_5R_2R_4g_m + L_4L_5R_4\right)}{2C_4C_5L_4L_5R_2R_4s^4 + 2R_2R_4 + s^3\left(2C_4L_4L_5R_2R_4g_m + 2C_4L_4L_5R_4 + 2C_5L_4L_5R_2 + 4C_5L_4L_5R_4\right) + s^2\left(2C_4L_4R_2R_4 + 2C_5L_4L_5R_2g_m + 2L_4L_5\right) + s\left(2L_4R_2R_4g_m + 2L_4R_2 + 4L_4R_4 + 2L_5R_2g_m + 2L_4L_5\right)}
10.62 INVALID-ORDER-62 Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)
                          s^{3} \left(C_{5} L_{4} L_{5} R_{2} R_{4} g_{m}+C_{5} L_{4} L_{5} R_{4}\right)+s^{2} \left(C_{5} L_{4} R_{2} R_{4} R_{5} g_{m}-C_{5} L_{4} R_{2} R_{4}+C_{5} L_{4} R_{4} R_{5}\right)+s \left(L_{4} R_{2} R_{4} g_{m}+L_{4} R_{4}\right)\\ -2 R_{2} R_{4} g_{m}+2 R_{4}+s^{4} \left(2 C_{4} C_{5} L_{4} L_{5} R_{2} R_{4} g_{m}+2 C_{4} L_{5} L_{4} R_{2} R_{4} g_{m}+2 C_{5} L_{4} R_{2} R_{5} g_{m}+2 C_{5} L_{4} R_{5} R_
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10.62 INVALID-ORDER-62 
$$Z(s) = \left(\infty, R_2, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$s^3 \left(C_5 L_4 L_5 R_2 R_4 g_m + C_5 L_4 L_5 R_4\right) + s^2 \left(C_5 L_4 R_2 R_4 R_5 g_m - C_5 L_4 R_2 R_4 + C_5 L_4 R_4 R_5\right) + s \left(L_4 R_2 R_4 g_m + L_4 R_4\right)$$

10.63 INVALID-ORDER-63  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \infty\right)$ 

 $-C_5L_4L_5R_2R_4R_5s^3 - L_4R_2R_4R_5s + s^2(L_4L_5R_2R_4R_5g_m - L_4L_5R_2R_4 + L_4L_5R_4R_5)$  $H(s) = \frac{-C_5L_4L_5R_2R_4R_5s^4 + 2L_4L_5R_2R_4R_5s^4 + 2L_4L_5R_4R_5s^4 + 2L_4L_5R_4R_5s^4 + 2L_4L_5R_4R_5s^4 + 2L_4L_5R_4R_5s^4 + 2L_4L_5R_2R_4R_5s^4 + 2L_4L_5R_4R_5s^4 + 2L_4L_5R_5R_5s^4 + 2L_4L_5R_5R_5s^4 + 2L_4L_5R_5R_5s^4 + 2L_4L_5R_5R_5s^4 + 2L_4L_5R_5R_5s^4 + 2L_4L_5R_5R_5s^4 + 2L_4L_5R$ 

10.64 INVALID-ORDER-64  $Z(s) = \left(\infty, R_2, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

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10.65 INVALID-ORDER-65 Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)
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 $H(s) = \frac{-C_5L_4R_2R_4R_5s^2 + s^3\left(C_5L_4L_5R_2R_4R_5g_m - C_5L_4L_5R_2R_4 + C_5L_4L_5R_4R_5\right) + s\left(L_4R_2R_4R_5g_m - C_5L_4L_5R_2R_4 + C_5L_4L_5R_2R_4 + C_5L_4L_5R_4R_5\right) + s\left(L_4R_2R_4R_5g_m - C_5L_4L_5R_2R_4R_5g_m + 2C_5L_4L_5R_2R_4 + 2C_5L_4L_5R_2R_4R_5g_m + 2C_5L_4L_5R_4R_5g_m + 2C_5L_4L_5R_5g_m + 2C_5L_4L_5R_5g_m + 2C_5L_4L_5R_5g_m + 2C_5L_4L_5R_5g_m + 2C_5L_4L_5R_5g_m + 2C_5L_4L_5R_5g_m + 2C_5L_5L_5R_5g_m + 2C_5L_5L_5R_5g_m + 2C_5L_5L_5R_5g_m + 2C_5L_5L_5R_5g_m + 2C_5L_5L_5R_5g_m + 2C_5L_5L_5R_5g_m + 2C_5L_5L_5$ 

10.66 INVALID-ORDER-66  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{-C_4C_5L_4R_2R_4s^3 + R_2R_4g_m + R_4 + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 - C_5L_4R_2\right) + s\left(-C_5R_2R_4 + L_4R_2g_m + L_4\right)}{2R_2g_m + s^3\left(2C_4C_5L_4R_2R_4g_m + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_4\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 4C_5L_4\right) + s\left(2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s\left(2C_5R_2R_4g_m + 2C_4R_4\right) + s\left(2C_5R_4R_4g_m + 2C_4R_4g_m + 2C_4R_4\right) + s\left(2C_4R_4R_4g_m + 2C_4R_4g_m + 2C_4R_4g$ 

10.67 INVALID-ORDER-67  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{R_5}{C_5R_5s + 1}, \infty\right)$ 

 $H(s) = \frac{-C_4C_5L_4R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_4L_4R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5 - C_5L_4R_2R_5\right) + s\left(-C_5R_2R_4R_5 + L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(2C_4C_5L_4R_2R_4R_5g_m + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 4C_4L_4R_5 + 2C_5L_4R_2R_5g_m + 4C_5L_4R_5\right) + s\left(2C_5R_2R_4R_5g_m + 2C_4R_5g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_5\right) + s\left(-C_5R_2R_4R_5 + L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)$ 

**10.68** INVALID-ORDER-68  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^3\left(C_4C_5L_4R_2R_4R_5g_m - C_4C_5L_4R_2R_4 + C_4C_5L_4R_4R_5\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 + C_5L_4R_2R_5g_m - C_5L_4R_2 + C_5L_4R_5\right) + s\left(C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5 + L_4R_2g_m + L_4\right)}{2R_2g_m + s^3\left(2C_4C_5L_4R_2R_4g_m + 2C_4C_5L_4R_2R_5g_m + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_4 + 2C_4C_5L_4R_5\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 4C_5L_4\right) + s\left(2C_5R_2R_4g_m + 2C_5R_2R_5g_m + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_2R_5g_m + 2C_5R_2R_4g_m + 2C_5R_5\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 4C_5L_4\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 2C_4R_5g_m + 2C_5R_2g_m + 2C_5R$ 

10.69 INVALID-ORDER-69  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4L_5R_4\right) + s^3\left(-C_4C_5L_4R_2R_4 + C_5L_4L_5R_2g_m + C_5L_4L_5\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 - C_5L_4R_2 + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s\left(-C_5R_2R_4 + L_4R_2g_m + L_4\right)}{2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^3\left(2C_4C_5L_4R_2R_4g_m + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_4\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 4C_5L_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s\left(-C_5R_2R_4 + L_4R_2g_m + 2C_4R_4\right) + s\left(-C_5R_4R_4 + L_4R_4R_4 + L_4R_4R_4\right) + s\left(-C_5R_4R_4 + L_4R_4R_4 +$ 

10.70 INVALID-ORDER-70  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_4C_5L_4L_5R_2R_4s^4 - R_2R_4 + s^3\left(C_4L_4L_5R_2R_4g_m + C_4L_4L_5R_4 - C_5L_4L_5R_2\right) + s^2\left(-C_4L_4R_2R_4 - C_5L_5R_2R_4 + L_4L_5R_2g_m + L_4L_5\right) + s\left(-L_4R_2 + L_5R_2R_4g_m + L_5R_4\right)}{2R_2R_4g_m + 2R_2 + 4R_4 + s^4\left(2C_4C_5L_4L_5R_2R_4g_m + 2C_4L_5R_2 + 4C_5L_4L_5R_2g_m + 2C_4L_4L_5 + 2C_5L_4L_5R_2g_m + 4C_5L_4L_5\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_5L_5R_2R_4g_m + 2C_4L_4R_2 + 4C_5L_4R_3\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_5L_5R_2R_4g_m + 2C_4L_4R_2 + 4C_5L_4R_3\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_5L_5R_2R_4g_m + 2C_4L_4R_3\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4 + 2C_5L_5R_2R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4 + 2C_5L_5R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4 + 2C_5L_5R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4 + 2C_5L_5R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_2R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_4R_4g_m + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_4R_4 + 2C_4L_4R_4\right) + s^2\left(2C_4L_4R_4R_4\right) + s^2\left(2C_4L$ 

10.71 INVALID-ORDER-71  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4L_5R_4\right) + s^3\left(C_4C_5L_4R_2R_4R_5g_m - C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_5L_4R_2R_4g_m + C_5L_4R_2\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 + C_5L_4R_2R_4g_m + C_5L_4R_2 +$ 

10.72 INVALID-ORDER-72  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \infty\right)$ 

 $H(s) = \frac{-C_4C_5L_4L_5R_2R_4R_5s^4 - R_2R_4R_5 + s^3\left(C_4L_4L_5R_2R_4R_5g_m - C_4L_4L_5R_2R_4 + C_4L_4L_5R_4R_5 - C_5L_4L_5R_2R_5\right) + s^2\left(-C_4L_4R_2R_4R_5 - C_5L_5R_2R_4R_5 + L_4L_5R_2R_4R_5 - C_5L_4L_5R_2R_4R_5 - C_5L_4L_5R_2R_4R_5 + L_4L_5R_2R_4R_5 - C_5L_4L_5R_2R_4R_5 + s^4\left(2C_4C_5L_4L_5R_2R_4R_5 + s^4\left(2C_4C_5L_4L_5R_4R_5 + s^4c_4C_5L_4L_5R_4R_5 + s^4c_4C_4L_4L_5R_4R_5 + s^4c_4C_4L_4L_5R_$ 

10.73 INVALID-ORDER-73  $Z(s) = \left(\infty, R_2, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

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10.74 INVALID-ORDER-74 Z(s) = \left(\infty, \ R_2, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)
H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_4C_5L_4L_5R_2R_4R_5g_m - C_4C_5L_4L_5R_2R_4 + C_4C_5L_4L_5R_2R_4 + C_4C_5L_4L_5R_2R_4 + C_5L_4L_5R_2R_4R_5 + c_5L_4L_5R_4R_4R_5 + c_5L_4L_5R_4R_5 + c_5L_4L_5R_4R_4R_5 +
10.75 INVALID-ORDER-75 Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{1}{C_5s}, \infty\right)
                                                                                                                                                                                                                                                                                                                      H(s) = \frac{-C_4C_5L_4R_2R_4s^3 - C_5R_2R_4s + R_2R_4g_m + R_4 + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4\right)}{2R_2g_m + s^3\left(2C_4C_5L_4R_2R_4g_m + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_4\right) + s^2\left(2C_4C_5R_2R_4 + 2C_4L_4R_2g_m + 2C_4L_4\right) + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + s^2\left(2C_4C_5R_4R_4 + 2C_4R_4R_4\right) + s^2\left(2C_4C_5R_4R_4 + 2C_4R_4R_4\right) + s^2\left(2C_4C_5R_4R_4 + 2C_4R_4R_4\right) + s^2\left(2C_4C_5R_4R_4 + 2C_4R_4R_4\right) + s^2\left(2C_4C_5R_4R_4\right) + s^2\left(
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10.76 INVALID-ORDER-76  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{R_5}{C_5R_5s+1}, \infty\right)$ 

 $-C_4C_5L_4R_2R_4R_5s^3 - C_5R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_4L_4R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5\right) \\ -2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(2C_4C_5L_4R_2R_4R_5g_m + 2C_4C_5L_4R_2R_4 + R_5g_m + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_4L_4R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_4L_4R_5\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4\right) + s\left(2C_4R_2R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2$ 

10.77 INVALID-ORDER-77  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $\frac{R_{2}R_{4}g_{m}+R_{4}+s^{3}\left(C_{4}C_{5}L_{4}R_{2}R_{4}R_{5}g_{m}-C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}+C_{4}C_{5}L_{4}R_{2}+C$ 

10.78 INVALID-ORDER-78  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{-C_4C_5L_4R_2R_4s^3 - C_5R_2R_4s + R_2R_4g_m + R_4 + s^4\left(C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4L_5R_4\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 + C_5L_5R_2R_4g_m + C_5L_5R_4\right)}{2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_2 + 4C_4C_5L_5R_2\right) + s^3\left(2C_4C_5L_4R_2R_4g_m + 2C_4C_5L_4R_2 + 4C_4C_5L_5R_4\right) + s^2\left(2C_4C_5R_2R_4 + 2C_4L_4R_2g_m + 2C_4L_4R_2g_m + 2C_4L_4R_2g_m + 2C_4L_4R_2g_m + 2C_4L_4R_2g_m + 2C_4R_4R_4 + 2C_5R_2R_4g_m + 2C_4R_4R_4 + 2C_5R_4R_4 + 2C_4R_4R_4R_4 + 2C_4R_4R_4 +$ 

10.79 INVALID-ORDER-79  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)$ 

 $\frac{-C_4C_5L_4L_5R_2R_4s^4-R_2R_4+s^3\left(C_4L_4L_5R_2R_4g_m+C_4L_4L_5R_4\right)+s^2\left(-C_4L_4R_2R_4-C_5L_5R_2R_4\right)+s\left(L_5R_2R_4g_m+L_5R_4\right)}{2R_2R_4g_m+2R_2+4R_4+s^4\left(2C_4C_5L_4L_5R_2+4C_4C_5L_4L_5R_2+4C_4C_5L_4L_5R_2+4C_4L_4L_5\right)+s^2\left(2C_4L_4R_2R_4g_m+2C_4L_4R_2+4C_4L_4R_4+2C_4L_5R_2R_4g_m+2C_4L_5R_4+2C_5L_5R_2R_4g_m+2C_5L_5R_2+4C_5L_5R_2\right)+s^2\left(2C_4L_4R_2R_4g_m+2C_4L_4R_4+2C_4L_5R_4g_m+2C_4L_5R_4g$ 

10.80 INVALID-ORDER-80  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, L_5s+R_5+\frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4R_2R_4 + R_5g_m - C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4g_m + C_4L_4R_4 + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 + C_5L_5R_4R_4 + C_4C_5L_4R_4 + C_4C_5L_4R_4\right) + s^2\left(C_4C_5L_4R_2R_4g_m + C_4L_4R_4 + C_5L_5R_4R_4 + C_4C_5L_4R_4\right) + s^2\left(C_4C_5L_4R_2R_4g_m + C_4L_4R_4 + C_5L_5R_4R_4\right) + s^2\left(C_4C_5L_4R_2R_4g_m + C_4C_5L_4R_4\right) + s^2\left(C_4C_5L_4R_4R_4 + C_4C_5L_4R_4\right) + s^2\left(C_4C_5R_4R_4R_5 + C_4C_5L_4R_4\right) + s^2\left(C_4C_5L_4R_4R_4 + C_4C_5L_4R_4\right) + s^2\left(C_4C_5L_4R_4R_4 + C_4C_5L_4R_4\right) + s^2\left(C_4C_5L_4R_4R_4\right) + s^2\left(C_4C_5L_4R_4R_5\right) + s^2\left(C_4C_5L_4R_5\right) +$ 

10.81 INVALID-ORDER-81  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

 $-C_4C_5L_4L_5R_2R_4R_5s^2 - R_2R_4R_5 + s^6(C_4L_4L_5R_2R_4R_5g_m - C_4L_4L_5R_2R_4 + C_4L_4L_5R_4R_5) + s^2(-C_4L_4R_2R_4R_5 - C_5L_5R_5g_m + 2R_4R_5g_m + 2R_4R_5 + s^6(2C_4C_5L_4L_5R_2R_4R_5 + s^6(2C_4C_5L_4L_5R_4R_5 + s^6(2C_4C_5L_4R_5R_4R_5 + s^6(2C_4C_5L_4R_5R_5R_4R$ 

10.82 INVALID-ORDER-82  $Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$ 

 $\frac{1621641659m}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^4\left(2C_4C_5L_4L_5R_2R_4g_m + 2C_4C_5L_4L_5R_2 + 4C_4C_5L_4L_5R_2 + 4C_4C_5L_4L_5R$ 

10.83 INVALID-ORDER-83 
$$Z(s) = \left(\infty, R_2, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

 $H(s) = \frac{-C_4C_5L_4R_2R_4R_5s^3 - C_5R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_4C_5L_4L_5R_2R_4R_5g_m - C_4C_5L_4L_5R_2R_4 + R_4R_5 + s^4\left(C_4C_5L_4L_5R_2R_4R_5g_m + 2C_4C_5L_4L_5R_2 + 4C_4C_5L_4L_5R_2 + 4C_4C_5L_4L_5R_2$ 

10.84 INVALID-ORDER-84  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, R_5, \infty\right)$ 

$$H(s) = \frac{C_2 R_4 R_5 s + R_4 R_5 g_m - R_4}{2R_4 g_m + 2R_5 g_m + s \left(4C_2 R_4 + 2C_2 R_5\right) + 2}$$

10.85 INVALID-ORDER-85  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4s^3 + C_5L_5R_4g_ms^2 + R_4g_m + s\left(C_2R_4 - C_5R_4\right)}{2C_2C_5L_5s^3 + 2g_m + s^2\left(4C_2C_5R_4 + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5\right)}$$

**10.86** INVALID-ORDER-86  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{L_5 R_4 g_m s - R_4 + s^2 \left( C_2 L_5 R_4 - C_5 L_5 R_4 \right)}{4 C_2 C_5 L_5 R_4 s^3 + 2 R_4 g_m + s^2 \left( 2 C_2 L_5 + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 \right) + s \left( 4 C_2 R_4 + 2 L_5 g_m \right) + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5 R_5 R_5 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5$$

**10.87** INVALID-ORDER-87  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4s^3 + R_4g_m + s^2\left(C_2C_5R_4R_5 + C_5L_5R_4g_m\right) + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2C_2C_5L_5s^3 + 2g_m + s^2\left(4C_2C_5R_4 + 2C_2C_5R_5 + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5\right)}$$

10.88 INVALID-ORDER-88  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-R_4R_5 + s^2\left(C_2L_5R_4R_5 - C_5L_5R_4R_5\right) + s\left(L_5R_4R_5g_m - L_5R_4\right)}{4C_2C_5L_5R_4R_5s^3 + 2R_4R_5g_m + 2R_5 + s^2\left(4C_2L_5R_4 + 2C_2L_5R_5 + 2C_5L_5R_4R_5g_m + 2C_5L_5R_5\right) + s\left(4C_2R_4R_5 + 2L_5R_4g_m + 2L_5R_5g_m + 2L_5\right)}$$

**10.89** INVALID-ORDER-89  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

10.90 INVALID-ORDER-90  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(C_5L_5R_4R_5g_m - C_5L_5R_4\right) + s\left(C_2R_4R_5 - C_5R_4R_5\right)}{2R_4g_m + 2R_5g_m + s^3\left(4C_2C_5L_5R_4 + 2C_2C_5L_5R_5\right) + s^2\left(4C_2C_5R_4R_5 + 2C_5L_5R_4g_m + 2C_5L_5R_5g_m + 2C_5L_5\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_5R_4R_5g_m + 2C_5R_5\right) + 2\left(4C_2R_4R_5 - C_5R_4R_5g_m + 2C_5R_5\right) + s\left(4C_2R_4R_5 - C_5R_4R_5 - C_5R_4R_5\right) + s\left(4C_2R_4R_5 - C_5R_4R_5g_m + 2C_5R_5\right) + s\left(4C_2R_4R_5 - C_5R_4R_5\right) + s\left(4C_2R_4R_5 - 2C_5R_4R_5\right) + s\left(4C_2R_4R_5 - 2C_5R_5\right) + s\left(4C_2R_5R_5\right) + s\left(4C_2R_5R_5\right)$$

**10.91** INVALID-ORDER-91  $Z(s) = \left(\infty, \frac{1}{C_{2}s}, \infty, \frac{1}{C_{4}s}, \frac{1}{C_{5}s}, \infty\right)$ 

$$H(s) = \frac{g_m + s(C_2 - C_5)}{s^2(2C_2C_4 + 4C_2C_5 + 2C_4C_5) + s(2C_4q_m + 2C_5q_m)}$$

**10.92** INVALID-ORDER-92  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5R_5s^2 + g_m + s\left(C_2 + C_5R_5g_m - C_5\right)}{2C_2C_4C_5R_5s^3 + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.93** INVALID-ORDER-93  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5s^3 + C_5L_5g_ms^2 + g_m + s\left(C_2 - C_5\right)}{2C_2C_4C_5L_5s^4 + 2C_4C_5L_5g_ms^3 + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.94** INVALID-ORDER-94  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{L_5 g_m s + s^2 \left(C_2 L_5 - C_5 L_5\right) - 1}{2g_m + s^3 \left(2C_2 C_4 L_5 + 4C_2 C_5 L_5 + 2C_4 C_5 L_5\right) + s^2 \left(2C_4 L_5 g_m + 2C_5 L_5 g_m\right) + s \left(4C_2 + 2C_4\right)}$$

**10.95** INVALID-ORDER-95  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5s^3 + g_m + s^2\left(C_2C_5R_5 + C_5L_5g_m\right) + s\left(C_2 + C_5R_5g_m - C_5\right)}{2C_2C_4C_5L_5s^4 + s^3\left(2C_2C_4C_5R_5 + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.96** INVALID-ORDER-96  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-R_5 + s^2 \left(C_2 L_5 R_5 - C_5 L_5 R_5\right) + s \left(L_5 R_5 g_m - L_5\right)}{2R_5 g_m + s^3 \left(2C_2 C_4 L_5 R_5 + 4C_2 C_5 L_5 R_5 + 2C_4 C_5 L_5 R_5\right) + s^2 \left(4C_2 L_5 + 2C_4 L_5 R_5 g_m + 2C_4 L_5 + 2C_5 L_5 R_5 g_m\right) + s \left(4C_2 R_5 + 2C_4 R_5 + 2L_5 g_m\right)}$$

10.97 INVALID-ORDER-97  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_5s^3 + R_5g_m + s^2\left(C_2L_5 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 + L_5g_m\right) - 1}{2C_2C_4C_5L_5s^4 + 2g_m + s^3\left(2C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4\right)}$$

10.98 INVALID-ORDER-98  $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_5s^3 + R_5g_m + s^2\left(C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 - C_5R_5\right) - 1}{2C_2C_4C_5L_5S^4 + 2g_m + s^3\left(4C_2C_5L_5 + 2C_4C_5L_5S_{g_m} + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5 + 2C_5L_5g_m\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4 + 2C_5R_5g_m\right)}$$

10.99 INVALID-ORDER-99  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5R_4R_5s^2 + R_4g_m + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2C_2C_4C_5R_4R_5s^3 + 2g_m + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_2C_5R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_4\right) + s\left(2C_2 + 2C_4R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5\right)}$$

**10.100** INVALID-ORDER-100  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4s^3 + C_5L_5R_4g_ms^2 + R_4g_m + s\left(C_2R_4 - C_5R_4\right)}{2C_2C_4C_5L_5R_4s^4 + 2g_m + s^3\left(2C_2C_5L_5 + 2C_4C_5L_5R_4g_m\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_4C_5R_4 + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_4R_4g_m + 2C_5R_4g_m + 2C_5R_4g_m\right)}$$

10.101 INVALID-ORDER-101 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{L_5 R_4 g_m s - R_4 + s^2 \left(C_2 L_5 R_4 - C_5 L_5 R_4\right)}{2 R_4 g_m + s^3 \left(2 C_2 C_4 L_5 R_4 + 4 C_2 C_5 L_5 R_4 + 2 C_4 C_5 L_5 R_4\right) + s^2 \left(2 C_2 L_5 + 2 C_4 L_5 R_4 g_m + 2 C_5 L_5 R_4 g_m + 2 C_5 L_5\right) + s \left(4 C_2 R_4 + 2 C_4 R_4 + 2 L_5 g_m\right) + 2 C_3 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_$$

**10.102** INVALID-ORDER-102  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4s^3 + R_4g_m + s^2\left(C_2C_5R_4R_5 + C_5L_5R_4g_m\right) + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2C_2C_4C_5L_5R_4s^4 + 2g_m + s^3\left(2C_2C_4C_5R_4R_5 + 2C_2C_5L_5 + 2C_4C_5R_4g_m\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_2C_5R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_4 + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_4R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5\right)}$$

**10.103** INVALID-ORDER-103  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-R_4R_5 + s^2\left(C_2L_5R_4R_5 - C_5L_5R_4R_5\right) + s\left(L_5R_4R_5g_m - L_5R_4\right)}{2R_4R_5g_m + 2R_5 + s^3\left(2C_2C_4L_5R_4R_5 + 4C_2C_5L_5R_4R_5\right) + s^2\left(4C_2L_5R_4 + 2C_2L_5R_5 + 2C_4L_5R_4R_5g_m + 2C_5L_5R_4\right) + s\left(4C_2R_4R_5 + 4C_2C_5L_5R_4R_5 + 2C_4C_5L_5R_4R_5\right) + s\left(4C_2R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5\right) + s\left(4C_2R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5\right) + s\left(4C_2R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5\right) + s\left(4C_2R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5\right) + s\left(4C_2R_4R_5 + 2C_4R_4R_5 + 2C_4R_4R_5\right) + s\left(4C_2R_4R_5 + 2C_4R_5R_4\right) + s\left(4C_2R_4R_5 + 2C_4R_5R_4\right) + s\left(4C_2R_4R_5 + 2C_4R_5R_5\right) + s\left(4C_2R_4R_5\right) + s\left(4C_2R_4R_5$$

**10.104** INVALID-ORDER-104  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(C_2L_5R_4 + C_5L_5R_4g_m - C_5L_5R_4\right) + s\left(C_2R_4R_5 + L_5R_4g_m\right)}{2C_2C_4C_5L_5R_4R_5s^4 + 2R_4g_m + 2R_5g_m + s^3\left(2C_2C_4L_5R_4 + 4C_2C_5L_5R_4 + 2C_4C_5L_5R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_4L_5R_4g_m + 2C_5L_5R_4g_m + 2C_5L_5R_4g_m + 2C_5L_5R_4g_m + 2C_5L_5R_4g_m + 2C_5L_5R_4g_m + 2C_4R_4R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_$$

10.105 INVALID-ORDER-105  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_5R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(C_5L_5R_4R_5g_m - C_5L_5R_4\right) + s\left(C_2R_4R_5 - C_5R_4R_5\right)}{2C_2C_4C_5L_5R_4R_5s^4 + 2R_4g_m + 2R_5g_m + s^3\left(4C_2C_5L_5R_4 + 2C_2C_5L_5R_5 + 2C_4C_5L_5R_4\right) + s^2\left(2C_2C_4R_4R_5 + 4C_2C_5R_4R_5 + 2C_4C_5R_4R_5 + 2C_5L_5R_4g_m + 2C_5L_5\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m + 2C_4R_5R_5g_m +$$

**10.106** INVALID-ORDER-106  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{g_m + s^2 \left( C_2 C_4 R_4 - C_4 C_5 R_4 \right) + s \left( C_2 + C_4 R_4 g_m - C_5 \right)}{4 C_2 C_4 C_5 R_4 s^3 + s^2 \left( 2 C_2 C_4 + 4 C_2 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 \right) + s \left( 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.107 INVALID-ORDER-107  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{R_5g_m + s^2\left(C_2C_4R_4R_5 - C_4C_5R_4R_5\right) + s\left(C_2R_5 + C_4R_4R_5g_m - C_4R_4 - C_5R_5\right) - 1}{4C_2C_4C_5R_4R_5s^3 + 2g_m + s^2\left(4C_2C_4R_4 + 2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_5\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4 + 2C_5R_5g_m\right)}$$

10.108 INVALID-ORDER-108  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_4C_5R_4R_5s^3 + g_m + s^2\left(C_2C_4R_4 + C_2C_5R_5 + C_4C_5R_4R_5g_m - C_4C_5R_4\right) + s\left(C_2 + C_4R_4g_m + C_5R_5g_m - C_5\right)}{s^3\left(4C_2C_4C_5R_4 + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.109** INVALID-ORDER-109  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_4C_5L_5R_4s^4 + g_m + s^3\left(C_2C_5L_5 + C_4C_5L_5R_4g_m\right) + s^2\left(C_2C_4R_4 - C_4C_5R_4 + C_5L_5g_m\right) + s\left(C_2 + C_4R_4g_m - C_5\right)}{2C_2C_4C_5L_5s^4 + s^3\left(4C_2C_4C_5R_4 + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.110** INVALID-ORDER-110 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{s^3 \left(C_2 C_4 L_5 R_4 - C_4 C_5 L_5 R_4\right) + s^2 \left(C_2 L_5 + C_4 L_5 R_4 g_m - C_5 L_5\right) + s \left(-C_4 R_4 + L_5 g_m\right) - 1}{4 C_2 C_4 C_5 L_5 R_4 s^4 + 2 g_m + s^3 \left(2 C_2 C_4 L_5 + 4 C_2 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5\right) + s^2 \left(4 C_2 C_4 R_4 + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4\right)}$$

10.111 INVALID-ORDER-111 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_5R_4s^4 + g_m + s^3\left(C_2C_4C_5R_4R_5 + C_2C_5L_5 + C_4C_5L_5R_4g_m\right) + s^2\left(C_2C_4R_4 + C_2C_5R_5 + C_4C_5R_4R_5g_m - C_4C_5R_4 + C_5L_5g_m\right) + s\left(C_2 + C_4R_4g_m + C_5R_5g_m - C_5\right)}{2C_2C_4C_5L_5s^4 + s^3\left(4C_2C_4C_5R_4 + 2C_2C_4C_5R_5 + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.112** INVALID-ORDER-112 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-R_5 + s^3 \left(C_2 C_4 L_5 R_4 R_5 - C_4 C_5 L_5 R_4 R_5\right) + s^2 \left(C_2 L_5 R_5 + C_4 L_5 R_4 R_5 g_m - C_4 L_5 R_4 - C_5 L_5 R_5\right) + s \left(-C_4 R_4 R_5 + L_5 R_5 g_m - L_5\right)}{4 C_2 C_4 C_5 L_5 R_4 R_5 s^4 + 2 R_5 g_m + s^3 \left(4 C_2 C_4 L_5 R_4 + 2 C_2 C_4 L_5 R_5 + 4 C_2 C_5 L_5 R_5 + 2 C_4 C_5 L_5 R_5\right) + s^2 \left(4 C_2 C_4 R_4 R_5 + 4 C_2 L_5 + 2 C_4 L_5 R_5 g_m + 2 C_4 L_5 R_5$$

**10.113** INVALID-ORDER-113 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_5R_4R_5s^4 + R_5g_m + s^3\left(C_2C_4L_5R_4 + C_2C_5L_5R_5 + C_4C_5L_5R_4R_5g_m - C_4C_5L_5R_4\right) + s^2\left(C_2C_4R_4R_5 + C_2L_5 + C_4L_5R_4g_m + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 + C_4R_4R_5g_m - C_4R_4 + L_5g_m\right) - 1}{2g_m + s^4\left(4C_2C_4C_5L_5R_4 + 2C_2C_4C_5L_5R_5\right) + s^3\left(2C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5R_4g_m + 2C_4C_5L_5\right) + s^2\left(4C_2C_4R_4 + 2C_2C_4R_5 + 2C_4L_5g_m + 2C_4C_5L_5g_m\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m\right) + s\left(4C_2 + 2C_4R$$

10.114 INVALID-ORDER-114 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_5R_4R_5s^4 + R_5g_m + s^3\left(C_2C_5L_5R_5 + C_4C_5L_5R_4R_5g_m - C_4C_5L_5R_4\right) + s^2\left(C_2C_4R_4R_5 - C_4C_5R_4R_5 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 + C_4R_4R_5g_m - C_4R_4 - C_5R_5\right) - 1}{2g_m + s^4\left(4C_2C_4C_5L_5R_4 + 2C_2C_4C_5L_5R_5\right) + s^3\left(4C_2C_4C_5L_5R_4g_m + 2C_4C_5L_5R_4g_m + 2C_4C_5L_5\right) + s^2\left(4C_2C_4R_4 + 2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4R_4 + 2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4R_4 + 2C_2C_4R_5 + 4C_2C_5R_5\right) + s\left(4C_2C_4R_4 + 2C_2C_4R_5 + 4C_2C_5R_5\right) + s\left(4C_2C_4R_4 + 2C_2C_4R_5\right) + s\left(4C_2C_4R_4 + 2C_2C_4R_5\right) + s\left(4C_2C_4R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4R_5 + 2C_4C_5R_5\right)$$

**10.115** INVALID-ORDER-115  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)$ 

$$H(s) = \frac{C_2C_4L_4R_5s^3 + C_2R_5s + R_5g_m + s^2\left(C_4L_4R_5g_m - C_4L_4\right) - 1}{4C_2C_4L_4s^3 + 2q_m + s^2\left(2C_2C_4R_5 + 2C_4L_4q_m\right) + s\left(4C_2 + 2C_4R_5q_m + 2C_4\right)}$$

**10.116** INVALID-ORDER-116  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_4 L_4 g_m s^2 + g_m + s^3 \left( C_2 C_4 L_4 - C_4 C_5 L_4 \right) + s \left( C_2 - C_5 \right)}{4 C_2 C_4 C_5 L_4 s^4 + 2 C_4 C_5 L_4 g_m s^3 + s^2 \left( 2 C_2 C_4 + 4 C_2 C_5 + 2 C_4 C_5 \right) + s \left( 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.117 INVALID-ORDER-117  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{R_5 g_m + s^3 \left(C_2 C_4 L_4 R_5 - C_4 C_5 L_4 R_5\right) + s^2 \left(C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_2 R_5 - C_5 R_5\right) - 1}{4 C_2 C_4 C_5 L_4 R_5 s^4 + 2 g_m + s^3 \left(4 C_2 C_4 L_4 + 2 C_4 C_5 L_4 R_5 g_m\right) + s^2 \left(2 C_2 C_4 R_5 + 4 C_2 C_5 R_5 + 2 C_4 C_5 R_5 + 2 C_4 L_4 g_m\right) + s \left(4 C_2 + 2 C_4 R_5 g_m + 2 C_4 + 2 C_5 R_5 g_m\right)}$$

**10.118** INVALID-ORDER-118  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_4C_5L_4R_5s^4 + g_m + s^3\left(C_2C_4L_4 + C_4C_5L_4R_5g_m - C_4C_5L_4\right) + s^2\left(C_2C_5R_5 + C_4L_4g_m\right) + s\left(C_2 + C_5R_5g_m - C_5\right)}{4C_2C_4C_5L_4s^4 + s^3\left(2C_2C_4C_5R_5 + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.119** INVALID-ORDER-119 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5s^5 + C_4C_5L_4L_5g_ms^4 + g_m + s^3\left(C_2C_4L_4 + C_2C_5L_5 - C_4C_5L_4\right) + s^2\left(C_4L_4g_m + C_5L_5g_m\right) + s\left(C_2 - C_5\right)}{s^4\left(4C_2C_4C_5L_4 + 2C_2C_4C_5L_5\right) + s^3\left(2C_4C_5L_4g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.120 INVALID-ORDER-120 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{C_4L_4L_5g_ms^3 + L_5g_ms + s^4\left(C_2C_4L_4L_5 - C_4C_5L_4L_5\right) + s^2\left(C_2L_5 - C_4L_4 - C_5L_5\right) - 1}{4C_2C_4C_5L_4L_5s^5 + 2C_4C_5L_4L_5g_ms^4 + 2g_m + s^3\left(4C_2C_4L_4 + 2C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5\right) + s^2\left(2C_4L_4g_m + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(4C_2 + 2C_4\right)}$$

10.121 INVALID-ORDER-121 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5s^5 + g_m + s^4\left(C_2C_4C_5L_4R_5 + C_4C_5L_4L_5g_m\right) + s^3\left(C_2C_4L_4 + C_2C_5L_5 + C_4C_5L_4R_5g_m - C_4C_5L_4\right) + s^2\left(C_2C_5R_5 + C_4L_4g_m + C_5L_5g_m\right) + s\left(C_2 + C_5R_5g_m - C_5\right)}{s^4\left(4C_2C_4C_5L_4 + 2C_2C_4C_5L_5\right) + s^3\left(2C_2C_4C_5R_5 + 2C_4C_5L_4g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.122 INVALID-ORDER-122 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

10.123 INVALID-ORDER-123 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5R_5s^5 + R_5g_m + s^4\left(C_2C_4L_4L_5 + C_4C_5L_4L_5R_5g_m - C_4C_5L_4L_5\right) + s^3\left(C_2C_4L_4R_5 + C_2C_5L_5R_5 + C_4L_4L_5g_m\right) + s^2\left(C_2L_5 + C_4L_4R_5g_m - C_4L_4 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 + L_5g_m\right) - 1}{4C_2C_4C_5L_4L_5s^5 + 2g_m + s^4\left(2C_2C_4C_5L_5R_5 + 2C_4C_5L_4L_5g_m\right) + s^3\left(4C_2C_4L_4 + 2C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 2C_4L_4g_m + 2C_4L_5g_m\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 2C_4L_4g_m + 2C_4L_5g_m\right) + s^2\left(2C_4C_5L_5R_5 + 2C_4C_5L_5R_5 + 2C_4C_5L_5R_5g_m\right) + s^2\left(2C_4C_5L_5R_5 + 2C_4C_5L_5R_5 + 2C_4C_5L_5R_5g_m\right) + s^2\left(2C_4C_5L_5R_5 + 2C_4C_5L_5R_5 + 2C_4C_5L_5R_5g_m\right) + s^2\left(2C_4C_5L_5R_5 + 2C_4C_5L_5R_5g_m\right) + s^2\left(2C_4C_5L_5R_5g_m\right) + s^2\left(2C_4C_5L_5R_5$$

10.124 INVALID-ORDER-124 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5R_5s^5 + R_5g_m + s^4\left(C_4C_5L_4L_5R_5g_m - C_4C_5L_4L_5\right) + s^3\left(C_2C_4L_4R_5 + C_2C_5L_5R_5 - C_4C_5L_4R_5\right) + s^2\left(C_4L_4R_5g_m - C_4L_4 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 - C_5R_5\right) - 1}{4C_2C_4C_5L_4L_5s^5 + 2g_m + s^4\left(4C_2C_4C_5L_4R_5 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5L_4R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5g_m + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5g_m + 2C_4C_5R_5\right) + s\left(4C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5g_m + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4C_5R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4R_5 + 2C_4C_5R_5\right) + s\left(4C_2C_4R_5R_5\right) + s\left(4C_2C_4R_5 + 2C_4C_5R_5\right) + s\left(4C_4C_5R_5 + 2C_4C$$

10.125 INVALID-ORDER-125  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$ 

**10.126** INVALID-ORDER-126  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{L_4 g_m s + s^2 \left(C_2 L_4 - C_5 L_4\right)}{2 g_m + s^3 \left(2 C_2 C_4 L_4 + 4 C_2 C_5 L_4 + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s \left(2 C_2 + 2 C_5\right)}$$

10.127 INVALID-ORDER-127 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

10.128 INVALID-ORDER-128 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_4R_5s^3 + L_4g_ms + s^2\left(C_2L_4 + C_5L_4R_5g_m - C_5L_4\right)}{2C_2C_4C_5L_4R_5s^4 + 2g_m + s^3\left(2C_2C_4L_4 + 4C_2C_5L_4 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4\right) + s^2\left(2C_2C_5R_5 + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_2 + 2C_5R_5g_m + 2C_5\right)}{2C_2C_4C_5L_4R_5s^4 + 2g_m + s^3\left(2C_2C_4L_4 + 4C_2C_5L_4 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4\right) + s^2\left(2C_2C_5R_5 + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_2 + 2C_5R_5g_m + 2C_5\right)}$$

10.129 INVALID-ORDER-129 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

10.130 INVALID-ORDER-130 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{L_4 L_5 g_m s^2 - L_4 s + s^3 \left(C_2 L_4 L_5 - C_5 L_4 L_5\right)}{s^4 \left(2 C_2 C_4 L_4 L_5 + 4 C_2 C_5 L_4 L_5 + 2 C_4 C_5 L_4 L_5\right) + s^3 \left(2 C_4 L_4 L_5 g_m + 2 C_5 L_4 L_5 g_m\right) + s^2 \left(4 C_2 L_4 + 2 C_2 L_5 + 2 C_4 L_4 + 2 C_5 L_5\right) + s \left(2 L_4 g_m + 2 L_5 g_m\right) + 2 C_5 L_4 L_5 g_m}$$

10.131 INVALID-ORDER-131 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_4L_5s^4 + L_4g_ms + s^3\left(C_2C_5L_4R_5 + C_5L_4L_5g_m\right) + s^2\left(C_2L_4 + C_5L_4R_5g_m - C_5L_4\right)}{2C_2C_4C_5L_4L_5s^5 + 2g_m + s^4\left(2C_2C_4C_5L_4R_5 + 2C_4C_5L_4L_5g_m\right) + s^3\left(2C_2C_4L_4 + 4C_2C_5L_4 + 2C_2C_5L_5 + 2C_4C_5L_4\right) + s^2\left(2C_2C_5R_5 + 2C_4L_4g_m + 2C_5L_4g_m + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_5g_m + 2C_5\right)}$$

10.132 INVALID-ORDER-132 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-L_4R_5s + s^3\left(C_2L_4L_5R_5 - C_5L_4L_5R_5\right) + s^2\left(L_4L_5R_5g_m - L_4L_5\right)}{2R_5 + s^4\left(2C_2C_4L_4L_5R_5 + 4C_2C_5L_4L_5R_5 + 2C_4C_5L_4L_5R_5\right) + s^3\left(4C_2L_4L_5 + 2C_4L_4L_5 + 2C_5L_4L_5R_5g_m\right) + s^2\left(4C_2L_4R_5 + 2C_4L_4R_5 + 2C_5L_5R_5 + 2L_4L_5g_m\right) + s\left(2L_4R_5g_m + 2L_5R_5g_m + 2L_5R_5g_m\right) + s^2\left(4C_2L_4R_5 + 2C_4L_4R_5 + 2C_5L_5R_5 + 2L_4L_5g_m\right) + s\left(2L_4R_5g_m + 2L_5R_5g_m + 2L_5R_5g_m\right) + s\left(2L_4R_5g_m +$$

10.133 INVALID-ORDER-133 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_4L_5R_5s^4 + s^3\left(C_2L_4L_5 + C_5L_4L_5R_5g_m - C_5L_4L_5\right) + s^2\left(C_2L_4R_5 + L_4L_5g_m\right) + s\left(L_4R_5g_m - L_4\right)}{2C_2C_4C_5L_4L_5R_5s^5 + 2R_5g_m + s^4\left(2C_2C_4L_4L_5 + 4C_2C_5L_4L_5 + 2C_4C_5L_4L_5\right) + s^3\left(2C_2C_4L_4R_5 + 2C_4C_5L_4L_5g_m\right) + s^2\left(4C_2L_4 + 2C_2L_5 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_5L_5R_5g_m + 2C_5L_5\right) + s\left(2C_2R_5 + 2L_4g_m + 2L_5R_5g_m\right) + s\left(2C_2R_5 + 2L_4R_5g_m\right) + s\left(2C_2R_5$$

10.134 INVALID-ORDER-134 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_4L_5R_5s^4 + s^3\left(C_5L_4L_5R_5g_m - C_5L_4L_5\right) + s^2\left(C_2L_4R_5 - C_5L_4R_5\right) + s\left(L_4R_5g_m - L_4\right)}{2C_2C_4C_5L_4L_5R_5s^5 + 2R_5g_m + s^4\left(4C_2C_5L_4L_5 + 2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4R_5 + 4C_2C_5L_4R_5 + 2C_2C_5L_5R_5 + 2C_4C_5L_4R_5 + 2C_4C_5L_4R_5g_m + 2C_4L_4 + 2C_5L_4R_5g_m + 2C_5L_5R_5g_m + 2C_5L_5\right) + s\left(2C_2R_5 + 2C_5R_5\right)}$$

**10.135** INVALID-ORDER-135  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$ 

$$H(s) = \frac{C_2C_4L_4R_5s^3 + R_5g_m + s^2\left(C_2C_4R_4R_5 + C_4L_4R_5g_m - C_4L_4\right) + s\left(C_2R_5 + C_4R_4R_5g_m - C_4R_4\right) - 1}{4C_2C_4L_4s^3 + 2g_m + s^2\left(4C_2C_4R_4 + 2C_2C_4R_5 + 2C_4L_4g_m\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4\right)}$$

**10.136** INVALID-ORDER-136 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^3 \left( C_2 C_4 L_4 - C_4 C_5 L_4 \right) + s^2 \left( C_2 C_4 R_4 - C_4 C_5 R_4 + C_4 L_4 g_m \right) + s \left( C_2 + C_4 R_4 g_m - C_5 \right)}{4 C_2 C_4 C_5 L_4 s^4 + s^3 \left( 4 C_2 C_4 C_5 R_4 + 2 C_4 C_5 L_4 g_m \right) + s^2 \left( 2 C_2 C_4 + 4 C_2 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 \right) + s \left( 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.137 INVALID-ORDER-137 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

10.138 INVALID-ORDER-138 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4R_5s^4 + g_m + s^3\left(C_2C_4C_5R_4R_5 + C_2C_4L_4 + C_4C_5L_4R_5g_m - C_4C_5L_4\right) + s^2\left(C_2C_4R_4 + C_2C_5R_5 + C_4C_5R_4R_5g_m - C_4C_5R_4 + C_4L_4g_m\right) + s\left(C_2 + C_4R_4g_m + C_5R_5g_m - C_5\right)}{4C_2C_4C_5L_4s^4 + s^3\left(4C_2C_4C_5R_4 + 2C_2C_4C_5R_5 + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.139 INVALID-ORDER-139 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5s^5 + g_m + s^4\left(C_2C_4C_5L_5R_4 + C_4C_5L_4L_5g_m\right) + s^3\left(C_2C_4L_4 + C_2C_5L_5 - C_4C_5L_4 + C_4C_5L_5R_4g_m\right) + s^2\left(C_2C_4R_4 - C_4C_5R_4 + C_4L_4g_m + C_5L_5g_m\right) + s\left(C_2 + C_4R_4g_m - C_5\right)}{s^4\left(4C_2C_4C_5L_4 + 2C_2C_4C_5L_5\right) + s^3\left(4C_2C_4C_5R_4 + 2C_4C_5L_4g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

**10.140** INVALID-ORDER-140 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{s^4 \left(C_2 C_4 L_4 L_5 - C_4 C_5 L_4 L_5\right) + s^3 \left(C_2 C_4 L_5 R_4 - C_4 C_5 L_5 R_4 + C_4 L_4 L_5 g_m\right) + s^2 \left(C_2 L_5 - C_4 L_4 + C_4 L_5 R_4 g_m - C_5 L_5\right) + s \left(-C_4 R_4 + L_5 g_m\right) - 1}{4 C_2 C_4 C_5 L_4 L_5 s^5 + 2 g_m + s^4 \left(4 C_2 C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(4 C_2 C_4 L_4 + 2 C_2 C_4 L_5 + 4 C_2 C_5 L_5 + 2 C_4 C_5 L_5 R_4 g_m + 2 C_4 C_5 L_5\right) + s^2 \left(4 C_2 C_4 R_4 + 2 C_4 L_5 g_m + 2 C_5 L_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 L_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 L_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 L_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 L_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m\right) + s \left(4 C_2 + 2 C_4 R$$

**10.141** INVALID-ORDER-141 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5s^5 + g_m + s^4\left(C_2C_4C_5L_4R_5 + C_2C_4C_5L_4R_5 + C_2C_4C_5L_4R_5 + C_2C_4C_5L_4R_5 + C_2C_4L_4 + C_2C_5L_5 + C_4C_5L_4R_5g_m - C_4C_5L_4 + C_4C_5L_4R_5g_m - C_4C_5R_4 + C_4C_5R_4R_5g_m - C_4C_5R_4 + C_4C_5R_4g_m + C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5R_5 + 2C_4C_5R_4g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_4g_m + 2C_4C_5R_4g_m + 2C_4C_5R_4g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right)$$

10.142 INVALID-ORDER-142 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

10.143 INVALID-ORDER-143 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5R_5s^5 + R_5g_m + s^4\left(C_2C_4C_5L_5R_4R_5 + C_2C_4L_4L_5 + C_4C_5L_4L_5R_5g_m - C_4C_5L_4L_5\right) + s^3\left(C_2C_4L_4R_5 + C_2C_4L_5R_4 + C_2C_5L_5R_5 + C_4C_5L_5R_4 + C_4L_4L_5g_m\right) + s^2\left(C_2C_4R_4R_5 + C_2L_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_2C_4R_4R_5 + C_2L_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_2C_4R_4R_5 + C_2L_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_2C_4R_4R_5 + C_2L_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_2C_4R_4R_5 + C_2L_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_2C_4R_4R_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_2C_4R_4R_5 + C_4L_4R_5g_m - C_4L_4 + C_4L_5R_4g_m + C_5L_5R_5\right) + s^2\left(C_4C_5L_5R_5 + C_4C_5L_5R_5 + C_4C_5L_5R_5\right) + s^2\left(C_4C_5L_5R_5 + C_4C_5L_5R_5 + C_4C_5L_5R_5\right) + s^2\left(C_4C_5L_5R_5 + C_4C_5L_5R_5\right) + s^2\left(C_4C_5L_5R_5\right) + s^2\left(C_5C_5L_5R_5\right) +$$

10.144 INVALID-ORDER-144 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5R_5s^5 + R_5g_m + s^4\left(C_2C_4C_5L_5R_4R_5 + C_4C_5L_4L_5R_5g_m - C_4C_5L_4L_5\right) + s^3\left(C_2C_4L_4R_5 + C_2C_5L_5R_5 - C_4C_5L_4R_5 + C_4C_5L_4R_5 + C_4C_5L_4R_5 - C_4C_5L_4R_5$$

10.145 INVALID-ORDER-145 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right)$$

$$H(s) = \frac{C_2L_4R_4R_5s^2 + s\left(L_4R_4R_5g_m - L_4R_4\right)}{2C_2C_4L_4R_4R_5s^3 + 2R_4R_5g_m + 2R_4 + s^2\left(4C_2L_4R_4 + 2C_2L_4R_5 + 2C_4L_4R_4R_5g_m + 2C_4L_4R_4\right) + s\left(2C_2R_4R_5 + 2L_4R_4g_m + 2L_4R_5g_m + 2L_5g_m + 2L_5g_m$$

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10.146 INVALID-ORDER-146 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                            H(s) = \frac{L_4 R_4 g_m s + s^2 \left(C_2 L_4 R_4 - C_5 L_4 R_4\right)}{2 R_4 g_m + s^3 \left(2 C_2 C_4 L_4 R_4 + 4 C_2 C_5 L_4 R_4 + 2 C_4 C_5 L_4 R_4\right) + s^2 \left(2 C_2 L_4 + 2 C_4 L_4 R_4 g_m + 2 C_5 L_4 R_4 g_m + 2 C_5 L_4\right) + s \left(2 C_2 R_4 + 2 C_5 R_4 + 2 L_4 g_m\right)}
10.147 INVALID-ORDER-147 Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)
                                                                            H(s) = \frac{s^2 \left( C_2 L_4 R_4 R_5 - C_5 L_4 R_4 R_5 \right) + s \left( L_4 R_4 R_5 g_m - L_4 R_4 \right)}{2 R_4 R_5 g_m + 2 R_4 + s^3 \left( 2 C_2 C_4 L_4 R_4 R_5 + 4 C_2 C_5 L_4 R_4 R_5 \right) + s^2 \left( 4 C_2 L_4 R_4 + 2 C_2 L_4 R_5 + 2 C_4 L_4 R_4 R_5 g_m + 2 C_5 L_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 + 2 L_4 R_4 g_m + 2 L_4 R_5 g_m + 2 C_4 L_4 R_4 R_5 g_m + 2 C_5 L_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 + 2 C_5 R_4 R_5 + 2 C_4 R_4 R_5 g_m + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 + 2 C_5 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 + 2 C_5 R_4 R_5 \right) + s \left( 2 C_2 R_4 R_5 \right) + s 
10.148 INVALID-ORDER-148 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
                    H(s) = \frac{C_2C_5L_4R_4R_5s^3 + L_4R_4g_ms + s^2\left(C_2L_4R_4 + C_5L_4R_4g_m - C_5L_4R_4\right)}{2C_2C_4C_5L_4R_4R_5s^4 + 2R_4g_m + s^3\left(2C_2C_4L_4R_4 + 4C_2C_5L_4R_4 + 2C_4C_5L_4R_4\right) + s^2\left(2C_2C_5R_4R_5 + 2C_4L_4R_4g_m + 2C_5L_4R_4g_m + 2C_5L_4R_5g_m + 2C_5L_4R_5g_m + 2C_5R_4R_5g_m + 2C_5R_5R_5g_m + 2C_5R
10.149 INVALID-ORDER-149 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)
             H(s) = \frac{C_2C_5L_4L_5R_4s^4 + C_5L_4L_5R_4g_ms^3 + L_4R_4g_ms + s^2\left(C_2L_4R_4 - C_5L_4R_4\right)}{2C_2C_4C_5L_4L_5R_4g_m + s^4\left(2C_2C_5L_4L_5 + 2C_4C_5L_4L_5R_4g_m\right) + s^3\left(2C_2C_4L_4R_4 + 4C_2C_5L_4R_4 + 2C_4C_5L_4R_4 + 2C_5L_4L_5g_m\right) + s^2\left(2C_2L_4 + 2C_4L_4R_4g_m + 2C_5L_4R_4g_m + 2C_5L_4R_4g_m\right) + s^2\left(2C_2L_4 + 2C_4L_4R_4g_m + 2C_5L_4R_4g_m\right) + s^2\left(2C_2L_4R_4 + 2C_5L_4R_4g_m + 2C_5L_4R_4g_m\right) + s^2\left(2C_2L_4R_4 + 2C_5L_4R_4g_m\right) + s^2\left(2C_2L_4R_4 + 2C_5L_4R_4g_m\right) + s^2\left(2C_2L_4R_4 + 2C_4L_4R_4g_m\right) + s^2\left(2C_2L_4R_4 + 2C_4L_4R_4g_m\right) + s^2\left(2C_4L_4R_4 + 2C_4L_4R_4g_m\right) + s^2\left(2C_
10.150 INVALID-ORDER-150 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                        H(s) = \frac{L_4 L_5 R_4 g_m s^2 - L_4 R_4 s + s^3 \left(C_2 L_4 L_5 R_4 - C_5 L_4 L_5 R_4\right)}{2 R_4 + s^4 \left(2 C_2 C_4 L_4 L_5 R_4 + 4 C_2 C_5 L_4 L_5 R_4 + 2 C_4 L_4 L_5 R_4\right) + s^3 \left(2 C_2 L_4 L_5 + 2 C_4 L_4 L_5 R_4 g_m + 2 C_5 L_4 L_5\right) + s^2 \left(4 C_2 L_4 R_4 + 2 C_2 L_5 R_4 + 2 C_4 L_4 L_5 g_m\right) + s \left(2 L_4 R_4 g_m + 2 L_4 + 2 L_5 R_4 g_m\right)}
10.151 INVALID-ORDER-151 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{C_2C_5L_4L_5R_4s^4 + L_4R_4g_ms + s^3\left(C_2C_5L_4R_4R_5 + C_5L_4L_5R_4g_m\right) + s^2\left(C_2L_4R_4 + C_5L_4R_4R_5g_m - C_5L_4R_4\right)}{2C_2C_4C_5L_4L_5R_4s^5 + 2R_4g_m + s^4\left(2C_2C_4C_5L_4R_4 + 2C_4C_5L_4R_4 + 2C_2C_5L_4R_5 + 2C_4C_5L_4R_4 + 2C_5L_4R_4R_5g_m + 2C_4C_5L_4R_4 + 2C_5L_4R_4R_5g_m + 2C_4C_5L_4R_4 + 2C_5L_4R_4 + 2C_5L_4R_4R_5g_m + 2C_4C_5L_4R_4 + 2C_5L_4R_4 + 2C_5L_4R
10.152 INVALID-ORDER-152 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
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 $-L_{4}R_{4}R_{5}s + s^{3}\left(C_{2}L_{4}L_{5}R_{4}R_{5} - C_{5}L_{4}L_{5}R_{4}R_{5}\right) + s^{2}\left(L_{4}L_{5}R_{4}R_{5}g_{m} - L_{4}L_{5}R_{4}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5} + 4C_{2}C_{5}L_{4}L_{5}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) + s^{3}\left(4C_{2}L_{4}L_{5}R_{4} + 2C_{2}L_{4}L_{5}R_{4} + 2C_{5}L_{4}L_{5}R_{4}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5} + 4C_{2}C_{5}L_{4}L_{5}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) + s^{2}\left(4C_{2}L_{4}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5} + 4C_{2}C_{5}L_{4}L_{5}R_{4}R_{5}\right) + s^{2}\left(4C_{2}L_{4}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5} + 4C_{2}C_{5}L_{4}L_{5}R_{4}R_{5}\right) + s^{2}\left(4C_{2}L_{4}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5} + 4C_{2}C_{5}L_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{5}R_{4}R_{5} + 2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{2}C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left(2C_{4}L_{5}R_{4}R_{5}\right) \\ -2R_{4}R_{5} + s^{4}\left($ 

10.153 INVALID-ORDER-153  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{C_2C_5L_4L_5R_4R_5s^4 + s^3\left(C_2L_4L_5R_4 + C_5L_4L_5R_4g_m - C_5L_4L_5R_4\right) + s^2\left(C_2L_4R_4R_5 + L_4L_5R_4g_m\right) + s\left(L_4R_5R_4R_5s^4 + s^3\left(C_2L_4L_5R_4R_5s^4 + s^3\left(C_2L_4L_5R_4R_5s^4 + c_5L_4L_5R_4g_m - C_5L_4L_5R_4\right) + s^2\left(C_2L_4R_4R_5 + L_4L_5R_4g_m\right) + s\left(L_4R_5R_4R_5s^4 + s^3\left(C_2L_4L_5R_4R_5s^4 + s^3\left(C_2L_4L_5R_4R_5s^4 + c_5L_4L_5R_4g_m + 2C_5L_4L_5R_4\right) + s^2\left(C_2L_4R_4R_5s^4 + c_5L_4L_5R_4s^4 + c_5L$ 

10.154 INVALID-ORDER-154  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 

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10.155 INVALID-ORDER-155 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
                                                                                                                                                                                                                                                                         H(s) = \frac{C_2C_4L_4R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(C_2L_4R_5 + C_4L_4R_4R_5g_m - C_4L_4R_4\right) + s\left(C_2R_4R_5 + L_4R_5g_m - L_4\right)}{2R_4g_m + 2R_5g_m + s^3\left(4C_2C_4L_4R_4 + 2C_2C_4L_4R_5\right) + s^2\left(4C_2L_4 + 2C_4L_4R_4g_m + 2C_4L_4R_5g_m + 2C_4L_4\right) + s\left(4C_2R_4 + 2C_2R_5 + 2L_4g_m\right) + 2C_4R_5g_m + 2C_4R
10.156 INVALID-ORDER-156 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                             H(s) = \frac{R_4 g_m + s^3 \left(C_2 C_4 L_4 R_4 - C_4 C_5 L_4 R_4\right) + s^2 \left(C_2 L_4 + C_4 L_4 R_4 g_m - C_5 L_4\right) + s \left(C_2 R_4 - C_5 R_4 + L_4 g_m\right)}{4 C_2 C_4 C_5 L_4 R_4 s^4 + 2 q_m + s^3 \left(2 C_2 C_4 L_4 + 4 C_2 C_5 L_4 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4\right) + s^2 \left(4 C_2 C_5 R_4 + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s \left(2 C_2 + 2 C_5 R_4 g_m + 2 C_5 L_4 R_4 g_m\right)}
10.157 INVALID-ORDER-157 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_4 L_4 R_4 R_5 - C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(C_2 L_4 R_5 + C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 - C_5 L_4 R_5\right) + s \left(C_2 R_4 R_5 - C_5 R_4 R_5 + L_4 R_5 g_m - L_4\right)}{4 C_2 C_4 C_5 L_4 R_4 R_5 s^4 + 2 R_4 g_m + 2 R_5 g_m + s^3 \left(4 C_2 C_4 L_4 R_5 + 4 C_2 C_5 L_4 R_5 + 2 C_4 C_5 L_4 R_5\right) + s^2 \left(4 C_2 C_5 R_4 R_5 + 4 C_2 L_4 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_
10.158 INVALID-ORDER-158 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                         H(s) = \frac{C_2C_4C_5L_4R_4R_5s^4 + R_4g_m + s^3\left(C_2C_4L_4R_4 + C_2C_5L_4R_5 + C_4C_5L_4R_4Sg_m - C_4C_5L_4R_4\right) + s^2\left(C_2C_5R_4R_5 + C_2L_4 + C_4L_4R_4g_m + C_5L_4R_5g_m - C_5L_4\right) + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4 + L_4g_m\right)}{2g_m + s^4\left(4C_2C_4C_5L_4R_4 + 2C_2C_4C_5L_4R_5\right) + s^3\left(2C_2C_4L_4 + 4C_2C_5L_4 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_2C_5R_5 + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5R_5g_m + 2C_5R_5g_m\right)}
10.159 INVALID-ORDER-159 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                      H(s) = \frac{C_2C_4C_5L_4L_5R_4s^5 + R_4g_m + s^4\left(C_2C_5L_4L_5 + C_4C_5L_4L_5R_4g_m\right) + s^3\left(C_2C_4L_4R_4 + C_2C_5L_5R_4 - C_4C_5L_4R_4 + C_5L_4L_5g_m\right) + s^2\left(C_2L_4 + C_4L_4R_4g_m - C_5L_4 + C_5L_5R_4g_m\right) + s\left(C_2R_4 - C_5R_4 + L_4g_m\right)}{2C_2C_4C_5L_4L_5s^5 + 2g_m + s^4\left(4C_2C_4C_5L_4R_4 + 2C_4C_5L_4L_5g_m\right) + s^3\left(2C_2C_4L_4 + 4C_2C_5L_4 + 2C_2C_5L_5 + 2C_4C_5L_4R_4g_m + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_4L_4g_m + 2C_5L_4g_m + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5L_4g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_4C_5R_4 + 2C_4C_5R_4g_m\right) + s\left(2C_4C_5R_4g_m\right) + 
10.160 INVALID-ORDER-160 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                       10.161 INVALID-ORDER-161 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{C_2C_4C_5L_4L_5R_4s^5 + R_4g_m + s^4\left(C_2C_4C_5L_4R_4R_5 + C_2C_5L_4L_5 + C_4C_5L_4R_4 + C_2C_5L_4R_5 + C_2C_5L_4R_
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$$H(s) = \frac{C_2C_4C_5L_4L_5R_4s^5 + R_4g_m + s^4\left(C_2C_4C_5L_4R_4R_5 + C_2C_5L_4L_5 + C_4C_5L_4R_5 + C_2C_5L_4R_5 + C_2C_5L_4R_$$

10.162 INVALID-ORDER-162 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-R_4R_5 + s^4 \left(C_2C_4L_4L_5R_4R_5 - C_4C_5L_4L_5R_4R_5 - C_4C_5L_4L_5R_4R_5 - C_4L_4L_5R_4R_5g_m - C_4L_4L_5R_4 - C_5L_4L_5R_5\right) + s^2 \left(C_2L_5R_4R_5 - C_4L_4R_4R_5 - C_5L_5R_4R_5 - C_4L_4R_4R_5 - C_5L_5R_4R_5 - C_4L_4R_5R_5 - C_4L_4R$$

**10.163** INVALID-ORDER-163 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5R_4R_5s^5 + R_4R_5g_m - R_4 + s^4\left(C_2C_4L_4L_5R_4 + C_2C_5L_4L_5R_5 + C_4C_5L_4L_5R_4 + C_2C_5L_4L_5R_4 + C_2C_$$

10.164 INVALID-ORDER-164 
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_4L_5R_4R_5s^5 + R_4R_5g_m - R_4 + s^4\left(C_2C_5L_4L_5R_5 + C_4C_5L_4L_5R_4\right) + s^3\left(C_2C_4L_4R_4R_5 + C_2C_5L_5R_4R_5 - C_4C_5L_4R_4R_5 + C_5L_4L_5R_5g_m - C_5L_4L_5\right)}{2R_4g_m + 2R_5g_m + s^5\left(4C_2C_4C_5L_4L_5R_4 + 2C_2C_4C_5L_4L_5R_5\right) + s^4\left(4C_2C_4C_5L_4L_5R_5 + 2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4L_5\right) + s^3\left(4C_2C_4L_4R_4 + 2C_2C_4L_4R_5 + 4C_2C_5L_4R_5 + 4C_2C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4L_5\right) + s^4\left(4C_2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4L_5\right) + s^4\left(4C_2C_4C_5L_4R_5 + 4C_2C_5L_4L_5\right) + s^4\left(4C_2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4L_5\right) + s^4\left(4C_2C_4C_5L_4L_5R_5g_m + 2C_4C_5L_4L_5\right) + s^4\left(4C_2C_4C_5L_4R_5 + 4C_2C_5L_4L_5\right) + s^4\left(4C_2C_4C_5L_4R_5 + 4C_2C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4R_5 + 4C_2C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4R_5\right) + s^4\left(4C_2C_4C_5L_4R_5\right) + s^4\left(4C_2C_5L_4R_5\right) + s^4\left$$

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H(s) = \frac{C_2C_4L_4R_4R_5s^3 + C_2R_4R_5s + R_4R_5g_m - R_4 + s^2\left(C_4L_4R_4R_5g_m - C_4L_4R_4\right)}{2R_4g_m + 2R_5g_m + s^3\left(4C_2C_4L_4R_4 + 2C_2C_4L_4R_5\right) + s^2\left(2C_2C_4R_4R_5 + 2C_4L_4R_4g_m + 2C_4L_4R_5g_m + 2C_4L_4\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_5g_m +
 10.166 INVALID-ORDER-166 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                    H(s) = \frac{C_4 L_4 R_4 g_m s^2 + R_4 g_m + s^3 \left(C_2 C_4 L_4 R_4 - C_4 C_5 L_4 R_4\right) + s \left(C_2 R_4 - C_5 R_4\right)}{4 C_2 C_4 C_5 L_4 R_4 s^4 + 2 g_m + s^3 \left(2 C_2 C_4 L_4 + 2 C_4 C_5 L_4 R_4 g_m + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_2 C_4 R_4 + 4 C_2 C_5 R_4 + 2 C_4 C_5 R_4 + 2 C_4 L_4 g_m\right) + s \left(2 C_2 + 2 C_4 R_4 g_m + 2 C_5 R_4 g_m + 2 C_5 R_4 g_m\right)}
 10.167 INVALID-ORDER-167 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
 H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_4 L_4 R_4 R_5 - C_4 C_5 L_4 R_4 R_5\right) + s^2 \left(C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4\right) + s \left(C_2 R_4 R_5 - C_5 R_4 R_5\right)}{4 C_2 C_4 C_5 L_4 R_4 R_5 s^4 + 2 R_4 g_m + 2 R_5 g_m + s^3 \left(4 C_2 C_4 L_4 R_4 + 2 C_2 C_4 L_4 R_5 g_m + 2 C_4 C_5 L_4 R_5\right) + s^2 \left(2 C_2 C_4 R_4 R_5 + 4 C_2 C_5 R_4 R_5 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_
 10.168 INVALID-ORDER-168 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
 H(s) = \frac{C_2C_4C_5L_4R_4R_5s^4 + R_4g_m + s^3\left(C_2C_4L_4R_4 + C_4C_5L_4R_4g_m - C_4C_5L_4R_4\right) + s^2\left(C_2C_5R_4R_5 + C_4L_4R_4g_m\right) + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2g_m + s^4\left(4C_2C_4C_5L_4R_4 + 2C_2C_4C_5L_4R_5\right) + s^3\left(2C_2C_4C_5R_4R_5 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s\left(2C_2C_4R_4 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_4\right) + s\left(2C_2C_4R_4 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_4\right) + s\left(2C_2C_4R_4 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_4\right) + s\left(2C_2C_4R_4 + 2C_4C_5R_4\right) + s\left(2C_2C_4R_4\right) +
 10.169 INVALID-ORDER-169 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4(C_4 L_4 s^2 + 1)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
 H(s) = \frac{C_2C_4C_5L_4L_5R_4s^5 + C_4C_5L_4L_5R_4g_ms^4 + R_4g_m + s^3\left(C_2C_4L_4R_4 + C_2C_5L_5R_4 - C_4C_5L_4R_4\right) + s^2\left(C_4L_4R_4g_m + C_5L_5R_4g_m\right) + s\left(C_2R_4 - C_5R_4\right)}{2C_2C_4C_5L_4L_5s^5 + 2g_m + s^4\left(4C_2C_4C_5L_4R_4 + 2C_4C_5L_4R_4 + 2C_4C_5L_4R_4g_m + 2C_4C_5R_4g_m + 2C_4C_5R
 10.170 INVALID-ORDER-170 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
 H(s) = \frac{C_4L_4L_5R_4g_ms^3 + L_5R_4g_ms - R_4 + s^4\left(C_2C_4L_4L_5R_4 - C_4C_5L_4L_5R_4\right) + s^2\left(C_2L_5R_4 - C_4L_4R_4 - C_5L_5R_4\right)}{4C_2C_4C_5L_4L_5R_4g_m + s^4\left(2C_2C_4L_4L_5 + 2C_4C_5L_4L_5\right) + s^3\left(4C_2C_4L_4R_4 + 2C_2C_4L_5R_4 + 4C_2C_5L_5R_4 + 2C_4L_4L_5g_m\right) + s^2\left(2C_2L_5 + 2C_4L_4R_4g_m + 2C_4L_4 + 2C_4L_5R_4g_m + 2C_5L_5\right) + s\left(4C_2R_4 + 2C_4R_4R_4g_m + 2C_4L_4R_4g_m + 2C_4L_4R_4g_m
 10.171 INVALID-ORDER-171 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
 H(s) = \frac{C_2C_4C_5L_4L_5R_4s^5 + R_4g_m + s^4\left(C_2C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5g_m - C_4C_5L_4R_4\right) + s^2\left(C_2C_5R_4R_5 + C_4L_4R_4g_m + C_5L_5R_4g_m\right) + s\left(C_2C_4C_5L_4R_5 + C_4C_5L_4R_4g_m + C_5L_5R_4g_m\right) + s\left(C_2C_4C_5L_4R_5 + C_4C_5L_4R_5g_m + s^4\left(4C_2C_4C_5L_4R_4 + 2C_2C_5L_5R_4 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m + 2C_4C_5L_4R_5g_m\right) + s^2\left(2C_4C_5R_4R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5L_4R_5g_m\right) + s^2\left(2C_4C_5R_4R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5L_4R_5g_m\right) + s^2\left(2C_4C_5R_4R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_4R_5g_m\right) + s^2\left(2C_4C_5R_4R_5g_m + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4g_m + 2C_4C_5R_4g_m\right
 10.172 INVALID-ORDER-172 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                     -R_4R_5 + s^4 \left( C_2C_4L_4L_5R_4R_5 - C_4C_5L_4L_5R_4R_5 - C_4C_5L_4L_5R_4R_5 - C_4L_4L_5R_4 \right) + s^2 \left( C_2L_5R_4R_5 - C_4L_4R_4R_5 - C_5L_5R_4R_5 - C_4L_4R_4R_5 - C_5L_5R_4R_5 \right) \\ -R_4R_5 + s^4 \left( C_2C_4L_4L_5R_4R_5 - C_4L_4L_5R_4R_5 - C_4L_4L_5R_4R_5 - C_4L_4L_5R_4 - C_4L_4L_5R_4 - C_4L_4L_5R_4R_5 - C_4L_4L_5R_4R_5 - C_4L_4L_5R_4R_5 \right) \\ -R_4R_5 + s^4 \left( C_2C_4L_4L_5R_4R_5 - C_4L_4L_5R_4R_5 - C_4L_4L_5R_4R_5 - C_4L_4L_5R_4 - C_4L_4
10.173 INVALID-ORDER-173 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
                                                  \frac{C_2C_4C_5L_4L_5R_4R_5s^5 + R_4R_5g_m - R_4 + s^4\left(C_2C_4L_4L_5R_4 + C_4C_5L_4L_5R_4g_m - C_4C_5L_4L_5R_4\right) + s^3\left(C_2C_4L_4R_4R_5 + C_2C_5L_5R_4R_5 + C_4L_4L_5R_4g_m\right)}{2R_4g_m + 2R_5g_m + s^5\left(4C_2C_4C_5L_4L_5R_4 + 2C_2C_4L_5R_4 + 2C_2C_5L_5R_4 + 2C_2C_5L_5R_5 + 2C_2C_5L_5R_5 + 2C_2C_5L_5R_5 + 2C_2C_5L_5R_5 + 2C_2C_5L_5R_5 + 2C_2C_5L_5R_5 + 2C
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10.165 INVALID-ORDER-165  $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5, \infty\right)$ 

**10.176** INVALID-ORDER-176 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2R_4s^3 + R_2R_4g_m + R_4 + s^2\left(C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s\left(C_2R_2R_4 - C_5R_2R_4\right)}{2C_2C_5L_5R_2s^3 + 2R_2g_m + s^2\left(4C_2C_5R_2R_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_2R_2 + 2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4\right) + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m +$$

10.177 INVALID-ORDER-177 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-R_2R_4 + s^2\left(C_2L_5R_2R_4 - C_5L_5R_2R_4\right) + s\left(L_5R_2R_4g_m + L_5R_4\right)}{4C_2C_5L_5R_2R_4s^3 + 2R_2R_4g_m + 2R_2 + 4R_4 + s^2\left(2C_2L_5R_2 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_2 + 4C_5L_5R_4\right) + s\left(4C_2R_2R_4 + 2L_5R_2g_m + 2L_5\right)}$$

**10.178** INVALID-ORDER-178 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

**10.179** INVALID-ORDER-179 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-R_2R_4R_5 + s^2\left(C_2L_5R_2R_4R_5 - C_5L_5R_2R_4R_5\right) + s\left(L_5R_2R_4R_5g_m - L_5R_2R_4 + L_5R_4R_5\right)}{4C_2C_5L_5R_2R_4R_5s^3 + 2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^2\left(4C_2L_5R_2R_4 + 2C_2L_5R_2R_5 + 2C_5L_5R_2R_4R_5g_m + 2C_5L_5R_2R_4 + L_5R_4R_5\right) + s\left(4C_2R_2R_4R_5 + 2L_5R_2R_4g_m + 2L_5R_4g_m + 2$$

**10.180** INVALID-ORDER-180 
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_5R_2R_4 + C_5L_5R_2R_4R_5g_m - C_5L_5R_2R_4 + C_5L_5R_4R_5\right) + s\left(C_2R_2R_4R_5 + L_5R_2R_4g_m + L_5R_4\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(4C_2C_5L_5R_2R_4 + 2C_2C_5L_5R_2R_5\right) + s^2\left(2C_2L_5R_2 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_2R_5g_m + 2C_5L_5R_2 + 4C_5L_5R_5\right) + s\left(4C_2R_2R_4 + 2C_2R_2R_5 + 2L_5R_2g_m + 2L_5\right)}$$

10.181 INVALID-ORDER-181 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_5L_5R_2R_4R_5g_m - C_5L_5R_2R_4 + C_5L_5R_2 + C_5R_2R_4 + C_5R_$$

10.182 INVALID-ORDER-182 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{R_2 g_m + s \left(C_2 R_2 - C_5 R_2\right) + 1}{s^2 \left(2 C_2 C_4 R_2 + 4 C_2 C_5 R_2 + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5\right)}$$

**10.183** INVALID-ORDER-183 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5R_2R_5s^2 + R_2g_m + s\left(C_2R_2 + C_5R_2R_5g_m - C_5R_2 + C_5R_5\right) + 1}{2C_2C_4C_5R_2R_5s^3 + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2R_5g_m + 2C_4C_5R_2 + 2C_4C_5R_5\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

**10.184** INVALID-ORDER-184 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2s^3 + R_2g_m + s^2\left(C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 - C_5R_2\right) + 1}{2C_2C_4C_5L_5R_2s^4 + s^3\left(2C_4C_5L_5R_2g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

**10.185** INVALID-ORDER-185 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-R_2 + s^2 \left(C_2 L_5 R_2 - C_5 L_5 R_2\right) + s \left(L_5 R_2 g_m + L_5\right)}{2R_2 g_m + s^3 \left(2C_2 C_4 L_5 R_2 + 4C_2 C_5 L_5 R_2 + 2C_4 C_5 L_5 R_2\right) + s^2 \left(2C_4 L_5 R_2 g_m + 2C_4 L_5 + 2C_5 L_5 R_2 g_m + 4C_5 L_5\right) + s \left(4C_2 R_2 + 2C_4 R_2\right) + 4C_5 L_5 R_2 g_m + 4C_5 L_5\right)}$$

**10.186** INVALID-ORDER-186 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2s^3 + R_2g_m + s^2\left(C_2C_5R_2R_5 + C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 + C_5R_2R_5g_m - C_5R_2 + C_5R_5\right) + 1}{2C_2C_4C_5L_5R_2s^4 + s^3\left(2C_2C_4C_5R_2R_5 + 2C_4C_5L_5R_2g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2g_m + 2C_4C_5R_2 + 2C_4C_5R_5\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$$

10.187 INVALID-ORDER-187 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{1}{C_4s}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$$

$$H(s) = \frac{-R_2R_5 + s^2\left(C_2L_5R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - L_5R_2 + L_5R_5\right)}{2R_2R_5g_m + 4R_5 + s^3\left(2C_2C_4L_5R_2R_5 + 4C_2C_5L_5R_2R_5 + 2C_4C_5L_5R_2R_5\right) + s^2\left(4C_2L_5R_2 + 2C_4L_5R_2g_m + 2C_4L_5R_2 + 2C_4L_5R_5 + 2C_5L_5R_2g_m + 4C_5L_5R_5\right) + s\left(4C_2R_2R_5 + 2C_4R_2R_5 + 2C_4R_3R_5 + 2C_4R$$

10.188 INVALID-ORDER-188 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{1}{C_4s}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2R_5s^3 + R_2R_5g_m - R_2 + R_5 + s^2\left(C_2L_5R_2 + C_5L_5R_2R_5g_m - C_5L_5R_2 + C_5L_5R_2\right) + s\left(C_2R_2R_5 + L_5R_2g_m + L_5\right)}{2C_2C_4C_5L_5R_2R_5s^4 + 2R_2g_m + s^3\left(2C_2C_4L_5R_2 + 4C_2C_5L_5R_2 + 2C_4C_5L_5R_2 + 2C_4C_5L_5R_2 + 2C_4C_5L_5R_2\right) + s^2\left(2C_2C_4R_2R_5 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m + 4C_5L_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_5\right) + s\left(4C_2R_2 + 2C_4R_5\right) + s\left(4C_2R_5\right) + s\left(4C$$

10.189 INVALID-ORDER-189 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{1}{C_4s}, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2R_5s^3 + R_2R_5g_m - R_2 + R_5 + s^2\left(C_5L_5R_2R_5g_m - C_5L_5R_2 + C_5L_5R_5\right) + s\left(C_2R_2R_5 - C_5R_2R_5\right)}{2C_2C_4C_5L_5R_2R_5s^4 + 2R_2g_m + s^3\left(4C_2C_5L_5R_2 + 2C_4C_5L_5R_2 + 2C_4C_5L_5R_5\right) + s^2\left(2C_2C_4R_2R_5 + 4C_2C_5R_2R_5 + 2C_4C_5L_5R_2 + 2C_4R_2R_5 + 2C_4R_2R_5g_m + 4C_5L_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_5R_2g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5 + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_2 + 2C_4R_5 + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_5 + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_5 + 2C_4R_5 + 2C_5R_5g_m + 4C_5R_5\right) + s\left(4C_2R_5 + 2C_5R_5g_m + 2C_4R_5\right) + s\left(4C_2R_5 + 2C_5R_5g_m + 2C_4R_5\right) + s\left(4C_2R_5 + 2C_4R_5\right) +$$

**10.190** INVALID-ORDER-190 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5R_2R_4R_5s^2 + R_2R_4g_m + R_4 + s\left(C_2R_2R_4 + C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5\right)}{2C_2C_4C_5R_2R_4R_5s^3 + 2R_2g_m + s^2\left(2C_2C_4R_2R_4 + 4C_2C_5R_2R_4 + 2C_4C_5R_2R_4R_5g_m + 2C_4C_5R_2R_4 + 2C_4C_5R_4R_5\right) + s\left(2C_2R_2 + 2C_4R_2R_4 + 2C_5R_2R_4 + 2C_5R_2R_4$$

10.191 INVALID-ORDER-191 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, L_5s + \frac{1}{C_5s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_5R_2R_4s^3 + R_2R_4g_m + R_4 + s^2\left(C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s\left(C_2R_2R_4 - C_5R_2R_4\right)}{2C_2C_4C_5L_5R_2R_4s^4 + 2R_2g_m + s^3\left(2C_2C_5L_5R_2 + 2C_4C_5L_5R_2R_4g_m + 2C_4C_5R_2R_4 + 4C_2C_5R_2R_4 + 2C_4C_5R_2R_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2R_4 + 2C_5R_2R_4g_m + 2C_5R_2R_4g_m$$

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10.192 INVALID-ORDER-192 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                                     H(s) = \frac{-R_2R_4 + s^2\left(C_2L_5R_2R_4 - C_5L_5R_2R_4\right) + s\left(L_5R_2R_4g_m + L_5R_4\right)}{2R_2R_4g_m + 2R_2 + 4R_4 + s^3\left(2C_2C_4L_5R_2R_4 + 4C_2C_5L_5R_2R_4 + 2C_4C_5L_5R_2R_4\right) + s\left(2C_2L_5R_2 + 2C_4L_5R_2R_4g_m + 2C_4L_5R_4g_m + 2C_5L_5R_2 + 4C_5L_5R_4\right) + s\left(4C_2R_2R_4 + 2C_4R_2R_4 + 2L_5R_2g_m + 2L_5\right)}
10.193 INVALID-ORDER-193 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                       \frac{C_2C_5L_5R_2R_4s^3+R_2R_4g_m+R_4+s^2\left(C_2C_5R_2R_4R_5+C_5L_5R_2R_4g_m+C_5L_5R_4\right)+s\left(C_2R_2R_4+C_5R_2R_4g_m-C_5R_2R_4+C_5R_4R_5\right)}{2C_2C_4C_5L_5R_2R_4s^4+2R_2g_m+s^3\left(2C_2C_4C_5R_2R_4R_5+2C_4C_5R_2R_4+4C_2C_5R_2R_4+4C_2C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_2R_4+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_4R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2C_4C_5R_5+2
10.194 INVALID-ORDER-194 Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)
H(s) = \frac{-R_2R_4R_5 + s^2\left(C_2L_5R_2R_4R_5 - C_5L_5R_2R_4R_5\right) + s\left(L_5R_2R_4R_5g_m - L_5R_2R_4 + L_5R_4R_5\right)}{2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^3\left(2C_2C_4L_5R_2R_4R_5 + 4C_2C_5L_5R_2R_4R_5\right) + s^2\left(4C_2L_5R_2R_4 + 2C_4L_5R_2R_4 + 2C_4L_5R_4R_5 + 2
10.195 INVALID-ORDER-195 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)
H(s) = \frac{C_2C_5L_5R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_5R_2R_4 + C_5L_5R_2R_4R_5g_m - C_5L_5R_2R_4 + C_5L_5R_4R_5\right) + s\left(C_2R_2R_4R_5 + C_5L_5R_2R_4 + C_5L_5R_4R_5 + C_5L_5R_4R_5
10.196 INVALID-ORDER-196 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \frac{C_2C_5L_5R_2R_4R_5s^4 + R_2R_4R_5g_m - R_2R_4R_
10.197 INVALID-ORDER-197 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                  H(s) = \frac{R_2g_m + s^2\left(C_2C_4R_2R_4 - C_4C_5R_2R_4\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 - C_5R_2\right) + 1}{4C_2C_4C_5R_2R_4s^3 + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2R_4g_m + 2C_4C_5R_2 + 4C_4C_5R_4\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}
10.198 INVALID-ORDER-198 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                     H(s) = \frac{R_2R_5g_m - R_2 + R_5 + s^2\left(C_2C_4R_2R_4R_5 - C_4C_5R_2R_4R_5\right) + s\left(C_2R_2R_5 + C_4R_2R_4R_5g_m - C_4R_2R_4 + C_4R_4R_5 - C_5R_2R_5\right)}{4C_2C_4C_5R_2R_4R_5s^3 + 2R_2g_m + s^2\left(4C_2C_4R_2R_4 + 2C_2C_4R_2R_5 + 4C_4C_5R_2R_4R_5g_m + 2C_4C_5R_2R_5 + 4C_4C_5R_4R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2R_4g_m + 2C_4R_4g_m + 2C_4R_4
10.199 INVALID-ORDER-199 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                            H(s) = \frac{C_2C_4C_5R_2R_4R_5s^3 + R_2g_m + s^2\left(C_2C_4R_2R_4 + C_2C_5R_2R_5 + C_4C_5R_2R_4R_5g_m - C_4C_5R_2R_4 + C_4C_5R_4R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_2 + C_5R_5\right) + 1}{s^3\left(4C_2C_4C_5R_2R_4 + 2C_2C_4C_5R_2R_5\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2R_4g_m + 2C_4C_5R_2R_5g_m + 2C_4C_5R_2 + 4C_4C_5R_4 + 2C_4C_5R_5\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5R_5\right)}
10.200 INVALID-ORDER-200 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                        H(s) = \frac{C_2C_4C_5L_5R_2R_4s^4 + R_2g_m + s^3\left(C_2C_5L_5R_2 + C_4C_5L_5R_2R_4g_m + C_4C_5L_5R_4\right) + s^2\left(C_2C_4R_2R_4 - C_4C_5R_2R_4 + C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 - C_5R_2\right) + 1}{2C_2C_4C_5L_5R_2s^4 + s^3\left(4C_2C_4C_5R_2R_4 + 2C_4C_5L_5R_2g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2R_4g_m + 2C_4C_5R_2 + 4C_4C_5R_4\right) + s\left(2C_4R_2g_m + 2C_4C_5R_2g_m + 2C_4C_5R_2g
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10.201 INVALID-ORDER-201 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)
                                        10.202 INVALID-ORDER-202 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{C_2C_4C_5L_5R_2R_4s^4 + R_2g_m + s^3\left(C_2C_4C_5R_2R_4R_5 + C_2C_5L_5R_2 + C_4C_5L_5R_2R_4g_m + C_4C_5L_5R_4\right) + s^2\left(C_2C_4R_2R_4 + C_2C_5R_2R_4 + C_4C_5R_2R_4 + C_4C_5R_2R_4 + C_4C_5R_4R_5 + C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_2 + C_5R_2R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_2 + C_5R_2R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_2 + C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_2 + C_4R_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m + C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_2 + C_4R_5R_5g_m - C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m + C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m + C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_5R_5g_m - C_5R_5\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_5R_5g_m + C_4R_5R_5g_m + C_4R_5R_5g_m + C_4R_5g_m + C_4R_5g
10.203 INVALID-ORDER-203 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     H(s) = \frac{162165 + 3 \left(02242502164165 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 04251214455 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425121445 - 0425
10.204 INVALID-ORDER-204 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{C_2C_4C_5L_5R_2R_4R_5s^4 + R_2R_5g_m - R_2 + R_5 + s^3\left(C_2C_4L_5R_2R_4 + C_2C_5L_5R_2R_5 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_2 + C_4L_5R_2R_4 + C_4C_5L_5R_2 + C_4L_5R_2R_4 + C_4C_5L_5R_2 + C_4C_
10.205 INVALID-ORDER-205 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
                                   \frac{C_2C_4C_5L_5R_2R_4R_5s^4 + R_2R_5g_m - R_2 + R_5 + s^3\left(C_2C_5L_5R_2R_5 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_4 + C_4C_5
10.206 INVALID-ORDER-206 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)
                                                                                                                                                                                                                                                                                        H(s) = \frac{C_2C_4L_4R_2R_5s^3 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5 + s^2\left(C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5\right)}{4C_2C_4L_4R_2s^3 + 2R_2g_m + s^2\left(2C_2C_4R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + 4C_4R_5}
10.207 INVALID-ORDER-207 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                        H(s) = \frac{R_2 g_m + s^3 \left(C_2 C_4 L_4 R_2 - C_4 C_5 L_4 R_2\right) + s^2 \left(C_4 L_4 R_2 g_m + C_4 L_4\right) + s \left(C_2 R_2 - C_5 R_2\right) + 1}{4 C_2 C_4 C_5 L_4 R_2 s^4 + s^3 \left(2 C_4 C_5 L_4 R_2 g_m + 4 C_4 C_5 L_4\right) + s^2 \left(2 C_2 C_4 R_2 + 4 C_2 C_5 R_2 + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 + 2 C_5 R_2 g_m + 4 C_5\right)}
10.208 INVALID-ORDER-208 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5}{C_5R_5s+1}, \infty\right)
                                       H(s) = \frac{R_2R_5g_m - R_2 + R_5 + s^3\left(C_2C_4L_4R_2R_5 - C_4C_5L_4R_2R_5\right) + s^2\left(C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5\right) + s\left(C_2R_2R_5 - C_5R_2R_5\right)}{4C_2C_4C_5L_4R_2R_5s^4 + 2R_2g_m + s^3\left(4C_2C_4L_4R_2 + 2C_4C_5L_4R_2R_5g_m + 4C_4C_5L_4R_5\right) + s^2\left(2C_2C_4R_2R_5 + 4C_2C_5R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_5R_2R_5 + 4C_5R_5g_m + 4C_5R_5\right) + s^2\left(2C_4C_4R_2R_5 + 2C_4C_5R_2R_5 + 2C_4C_5R_2R_5 + 2C_4C_5R_2R_5 + 2C_4C_5R_2R_5 + 2C_4C_5R_2R_5 + 2C_4C_5R_2R_5 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_4R_5 + 2C_4R_5R_5g_m + 2C_4R_5 + 2C_4R_5R_5g_m 
10.209 INVALID-ORDER-209 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
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 $H(s) = \frac{C_2C_4C_5L_4R_2R_5s^4 + R_2g_m + s^3\left(C_2C_4L_4R_2 + C_4C_5L_4R_2R_5g_m - C_4C_5L_4R_2 + C_4C_5L_4R_5\right) + s^2\left(C_2C_5R_2R_5 + C_4L_4R_2g_m + C_4L_4\right) + s\left(C_2R_2 + C_5R_2R_5g_m - C_5R_2 + C_5R_5\right) + 1}{4C_2C_4C_5L_4R_2s^4 + s^3\left(2C_2C_4C_5R_2R_5 + 2C_4C_5L_4R_2g_m + 4C_4C_5L_4\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2g_m + 2C_4C_5R_2 + 2C_4C_5R_5\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}$ 

10.210 INVALID-ORDER-210  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2s^5 + R_2g_m + s^4\left(C_4C_5L_4L_5R_2g_m + C_4C_5L_4L_5\right) + s^3\left(C_2C_4L_4R_2 + C_2C_5L_5R_2 - C_4C_5L_4R_2\right) + s^2\left(C_4L_4R_2g_m + C_4L_4 + C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 - C_5R_2\right) + 1}{s^4\left(4C_2C_4C_5L_4R_2 + 2C_2C_4C_5L_5R_2\right) + s^3\left(2C_4C_5L_4R_2g_m + 4C_4C_5L_4 + 2C_4C_5L_5R_2g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 2C_4C_5R_2\right) + s\left(2C_4R_2g_m + 2C_4R_2g_m + 2C_4R_2g_m\right) + s\left(2C_4R_2g_m + 2C_4R_2g_m + 2C_4R_2$ 

10.211 INVALID-ORDER-211  $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$ 

10.212 INVALID-ORDER-212  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2s^5 + R_2g_m + s^4\left(C_2C_4C_5L_4R_2R_5 + C_4C_5L_4R_2g_m + C_4C_5L_4R_2 + C_2C_5L_5R_2 + C_4C_5L_4R_2 + C_2C_5L_5R_2 + C_4C_5L_4R_2 + C_4C_5L_$ 

10.213 INVALID-ORDER-213  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

 $H(s) = \frac{-R_2R_5 + s^4\left(C_2C_4L_4L_5R_2R_5 - C_4C_5L_4L_5R_2R_5 - C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4L_5R_5\right) + s^2\left(C_2L_5R_2R_5 - C_4L_4R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - C_4L_4L_5R_2R_5 + C_4L_4L_5R_2 + C_4L_4L_5R_5\right) + s^2\left(C_2L_5R_2R_5 - C_4L_4R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - C_4L_4L_5R_2R_5 + C_4L_4L_5R_5\right) + s^2\left(C_2L_5R_2R_5 - C_4L_4R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - C_4L_4L_5R_2R_5 + C_4L_4L_5R_5\right) + s^2\left(C_2L_5R_2R_5 - C_4L_4R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - C_4L_4L_5R_2R_5 + C_4L_4L_5R_5\right) + s^2\left(C_2L_5R_2R_5 - C_4L_4R_2R_5 - C_5L_5R_2R_5\right) + s\left(L_5R_2R_5g_m - C_4L_4L_5R_5\right) + s\left(L_5R_5g_m - C_4L_4L_5R_5\right) + s\left(L_5R_5g_m - C_4L_4L_5R_5\right) + s\left(L_5R_5g_m -$ 

10.214 INVALID-ORDER-214  $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_5s^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(C_2C_4L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4R_2 + C_4C_5L_4R_2 + C_4C_5L_5R_2 +$ 

10.215 INVALID-ORDER-215  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2S^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(C_4C_5L_4L_5R_2S_{5g_m} - C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + S^2\left(C_4L_4R_2R_5 + C_2C_5L_5R_2R_5 - C_4C_5L_4R_2R_5\right) + s^2\left(C_4L_4R_2R_5 + C_4C_5L_4R_2R_5 + C_4C_5$ 

**10.216** INVALID-ORDER-216  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$ 

 $H(s) = \frac{C_2L_4R_2R_5s^2 + s\left(L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)}{2C_2C_4L_4R_2R_5s^3 + 2R_2R_5g_m + 2R_2 + 2R_5 + s^2\left(4C_2L_4R_2 + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 2C_4L_4R_5\right) + s\left(2C_2R_2R_5 + 2L_4R_2g_m + 4L_4\right)}$ 

10.217 INVALID-ORDER-217  $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{1}{C_5 s}, \ \infty\right)$ 

 $H(s) = \frac{s^2 \left(C_2 L_4 R_2 - C_5 L_4 R_2\right) + s \left(L_4 R_2 g_m + L_4\right)}{2 R_2 g_m + s^3 \left(2 C_2 C_4 L_4 R_2 + 4 C_2 C_5 L_4 R_2 + 2 C_4 C_5 L_4 R_2\right) + s^2 \left(2 C_4 L_4 R_2 g_m + 2 C_4 L_4 + 2 C_5 L_4 R_2 g_m + 4 C_5 L_4\right) + s \left(2 C_2 R_2 + 2 C_5 R_2\right) + 2 C_4 L_4 R_2 g_m + 2 C_4 L_4 R_$ 

10.218 INVALID-ORDER-218  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

 $H(s) = \frac{s^2 \left(C_2 L_4 R_2 R_5 - C_5 L_4 R_2 R_5\right) + s \left(L_4 R_2 R_5 g_m - L_4 R_2 + L_4 R_5\right)}{2 R_2 R_5 g_m + 2 R_2 + 2 R_5 + s^3 \left(2 C_2 C_4 L_4 R_2 R_5 + 4 C_2 C_5 L_4 R_2 R_5\right) + s^2 \left(4 C_2 L_4 R_2 + 2 C_4 L_4 R_2 R_5 g_m + 2 C_4 L_4 R_5 + 2 C_5 L_4 R_2 R_5 g_m + 4 C_5 L_4 R_5\right) + s \left(2 C_2 R_2 R_5 + 2 C_5 R_2 R_5 + 2 L_4 R_2 g_m + 4 L_4\right)}$ 

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10.219 INVALID-ORDER-219 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                        H(s) = \frac{C_2C_5L_4R_2R_5s^3 + s^2\left(C_2L_4R_2 + C_5L_4R_2R_5g_m - C_5L_4R_2 + C_5L_4R_5\right) + s\left(L_4R_2g_m + L_4\right)}{2C_2C_4C_5L_4R_2R_5s^4 + 2R_2g_m + s^3\left(2C_2C_4L_4R_2 + 4C_2C_5L_4R_2 + 2C_4C_5L_4R_2 + 2C_4C_5L_4R_2\right) + s\left(2C_2C_5R_2R_5 + 2C_4L_4R_2g_m + 4C_5L_4\right) + s\left(2C_2R_2 + 2C_5R_2R_5g_m + 2C_5R_2 + 2C_5R_5\right) + 2C_5R_5 + 2C_5R_5
10.220 INVALID-ORDER-220 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                  H(s) = \frac{C_2C_5L_4L_5R_2s^4 + s^3\left(C_5L_4L_5R_2g_m + C_5L_4L_5\right) + s^2\left(C_2L_4R_2 - C_5L_4R_2\right) + s\left(L_4R_2g_m + L_4\right)}{2C_2C_4C_5L_4L_5R_2s^5 + 2R_2g_m + s^4\left(2C_4C_5L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^3\left(2C_2C_4L_4R_2 + 4C_2C_5L_4R_2 + 2C_4C_5L_4R_2\right) + s^2\left(2C_4L_4R_2g_m + 2C_4L_4 + 2C_5L_4R_2g_m + 4C_5L_4 + 2C_5L_5R_2g_m + 2C_5L_5\right) + s\left(2C_2R_2 + 2C_5R_2\right) + 2C_3R_2 + 2C_3R_2 + 2C_4R_3 +
10.221 INVALID-ORDER-221 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                       H(s) = \frac{-L_4R_2s + s^3\left(C_2L_4L_5R_2 - C_5L_4L_5R_2\right) + s^2\left(L_4L_5R_2g_m + L_4L_5\right)}{2R_2 + s^4\left(2C_2C_4L_4L_5R_2 + 4C_2C_5L_4L_5R_2 + 2C_4C_5L_4L_5R_2\right) + s^3\left(2C_4L_4L_5R_2g_m + 2C_4L_4L_5 + 2C_5L_4L_5R_2g_m + 4C_5L_4L_5\right) + s^2\left(4C_2L_4R_2 + 2C_5L_5R_2\right) + s\left(2L_4R_2g_m + 4L_4 + 2L_5R_2g_m + 2L_5\right)}
10.222 INVALID-ORDER-222 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{C_2C_5L_4L_5R_2s^4 + s^3\left(C_2C_5L_4R_2R_5 + C_5L_4L_5R_2g_m + C_5L_4L_5\right) + s^2\left(C_2L_4R_2 + C_5L_4R_2R_5g_m - C_5L_4R_2 + C_5L_4R_5\right) + s\left(L_4R_2g_m + L_4\right)}{2C_2C_4C_5L_4L_5R_2s^5 + 2R_2g_m + s^4\left(2C_2C_4C_5L_4R_2R_5 + 2C_4C_5L_4L_5\right) + s^3\left(2C_2C_4L_4R_2 + 4C_2C_5L_4R_2 + 2C_4C_5L_4R_2 + 2C_4C_5L_4R_2\right) + s^2\left(2C_2C_5R_2R_5 + 2C_4L_4R_2g_m + 2C_4L_4R
10.223 INVALID-ORDER-223 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -L_{4}R_{2}R_{5}s + s^{3}\left(C_{2}L_{4}L_{5}R_{2}R_{5} - C_{5}L_{4}L_{5}R_{2}R_{5}\right) + s^{2}\left(L_{4}L_{5}R_{2}R_{5}g_{m} - L_{4}L_{5}R_{2} + L_{4}L_{5}R_{5}\right)
H(s) = \frac{-L_4R_2R_5s + s^3\left(C_2L_4L_5R_2R_5 - C_5L_4L_5R_2R_5 + s^2\left(L_4L_5R_2R_5 - C_5L_4L_5R_2R_5 - L_4L_5R_2\right) + s^2\left(L_4L_5R_2R_5 - L_4L_5R_2\right) + s^2\left(L_4L_5R_2R_5 - L_4L_5R_2R_5 - L_4L_5R_2\right) + s^2\left(L_4L_5R_2R_5 + 2C_4L_4L_5R_2 + 2
10.224 INVALID-ORDER-224 Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)
H(s) = \frac{C_2C_5L_4L_5R_2R_5s^4 + s^3\left(C_2L_4L_5R_2 + C_5L_4L_5R_2 + C_5L_4L_5R_
10.225 INVALID-ORDER-225 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10.226 INVALID-ORDER-226 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)
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 $H(s) = \frac{C_2C_4L_4R_2R_5s^3 + R_2R_5g_m - R_2 + R_5 + s^2\left(C_2C_4R_2R_4R_5 + C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5\right) + s\left(C_2R_2R_5 + C_4R_2R_4R_5g_m - C_4R_2R_4 + C_4R_4R_5\right)}{4C_2C_4L_4R_2s^3 + 2R_2g_m + s^2\left(4C_2C_4R_2R_4 + 2C_2C_4R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4\right) + s\left(4C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_2R_5g_m + 2C_4R_2 + 4C_4R_4 + 2C_4R_5\right) + 4}$   $\mathbf{10.227} \quad \mathbf{INVALID\text{-}ORDER\text{-}227} \ Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$ 

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10.228 INVALID-ORDER-228 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
```

 $H(s) = \frac{R_2R_5g_m - R_2 + R_5 + s^3\left(C_2C_4L_4R_2R_5 - C_4C_5L_4R_2R_5\right) + s^2\left(C_2C_4R_2R_4R_5 - C_4C_5R_2R_4R_5 + C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5\right) + s\left(C_2R_2R_5 + C_4R_2R_4R_5g_m - C_4R_2R_4 + C_4R_4R_5 - C_5R_2R_4R_5\right) + s^2\left(C_2C_4R_2R_4R_5 + C_4C_5R_2R_4R_5 + C_4C_5R_4R_5 + C_4C_5R_4R$ 

10.229 INVALID-ORDER-229 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_4R_2R_5s^4 + R_2g_m + s^3\left(C_2C_4C_5R_2R_4R_5 + C_2C_4L_4R_2 + C_4C_5L_4R_2R_5g_m - C_4C_5L_4R_2 + C_4C_5L_4R_5\right) + s^2\left(C_2C_4R_2R_4 + C_2C_5R_2R_5 + C_4C_5R_2R_4 + C_4C_5R_2R_4 + C_4C_5R_4R_5 + C_4L_4R_2g_m + C_4L_4\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 + C_5R_2R_5g_m - C_4C_5R_2R_4 + C_4C_5R_4R_5 + C_4C_5R_4 + C_4C_5R_4R_5 + C_4C_5R_5R_5 +$ 

10.230 INVALID-ORDER-230 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2s^5 + R_2g_m + s^4\left(C_2C_4C_5L_5R_2R_4 + C_4C_5L_4L_5R_2g_m + C_4C_5L_4L_5\right) + s^3\left(C_2C_4L_4R_2 + C_2C_5L_5R_2 - C_4C_5L_4R_2 + C_4C_5L_5R_4\right) + s^2\left(C_2C_4R_2R_4 - C_4C_5R_2R_4 + C_4L_4R_2g_m + C_4L_4 + C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 + C_4R_2R_4 - C_4C_5L_5R_4\right) + s^2\left(C_2C_4R_2R_4 - C_4C_5R_2R_4 + C_4L_4R_2g_m + C_4L_4 + C_5L_5R_2g_m + C_5L_5\right) + s\left(C_2R_2 + C_4R_2R_4 - C_4C_5L_5R_2\right) + s^2\left(C_2C_4R_2 + C_4C_5L_5R_2\right) + s^2\left(C_4C_5R_4R_2 + C_4C_5L_5R_2\right) + s^2\left(C_4C_5R_4R_4 + C_4C_5L_5R_4\right) + s^2\left(C_4C_5R_4R_4 + C_4C_5R_4\right) + s^2\left(C_4C_5R_4R_4 + C_4C_5L_5R_4\right) + s^2\left(C_4C_5R_4R_4 + C_4C_5L_5R_4\right)$ 

**10.231** INVALID-ORDER-231 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

 $H(s) = \frac{-R_2 + s^4 \left(C_2 C_4 L_4 L_5 R_2 - C_4 C_5 L_4 L_5 R_2 \right) + s^3 \left(C_2 C_4 L_5 R_2 R_4 - C_4 C_5 L_5 R_2 R_4 + C_4 L_4 L_5 \right) + s^2 \left(C_2 L_5 R_2 - C_4 L_4 R_2 + C_4 L_5 R_2 R_4 g_m + C_4 L_5 R_4 - C_5 L_5 R_2\right) + s \left(-C_4 R_2 R_4 + L_5 R_2 g_m + C_4 L_4 L_5 R_2 g_m + C_4 L_4 R_2 + C_4 L_5 R_2 g_m + C_4 L_5 R_2 R_4 + C_4 L_5 R_2 g_m + C_4 L_5 R_2 R_4 + C_4 L_5$ 

**10.232** INVALID-ORDER-232 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2s^5 + R_2g_m + s^4\left(C_2C_4C_5L_4R_2R_5 + C_2C_4C_5L_5R_2R_4 + C_4C_5L_4R_5 + C_2C_4L_4R_2 + C_2C_5L_5R_2 + C_4C_5L_4R_2 + C_4C_5L_4R_5 + C_4C_$ 

10.233 INVALID-ORDER-233 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \infty\right)$$

 $H(s) = \frac{-R_2R_5 + s^4\left(C_2C_4L_4L_5R_2R_5 - C_4C_5L_4L_5R_2R_5\right) + s^3\left(C_2C_4L_5R_2R_4R_5 - C_4C_5L_5R_2R_4R_5 + C_4L_4L_5R_2R_5g_m - C_4L_4L_5R_2 + C_4L_4L_5R_2 + C_4L_4L_5R_2R_5g_m - C_4L_4L_5R_2R_5g_m + 4C_4C_5L_4L_5R_2R_5g_m + 4C_4C_5L_4L_5R_2R_5g_m + 4C_4C_5L_4L_5R_2R_5g_m + 4C_4C_5L_4L_5R_2R_5 + 4C_2C_4L_5R_2R_5 + 4C_2C_4L_5R_2R_5 + 4C_2C_4L_5R_2R_5 + 4C_4C_5L_5R_2R_5 + 4C_4C_5L_5R_5R_5 + 4C_4C_5L_5R_5R_5 + 4C_4C_5L_5R_5R_5R_5 + 4C_4C_5L_5R_5R_5 + 4C_4C_5$ 

10.234 INVALID-ORDER-234 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_5s^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(C_2C_4C_5L_5R_2R_4R_5 + C_2C_4L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4R_2R_5 + C_4C_5L_5R_2R_4 + C_4C_5L_5R_4 + C_$ 

10.235 INVALID-ORDER-235 
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2S^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(C_2C_4C_5L_5R_2R_4R_5 + C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + S^3\left(C_2C_4L_4R_2R_5 + C_2C_5L_5R_2R_5 - C_4C_5L_4R_2R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4R_4R_5 + C_4C_5L_4$ 

10.236 INVALID-ORDER-236 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, R_5, \infty\right)$$

 $H(s) = \frac{C_2L_4R_2R_4R_5s^2 + s\left(L_4R_2R_4R_5g_m - L_4R_2R_4 + L_4R_4R_5\right)}{2C_2C_4L_4R_2R_4R_5s^3 + 2R_2R_4R_5g_m + 2R_2R_4 + 2R_4R_5 + s^2\left(4C_2L_4R_2R_4 + 2C_2L_4R_2R_5 + 2C_4L_4R_2R_4 + 2C_4L_4R_4R_4 + 2C_4L_4R_4R_4$ 

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10.237 INVALID-ORDER-237 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
                                                                                          H(s) = \frac{s^2 \left( C_2 L_4 R_2 R_4 - C_5 L_4 R_2 R_4 \right) + s \left( L_4 R_2 R_4 g_m + L_4 R_4 \right)}{2 R_2 R_4 g_m + 2 R_4 + s^3 \left( 2 C_2 C_4 L_4 R_2 R_4 + 4 C_2 C_5 L_4 R_2 R_4 + 2 C_4 C_5 L_4 R_2 R_4 \right) + s^2 \left( 2 C_2 L_4 R_2 + 2 C_4 L_4 R_2 R_4 g_m + 2 C_4 L_4 R_4 + 2 C_5 L_4 R_2 R_4 g_m + 2 C_5 L_4 R_2 + 4 C_5 L_4 R_4 \right) + s \left( 2 C_2 R_2 R_4 + 2 C_5 R_2 R_4 + 2 L_4 R_2 g_m + 2 L_4 \right)}
10.238 INVALID-ORDER-238 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \frac{R_5}{C_5R_5s+1}, \infty\right)
                                  10.239 INVALID-ORDER-239 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, R_5 + \frac{1}{C_5s}, \infty\right)
H(s) = \frac{C_2C_5L_4R_2R_4R_5s^3 + s^2\left(C_2L_4R_2R_4 + C_5L_4R_2R_4 + C_5L_4R_4R_4 + C_5L_4R_4R_
10.240 INVALID-ORDER-240 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, L_5s + \frac{1}{C_5s}, \infty\right)
H(s) = \frac{C_2C_5L_4L_5R_2R_4s^4 + s^3\left(C_5L_4L_5R_2R_4g_m + C_5L_4L_5R_4\right) + s^2\left(C_2L_4R_2R_4 - C_5L_4R_2R_4\right) + s\left(L_4R_2R_4g_m + L_4R_4\right)}{2C_2C_4L_5R_2R_4s^5 + 2R_2R_4g_m + 2R_4 + s^4\left(2C_2C_5L_4L_5R_2 + 2C_4C_5L_4L_5R_2\right) + s^3\left(2C_2C_4L_4R_2R_4 + 4C_2C_5L_4R_2R_4 + 2C_4C_5L_4R_2R_4 + 2C_5L_4L_5R_2g_m + 2C_5L_4L_5\right) + s^2\left(2C_2L_4R_2R_4 + 2C_4L_4R_2R_4 + 2C_4C_5L_4R_2R_4 + 2C_4C_5L_4R_2R_4 + 2C_5L_4R_2R_4 + 2C_5L_4R_2R_4 + 2C_5L_4L_5R_2g_m + 2C_4L_4R_2R_4 + 2C_4L_4R_2R_4 + 2C_5L_4R_2R_4 + 2C_5L_4R_2
10.241 INVALID-ORDER-241 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)
H(s) = \frac{-L_4R_2R_4s + s^3\left(C_2L_4L_5R_2R_4 - C_5L_4L_5R_2R_4\right) + s^2\left(L_4L_5R_2R_4g_m + L_4L_5R_4\right)}{2R_2R_4 + s^4\left(2C_2C_4L_4L_5R_2R_4 + 4C_2C_5L_4L_5R_2R_4 + 2C_4L_4E_3R_2 + 2C_4L_4E_3R_4 + 2C_5L_4L_5R_2 + 4C_5L_4L_5R_2 + 4C_5L_5L_5R_2 + 4C_5L_5L_5R
10.242 INVALID-ORDER-242 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H(s) = \frac{C_2C_3L_4L_5R_2R_4s^5 + 2R_2R_4g_m + 2R_4 + s^4\left(2C_2C_4C_5L_4R_2R_4 + s^4\left(2C_2C_4C_5L_4L_5R_2 + 2C_4C_5L_4L_5R_4\right) + s^3\left(2C_2C_4L_4R_2R_4 + 4C_2C_5L_4R_2R_4 + 2C_4C_5L_4R_2R_4 + 2C_4C_5L_4R
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10.243 INVALID-ORDER-243  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

 $H(s) = \frac{-L_4 R_2 R_4 R_5 s + s^3 \left(C_2 L_4 L_5 R_2 R_4 R_5 - C_5 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 - C_5 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 + 2 C_4 L_4 L_5 R_2 R_4 R_5\right) + s^2 \left(L_4 L_5 R_2 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5 R_4 R_5 R_4 R_5\right) + s^2 \left(L_4 L_5 R_4 R_5\right$ 

10.244 INVALID-ORDER-244  $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_5L_4L_5R_2R_4R_5s^4 + s^3\left(C_2D_4D_5C_5L_4L_5R_2R_4R_5s^5 + 2R_2R_4R_5s^4 + s^4\left(2C_2C_4L_4L_5R_2R_4 + 4C_2C_5L_4L_5R_2R_4 + 2C_4C_5L_4L_5R_2R_4 + 2C_4C_5L_4L_5R_4R_5 + 2C_4C_5L_4L_5R_5R_5 + 2C_4C_5L_5R_5R_5 + 2C_4C_5L_5R_5R_5 + 2C_4C_5L_5R_5R_5 + 2C_4C_5L_5R_5R_5 + 2C_4C_5L_5R_5R_5 + 2C_4C_$ 

10.245 INVALID-ORDER-245  $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_5L_4L_5R_2R_4R_5s^4 + s^3\left(C_5L_4L_5R_2R_4R_5s^5 + 2R_2R_4R_5g_m + 2R_2R_4R_5g_m + 2R_2R_4R_5g_m + 2R_2R_4R_5g_m + 2R_2R_4R_5g_m + 2R_4R_5g_m + 2$ 

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10.246 INVALID-ORDER-246 Z(s) = \left( \infty, \frac{R_2}{G_2R_2s+1}, \infty, \frac{C_4L_Ra_s^2 + L_4s + R_4}{C_4L_4S^2 + 1}, R_5, \infty \right)

H(s) = \frac{C_2C_4L_4R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2(C_2L_4R_2R_5 + C_4L_4R_2R_4g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5) + s(C_2R_2R_4R_5 + L_4R_2R_5g_m - L_4R_2 + L_4R_5)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2R_4R_4 + 2R_5 + s^3(4C_2C_4L_4R_2R_4 + 2C_2C_4L_4R_2R_5) + s^2(4C_2L_4R_2R_2R_2g_m + 2C_4L_4R_2R_5g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_4L_4R_5) + s(4C_2R_2R_4 + 2C_2R_2R_5 + 2L_4R_2g_m + 4L_4)}

10.247 INVALID-ORDER-247 Z(s) = \left( \infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{C_4L_4R_2s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{1}{C_5s}, \infty \right)

H(s) = \frac{R_2R_4g_m + R_4 + s^3(C_2C_4L_4R_2R_4 - C_4C_5L_4R_2R_4) + s^2(C_2L_4R_2 + C_4L_4R_2R_4g_m + C_4L_4R_4 - C_5L_4R_2) + s(C_2R_2R_4 - C_5R_2R_4 + L_4R_2g_m + L_4)}{4C_2C_4C_3L_4R_2R_4s^2 + 4C_4C_3L_4R_2R_4g_m + 2C_4C_5L_4R_2R_4g_m + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2g_m + 2C_4L_4R_2g_m
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10.249 INVALID-ORDER-249  $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4R_2R_4R_5s^4 + R_2R_4g_m + R_4 + s^3\left(C_2C_4L_4R_2R_4 + C_2C_5L_4R_2R_5 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_2 +$ 

10.250 INVALID-ORDER-250  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_5L_4L_5R_2 + C_4C_5L_4L_5R_2 + C_4C_5L_4L_5R_4\right) + s^3\left(C_2C_4L_4R_2R_4 + C_2C_5L_5R_2R_4 - C_4C_5L_4R_2R_4 + C_5L_4L_5\right) + s^2\left(C_2L_4R_2 + C_4L_4R_2R_4g_m + C_4L_4R_4 - C_5L_4R_2 + C_5L_5R_2R_4\right)}{2C_2C_4C_5L_4L_5R_2s^5 + 2R_2g_m + s^4\left(4C_2C_4C_5L_4R_2R_4 + 2C_4C_5L_4L_5\right) + s^3\left(2C_2C_4L_4R_2 + 4C_2C_5L_4R_2 + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_2\right) + s^3\left(2C_2C_4L_4R_2 + 4C_4C_5L_4R_2 + 4C_4C_5L_4R_2\right) + s^3\left(2C_4C_4L_4R_2R_4 + 2C_4C_5L_4R_2 + 4C_4C_5L_4R_2\right) + s^3\left(2C_4C_4L_4R_2R_4 + 2C_4C_5L_4R_2 + 2C_4C_5L_4R_2\right) + s^3\left(2C_4C_4L_4R_2R_4 + 2C_4C_5L_4R_2\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_5L_4R_4\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_5L_4R_4\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_5L_4R_4\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_4L_4R_4\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_4L_4R_4\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_4L_4R_4\right) + s^3\left(2C_4C_4L_4R_4R_4 + 2C_4C_4L_4R_4\right) + s^3\left(2C_4C_4L_4R_4 + 2C_4C_4L_4R_4\right) + s^3\left$ 

10.251 INVALID-ORDER-251  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)$ 

 $H(s) = \frac{-R_2R_4 + s^4\left(C_2C_4L_4L_5R_2R_4 - C_4C_5L_4L_5R_2R_4 + C_4L_4L_5R_2 + C_4L_4L_5R_4 + C_4L_4L_5R_4$ 

10.252 INVALID-ORDER-252  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, L_5s+R_5+\frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_4C_5L_4R_2R_4R_5 + C_2C_5L_4L_5R_2 + C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4R_2R_4 + C_2C_5L_4R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_4R_4 + C_4C_5L_4R_$ 

10.253 INVALID-ORDER-253  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

 $H(s) = \frac{-R_2R_4R_5 + s^4\left(C_2C_4L_4L_5R_2R_4R_5 - C_4C_5L_4L_5R_2R_4R_5\right) + s^3\left(C_2L_4L_5R_2R_4R_5\right) + s^3\left(C_2L_4L_5R_2R_5 + C_4L_4R_5R_5\right) + s^3\left(C_2L_4L_5R_2R_4R_5\right) + s^3\left(C_2L_4L_5R_4R_5\right) + s^3\left(C_2L_4$ 

10.254 INVALID-ORDER-254  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_4R_5s^5 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_4L_4L_5R_2R_4 + C_2C_5L_4L_5R_2R_4 + C_4C_5L_4L_5R_2R_4 + C_4C_5L_4L_5R_4 + C_4C_5L_4L_5R_$ 

10.255 INVALID-ORDER-255  $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_4R_5s^5 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_5L_4L_5R_2R_5 + C_4C_5L_4L_5R_2R_4R_5g_m - C_4C_5L_4L_5R_2R_4R_5g_m - C_4C_5L_4L_5R_2R_4R_5g_m - C_4C_5L_4L_5R_2R_4R_5g_m - C_4C_5L_4L_5R_2R_4g_m + 2C_4C_5L_4L_5R_2R_4g_m + 2C_4C_5L_4L_5R_4g_m + 2C_4C_5L_4L_$ 

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10.256 INVALID-ORDER-256 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5, \infty\right)
      H(s) = \frac{C_2C_4L_4R_2R_4R_5s^3 + C_2R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_4L_4R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(4C_2C_4L_4R_2R_4 + 2C_2C_4L_4R_2R_5\right) + s^2\left(2C_2C_4R_2R_4R_5 + 2C_4L_4R_2R_4g_m + 2C_4L_4R_2 + 4C_4L_4R_4 + 2C_4L_4R_5\right) + s\left(4C_2R_2R_4 + 2C_2R_2R_5 + 2C_4R_2R_4R_5g_m + 2C_4R_4R_5\right)}
10.257 INVALID-ORDER-257 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{1}{C_5s}, \infty\right)
    10.258 INVALID-ORDER-258 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                       H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^3\left(C_2C_4L_4R_2R_4R_5 - C_4C_5L_4R_2R_4R_5\right) + s^2\left(C_4L_4R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5\right) + s\left(C_2R_2R_4R_5g_m - C_4L_4R_2R_4 + C_4L_4R_4R_5\right) + s\left(C_2R_2R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_2R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_2R_4R_4R_5g_m + 2C_4C_5R_4R_4R_5\right) + s\left(C_2R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_2R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_2R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5L_4R_2R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5L_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5R_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5R_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5R_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4C_5R_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5\right) + s\left(C_4R_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m\right) + s\left(C_4R_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m\right) + s\left(C_4R_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R_5g_m\right) + s\left(C_4R_4R_4R_5g_m + 2C_4R_4R_5g_m + 2C_4R_4R
10.259 INVALID-ORDER-259 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
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 $\frac{C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}+S^{4}+R_{2}R_{4}g_{m}+R_{4}+s^{3}\left(C_{2}C_{4}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{5}+S^{2}\left(C_{2}C_{5}R_{2}R_{4}R_{5}+C_{4}L_{4}R_{2}R_{4}g_{m}+C_{4}L_{4}R_{4}\right)+s\left(\frac{1}{2}R_{2}g_{m}+s^{4}\left(4C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}+2C_{2}C_{4}C_{5}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{2}R_{4}g_{m}+2C_{4}C_{5}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{2}R_{4}g_{m}+C_{4}L_{4}R_{4}\right)+s\left(\frac{1}{2}R_{2}g_{m}+s^{4}\left(4C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}+2C_{2}C_{4}C_{5}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{2}R_{4}g_{m}+2C_{4}C_{5}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{2}R_{4}+C_{4}C_{5}L_{4}R_{2}R_{5}+C_{4}L_{4}R_{5}+C_{4}L_$ 

10.260 INVALID-ORDER-260  $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4L_5R_4\right) + s^3\left(C_2C_4L_4R_2R_4 + C_2C_5L_5R_2R_4 - C_4C_5L_4R_2R_4\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4 + C_4C_5L_4R_2R_4\right) + s^2\left(C_4L_4R_2R_4g_m + C_4L_4R_4\right) + s^2\left(C_4L_4R_4R_4 + C_4L_4R_4\right) + s^2\left(C_4L_4R_4R_4 + C_4L_4R_4\right) + s^2\left(C_4L_4R_4R_4 + C_4L_5L_4R_4\right) + s^2\left(C_4L_4R_4R_4$ 

10.261 INVALID-ORDER-261  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-R_2R_4 + s^4 \left(C_2C_4L_4L_5R_2R_4 - C_4C_5L_4L_5R_2R_4\right) + s^3 \left(C_4L_4L_5R_2R_4g_m + C_4L_4L_5R_4\right) + s^2 \left(C_2L_5R_2R_4 - C_4L_4R_2R_4 - C_5L_5R_2R_4\right) + s^2 \left(C_2L_5R_2R_4 - C_4L_4R_2R_4 - C_4L_4R_2R_4\right) + s^2 \left(C_2L_5R_2R_4 - C_4L_4R_2R_4\right) + s^2 \left(C_2L_5R_4R_4 - C_4L_4R_4R_4\right) + s^2 \left$ 

10.262 INVALID-ORDER-262  $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_4L_5R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_4C_5L_4R_2R_4R_5 + C_4C_5L_4L_5R_2R_4g_m + C_4C_5L_4L_5R_4\right) + s^3\left(C_2C_4L_4R_2R_4 + C_2C_5L_5R_2R_4 + C_4C_5L_4R_2R_4 + C_4C_5L_4R_4R_4 + C_4C$ 

10.263 INVALID-ORDER-263  $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$ 

 $-R_2R_4R_5 + s^4\left(C_2C_4L_4L_5R_2R_4R_5 - C_4C_5L_4L_5R_2R_4R_5\right)$ 

 $\frac{-n_2n_4n_5+s}{4C_2C_4C_5L_4L_5R_2R_4R_5s^5+2R_2R_4R_5g_m+2R_2R_5+4R_4R_5+s^4\left(4C_2C_4L_4L_5R_2R_4+2C_2C_4L_4L_5R_2R_4+2C_4C_5L_4L_5R_4R_5+2C_4C_5L_4R_5R_5+2C_4C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5R_5+2C_5L_5R_5+2C_5L_5R_5+2C_5L_5R_5+2C_5L_5R_5+2C_5L_5R_5+2C_5$ 

10.264 INVALID-ORDER-264  $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$ 

 $C_2C_4C_5L_4L_5R_2R_4R_5s^5 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4(C_2C_4L_4L_5R_2R_4 + C_4C_5L_4R_5g_m)$  $\frac{C_2C_4C_5L_4L_5R_2R_4R_5s + R_2R_4R_5s +$ 

10.265 INVALID-ORDER-265 
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

 $C_2C_4C_5L_4L_5R_2R_4R_5s^5 + R_2R_4R_5g_m - R_5g_m - R$ 

 $H(s) = \frac{1}{2R_{2}R_{4}g_{m} + 2R_{2}R_{5}g_{m} + 2R_{2} + 4R_{4} + 2R_{5} + s^{5}\left(4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4} + 2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4} + 2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}R_{5} + 2C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}g_{m} + 2C_{4}C_{5}L_{4}L_{5}R_{2} + 4C_{4}C_{5}L_{4}L_{5}R_{2} + 4$ 

**10.266** INVALID-ORDER-266  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, R_5, \infty\right)$ 

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5\right)}{2R_4 g_m + 2R_5 g_m + s \left(2C_2 R_2 R_4 g_m + 2C_2 R_2 R_5 g_m + 2C_2 R_2 + 4C_2 R_4 + 2C_2 R_5\right) + 2}$$

10.267 INVALID-ORDER-267  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_4 g_m + s^3 \left(C_2 C_5 L_5 R_2 R_4 g_m + C_2 C_5 L_5 R_4\right) + s^2 \left(-C_2 C_5 R_2 R_4 + C_5 L_5 R_4 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 - C_5 R_4\right)}{2 g_m + s^3 \left(2 C_2 C_5 L_5 R_2 g_m + 2 C_2 C_5 L_5\right) + s^2 \left(2 C_2 C_5 R_2 R_4 g_m + 2 C_2 C_5 R_2 + 4 C_2 C_5 R_4 + 2 C_5 L_5 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 + 2 C_5 R_4 g_m + 2 C_5\right)}$$

**10.268** INVALID-ORDER-268  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{-C_2C_5L_5R_2R_4s^3 - R_4 + s^2\left(C_2L_5R_2R_4g_m + C_2L_5R_4 - C_5L_5R_4\right) + s\left(-C_2R_2R_4 + L_5R_4g_m\right)}{2R_4g_m + s^3\left(2C_2C_5L_5R_2R_4g_m + 2C_2C_5L_5R_2 + 4C_2C_5L_5R_4\right) + s^2\left(2C_2L_5R_2g_m + 2C_2L_5 + 2C_5L_5R_4g_m + 2C_5L_5\right) + s\left(2C_2R_2R_4g_m + 2C_2R_2 + 4C_2R_4 + 2L_5g_m\right) + 2C_2R_3R_4g_m + 2C_3R_4g_m + 2C_$$

10.269 INVALID-ORDER-269  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{R_4 g_m + s^3 \left(C_2 C_5 L_5 R_2 R_4 g_m + C_2 C_5 L_5 R_4\right) + s^2 \left(C_2 C_5 R_2 R_4 R_5 g_m - C_2 C_5 R_2 R_4 + C_2 C_5 R_4 R_5 + C_5 L_5 R_4 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^3 \left(2 C_2 C_5 L_5 R_2 g_m + 2 C_2 C_5 L_5\right) + s^2 \left(2 C_2 C_5 R_2 R_4 g_m + 2 C_2 C_5 R_2 R_5 g_m + 2 C_2 C_5 R_2 + 4 C_2 C_5 R_4 + 2 C_2 C_5 R_5 + 2 C_5 L_5 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right)}$$

10.270 INVALID-ORDER-270  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-C_2C_5L_5R_2R_4R_5s^3 - R_4R_5 + s^2\left(C_2L_5R_2R_4R_5g_m - C_2L_5R_2R_4 + C_2L_5R_4R_5 - C_5L_5R_4R_5\right) + s\left(-C_2R_2R_4R_5 + L_5R_4R_5g_m - L_5R_4\right)}{2R_4R_5g_m + 2R_5 + s^3\left(2C_2C_5L_5R_2R_4R_5g_m + 2C_2C_5L_5R_2R_4R_5 + 4C_2C_5L_5R_2R_4g_m + 2C_2L_5R_2R_4g_m + 2C_2L_5R_2R_4g_m + 2C_2L_5R_2R_4g_m + 2C_2L_5R_4R_5g_m + 2C_5L_5R_4R_5g_m + 2C_5L_5R_5g_m + 2C$$

10.271 INVALID-ORDER-271  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_5 L_5 R_2 R_4 + C_2 C_5 L_5 R_4 R_5 \right) + s^2 \left(C_2 L_5 R_2 R_4 g_m + C_2 L_5 R_4 + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4 \right) + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5 + L_5 R_4 g_m \right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_2 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_5 L_5 R_2 + 4 C_2 C_5 L_5 R_4 + 2 C_2 C_5 L_5 R_4 g_m + 2 C_2 L_5 R_4 g_m + 2 C_2 L_5 R_4 g_m + 2 C_2 R_4 g_m +$$

10.272 INVALID-ORDER-272  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_5 L_5 R_2 R_4 + C_2 C_5 L_5 R_4 R_5 \right) + s^2 \left(-C_2 C_5 R_2 R_4 R_5 + C_5 L_5 R_4 R_5 g_m - C_5 L_5 R_4 \right) + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5 - C_5 R_4 R_5 \right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_2 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_5 L_5 R_2 + 4 C_2 C_5 L_5 R_2 + 4 C_2 C_5 L_5 R_4 + 2 C_2 C_5 L_5 R_4 R_5 g_m + 2 C_2 C_5 R_2 R_4 R_5 g_m + 2 C_2 R_5 R_5 g_m + 2 C_2 R_$$

10.273 INVALID-ORDER-273  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_2C_5R_2s^2 + g_m + s\left(C_2R_2g_m + C_2 - C_5\right)}{2C_2C_4C_5R_2s^3 + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.274 INVALID-ORDER-274 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5R_2R_5s^2 + R_5g_m + s\left(C_2R_2R_5g_m - C_2R_2 + C_2R_5 - C_5R_5\right) - 1}{2C_2C_4C_5R_2R_5s^3 + 2g_m + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_2 + 2C_2C_4R_5 + 2C_2C_5R_2R_5g_m + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s\left(2C_2R_2g_m + 4C_2 + 2C_4R_5g_m + 2C_4 + 2C_5R_5g_m\right)}$$

10.275 INVALID-ORDER-275 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^2 \left( C_2 C_5 R_2 R_5 g_m - C_2 C_5 R_2 + C_2 C_5 R_5 \right) + s \left( C_2 R_2 g_m + C_2 + C_5 R_5 g_m - C_5 \right)}{s^3 \left( 2 C_2 C_4 C_5 R_2 R_5 g_m + 2 C_2 C_4 C_5 R_2 + 2 C_2 C_4 C_5 R_5 \right) + s^2 \left( 2 C_2 C_4 R_2 g_m + 2 C_2 C_4 + 2 C_2 C_5 R_2 g_m + 4 C_2 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 \right) + s \left( 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.276 INVALID-ORDER-276 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^3 \left(C_2 C_5 L_5 R_2 g_m + C_2 C_5 L_5\right) + s^2 \left(-C_2 C_5 R_2 + C_5 L_5 g_m\right) + s \left(C_2 R_2 g_m + C_2 - C_5\right)}{s^4 \left(2C_2 C_4 C_5 L_5 R_2 g_m + 2C_2 C_4 C_5 L_5\right) + s^3 \left(2C_2 C_4 C_5 L_5 g_m\right) + s^2 \left(2C_2 C_4 R_2 g_m + 2C_2 C_4 + 2C_2 C_5 R_2 g_m + 4C_2 C_5 + 2C_4 C_5\right) + s \left(2C_4 g_m + 2C_5 g_m\right)}$$

10.277 INVALID-ORDER-277 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_5R_2s^3 + s^2\left(C_2L_5R_2g_m + C_2L_5 - C_5L_5\right) + s\left(-C_2R_2 + L_5g_m\right) - 1}{2C_2C_4C_5L_5R_2s^4 + 2g_m + s^3\left(2C_2C_4L_5R_2g_m + 2C_2C_4L_5 + 2C_2C_5L_5R_2g_m + 4C_2C_5L_5 + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2 + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(2C_2R_2g_m + 4C_2 + 2C_4L_5g_m\right) + s\left(2C_2R_2g_m + 2C_3L_5g_m\right) + s\left(2C_2R_2g_m\right) +$$

10.278 INVALID-ORDER-278 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^3 \left(C_2 C_5 L_5 R_2 g_m + C_2 C_5 L_5\right) + s^2 \left(C_2 C_5 R_2 R_5 g_m - C_2 C_5 R_2 + C_2 C_5 R_5 + C_5 L_5 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_5 R_5 g_m - C_5\right)}{s^4 \left(2 C_2 C_4 C_5 L_5 R_2 g_m + 2 C_2 C_4 C_5 R_2 R_5 g_m + 2 C_2 C_4 C_5 R_5 + 2 C_4 C_5 L_5 g_m\right) + s^2 \left(2 C_2 C_4 R_2 g_m + 2 C_2 C_4 + 2 C_2 C_5 R_2 g_m + 4 C_2 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s \left(2 C_4 G_5 R_5 R_5 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_4 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_5 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_5 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_5 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_5 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_5 R_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s \left(2 C_5 R_5 R_5 g_m\right) + s$$

10.279 INVALID-ORDER-279 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$-C_{2}C_{5}L_{5}R_{2}R_{5}s^{3}-R_{5}+s^{2}\left(C_{2}L_{5}R_{2}R_{5}g_{m}-C_{2}L_{5}R_{5}-C_{5}L_{5}R_{5}\right)+s\left(-C_{2}R_{2}R_{5}+L_{5}R_{5}g_{m}-L_{5}\right)$$

$$H(s) = \frac{-C_2C_5L_5R_2R_5s^3 - R_5 + s^2\left(C_2L_5R_2R_5g_m - C_2L_5R_2 + C_2L_5R_5 - C_5L_5R_5\right) + s\left(-C_2R_2R_5 + L_5R_5g_m - L_5\right)}{2C_2C_4C_5L_5R_2R_5s^4 + 2R_5g_m + s^3\left(2C_2C_4L_5R_2R_5g_m + 2C_2C_4L_5R_2 + 2C_2C_4L_5R_5 + 2C_4C_5L_5R_5\right) + s^2\left(2C_2C_4R_2R_5 + 2C_4L_5R_5g_m + 4C_2L_5 + 2C_4L_5R_5g_m + 4C_2L_5 + 2C_4L_5R_5g_m + 4C_2L_5 + 2C_4L_5R_5g_m + 4C_2R_5 + 2C_4R_5 + 2C_4$$

**10.280** INVALID-ORDER-280 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_2 C_5 L_5 R_2 R_5 g_m - C_2 C_5 L_5 R_2 + C_2 C_5 L_5 R_2 + C_2 C_5 L_5 R_5\right) + s^2 \left(C_2 L_5 R_2 g_m + C_2 L_5 + C_5 L_5 R_5 g_m - C_5 L_5\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5 + L_5 g_m\right) - 1}{2 g_m + s^4 \left(2 C_2 C_4 C_5 L_5 R_2 g_m + 2 C_2 C_4 C_5 L_5 R_2 g_m + 2 C_2 C_4 L_5 + 2 C_2 C_4 L_5 R_2 g_m + 2 C_2 C_4 R_5 R_5 g_m + 2 C_4$$

10.281 INVALID-ORDER-281 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$$

$$H(s) = \frac{R_5g_m + s^3\left(C_2C_5L_5R_2R_5g_m - C_2C_5L_5R_2 + C_2C_5L_5R_2 + C_2C_5L_5R_5\right) + s^2\left(-C_2C_5R_2R_5 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_2R_5g_m - C_2R_2 + C_2R_5 - C_5R_5\right) - 1}{2g_m + s^4\left(2C_2C_4C_5L_5R_2g_m + 2C_2C_4C_5L_5R_2\right) + s^3\left(2C_2C_4C_5R_2R_5 + 2C_2C_5L_5R_2g_m + 4C_2C_5L_5 + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_5 + 2C_2C_5R_5g_m + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_5 + 2C_2C_5R_5g_m + 4C_2C_5R_5 + 2C_4C_5R_5\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_5 + 2C_2C_5R_5g_m + 4C_2C_5R_5\right) + s^2\left(2C_2C_4R_5R_5g_m + 2C_2C_5R_5g_m + 2C_2C_5R_5g_m + 4C_2C_5R_5\right) + s^2\left(2C_2C_4R_5R_5g_m + 2C_2C_4R_5\right) + s^2\left(2C_2C_4R_5R_5g_m + 2C_2C_5R_5g_m + 2C$$

10.282 INVALID-ORDER-282 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_2C_5R_2R_4s^2 + R_4g_m + s\left(C_2R_2R_4g_m + C_2R_4 - C_5R_4\right)}{2C_2C_4C_5R_2R_4s^3 + 2g_m + s^2\left(2C_2C_4R_2R_4g_m + 2C_2C_4R_4 + 2C_2C_5R_2R_4g_m + 2C_2C_5R_2 + 4C_2C_5R_4 + 2C_4C_5R_4\right) + s\left(2C_2R_2g_m + 2C_2 + 2C_4R_4g_m + 2C_5R_4g_m + 2C_5R_5R_4g_m + 2C_5R_5R_5g_m + 2C_5R_5R_5g_m + 2C_5R_5g_m + 2C_5R_5g_m + 2C_5R_5g_m + 2C_5R_5g_m + 2C_5R_5g_m + 2C_5R$$

10.286 INVALID-ORDER-286  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_5R_2R_4s^3 - R_4 + s^2\left(C_2L_5R_2R_4g_m + C_2L_5R_4 - C_5L_5R_4\right) + s\left(-C_2R_2R_4 + L_5R_4g_m\right)}{2C_2C_4C_5L_5R_2R_4s^4 + 2R_4g_m + s^3\left(2C_2C_4L_5R_2R_4g_m + 2C_2C_5L_5R_2R_4g_m + 2C_2C_5L_5R_2 + 4C_2C_5L_5R_4 + 2C_4C_5L_5R_4\right) + s^2\left(2C_2C_4R_2R_4 + L_5R_4g_m + 2C_5L_5R_4g_m + 2C_5L_5R_5g_m + 2C_5L_5R_5g_m + 2C_5L_5R_5g_m + 2C_5L_5R_5g_m + 2C_5L_5R_5g_m + 2C_5L_5R_5g_m + 2C$ 

10.287 INVALID-ORDER-287  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{R_4 g_m + s^3 \left(C_2 C_5 L_5 R_2 R_4 g_m + C_2 C_5 L_5 R_4\right) + s^2 \left(C_2 C_5 R_2 R_4 R_5 g_m - C_2 C_5 R_2 R_4 + C_2 C_5 R_4 R_5 + C_5 L_5 R_4 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 + C_5 R_4 R_5 g_m - C_5 R_5 R_4 R_5 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_2 R_4 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m + C_2 R_4 R_5 g_m\right) + s \left(C_2 R_4 R_5 g_m\right) +$ 

10.288 INVALID-ORDER-288  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_5R_2R_4R_5s^3 - R_4R_5 + s^2\left(C_2L_5R_2R_4R_5g_m - C_2L_5R_2R_4 + C_2L_5R_4R_5 - C_5L_5R_4R_5\right) + s\left(-C_2R_2R_4R_5 + R_5R_4R_5 + R_5R_5R_5 + R$ 

10.289 INVALID-ORDER-289  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

10.290 INVALID-ORDER-290  $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$ 

 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_5 L_5 R_2 R_4 + C_2 C_5 L_5 R_2 R_4 + C_2 C_5 L_5 R_2 R_4 R_5\right) + s^2 \left(-C_2 C_5 R_2 R_4 R_5 g_m + 2C_2 C_5 L_5 R_5 R_5 g_m + 2C_$ 

10.291 INVALID-ORDER-291  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5R_2R_4s^3 + g_m + s^2\left(C_2C_4R_2R_4g_m + C_2C_4R_4 - C_2C_5R_2 - C_4C_5R_4\right) + s\left(C_2R_2g_m + C_2 + C_4R_4g_m - C_5\right)}{s^3\left(2C_2C_4C_5R_2R_4g_m + 2C_2C_4C_5R_2 + 4C_2C_4C_5R_4\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$ 

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10.292 INVALID-ORDER-292 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
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$$H(s) = \frac{-C_2C_4C_5R_2R_4R_5s^3 + R_5g_m + s^2\left(C_2C_4R_2R_4R_5g_m - C_2C_4R_2R_4 + C_2C_4R_4R_5 - C_2C_5R_2R_5 - C_4C_5R_4R_5\right) + s\left(C_2R_2R_5g_m - C_2R_2 + C_2R_5 + C_4R_4R_5g_m - C_4R_4 - C_5R_5\right) - 1}{2g_m + s^3\left(2C_2C_4C_5R_2R_4R_5g_m + 2C_2C_4C_5R_2R_5 + 4C_2C_4R_2R_4g_m + 2C_2C_4R_2R_5g_m + 2C_2C_4R_2 + 4C_2C_4R_5 + 2C_2C_5R_2R_5g_m + 4C_2C_5R_5 + 2C_4C_5R_4R_5g_m + 2C_4C_5R_5\right) + s\left(2C_2R_2g_m + 4C_2 + 2C_4R_4g_m + 2C_4R$$

10.293 INVALID-ORDER-293 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

**10.294** INVALID-ORDER-294 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^4 \left(C_2 C_4 C_5 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_5 R_4\right) + s^3 \left(-C_2 C_4 C_5 R_2 R_4 + C_2 C_5 L_5 R_2 g_m + C_2 C_5 L_5 + C_4 C_5 L_5 R_4 g_m\right) + s^2 \left(C_2 C_4 R_2 R_4 g_m + C_2 C_5 R_2 - C_4 C_5 R_4 + C_5 L_5 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_4 R_4 g_m - C_5\right)}{s^4 \left(2C_2 C_4 C_5 L_5 R_2 g_m + 2C_2 C_4 C_5 L_5\right) + s^3 \left(2C_2 C_4 C_5 R_2 R_4 g_m + 2C_2 C_4 C_5 R_2 + 4C_2 C_4 C_5 R_4 + 2C_4 C_5 L_5 g_m\right) + s^2 \left(2C_2 C_4 R_2 g_m + 2C_2 C_4 R_2 g_m + 2C_2 C_4 R_2 g_m + 2C_2 C_5 R_2 g_m + 4C_2 C_5 R_2 g_m + 2C_4 C_5 R_4 g_m + 2C_4 C_5\right)}$$

**10.295** INVALID-ORDER-295 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_5R_2R_4s^4 + s^3\left(C_2C_4L_5R_2R_4g_m + C_2C_5L_5R_2 - C_4C_5L_5R_4\right) + s^2\left(-C_2C_4R_2R_4 + C_2L_5R_2g_m + C_2L_5 + C_4L_5R_4g_m - C_5L_5\right) + s\left(-C_2R_2 - C_4R_4 + L_5g_m\right) - 1}{2g_m + s^4\left(2C_2C_4C_5L_5R_2R_4g_m + 2C_2C_4L_5R_2g_m + 2C_2C_4L_5 + 2C_2C_5L_5R_2g_m + 4C_2C_5L_5 + 2C_4C_5L_5R_4g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_2R_4g_m + 2C_4C_4R_4 + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(2C_2R_2g_m + 4C_2C_4L_5R_2g_m + 2C_4C_5L_5R_4g_m + 2C_4C_5L_5R_4g_m + 2C_4C_5L_5R_4g_m + 2C_4C_4R_4 + 2C_4L_5g_m + 2C_4C_5L_5g_m\right) + s\left(2C_4R_4R_4 + 2C_4R_4R_4 + 2C_4R_4R_4$$

10.296 INVALID-ORDER-296 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^4 \left(C_2 C_4 C_5 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_5 R_4 g_m + C_2 C_4 C_5 L_5 R_4 g_m + C_2 C_4 C_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 R_2 R_4 R_5 g_m - C_2 C_5 R_5 + C_4 C_5 R_4 R_5 g_m - C_2 C_5 R_5 + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_5 g_m$$

10.297 INVALID-ORDER-297 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_5R_2R_4R_5s^4 - R_5 + s^3\left(C_2C_4L_5R_2R_4R_5g_m - C_2C_4L_5R_2R_4 + C_2C_4L_5R_4R_5 - C_4C_5L_5R_4R_5\right) + s^2\left(-C_2C_4R_2R_4R_5 + C_2L_5R_2R_5g_m - C_2L_5R_2 + C_2C_4L_5R_2R_5g_m - C_2L_5R_2R_5g_m + C_2C_4L_5R_2R_5g_m + C_2C_4L_5R_2R_5g_$$

10.298 INVALID-ORDER-298 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{R_5 g_m + s^4 \left(C_2 C_4 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_5 R_2 R_4 + C_2 C_4 C_5 L_5 R_4 R_5\right) + s^3 \left(C_2 C_4 L_5 R_4 R_5 g_m - C_2 C_5 L_5 R_2 + C_2 C_5 L_5 R_2 + C_2 C_5 L_5 R_2 + C_2 C_5 L_5 R_4 R_5 g_m - C_4 C_5 L_5 R_4 R_5 g_m - C_2 C_4 R_2 R_4 R_5 g_m - C_2 C_4 R_5 R_5 g_m - C_2 C_4 R_5$$

10.299 INVALID-ORDER-299 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$$

$$H(s) = \frac{R_5g_m + s^4 \left(C_2C_4C_5L_5R_2R_4R_5g_m - C_2C_4C_5L_5R_2R_4 + C_2C_4C_5L_5R_2R_4 + C_2C_4C_5L_5R_2R_4 + C_2C_4C_5L_5R_2R_4R_5 + C_2C_5L_5R_2 + C_2C_5L_5R_2 + C_2C_5L_5R_2 + C_2C_5L_5R_2 + C_2C_5L_5R_4 + C_2C_4C_5L_5R_4 + S^2 \left(C_2C_4R_2R_4R_5g_m - C_4C_5L_5R_4R_5 + C_2C_5L_5R_2R_4R_5 + C_2C_5L_5R_4R_5 + C_2C_5L_5R_5R_5 + C_2C_5L_5R_5R_5 + C_2C_5L_5R_5R_5 + C_2C_5L_5R_5 + C_2C_5L_5R_5R_5 + C_2C_5L_5R_5 + C$$

**10.300** INVALID-ORDER-300 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)$$

$$H(s) = \frac{R_5 g_m + s^3 \left(C_2 C_4 L_4 R_2 R_5 g_m - C_2 C_4 L_4 R_2 + C_2 C_4 L_4 R_5\right) + s^2 \left(C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5\right) - 1}{2 g_m + s^3 \left(2 C_2 C_4 L_4 R_2 g_m + 4 C_2 C_4 L_4\right) + s^2 \left(2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_2 + 2 C_2 C_4 R_5 + 2 C_4 L_4 g_m\right) + s \left(2 C_2 R_2 g_m + 4 C_2 + 2 C_4 R_5 g_m + 2 C_4\right)}$$

**10.301** INVALID-ORDER-301  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_2C_4C_5L_4R_2s^4 + g_m + s^3\left(C_2C_4L_4R_2g_m + C_2C_4L_4 - C_4C_5L_4\right) + s^2\left(-C_2C_5R_2 + C_4L_4g_m\right) + s\left(C_2R_2g_m + C_2 - C_5\right)}{s^4\left(2C_2C_4C_5L_4R_2g_m + 4C_2C_4C_5L_4\right) + s^3\left(2C_2C_4C_5R_2 + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.302 INVALID-ORDER-302  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_4R_2R_5s^4 + R_5g_m + s^3\left(C_2C_4L_4R_2R_5g_m - C_2C_4L_4R_2 + C_2C_4L_4R_5 - C_4C_5L_4R_5\right) + s^2\left(-C_2C_5R_2R_5 + C_4L_4R_5g_m - C_4L_4\right) + s\left(C_2R_2R_5g_m - C_2R_2 + C_2R_5 - C_5R_5\right) - 1}{2g_m + s^4\left(2C_2C_4C_5L_4R_2R_5g_m + 4C_2C_4C_5L_4R_5\right) + s^3\left(2C_2C_4C_5R_2R_5 + 2C_4C_5L_4R_5g_m\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_5 + 2C_2C_4R_5 + 2C_4C_5R_5 + 2$ 

**10.303** INVALID-ORDER-303  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

**10.304** INVALID-ORDER-304  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{g_m + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_4 L_5\right) + s^4 \left(-C_2 C_4 C_5 L_4 R_2 + C_4 C_5 L_4 L_5 g_m\right) + s^3 \left(C_2 C_4 L_4 R_2 g_m + C_2 C_4 L_4 + C_2 C_5 L_5 R_2 g_m + C_2 C_5 L_5 - C_4 C_5 L_4\right) + s^2 \left(-C_2 C_5 R_2 + C_4 L_4 g_m + C_5 L_5 g_m\right) + s \left(C_2 R_2 g_m + C_2 C_5 L_5 R_2 g_m + C_2 C_5 R_2 g_m + C_2 C_5 L_5 R_2 g_m + C_2 C_5 R_2 g_m + C_2 C_5 L_5 R_2 g_m + C_2 C_5 L_5 R_2 g_m + C_2 C_5 R_2 g_m + C$ 

10.305 INVALID-ORDER-305  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_4L_5R_2s^5 + s^4\left(C_2C_4L_4L_5R_2g_m + C_2C_4L_4L_5 - C_4C_5L_4L_5\right) + s^3\left(-C_2C_4L_4R_2 - C_2C_5L_5R_2 + C_4L_4L_5g_m\right) + s^2\left(C_2L_5R_2g_m + C_2L_5 - C_4L_4 - C_5L_5\right) + s\left(-C_2R_2 + L_5g_m\right) - 1}{2g_m + s^5\left(2C_2C_4C_5L_4L_5R_2g_m + 4C_2C_4L_5R_2g_m + 4C_2C_4L_5R_2g_m + 4C_2C_4L_5R_2g_m + 4C_2C_5L_5\right) + s^2\left(2C_2C_4R_2 + 2C_4L_4g_m + 2C_4L_5g_m\right) + s^2\left(2C_2C_4R_2 + 2C_4L_5R_2g_m + 4C_2C_4L_5R_2g_m +$ 

**10.306** INVALID-ORDER-306  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

10.307 INVALID-ORDER-307  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_4L_5R_2R_5s^5 - R_5 + s^4\left(C_2C_4L_4L_5R_2R_5g_m - C_2C_4L_4L_5R_5 - C_4C_5L_4L_5R_5\right) + s^3\left(-C_2C_4L_4R_2R_5 - C_2C_5L_5R_2R_5 + C_4L_4L_5R_5g_m - C_4L_4L_5\right) + s^2\left(-C_2C_4L_4R_2R_5 - C_4C_5L_4L_5R_5g_m + 4C_2C_4L_4L_5R_5g_m + 4C_2C_4L_4L_5R_5g_m + 4C_2C_4L_4R_5 + 2C_4C_5L_4L_5R_5g_m + 4C_2C_4L_4R_5 + 2C_4C_5L_4R_5 + 2C_4C_4L_4R_5 + 2C_4C$ 

10.308 INVALID-ORDER-308  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{R_5 g_m + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 g_m - C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 L_4 L_5 R_2 g_m + C_2 C_4 L_4 L_5 R_2 g_m + C_2 C_4 L_4 L_5 R_2 g_m - C_4 C_5 L_4 L_5 R_2 g_m - C_2 C_4 L_4 R_2 + C_4 L_4 R_4 R_4 + C_4 L_4 R_4 R_4$ 

**10.309** INVALID-ORDER-309  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)$ 

 $H(s) = \frac{R_5g_m + s^5 \left(C_2C_4C_5L_4L_5R_2g_m - C_2C_4C_5L_4L_5R_2 + C_2C_4C_5L_4L_5R_2 + C_2C_4C_5L_4L_5R_5 + s^4 \left(-C_2C_4C_5L_4L_5R_5g_m - C_4C_5L_4L_5\right) + s^3 \left(C_2C_4L_4R_2R_5g_m - C_2C_4L_4R_2 + C_2C_4L_4R_5 + C_2C_5L_5R_2R_5g_m - C_2C_4L_4R_5 + C_2C_5L_5R_2R_5g_m - C_2C_4L_4R_5 + C_2C_5L_5R_2R_5g_m - C_2C_4L_4R_5 + C_2C_5L_5R_2R_5g_m - C_2C_4L_4R_5 + C_2C_5L_5R_5g_m - C_2C_4L_4R_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_4R_5g_m - C_2C_4L_4R_5g_m - C_2C_4L_4R_5g_m - C_2C_4L_4R_5g_m - C_2C_4L_4R_5g_m - C_2C_4L_5L_5g_m - C_2C_4L_5L_5g$ 

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10.312 INVALID-ORDER-312 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_4R_2R_5s^3 + s^2\left(C_2L_4R_2R_5g_m - C_2L_4R_2 + C_2L_4R_5 - C_5L_4R_5\right) + s\left(L_4R_5g_m - L_4\right)}{2C_2C_4C_5L_4R_2R_5s^4 + 2R_5g_m + s^3\left(2C_2C_4L_4R_2R_5g_m + 2C_2C_4L_4R_2 + 2C_2C_4L_4R_5 + 2C_2C_5L_4R_5 + 2C_4C_5L_4R_5\right) + s^2\left(2C_2C_5R_2R_5 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_5L_4R_5g_m\right) + s\left(2C_2R_2R_5g_m + 2C_2R_5 + 2C_5L_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_2R_2R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2
10.313 INVALID-ORDER-313 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{L_4 g_m s + s^3 \left(C_2 C_5 L_4 R_2 R_5 g_m - C_2 C_5 L_4 R_2 + C_2 C_5 L_4 R_5\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 + C_5 L_4 R_5 g_m - C_5 L_4\right)}{2 g_m + s^4 \left(2 C_2 C_4 C_5 L_4 R_2 R_5 g_m + 2 C_2 C_4 L_4 R_2 g_m + 2 C_2 C_4 L_4 + 2 C_2 C_5 L_4 R_2 g_m + 4 C_2 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_
10.314 INVALID-ORDER-314 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{L_4 g_m s + s^4 \left(C_2 C_5 L_4 L_5 R_2 g_m + C_2 C_5 L_4 L_5\right) + s^3 \left(-C_2 C_5 L_4 R_2 + C_5 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 - C_5 L_4\right)}{2 g_m + s^5 \left(2 C_2 C_4 C_5 L_4 L_5 R_2 g_m + 2 C_2 C_4 L_5 L_4 L_5 g_m\right) + s^3 \left(2 C_2 C_4 L_4 R_2 g_m + 2 C_2 C_5 L_4 R_2 g_m + 2 C_2 C_5 L_5 R_2 g_m + 2 C_2 C_5 L_5 + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_2 C_5 R_2 + 2 C_4 L_4 g_m + 2 C_5 L_5 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 C_5 L_5 R_2 g_m + 2 C_2 C_5 L_5 R_2 g_m + 2 C_2 C_5 L_5 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g_m + 2 C_2 R_2 g_m\right) + s \left(2 C_2 R_2 g
10.315 INVALID-ORDER-315 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_4L_5R_2s^4 - L_4s + s^3\left(C_2L_4L_5R_2g_m + C_2L_4L_5 - C_5L_4L_5\right) + s^2\left(-C_2L_4R_2 + L_4L_5g_m\right)}{2C_2C_4C_5L_4L_5R_2s^5 + s^4\left(2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4L_5 + 2C_4C_5L_4L_5\right) + s^3\left(2C_2C_4L_4R_2 + 2C_4L_4L_5g_m + 4C_2L_4 + 2C_4L_5R_2g_m + 4C_2L_4 + 2C_4L_4L_5g_m\right) + s^2\left(2C_2L_4R_2g_m + 4C_2L_4 + 2C_4L_4 + 2C_5L_5\right) + s\left(2C_2R_2 + 2C_4L_4R_2 + 2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_4R_2g_m + 4C_4L_4 + 2C_4L_4R_2g_m\right)}
10.316 INVALID-ORDER-316 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{L_4 g_m s + s^4 \left(C_2 C_5 L_4 L_5 R_2 g_m + C_2 C_5 L_4 R_2 + C_2 C_5 L_4 R_2 + C_2 C_5 L_4 R_5 + C_5 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 + C_5 L_4 R_5 g_m - C_2 C_5 L_4 R_2 R_5 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 L_5 g_m\right) + s^2 \left(C_2 L_4 R_2 g_m + C_2 L_4 L_5 L_5 L_5 L_5 L_5 L_5
10.317 INVALID-ORDER-317 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C_{2}C_{5}L_{4}L_{5}R_{2}R_{5}s^{4}-L_{4}R_{5}s+s^{3}\left(C_{2}L_{4}L_{5}R_{2}R_{5}g_{m}-C_{2}L_{4}L_{5}R_{2}+C_{2}L_{4}L_{5}R_{5}-C_{5}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{4}R_{2}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}
H(s) = \frac{-C_2C_5L_4L_5R_2R_5s + s + (C_2L_4L_5R_2r_5g m + C_2L_4L_5R_2r_5g m + C_2L_4L_5R_5r_5 + c + c + C_2L_4L_5R_5r_5 + c
10.318 INVALID-ORDER-318 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s^{4} \left(C_{2} C_{5} L_{4} L_{5} R_{2} R_{5} g_{m}-C_{2} C_{5} L_{4} L_{5} R_{2}+C_{2} C_{5} L_{4} L_{5} R_{5}\right)+s^{3} \left(C_{2} L_{4} L_{5} R_{2} g_{m}+C_{2} L_{4} L_{5}+C_{5} L_{4} L_{5} R_{5} g_{m}-C_{5} L_{4} L_{5} R_{5}\right)+s^{3} \left(C_{2} L_{4} L_{5} R_{2} g_{m}+C_{2} L_{4} L_{5}+C_{5} L_{4} L_{5} R_{5} g_{m}-C_{5} L_{4} L_{5} R_{5}\right)+s^{3} \left(C_{2} L_{4} L_{5} R_{2} g_{m}+C_{2} L_{4} L_{5}+C_{5} L_{4} L_{5} R_{5} g_{m}-C_{5} L_{4} L_{5} R_{5}\right)+s^{3} \left(C_{2} L_{4} L_{5} R_{2} g_{m}+C_{2} L_{4} L_{5}+C_{5} L_{4} L_{5} R_{5} g_{m}-C_{5} L_{4} L_{5} R_{5}\right)+s^{3} \left(C_{2} L_{4} L_{5} R_{2} g_{m}+C_{2} L_{4} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} L_{5} R_{5} g_{m}-C_{5} L_{5} L_{5} R_{5} g_{m}-
H(s) = \frac{1}{2R_5g_m + s^5\left(2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_2C_4L_4R_2R_2g_m + 2C_2C_4L_
10.319 INVALID-ORDER-319 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s^{4} \left(C_{2} C_{5} L_{4} L_{5} R_{2} R_{5} g_{m}-C_{2} C_{5} L_{4} L_{5} R_{2}+C_{2} C_{5} L_{4} L_{5} R_{5}\right)+s^{3} \left(-C_{2} C_{5} L_{4} R_{2} R_{5}+C_{5} L_{4} L_{5} R_{5} g_{m}-C_{5} L_{4} L_{5} R_{5} R_{5} R_{m}\right)+s^{3} \left(-C_{2} C_{5} L_{4} R_{5} R_{5
                                                          \frac{2R_5g_m + s^5 \left(2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4C_5L_4L_5R_2 + 2C_2C_4C_5L_4L_5R_2 + 2C_2C_4L_4R_2R_5 + 2C_2C_4L_4R_2R_5g_m + 2C_4C_5L_4L_5R_2g_m + 4C_2C_5L_4L_5R_2g_m + 4C_2C_5L_4R_2g_m +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
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 $H(s) = \frac{s^2 \left( C_2 L_4 R_2 R_5 g_m - C_2 L_4 R_2 + C_2 L_4 R_5 \right) + s \left( L_4 R_5 g_m - L_4 \right)}{2 R_5 g_m + s^3 \left( 2 C_2 C_4 L_4 R_2 R_5 g_m + 2 C_2 C_4 L_4 R_2 + 2 C_2 C_4 L_4 R_5 \right) + s^2 \left( 2 C_2 L_4 R_2 g_m + 4 C_2 L_4 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 \right) + s \left( 2 C_2 R_2 R_5 g_m + 2 C_2 R_2 + 2 C_2 R_5 + 2 L_4 g_m \right) + 2 C_2 R_3 g_m + 2 C_3 R_5 g_m + 2 C_4 R_$ 

 $H(s) = \frac{-C_2C_5L_4R_2s^3 + L_4g_ms + s^2\left(C_2L_4R_2g_m + C_2L_4 - C_5L_4\right)}{2C_2C_4C_5L_4R_2s^4 + 2g_m + s^3\left(2C_2C_4L_4R_2g_m + 2C_2C_4L_4 + 2C_2C_5L_4R_2g_m + 4C_2C_5L_4 + 2C_4C_5L_4\right) + s^2\left(2C_2C_5R_2 + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_2R_2g_m + 2C_2 + 2C_5\right)}$ 

**10.310** INVALID-ORDER-310  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$ 

10.311 INVALID-ORDER-311  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$ 

10.320 INVALID-ORDER-320  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$   $R_5 g_m + s^3 \left(C_2 C_4 L_4 R_2 R_5 g_m - C_2 C_4 L_4 R_2 + C_2 C_4 L_4 R_5\right) + s^2 \left(C_2 C_4 R_2 R_4 R_5 g_m - C_2 C_4 R_2 R_4 + C_2 C_4 R_4 R_5 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5 + C_4 R_5 R_5\right)$ 

 $H(s) = \frac{R_5 g_m + s^3 \left(C_2 C_4 L_4 R_2 R_5 g_m - C_2 C_4 L_4 R_2 + C_2 C_4 L_4 R_5\right) + s^2 \left(C_2 C_4 R_2 R_4 R_5 g_m - C_2 C_4 R_2 R_4 + C_2 C_4 R_4 R_5 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5 + C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2 g_m + s^3 \left(2 C_2 C_4 L_4 R_2 g_m + 4 C_2 C_4 L_4\right) + s^2 \left(2 C_2 C_4 R_2 R_4 g_m + 2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_2 + 4 C_2 C_4 R_4 + 2 C_2 C_4 R_5 + 2 C_4 L_4 g_m\right) + s \left(2 C_2 R_2 g_m + 4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5$ 

10.321 INVALID-ORDER-321  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_4R_2s^4 + g_m + s^3\left(-C_2C_4C_5R_2R_4 + C_2C_4L_4R_2g_m + C_2C_4L_4 - C_4C_5L_4\right) + s^2\left(C_2C_4R_2R_4g_m + C_2C_4R_4 - C_2C_5R_2 - C_4C_5R_4 + C_4L_4g_m\right) + s\left(C_2R_2g_m + C_2 + C_4R_4g_m - C_5\right)}{s^4\left(2C_2C_4C_5L_4R_2g_m + 4C_2C_4C_5L_4\right) + s^3\left(2C_2C_4C_5R_2R_4g_m + 2C_2C_4C_5R_2 + 4C_2C_4C_5R_4 + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4G_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4g_m + 2C_4C_$ 

10.322 INVALID-ORDER-322  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

10.323 INVALID-ORDER-323  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

10.324 INVALID-ORDER-324  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

10.325 INVALID-ORDER-325  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_4L_5R_2s^5 + s^4\left(-C_2C_4C_5L_5R_2R_4 + C_2C_4L_4L_5R_2g_m + C_2C_4L_4F_2 + C_2C_4L_5R_2R_4g_m + C_2C_4L_5R_2R_4g_m + C_2C_4L_5R_4 + C_4L_4L_5g_m\right) + s^2\left(-C_2C_4R_2R_4 + C_2L_5R_2g_m + C_2C_4L_5R_2R_4g_m + C_2C_4L_5R_2g_m + C_2C_4L_5R_2g_m$ 

10.326 INVALID-ORDER-326  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

10.327 INVALID-ORDER-327  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_4L_5R_2R_5s^5 - R_5 + s^4\left(-C_2C_4C_5L_5R_2R_4R_5 + C_2C_4L_4L_5R_2 + C_2C_4L_4L_5R_5 - C_4C_5L_4L_5R_5\right) + s^3\left(-C_2C_4L_4R_2R_5 + C_2C_4L_4R_2R_5 + C_2C_4L_4R_5 + C_2C_4L_5R_5 + C_2C_4L_5R_5$ 

10.328 INVALID-ORDER-328  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{R_5 g_m + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 R_5 g_m - C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_4 L_4 L_5 R_2 g_m + C_2 C_4 L_4 L_5 R_2 g_m + C_2 C_4 L_4 L_5 R_2 g_m + C_2 C_4 L_4 L_5 R_2 g_m - C_4 C_5 L_4 L_5 \right) \\ - 2 g_m + s^5 \left(2 C_2 C_4 C_5 L_4 L_5 R_2 g_m + 4 C_2 C_4 C_5 L_4 L_5 \right) + s^4 \left(2 C_2 C_4 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_2 + 4 C_2 C_4 C_5 L_5 R_5 + 2 C_4 C_5 L_4 L_5 g_m \right) \\ + s^5 \left(2 C_2 C_4 C_5 L_4 L_5 R_2 g_m + 4 C_2 C_4 C_5 L_4 L_5 R_2 g_m + 2 C_2 C_4 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_5 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_5 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_5 R_5 g_m + 2 C_2 C_4 C_5$ 

10.329 INVALID-ORDER-329  $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$ 

 $H(s) = \frac{R_5 g_m + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 R_5 g_m - C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 R_2 R_5 + C_2 C_4 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_5 R_2 R_4 + C_2 C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5 \right) \\ + s^4 \left(C_2 C_4 C_5 L_4 L_5 R_2 g_m + 4 C_2 C_4 C_5 L_4 R_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_2 R_4 + C_2 C_4 C_5 L_5 R_2 R_4 + C_2 C_4 C_5 L_4 L_5 g_m \right) \\ + s^4 \left(C_2 C_4 C_5 L_4 L_5 R_2 g_m + 4 C_2 C_4 C_5 L_4 R_5 g_m + 2 C_2 C_4 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_5 R_5 g_m + 2 C_2 C_4 C_5 L_5 R_5 g_m + 2 C_2 C_4 C_5 L_5 R_5 g_m + 2 C_2 C_4 C_5 L_5$ 

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10.330 INVALID-ORDER-330 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right)
H(s) = \frac{s^2 \left( C_2 L_4 R_2 R_4 R_5 g_m - C_2 L_4 R_2 R_4 + C_2 L_4 R_4 R_5 \right) + s \left( L_4 R_4 R_5 g_m - L_4 R_4 \right)}{2 R_4 R_5 g_m + 2 R_4 + s^3 \left( 2 C_2 C_4 L_4 R_2 R_4 R_5 g_m + 2 C_2 L_4 R_2 R_4 g_m + 2 C_2 L_4 R_2 R_5 g_m + 2 C_4 L_4 R_4 \right) + s \left( 2 C_2 R_2 R_4 R_5 g_m + 2 C_2 R_4 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 R_5 g_m
10.331 INVALID-ORDER-331 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
                                                       \frac{-C_{2}C_{5}L_{4}R_{2}R_{4}s^{3}+L_{4}R_{4}g_{m}s+s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m}+C_{2}L_{4}R_{4}-C_{5}L_{4}R_{4}\right)}{2C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}g_{m}+s^{3}\left(2C_{2}C_{4}L_{4}R_{2}R_{4}g_{m}+2C_{2}C_{4}L_{4}R_{2}+4C_{2}C_{5}L_{4}R_{2}+4C_{2}C_{5}L_{4}R_{2}+4C_{2}C_{5}L_{4}R_{2}+4C_{2}C_{5}L_{4}R_{2}+2C_{2}L_{4}R_{2}g_{m}+2C_{2}L_{4}+2C_{4}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}R_{2}g_{m}+2C_{5}L_{4}
10.332 INVALID-ORDER-332 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -C_2C_5L_4R_2R_4R_5s^3 + s^2\left(C_2L_4R_2R_4R_5g_m - C_2L_4R_2R_4 + C_2L_4R_4R_5 - C_5L_4R_4R_5\right) + s\left(L_4R_4R_5g_m - C_4L_4R_4R_5 - C_5L_4R_4R_5\right) + s\left(L_4R_4R_5g_m - C_4L_4R_4R_5\right) + s\left(L_4R_4R_5g_m - C_4L_4R_5\right) + s\left(L_4R_5g_m - C_5L_4R_5\right) + s\left(L_4R_5g_m - C_5L_4R_5\right) + s\left(L_4R_5g_m - C_5L_4R_5\right) + s\left(L_4R_5g_m - C_5L_5R_5\right) + s\left(L_5R_5g_m - C_5L_5R_5\right) + s
H(s) = \frac{-C_2C_5L_4R_2R_4R_5s^\circ + s^\circ (C_2L_4R_2R_4R_5g_m - C_2L_4R_2R_4 + C_2L_4R_4R_5 - C_5L_4R_4R_5) + s(L_4R_4R_5g_m - C_2L_4R_2R_4R_5g_m - C_2L_4R_2R_4 + C_2L_4R_2R_4 + C_2L_4R_4R_5) + s(L_4R_4R_5g_m - C_2L_4R_2R_4R_5g_m - C_2L_4R_4R_5g_m - C_2L_4R_4R
10.333 INVALID-ORDER-333 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L_{4}R_{4}g_{m}s + s^{3}\left(C_{2}C_{5}L_{4}R_{2}R_{4}R_{5}g_{m} - C_{2}C_{5}L_{4}R_{2}R_{4} + C_{2}C_{5}L_{4}R_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m} + C_{2}L_{4}R_{4} + C_{5}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m} + C_{2}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m} + C_{2}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{5}g_{m} + C_{2}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{5}g_{m} + C_{2}L_{5}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{5}g_{m} + C_{2}L_{5}R_{5}\right) + s^{2}\left(C_{2}L_{5}R_{5}g_{m} + C_{2}L_{5}R_{5}\right) + s^{2}\left(C_{2}L_{5}R_{5}g_
                                                       \frac{L_4 I \iota_4 y_m s + s - ( \iota_2 \iota_5 L_4 I \iota_2 I \iota_4 I \iota_5 g_m - \iota_2 \iota_5 L_4 I \iota_2 I \iota_4 + \iota_5 \iota_2 I \iota_4 I \iota_4 I \iota_5 g_m - \iota_2 \iota_5 L_4 I \iota_4 I \iota_5 g_m - \iota_2 \iota_5 L_4 I \iota_4 I \iota_5 g_m + \iota_5 L_4 I \iota_4 I \iota_5 g_m - \iota_2 \iota_5 L_4 I \iota_4 I \iota_5 g_m + \iota_5 L_4 I \iota_4 I \iota_5 g_m - \iota_5 L_4 I \iota_5 I \iota_4 I \iota_5 g_m - \iota_5 L_4 I \iota_5 I \iota_4 I \iota_5 I \iota_4 I \iota_5 g_m - \iota_5 L_4 I \iota_5 I \iota_4 I \iota_5 I \iota_4 I \iota_5 I \iota_4 I \iota_5 
10.334 INVALID-ORDER-334 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L_{4}R_{4}g_{m}s + s^{4}\left(C_{2}C_{5}L_{4}L_{5}R_{2}R_{4}g_{m} + C_{2}C_{5}L_{4}L_{5}R_{4}\right) + s^{3}\left(-C_{2}C_{5}L_{4}R_{2}R_{4} + C_{5}L_{4}L_{5}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m}\right)
10.335 INVALID-ORDER-335 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -C_2C_5L_4L_5R_2R_4s^2 - L_4R_4s + s^3\left(C_2L_4L_5R_2R_4g_m + C_2L_4L_5R_4 - C_5L_4L_5R_4\right) + s^2\left(-C_2L_4R_2R_4 + L_4R_4S_5 - L_4R_4S_5 + 2R_4S_5 + 2R_4S_5 + 2R_4S_5 + 2R_4S_5 - L_4R_5S_4S_5 + 2R_4S_5 + 2R_4S_5 - L_4R_5S_4S_5 + 2R_4S_5 - L_4R_5S_4S_5 + 2R_4S_5 - L_4R_5S_4S_5 + 2R_4S_5 - L_4R_5S_4S_5 - L_4R_5S_5 - L_4R_5S
10.336 INVALID-ORDER-336 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   L_4R_4g_ms + s^4(C_2C_5L_4L_5R_2R_4g_m + C_2C_5L_4L_5R_4)
H(s) = \frac{1}{2R_4g_m + s^5 \left(2C_2C_4C_5L_4L_5R_2R_4g_m + 2C_2C_4C_5L_4R_2R_4 + 2C_2C_4C_5L_4R_2R_4 + 2C_2C_4C_5L_4R_2R_4 + 2C_2C_5L_4L_5R_2g_m + 2C_2C_5L_4L_5R_2g_m + 2C_2C_5L_4L_5R_2g_m + 2C_2C_5L_4L_5R_2g_m + 2C_2C_5L_4R_2R_4g_m + 2C_2C_5L_4R_4R_5g_m + 2C_2C_5L_4R_4R_5g_m + 2C_2C_5L_4R_4R_5g_m + 2C_2C_5L_4R_4R_5g_m + 2C_2C_5L_4R_4R_5g_m + 2C_2C_5L_4R_5g_m + 2C_2C_5L_5L_5G_m + 2C_2C_5L_5L_5G_m + 2C_2C_5L_5L_5G_m + 2C_2C_5L_5L_5G_m + 2C_2C_5L_5L_5G_m + 2C_2C_5L_5L_
10.337 INVALID-ORDER-337 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
H(s) = \frac{-C_2C_5L_4L_5R_2R_4R_5s^5 + 2R_4R_5 + s^4\left(2C_2C_4L_4L_5R_2R_4R_5g_m + 2C_2C_4L_4L_5R_2R_4R_5g_m + 2C_2C_5L_4L_5R_2R_4R_5g_m + 2C_2C_5L_4L_5R_2R_4R_5g_m + 2C_2C_5L_4L_5R_2R_4R_5 + s^4\left(2C_2C_4L_4L_5R_2R_4R_5 + s^4\left(2C_2C_4L_4L_5R_2R_4R_5 + 2C_2C_4L_4L_5R_2R_4R_5 + 2C_2C_5L_4L_5R_2R_4R_5 + 2C_2C_5L_4L_5R_4R_5 + 2C_2C_5L_4L_5R_2R_4R_5 + 2C_2C_5L_4L_5R_2R_4R_5 + 2C_2C_5L_4L_5R_4R_5 + 2C_2C_5L_5L_5R_5R_5 + 2C_2C_5L_5R_5R_5R_5 + 2
10.338 INVALID-ORDER-338 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)
H(s) = \frac{1}{2R_4R_5g_m + 2R_4 + s^5\left(2C_2C_4C_5L_4L_5R_2R_4R_5g_m + 2C_2C_4C_5L_4L_5R_2R_4 + 2C_2C_4L_4L_5R_4R_5\right) + s^4\left(2C_2C_4L_4L_5R_2R_4g_m + 2C_2C_5L_4L_5R_2R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_4L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R
10.339 INVALID-ORDER-339 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
                                                       \overline{2R_4R_5g_m + 2R_4 + s^5 \left(2C_2C_4C_5L_4L_5R_2R_4R_5g_m + 2C_2C_4C_5L_4L_5R_2R_4 + 2C_2C_4C_5L_4L_5R_2R_4R_5 + 2C_2C_5L_4L_5R_2R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_4L_5
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10.340 INVALID-ORDER-340 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
```

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_4 L_4 R_2 R_4 R_5 g_m - C_2 C_4 L_4 R_2 R_4 + C_2 C_4 L_4 R_4 R_5 \right) + s^2 \left(C_2 L_4 R_2 R_5 g_m - C_2 L_4 R_5 + C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 \right) + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5 + L_4 R_5 g_m - L_4 \right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_2 C_4 L_4 R_2 R_4 g_m + 2 C_2 C_4 L_4 R_2 R_5 g_m + 2 C_2 C_4 L_4 R_2 + 4 C_2 C_4 L_4 R_4 + 2 C_2 C_4 L_4 R_5 \right) + s^2 \left(2 C_2 L_4 R_2 g_m + 4 C_2 L_4 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 R_5 g_$$

10.341 INVALID-ORDER-341 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_4R_2R_4s^4 + R_4g_m + s^3\left(C_2C_4L_4R_2R_4g_m + C_2C_5L_4R_2 - C_4C_5L_4R_4\right) + s^2\left(-C_2C_5R_2R_4 + C_2L_4R_2g_m + C_2L_4 + C_4L_4R_4g_m - C_5L_4\right) + s\left(C_2R_2R_4g_m + C_2R_4 - C_5R_4 + L_4g_m\right)}{2g_m + s^4\left(2C_2C_4L_4R_2R_4g_m + 2C_2C_4L_4R_2g_m + 2C_2C_4L_4R_2g_m + 2C_2C_5L_4R_2g_m + 2C_2C_5L_4R_2g_m + 2C_2C_5R_4R_4g_m + 2C_4C_5L_4R_4g_m + 2C_4C_$$

**10.342** INVALID-ORDER-342 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_4R_2R_4R_5s^4 + R_4R_5g_m - R_4 + s^3\left(C_2C_4L_4R_2R_4 + C_2C_4L_4R_2R_5 - C_4C_5L_4R_2R_5 - C_4C_5L_4R_4R_5\right) + s^2\left(-C_2C_5R_2R_4R_5 + C_2L_4R_2R_5g_m - C_2C_4L_4R_2R_4g_m + 2C_2C_4L_4R_2R_5g_m + 2C_4C_5L_4R_2R_5g_m + 2C_4C_5L_4R_3R_5g_m + 2C_4C_5L_4R_5g_m + 2C$$

**10.343** INVALID-ORDER-343 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

10.344 INVALID-ORDER-344 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

10.345 INVALID-ORDER-345 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_4L_5R_2R_4s^5 - R_4 + s^4\left(C_2C_4L_4L_5R_2R_4g_m + C_2C_5L_4L_5R_2 - C_4C_5L_4L_5R_4\right) + s^3\left(-C_2C_4L_4R_2R_4 - C_2C_5L_5R_2R_4 + C_2L_4L_5R_2g_m + C_2L_4L_5 + C_2C_5L_4L_5R_2g_m + C_2C_4L_4R_2R_4 - C_2C_5L_4L_5R_2g_m + C_2C_4L_4R_2R_4 - C_2C_5L_4L_5R_2g_m + C_2C_4L_4R_2R_4 - C_2C_5L_4L_5R_2g_m + C_2C_4L_4R_2R_4g_m + C_2C_4L_4R_4g_m + C_2C_$$

**10.346** INVALID-ORDER-346 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{R_4 g_m + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_4 L_5 R_4 g_m + C_2 C_4 L_5 L_4 R_2 R_4 g_m + C_2 C_4 L_4 R_2 R_4 g_m - C_2 C_5 L_4 R_2 R_4 g_m - C_2 C_5 L_4 R_2 R_4 g_m + C_2 C_5 L_4 L_5 R_2 g_m + C_2 C_5 L_4 R_2 R_4 g_m + C$$

10.347 INVALID-ORDER-347 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_4L_5R_2R_4R_5s^5 - R_4R_5 + s^4\left(C_2C_4L_4L_5R_2R_4R_5g_m - C_2C_4L_4L_5R_2R_4 + C_2C_4L_4L_5R_2R_4 + C_2C_4L_4L_5R_2R_4 + C_2C_4L_4L_5R_2R_4R_5g_m - C_2C_4L_4L_5R_2R_4R_5g_m + C_2C_4L_4L_5R_2R_4g_m + C_2C_4L_4L_5R_4g_m + C_2C_4L$$

**10.348** INVALID-ORDER-348 
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_4 L_5 R_2 R_4 + C_2 C_4 C_5 L_4 L_5 R_2 R_4 R_5 g_m - C_2 C_4 L_5 L_4 L_5 R_2 R_4 g_m + C_2 C_4 L_4 L_5 R_4 R_5 g_m - C_2 C_5 L_4 L_5 R_2 R_5 g_m - C_2 C_5 L_4 L_5 R_2 R_4 R_5 g_m - C_4 C_5 L_4 L_5 R_4 R_5 g_m - C_4 C$$

10.349 INVALID-ORDER-349 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_4 L_5 R_2 R_4 + C_2 C_4 C_5 L_4 L_5 R_2 R_4 R_5 + C_2 C_5 L_4 L_5 R_2 R_5 g_m + C_2 C_4 C_5 L_4 L_5 R_2 R_4 R_5 + C_2 C_4 C_5 L_4 L_5 R_2 R_5 g_m + C_2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_2 C_4 C_5 L_4 L_5 R_4 R_5 g_m + C_2 C_4 C_5 L_4 L_5 R_5 g_m + C_2 C_4 C_5 L$$

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10.350 INVALID-ORDER-350 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5, \infty\right)
 H(s) = \frac{R_4 R_5 g_m - R_4 + s^3 \left(C_2 C_4 L_4 R_2 R_4 R_5 g_m - C_2 C_4 L_4 R_2 R_4 + C_2 C_4 L_4 R_4 R_5 g_m - C_4 L_4 R_4 \right) + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5 g_m - C_2 R_2 R_4 R_5 g_m + 2 C_2 C_4 L_4 R_2 R_4 g_m + 2 C_2 R_4 R_5 g_m + 2 C_2 R_4 
 10.351 INVALID-ORDER-351 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
 H(s) = \frac{-C_2C_4C_5L_4R_2R_4s^4 + R_4g_m + s^3\left(C_2C_4L_4R_2R_4g_m + C_2C_4L_4R_4 - C_4C_5L_4R_4\right) + s^2\left(-C_2C_5R_2R_4 + C_4L_4R_4g_m\right) + s\left(C_2R_2R_4g_m + C_2R_4 - C_5R_4\right)}{2g_m + s^4\left(2C_2C_4C_5L_4R_2R_4g_m + 2C_2C_4L_4R_2g_m + 2C_2C_4L_4R_2g_m + 2C_4C_5L_4R_4\right) + s^2\left(2C_2C_4R_2R_4g_m + 2C_4C_5L_4R_4\right) + s^2\left(2C_2C_4R_2R_4g_m + 2C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(2C_2C_4R_2R_4g_m + 2C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(2C_4C_4R_4R_4g_m + 2C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(2C_4C_4R_4R_4g_m + 2C_4C_5R_4R_4\right) + s^2\left(2C_4R_4R_4g_m + 2C_4C_5R_4\right) + s^2\left(2C_4R_4R_4g_m + 2C_4C_5R_4R_4\right) + s^2\left(2C_4R_4R_4g_m + 2C_4C_5R_4\right) + s^2\left(2
 10.352 INVALID-ORDER-352 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                               -C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}R_{5}s^{4} + R_{4}R_{5}g_{m} - R_{4} + s^{3}\left(C_{2}C_{4}L_{4}R_{2}R_{4}R_{5}g_{m} - C_{2}C_{4}L_{4}R_{2}R_{4} + C_{2}C_{4}L_{4}R_{2}R_{4} + C_{2}C_{4}L_{4}R_{2}R_{4} + C_{2}C_{4}L_{4}R_{2}R_{4} + C_{2}C_{4}L_{4}R_{2}R_{5}g_{m} + 2C_{2}C_{4}L_{4}R_{2}R_{5}g_{m} + 2C_{4}C_{5}L_{4}R_{4}R_{5}g_{m} + 2C_{4}C_{5}L_{4}R_{5}g_{m} + 2C
 10.353 INVALID-ORDER-353 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                 \frac{R_{4}g_{m}+s^{4}\left(C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}+C_{2}C_{4}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+S^{2}\left(C_{2}C_{5}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{4}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}R_{2}+C_{2}C_{4}L_{4}R_{2}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_{4}+C_{4}C_{5}L_{4}R_
10.354 INVALID-ORDER-354 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
 10.355 INVALID-ORDER-355 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}s^{5}-R_{4}+s^{4}\left(C_{2}C_{4}L_{4}L_{5}R_{2}R_{4}g_{m}+C_{2}C_{4}L_{4}L_{5}R_{4}-C_{4}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}-C_{4}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{5}-C_{4}L_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{4}L_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}R_{5}R_{5}-C_{5}R_{5}R_{5}\right)+s^{3}\left(-C_{2}
                                                 -C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}s^{5}-R_{4}+s^{4}\left(C_{2}C_{4}L_{4}L_{5}R_{2}R_{4}g_{m}+C_{2}C_{4}L_{4}L_{5}R_{4}-C_{4}C_{5}L_{4}L_{5}R_{4}\right)+s^{3}\left(-C_{2}C_{4}L_{4}R_{2}R_{4}-C_{2}C_{5}L_{4}L_{5}R_{4}+C_{2}C_{4}L_{4}L_{5}R_{4}+C_{2}C_{4}L_{4}L_{5}R_{4}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{4}L_{5}R_{2}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{2}C_{4}L_{5}R_{4}+C_{
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10.356 INVALID-ORDER-356  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{R_4 g_m + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_4 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_4 R_2 R_4 + C_2 C_4 C_5 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_4 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 R_2$ 

10.357 INVALID-ORDER-357  $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$ 

10.358 INVALID-ORDER-358  $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $R_4R_5g_m - R_4 + s^5 (C_2C_4C_5L_4L_5R_2R_4R_5g_m - C_2C_4C_5L_4L_5R_2R_4$ 

 $\frac{1}{2R_4q_m + 2R_5q_m + s^5\left(2C_2C_4C_5L_4L_5R_2R_4q_m + 2C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_4 + 2C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_4 + 2C_2C_4C_5L_4L_5R_4 + 2C_2C_4C_5L_4L_5R_5 + 2C_2C_4C_5L_4L_5R_5 + 2C_2C_4C_5L_4L_5R_5 + 2C_2C_4C_5L_4L_5R_5 + 2C_2C_$ 

10.359 INVALID-ORDER-359 
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$$

 $H(s) = \frac{1}{2R_4g_m + 2R_5g_m + s^5\left(2C_2C_4C_5L_4L_5R_2R_4g_m + 2C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_5\right) + s^4\left(2C_2C_4C_5L_4R_2R_5g_m + 2C_2C_4C_5L_4R_2R_5 + 4C_2C_4C_5L_4R_2R_5 + 4C_2C_4C_5L_4R_5R_5 + 4C_2C_4C_5L_5R_5 + 4C_2C_4C_5L_5R_5 + 4C_2C_4C_5L_5R_5 + 4C_2C_4C_5L_5R_5 + 4C_2C_4C_5L_5R_5 + 4C_2C_4C_5L_5R_5 + 4C_2C_4$ 

**10.360** INVALID-ORDER-360 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2R_4s^3 + C_2L_2R_4g_ms^2 + R_4g_m + s\left(C_2R_4 - C_5R_4\right)}{2g_m + s^3\left(2C_2C_5L_2R_4g_m + 2C_2C_5L_2\right) + s^2\left(4C_2C_5R_4 + 2C_2L_2g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5\right)}$$

10.361 INVALID-ORDER-361 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(C_2L_2R_4R_5g_m - C_2L_2R_4\right) + s\left(C_2R_4R_5 - C_5R_4R_5\right)}{2R_4g_m + 2R_5g_m + s^3\left(2C_2C_5L_2R_4R_5g_m + 2C_2C_5L_2R_5\right) + s^2\left(4C_2C_5R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_5R_4R_5g_m + 2C_5R_5\right) + 2c_3R_5g_m + 2c_3R_5$$

10.362 INVALID-ORDER-362 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{R_4 g_m + s^3 \left(C_2 C_5 L_2 R_4 R_5 g_m - C_2 C_5 L_2 R_4\right) + s^2 \left(C_2 C_5 R_4 R_5 + C_2 L_2 R_4 g_m\right) + s \left(C_2 R_4 + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^3 \left(2 C_2 C_5 L_2 R_4 g_m + 2 C_2 C_5 L_2 R_5 g_m + 2 C_2 C_5 L_2\right) + s^2 \left(4 C_2 C_5 R_4 + 2 C_2 C_5 R_5 + 2 C_2 L_2 g_m\right) + s \left(2 C_2 + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2 C_5\right)}$$

**10.363** INVALID-ORDER-363 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_2L_5R_4g_ms^4 + R_4g_m + s^3\left(-C_2C_5L_2R_4 + C_2C_5L_5R_4\right) + s^2\left(C_2L_2R_4g_m + C_5L_5R_4g_m\right) + s\left(C_2R_4 - C_5R_4\right)}{2C_2C_5L_2L_5g_ms^4 + 2g_m + s^3\left(2C_2C_5L_2R_4g_m + 2C_2C_5L_2 + 2C_2C_5L_5\right) + s^2\left(4C_2C_5R_4 + 2C_2L_2g_m + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5\right)}$$

**10.364** INVALID-ORDER-364 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2L_5R_4s^4 + C_2L_2L_5R_4g_ms^3 + L_5R_4g_ms - R_4 + s^2\left(-C_2L_2R_4 + C_2L_5R_4 - C_5L_5R_4\right)}{2R_4g_m + s^4\left(2C_2C_5L_2L_5R_4g_m + 2C_2C_5L_2L_5\right) + s^3\left(4C_2C_5L_5R_4 + 2C_2L_2L_5g_m\right) + s^2\left(2C_2L_2R_4g_m + 2C_2L_2 + 2C_2L_5 + 2C_5L_5R_4g_m + 2C_5L_5\right) + s\left(4C_2R_4 + 2L_5g_m\right) + 2c_3R_4g_m +$$

**10.365** INVALID-ORDER-365 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_2L_5R_4g_ms^4 + R_4g_m + s^3\left(C_2C_5L_2R_4R_5g_m - C_2C_5L_2R_4 + C_2C_5L_5R_4\right) + s^2\left(C_2C_5R_4R_5 + C_2L_2R_4g_m + C_5L_5R_4g_m\right) + s\left(C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2C_2C_5L_2L_5g_ms^4 + 2g_m + s^3\left(2C_2C_5L_2R_4g_m + 2C_2C_5L_2R_5g_m + 2C_2C_5L_2 + 2C_2C_5L_5\right) + s^2\left(4C_2C_5R_4 + 2C_2C_5R_5 + 2C_2L_2g_m + 2C_5L_5g_m\right) + s\left(2C_2 + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5R_5g_m + 2C_5R_5g_m\right)}$$

**10.366** INVALID-ORDER-366 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2L_5R_4R_5s^4 - R_4R_5 + s^3\left(C_2L_2L_5R_4R_5g_m - C_2L_2L_5R_4\right) + s^2\left(-C_2L_2R_4R_5 + C_2L_5R_4R_5 - C_5L_5R_4R_5\right) + s\left(L_5R_4R_5g_m - L_5R_4\right)}{2R_4R_5g_m + 2R_5 + s^4\left(2C_2C_5L_2L_5R_4g_m + 2C_2L_5L_5R_5\right) + s^3\left(4C_2C_5L_2L_5R_4g_m + 2C_2L_2L_5R_4g_m + 2C_2L_2L_5\right) + s^2\left(2C_2L_2R_4R_5g_m + 2C_2L_2R_5 + 4C_2L_5R_4 + 2C_2L_5R_5\right) + s\left(4C_2R_4R_5g_m + 2C_5L_5R_4\right) + s\left(4C_2R_4R_5g_m + 2C_2L_2L_5R_4g_m + 2C_2L_2L_5\right) + s^2\left(2C_2L_2R_4R_5g_m + 2C_2L_2R_5 + 4C_2L_5R_5\right) + s\left(4C_2R_4R_5g_m + 2C_5L_5R_5\right) + s\left(4C_2R_4R_5g_m + 2C_2L_2L_5R_4g_m + 2C_2L_2L_5\right) + s^2\left(2C_2L_2R_4R_5g_m + 2C_2L_2R_5 + 4C_2L_5R_5\right) + s\left(4C_2R_4R_5g_m + 2C_3L_5R_5\right) + s\left(4C_2R_4R_5g$$

10.367 INVALID-ORDER-367 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$$

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 L_2 L_5 R_4 R_5 + C_2 L_2 L_5 R_4 g_m\right) + s^2 \left(C_2 L_2 R_4 R_5 g_m - C_2 L_2 R_4 + C_2 L_5 R_4 R_5 g_m - C_5 L_5 R_4\right) + s \left(C_2 R_4 R_5 + L_5 R_4 g_m\right)}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_2 C_5 L_2 L_5 R_4 g_m + 2 C_2 C_5 L_2 L_5 R_5 g_m + 2 C_2 L_2 L_5 g_m\right) + s^2 \left(2 C_2 L_2 R_4 g_m + 2 C_2 L_2 R_5 g_m + 2 C_2 L_2 + 2 C_2 L_5 R_4 g_m + 2 C_5 L_5 R_5 g_m + 2 C_5 L_5\right) + s \left(4 C_2 R_4 + 2 C_2 R_5 g_m + 2 C_2 L_5 R_5 g_m + 2 C_2 L_5 R_5 g_m + 2 C_5 L_5 R_5 g_m$$

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10.368 INVALID-ORDER-368 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
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 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 L_2 R_4 R_5 g_m - C_2 L_2 R_4 R_5 g_m - C_2 L_2 R_4 R_5 g_m - C_5 L_5 R_5 g_m - C_5 L$ 

**10.369** INVALID-ORDER-369  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$ 

$$H(s) = \frac{C_2R_5s + R_5g_m + s^2\left(C_2L_2R_5g_m - C_2L_2\right) - 1}{2g_m + s^3\left(2C_2C_4L_2R_5g_m + 2C_2C_4L_2\right) + s^2\left(2C_2C_4R_5 + 2C_2L_2g_m\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4\right)}$$

10.370 INVALID-ORDER-370  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{-C_2C_5L_2s^3 + C_2L_2g_ms^2 + g_m + s\left(C_2 - C_5\right)}{2C_2C_4C_5L_2s^4 + s^3\left(2C_2C_4L_2g_m + 2C_2C_5L_2g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.371 INVALID-ORDER-371  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$ 

$$H(s) = \frac{-C_2C_5L_2R_5s^3 + R_5g_m + s^2\left(C_2L_2R_5g_m - C_2L_2\right) + s\left(C_2R_5 - C_5R_5\right) - 1}{2C_2C_4C_5L_2R_5s^4 + 2g_m + s^3\left(2C_2C_4L_2R_5g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_5g_m\right) + s^2\left(2C_2C_4R_5 + 4C_2C_5R_5 + 2C_2L_2g_m + 2C_4C_5R_5\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4 + 2C_5R_5g_m\right)}$$

10.372 INVALID-ORDER-372  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{g_m + s^3 \left( C_2 C_5 L_2 R_5 g_m - C_2 C_5 L_2 \right) + s^2 \left( C_2 C_5 R_5 + C_2 L_2 g_m \right) + s \left( C_2 + C_5 R_5 g_m - C_5 \right)}{s^4 \left( 2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 L_2 \right) + s^3 \left( 2 C_2 C_4 C_5 L_2 g_m + 2 C_2 C_5 L_2 g_m \right) + s^2 \left( 2 C_2 C_4 + 4 C_2 C_5 + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 \right) + s \left( 2 C_4 g_m + 2 C_5 g_m \right)}$$

10.373 INVALID-ORDER-373  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

$$H(s) = \frac{C_2C_5L_2L_5g_ms^4 + g_m + s^3\left(-C_2C_5L_2 + C_2C_5L_5\right) + s^2\left(C_2L_2g_m + C_5L_5g_m\right) + s\left(C_2 - C_5\right)}{2C_2C_4C_5L_2L_5g_ms^5 + s^4\left(2C_2C_4C_5L_2 + 2C_2C_4C_5L_5\right) + s^3\left(2C_2C_4L_2g_m + 2C_2C_5L_2g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.374 INVALID-ORDER-374  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{-C_2C_5L_2L_5s^4 + C_2L_2L_5g_ms^3 + L_5g_ms + s^2\left(-C_2L_2 + C_2L_5 - C_5L_5\right) - 1}{2C_2C_4C_5L_2L_5s^5 + 2g_m + s^4\left(2C_2C_4L_2L_5g_m + 2C_2C_5L_2L_5g_m\right) + s^3\left(2C_2C_4L_2 + 2C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5\right) + s^2\left(2C_2L_2g_m + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(4C_2 + 2C_4\right)}$$

10.375 INVALID-ORDER-375  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$ 

$$H(s) = \frac{C_2C_5L_2L_5g_ms^4 + g_m + s^3\left(C_2C_5L_2R_5g_m - C_2C_5L_2 + C_2C_5L_5\right) + s^2\left(C_2C_5R_5 + C_2L_2g_m + C_5L_5g_m\right) + s\left(C_2 + C_5R_5g_m - C_5\right)}{2C_2C_4C_5L_2L_5g_ms^5 + s^4\left(2C_2C_4C_5L_2R_5g_m + 2C_2C_4C_5L_2\right) + s^3\left(2C_2C_4C_5R_5 + 2C_2C_4L_2g_m + 2C_4C_5L_2g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_5g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.376 INVALID-ORDER-376  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

$$H(s) = \frac{-C_2C_5L_2L_5R_5s^4 - R_5 + s^3\left(C_2L_2L_5R_5g_m - C_2L_2L_5\right) + s^2\left(-C_2L_2R_5 + C_2L_5R_5 - C_5L_5R_5\right) + s\left(L_5R_5g_m - L_5\right)}{2C_2C_4C_5L_2L_5R_5s^5 + 2R_5g_m + s^4\left(2C_2C_4L_2L_5R_5g_m + 2C_2C_4L_2L_5 + 2C_2C_4L_2R_5 + 2C_2C_4L_2R_5 + 2C_2C_4L_2R_5 + 2C_2C_4L_2R_5 + 2C_2C_4L_2R_5 + 2C_2C_4L_2R_5 + 2C_4C_5L_5R_5\right) + s^2\left(2C_2L_2R_5g_m + 4C_2L_5 + 2C_4L_5R_5g_m + 2C_4L_5 + 2C_5L_5R_5g_m\right) + s\left(4C_2R_5 + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m\right) + s\left(4C_2R_5 + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m\right) + s\left(4C_2R_5 + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m\right) + s\left(4C_2R_5 + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m + 2C_4L_5R_5g_m\right) + s\left(4C_2R_5 + 2C_4R_5R_5g_m\right) + s\left(4C_4R_5 +$$

10.377 INVALID-ORDER-377  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

$$H(s) = \frac{R_5g_m + s^4 \left( C_2C_5L_2L_5R_5g_m - C_2C_5L_2L_5 \right) + s^3 \left( C_2C_5L_5R_5 + C_2L_2L_5g_m \right) + s^2 \left( C_2L_2R_5g_m - C_2L_2 + C_2L_5 + C_5L_5R_5g_m - C_5L_5 \right) + s \left( C_2R_5 + L_5g_m \right) - 1}{2g_m + s^5 \left( 2C_2C_4C_5L_2L_5 \right) + s^4 \left( 2C_2C_4C_5L_5R_5 + 2C_2C_4L_2L_5g_m \right) + s^3 \left( 2C_2C_4L_2R_5g_m + 2C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5 + 2C_4C_5L_5 \right) + s^2 \left( 2C_2C_4R_5 + 2C_4L_5g_m + 2C_4L_5g_m + 2C_5L_5g_m \right) + s \left( 4C_2 + 2C_4C_5L_5 + 2C_4C_5L_5 + 2C_4C_5L_5 + 2C_4C_5L_5 \right) + s^2 \left( 2C_4R_5 + 2C_4C_5L_5 + 2C_4C_5L_5 + 2C_4C_5L_5 \right) + s^2 \left( 2C_4R_5 + 2C_4C_5L_5 + 2C_4C_5L_5 \right) + s^2 \left( 2C_4R_5 + 2C_4C_5L_5 + 2C_4C_5L_5 \right) + s^2 \left( 2C_4R_5 + 2C_4C_5L_5 + 2C_4C_5L_5 \right) + s^2 \left( 2C_4R_5 + 2C_4R_5 \right) + s^2 \left($$

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10.378 INVALID-ORDER-378 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{R_5g_m + s^4\left(C_2C_5L_2L_5R_5g_m - C_2C_5L_2L_5\right) + s^3\left(-C_2C_5L_2R_5 + C_2C_5L_2R_5 + c_2C_5L_2R_5g_m - C_2L_2 + C_5L_5R_5g_m - C_5L_5\right) + s\left(C_2R_5 - C_5R_5\right) - 1}{2g_m + s^5\left(2C_2C_4C_5L_2L_5\right) + s^4\left(2C_2C_4C_5L_2R_5 + 2C_2C_4L_2R_5g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 4C_2C_5R_5 + 2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_2C_4R_5 + 2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_4C_5L_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_5C_5R_5g_m + 2C_4C_5L_5\right) + s^2\left(2C_5C_5R_5g_m + 2C_5C_5L_5\right) + s^2\left(2C_5C_5R_5g_m + 2C_5C_5L_5\right) + s^2\left(2C_5C_5R_5g_m + 2C_5
10.379 INVALID-ORDER-379 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right)
                                                                                                                                                                                                                                                                            H(s) = \frac{C_2R_4R_5s + R_4R_5g_m - R_4 + s^2\left(C_2L_2R_4R_5g_m - C_2L_2R_4\right)}{2R_4g_m + 2R_5g_m + s^3\left(2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_2C_4R_4R_5 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_4R_4R_5 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_4R_4R_5 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_4R_4R_5 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_4R_4R_5g_m + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4R_4\right) + s^2\left(2C_4R_4R_5g_m + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4R_4g_m + 2C
10.380 INVALID-ORDER-380 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                               H(s) = \frac{-C_2C_5L_2R_4s^3 + C_2L_2R_4g_ms^2 + R_4g_m + s\left(C_2R_4 - C_5R_4\right)}{2C_2C_4C_5L_2R_4s^4 + 2g_m + s^3\left(2C_2C_4L_2R_4g_m + 2C_2C_5L_2R_4g_m + 2C_2C_5L_2\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_2L_2g_m + 2C_4C_5R_4\right) + s\left(2C_2 + 2C_4R_4g_m + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5
10.381 INVALID-ORDER-381 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(C_2L_2R_4R_5g_m - C_2L_2R_4\right) + s\left(C_2R_4R_5 - C_5R_4R_5\right)}{2C_2C_4C_5L_2R_4R_5s^4 + 2R_4g_m + 2R_5g_m + s^3\left(2C_2C_4L_2R_4R_5g_m + 2C_2C_5L_2R_4R_5g_m + 2C_2C_5L_2R_4\right) + s\left(2C_2C_4R_4R_5 + 4C_2C_5R_4R_5 + 4C_2C_5R_4R_5\right) + s\left(4C_2R_4 + 2C_2R_5 + 2C_4R_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m
10.382 INVALID-ORDER-382 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{R_4 g_m + s^3 \left(C_2 C_5 L_2 R_4 R_5 g_m - C_2 C_5 L_2 R_4\right) + s^2 \left(C_2 C_5 R_4 R_5 + C_2 L_2 R_4 g_m\right) + s \left(C_2 R_4 + C_5 R_4 R_5 g_m - C_5 R_4\right)}{2 g_m + s^4 \left(2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 L_2 R_4 g_m + 2 C_2 C_5 L_2 R_5 g_m + 2 C_2 C_5 L_2\right) + s^2 \left(2 C_2 C_4 R_4 + 4 C_2 C_5 R_4 + 2 C_2 C_5 R_5 + 2 C_2 L_2 g_m + 2 C_4 C_5 R_4\right) + s \left(2 C_2 + 2 C_4 R_4 g_m + 2 C_5 R_5 
10.383 INVALID-ORDER-383 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                   \frac{C_{2}C_{5}L_{2}L_{5}R_{4}g_{m}s^{4}+R_{4}g_{m}+s^{3}\left(-C_{2}C_{5}L_{2}R_{4}+C_{2}C_{5}L_{5}R_{4}\right)+s^{2}\left(C_{2}L_{2}R_{4}g_{m}+C_{5}L_{5}R_{4}g_{m}\right)+s\left(C_{2}R_{4}-C_{5}R_{4}\right)}{2C_{2}C_{4}C_{5}L_{2}L_{5}R_{4}+2C_{2}C_{5}L_{2}L_{5}g_{m})+s^{3}\left(2C_{2}C_{4}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}+2C_{2}C_{5}L_{2}+2C_{2}C_{5}L_{5}+2C_{4}C_{5}L_{5}R_{4}+2C_{2}L_{2}g_{m}+2C_{4}C_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+4C_{2}C_{5}L_{2}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+4C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+4C_{2}C_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}g_{m}\right)+s^{2}\left(2C_{2}C_{4}R_{4}+2C_{2}C_{5}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{4}+2C_{2}L_{5}R_{5}R_{5}+2C_{4}L_{5}R_{5}R_{5}+2C_{4}L_{5}R_{5}R_{5}+2C_{4}L_{5}R_{5}R_{5}+2C_{5}L_{5}R_{5}R_{5}+2C_{5}L_{5}R_{5}R_{5}+2C_{5}L_{5}R_{5}R_{5}+2C_{5}L_{5}R_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_{5}L_{5}R_{5}+2C_
10.384 INVALID-ORDER-384 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_5R_4s^4 + C_2L_2L_5R_4g_ms^3 + L_5R_4g_ms - R_4 + s^2\left(-C_2L_2R_4 + C_2L_5R_4 - C_5L_5R_4\right)}{2C_2C_4C_5L_2L_5R_4s^5 + 2R_4g_m + s^4\left(2C_2C_4L_2L_5R_4g_m + 2C_2C_5L_2L_5\right) + s^3\left(2C_2C_4L_2R_4 + 2C_2C_4L_5R_4 + 4C_2C_5L_5R_4\right) + s^2\left(2C_2L_2R_4g_m + 2C_4L_5R_4g_m + 2C_5L_5R_4g_m 
10.385 INVALID-ORDER-385 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                   \frac{C_{2}C_{5}L_{2}L_{5}R_{4}g_{m}s^{4}+R_{4}g_{m}+s^{3}\left(C_{2}C_{5}L_{2}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}R_{4}+C_{2}C_{5}L_{5}R_{4}\right)+s^{2}\left(C_{2}C_{5}R_{4}R_{5}+C_{2}L_{2}R_{4}g_{m}+C_{5}L_{5}R_{4}g_{m}\right)+s\left(C_{2}R_{4}+C_{5}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}R_{4}g_{m}+C_{5}L_{5}R_{4}g_{m}\right)+s\left(C_{2}R_{4}+C_{5}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}R_{4}g_{m}+C_{5}L_{5}R_{4}g_{m}\right)+s^{2}\left(C_{2}C_{4}C_{5}L_{2}R_{4}R_{5}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}R_{4}g_{m}+2C_{2}C_{5
10.386 INVALID-ORDER-386 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \frac{C_2C_5L_2L_5R_4R_5s^5 - R_4R_5g_m - C_2L_2L_5R_4R_5g_m - C_2L_2L_5R_4R_5g_m - C_2L_2L_5R_4R_5 - C_5L_5R_4R_5 - C_5L_5R_4R_
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 $\frac{2R_4g_m + 2R_5g_m + s^5 \left(2C_2C_4C_5L_2L_5R_4R_5g_m + 2C_2C_4L_5L_5R_4\right) + s^4 \left(2C_2C_4C_5L_5R_4R_5 + 2C_2C_4L_2L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4 + 2C_2C_4L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_5R_4g_m + 2C_2C_5L_2R_5g_m + 2C_2C_4L_2R_4g_m + 2C_2C_4L_5R_4g_m + 2C_2C_5L_2R_5g_m + 2C_2C_4L_2R_4g_m + 2C_2C_5L_2R_5g_m + 2C_2C_5L_3R_5g_m + 2C_2C_5L_3R_5g_m + 2C_2C_5L_3R_5g_m + 2C_2C_5L_3R_5g_m + 2C_2C_5L_3R_5g_m + 2C_2C_5L_3R_5$ 

 $R_{4}R_{5}g_{m}-R_{4}+s^{4}\left(C_{2}C_{5}L_{2}L_{5}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{5}R_{4}\right)+s^{3}\left(C_{2}C_{5}L_{5}R_{4}R_{5}+C_{2}L_{2}L_{5}R_{4}g_{m}\right)+s^{2}\left(C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{5}R_{4}\right)+s^{3}\left(C_{2}C_{5}L_{5}R_{4}R_{5}+C_{2}L_{2}L_{5}R_{4}g_{m}\right)+s^{2}\left(C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{5}R_{4}\right)+s^{3}\left(C_{2}C_{5}L_{5}R_{4}R_{5}+C_{2}L_{2}L_{5}R_{4}g_{m}\right)+s^{2}\left(C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{5}R_{4}\right)+s^{3}\left(C_{2}C_{5}L_{5}R_{4}R_{5}+C_{2}L_{2}L_{5}R_{4}g_{m}\right)+s^{2}\left(C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{5}R_{4}\right)+s^{2}\left(C_{2}L_{5}R_{4}R_{5}+C_{2}L_{5}R_{4}R_{5}\right)+s^{2}\left(C_{2}L_{5}R_{4}R_{5}+C_{2}L_{5}R_{4}R_{5}\right)+s^{2}\left(C_{2}L_{5}R_{4}R_{5}+C_{2}L_{5}R_{4}R_{5}\right)+s^{2}\left(C_{2}L_{5}R_{4}R_{5}+C_{2}L_{5}R_{5}R_{5}\right)+s^{2}\left(C_{2}L_{5}R_{5}+C_{2}L_{5}R_{5}+C_{2}L_{5}R_{5}\right)+s^{2}\left(C_{2}L_{5}R_{5}+C_{2}L$ 

10.387 INVALID-ORDER-387  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$ 

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10.388 INVALID-ORDER-388 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R_4R_5g_m - R_4 + s^4\left(C_2C_5L_2L_5R_4R_5g_m - C_2C_5L_2L_5R_4\right) + s^3\left(-C_2C_5L_2R_4R_5 + C_2C_5L_5R_4R_5\right)
H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_4 R_5 + C_2 C_5 L_5 R_4 R_5\right)}{2 R_4 g_m + 2 R_5 g_m + s^5 \left(2 C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m + 2 C_2 C_4 L_5 R_4 R_5 g_m + 2 C_2 C_5 L_2 R_5 R_5 g_m + 2 C_2 C_5 L_2 
10.389 INVALID-ORDER-389 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right)
                                                                                                                                                                                                                                                                            10.390 INVALID-ORDER-390 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                   H(s) = \frac{-C_2C_4C_5L_2R_4s^4 + g_m + s^3\left(C_2C_4L_2R_4g_m - C_2C_5L_2\right) + s^2\left(C_2C_4R_4 + C_2L_2g_m - C_4C_5R_4\right) + s\left(C_2 + C_4R_4g_m - C_5\right)}{s^4\left(2C_2C_4C_5L_2R_4g_m + 2C_2C_4L_2\right) + s^3\left(4C_2C_4C_5R_4 + 2C_2C_4L_2g_m + 2C_2C_5L_2g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}
10.391 INVALID-ORDER-391 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{-C_2C_4C_5L_2R_4R_5s^4 + R_5g_m + s^3\left(C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4 - C_2C_5L_2R_5\right) + s^2\left(C_2C_4R_4R_5 + C_2L_2R_5g_m - C_2L_2 - C_4C_5R_4R_5\right) + s\left(C_2R_5 + C_4R_4R_5g_m - C_4R_4 - C_5R_5\right) - 1}{2g_m + s^4\left(2C_2C_4C_5L_2R_5g_m + 2C_2C_4L_2R_4g_m + 2C_2C_4L_2R_5g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_5g_m\right) + s^2\left(4C_2C_4R_4 + 2C_2C_4R_5 + 4C_2C_5R_5 + 2C_2L_2g_m + 2C_4C_5R_4R_5g_m + 2C_4C_5R_5\right) + s\left(4C_2 + 2C_4R_4g_m + 2C_4R_5g_m + 2C_4C_5R_5\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4C_5R_5\right) + s\left(4C_4 + 2C_4R_5g_m + 2C_
10.392 INVALID-ORDER-392 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{7} s}, \infty, R_4 + \frac{1}{C_{4} s}, R_5 + \frac{1}{C_{5} s}, \infty\right)
                                                                                             H(s) = \frac{g_m + s^4 \left(C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4\right) + s^3 \left(C_2 C_4 C_5 R_4 R_5 + C_2 C_4 L_2 R_4 g_m + C_2 C_5 L_2 R_5 g_m - C_2 C_5 L_2\right) + s^2 \left(C_2 C_4 R_4 + C_2 C_5 R_5 + C_2 L_2 g_m + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4\right) + s \left(C_2 + C_4 R_4 g_m + C_5 R_5 g_m - C_5\right)}{s^4 \left(2 C_2 C_4 C_5 L_2 R_4 g_m + 2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 L_2\right) + s^3 \left(4 C_2 C_4 C_5 R_4 + 2 C_2 C_4 C_5 R_5 + 2 C_2 C_4 L_2 g_m + 2 C_2 C_5 L_2 g_m\right) + s^2 \left(2 C_2 C_4 + 4 C_2 C_5 + 2 C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s \left(2 C_4 g_m + 2 C_5 R_5 g_m + 2 C_4 C_5\right) + s^2 \left(2 C_4 R_4 + C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s^2 \left(2 C_4 R_4 + C_4 C_5 R_4 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5\right) + s^2 \left(2 C_4 R_4 R_5 g_m + 2 C_4 R_5 g_m + 2 
10.393 INVALID-ORDER-393 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                      H(s) = \frac{C_2C_4C_5L_2L_5R_4g_ms^5 + g_m + s^4\left(-C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_5L_2L_5g_m\right) + s^3\left(C_2C_4L_2R_4g_m - C_2C_5L_2 + C_2C_5L_5 + C_4C_5L_5R_4g_m\right) + s^2\left(C_2C_4R_4 + C_2L_2g_m - C_4C_5R_4 + C_5L_5g_m\right) + s\left(C_2 + C_4R_4g_m - C_5\right)}{2C_2C_4C_5L_2L_5g_ms^5 + s^4\left(2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2 + 2C_2C_4C_5L_5\right) + s^3\left(4C_2C_4C_5R_4 + 2C_2C_4L_2g_m + 2C_4C_5L_2g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}
10.394 INVALID-ORDER-394 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_4C_5L_2L_5R_4s^5 + s^4\left(C_2C_4L_2L_5R_4g_m - C_2C_5L_2L_5\right) + s^3\left(-C_2C_4L_2R_4 + C_2L_4L_5R_4 + C_2L_4L_5g_m - C_4C_5L_5R_4\right) + s^2\left(-C_2L_2 + C_2L_5 + C_4L_5R_4g_m - C_5L_5\right) + s\left(-C_4R_4 + L_5g_m\right) - 1}{2g_m + s^5\left(2C_2C_4C_5L_2L_5R_4g_m + 2C_2C_4L_5L_5R_4g_m + 2C_2C_4L_2L_5g_m + 2C_2C_4L_5 + 4C_2C_4L_5 + 4C_2C_5L_5 + 2C_4C_5L_5\right) + s^2\left(4C_2C_4R_4 + 2C_2L_2g_m + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(4C_2C_4L_5R_4g_m + 2C_4C_5L_5\right) + s^2\left(4C_2C_4R_4 + 2C_4C_5L_5\right) + s^2\left(4C_4C_5L_5\right) + s^2\left(4C_4C_5L_5\right)
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**10.395** INVALID-ORDER-395 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_2L_5R_4g_ms^5 + g_m + s^4\left(C_2C_4C_5L_2R_4R_5g_m - C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2g_m\right) + s^3\left(C_2C_4C_5R_4R_5 + C_2C_4L_2R_4g_m + C_2C_5L_2 + C_2C_5L_5 + C_4C_5L_2R_4g_m\right) + s^2\left(C_2C_4R_4 + C_2C_5R_5 + C_2L_2g_m + C_4C_5R_4R_5g_m - C_4C_5R_4 + C_4C_5R_4R_5g_m - C_4C_5R_4R_5g_m\right) + s^2\left(C_2C_4R_4 + C_2C_5R_5 + C_4C_5R_4R_5g_m - C_4C_5R_4R_5g_m - C_4C_5R_4R_5g_m\right) + s^2\left(C_2C_4R_4 + C_2C_5R_5 + C_4C_5R_4g_m\right) + s^2\left(C_2C_4R_4 + C_2C_5R_5g_m\right) + s^2\left(C_2C_4R_5R_5g_m\right) + s^2\left(C_2C_4R_5R_5g$$

10.396 INVALID-ORDER-396 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_2L_5R_4R_5s^5 - R_5 + s^4\left(C_2C_4L_2L_5R_4R_5g_m - C_2C_4L_2L_5R_4 - C_2C_5L_2L_5R_5\right) + s^3\left(-C_2C_4L_2R_4R_5 + C_2L_4L_5R_4R_5 + C_2L_4L_5R_4g_m - C_2L_4L_5R_4R_5\right) + s^2\left(-C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + C_2C_4L_5R_4R_5 + C_2C_4L_5R_4R_5\right) + s^2\left(-C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_$$

10.397 INVALID-ORDER-397 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

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10.398 INVALID-ORDER-398 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{R_5g_m + s^5 \left(C_2C_4C_5L_2L_5R_4R_5g_m - C_2C_4C_5L_2L_5R_4\right) + s^4 \left(-C_2C_4C_5L_2R_4R_5 + C_2C_5L_2L_5R_5g_m - C_2C_5L_2L_5\right) + s^3 \left(C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4 - C_2C_5L_2R_5 + C_2C_5L_2R_5 + C_2C_5L_2R_5\right) + s^4 \left(2C_2C_4C_5L_2R_5R_5g_m + 2C_2C_4C_5L_2R_5 + 4C_2C_4C_5L_2R_5 + 4C_2C_4C_5L_2R_5\right) + s^3 \left(4C_2C_4C_5R_4R_5 + 2C_2C_4L_2R_4g_m + 2C_2C_4L_2R_5g_m + 2C_2C_4L_
10.399 INVALID-ORDER-399 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)
                                                                                                                                                                                                                                                                                    H(s) = \frac{C_2C_4L_4R_5s^3 + C_2R_5s + R_5g_m + s^4\left(C_2C_4L_2L_4R_5g_m - C_2C_4L_2L_4\right) + s^2\left(C_2L_2R_5g_m - C_2L_2 + C_4L_4R_5g_m - C_4L_4\right) - 1}{2C_2C_4L_2L_4g_ms^4 + 2g_m + s^3\left(2C_2C_4L_2R_5g_m + 2C_2C_4L_2 + 4C_2C_4L_4\right) + s^2\left(2C_2C_4R_5 + 2C_2L_2g_m + 2C_4L_4g_m\right) + s\left(4C_2 + 2C_4R_5g_m + 2C_4L_4\right)}
10.400 INVALID-ORDER-400 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                          H(s) = \frac{-C_2C_4C_5L_2L_4s^5 + C_2C_4L_2L_4g_ms^4 + g_m + s^3\left(C_2C_4L_4 - C_2C_5L_2 - C_4C_5L_4\right) + s^2\left(C_2L_2g_m + C_4L_4g_m\right) + s\left(C_2 - C_5\right)}{2C_2C_4C_5L_2L_4g_ms^5 + s^4\left(2C_2C_4C_5L_2 + 4C_2C_4C_5L_4\right) + s^3\left(2C_2C_4L_2g_m + 2C_2C_5L_2g_m + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}
10.401 INVALID-ORDER-401 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                        -C_{2}C_{4}C_{5}L_{2}L_{4}R_{5}s^{5} + R_{5}g_{m} + s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{5}g_{m} - C_{2}C_{4}L_{2}L_{4}\right) + s^{3}\left(C_{2}C_{4}L_{4}R_{5} - C_{2}C_{5}L_{2}R_{5} - C_{4}C_{5}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{2}R_{5}g_{m} - C_{2}L_{2} + C_{4}L_{4}R_{5}g_{m} - C_{4}L_{4}\right) + s\left(C_{2}R_{5} - C_{5}R_{5}\right) - 1
-C_{2}C_{4}C_{5}L_{2}L_{4}R_{5}s^{5} + R_{5}g_{m} + s^{4}\left(2C_{2}C_{4}C_{5}L_{2}R_{5} + 4C_{2}C_{4}L_{2}L_{4}g_{m}\right) + s^{3}\left(2C_{2}C_{4}L_{2}R_{5}g_{m} + 2C_{2}C_{4}L_{2} + 4C_{2}C_{4}L_{4}R_{5}g_{m}\right) + s^{2}\left(2C_{2}C_{4}R_{5} + 4C_{2}C_{5}R_{5} + 2C_{4}L_{4}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m} + 2C_{4}C_{5}L_{4}R_{5}g_{m}\right) + s^{2}\left(2C_{2}C_{4}R_{5} + 4C_{2}C_{5}R_{5} + 2C_{4}L_{4}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m} + 2C_{4}C_{5}L_{4}R_{5}g_{m}\right) + s^{2}\left(2C_{2}C_{4}R_{5} + 4C_{2}C_{5}R_{5} + 2C_{4}L_{4}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m} + 2C_{4}C_{5}L_{4}R_{5}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m} + 2C_{4}C_{5}R_{5}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m} + 2C_{4}R_{5}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m}\right) + s\left(4C_{2} + 2C_{4}R_{5}g_{m}\right) + s\left(4
10.402 INVALID-ORDER-402 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                        10.403 INVALID-ORDER-403 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                   H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(-C_2C_4C_5L_2L_4 + C_2C_4C_5L_4L_5\right) + s^4\left(C_2C_4L_2L_4g_m + C_2C_5L_2L_5g_m + C_4C_5L_4L_5g_m\right) + s^3\left(C_2C_4L_4 - C_2C_5L_2 + C_2C_5L_5 - C_4C_5L_4\right) + s^2\left(C_2L_2g_m + C_4L_4g_m + C_5L_5g_m\right) + s\left(C_2 - C_5\right)}{s^5\left(2C_2C_4C_5L_2L_4g_m + 2C_2C_4C_5L_2L_5g_m\right) + s^4\left(2C_2C_4C_5L_2 + 4C_2C_4C_5L_4 + 2C_2C_4C_5L_5\right) + s^3\left(2C_2C_4L_2g_m + 2C_4C_5L_2g_m + 2C_4C_5L_2g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4G_5L_4 + 2C_4C_5L_5\right) + s^3\left(2C_4C_4L_4 - 2C_4C_5L_4g_m + 2C_4C_5L_4g_m\right) + s^2\left(2C_4C_5L_4G_5L_4G_5L_4G_5\right) + s^2\left(2C_4C_5L_4G_5L_4G_5L_4G_5\right) + s^2\left(2C_4C_5L_4G_5L_4G_5\right) + s^2\left(2C_4C_5L_4G_5L_4G_5\right) + s^2\left(2C_4C_5L_4G_5L_4G_5\right) + s^2\left(2C_4C_5L_4G_5L_4G_5\right) + s^2\left(2C_4C_5L_4G_5\right) + s^2\left(
10.404 INVALID-ORDER-404 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_4C_5L_2L_4L_5s^6 + C_2C_4L_2L_4L_5g_ms^5 + L_5g_ms + s^4\left(-C_2C_4L_2L_4 + C_2C_4L_4L_5 - C_4C_5L_4L_5\right) + s^3\left(C_2L_2L_5g_m + C_4L_4L_5g_m\right) + s^2\left(-C_2L_2 + C_2L_5 - C_4L_4 - C_5L_5\right) - 1}{2C_2C_4C_5L_2L_4L_5g_ms^6 + 2g_m + s^5\left(2C_2C_4C_5L_2L_5 + 4C_2C_4L_4L_5\right) + s^4\left(2C_2C_4L_2L_4g_m + 2C_2C_4L_2L_5g_m + 2C_4C_5L_4L_5g_m\right) + s^3\left(2C_2C_4L_2 + 4C_2C_4L_5 + 4C_2C_4L_5 + 4C_2C_4L_5\right) + s^2\left(2C_2L_2g_m + 2C_4L_5g_m + 2C_4L_5g_m\right) + s^2\left(2C_4C_5L_4L_5g_m\right) + s^2\left(2C_4C_5L_5L_5g_m\right) + s^2\left(2C_5C_5L_5L_5g_m\right) + s^2\left(2C
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10.405 INVALID-ORDER-405  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(C_2C_4C_5L_2L_4R_5g_m - C_2C_4C_5L_2L_4 + C_2C_4C_5L_4L_5\right) + s^4\left(C_2C_4C_5L_4R_5 + C_2C_4L_2L_4g_m + C_2C_5L_2L_5g_m + C_4C_5L_4L_5g_m\right) + s^3\left(C_2C_4L_4 + C_2C_5L_2R_5g_m - C_2C_5L_2 + C_2C_5L_5 + C_4C_5L_4R_5g_m - C_4C_5L_4\right) + s^2\left(C_2C_5R_5 + C_2L_2g_m + C_4C_5L_4g_m + C_2C_5L_2g_m + C_4C_5L_4g_m + C_4C_5L_4g_$ 

**10.406** INVALID-ORDER-406  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$ 

 $-C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}s^{6}-R_{5}+s^{5}\left(C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}-C_{2}C_{4}L_{2}L_{4}L_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{2}L_{4}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}-C_{2}C_{5}L_{2}L_{5}R_{5}-C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{3}\left(C_{2}L_{2}L_{5}R_{5}g_{m}-C_{2}L_{2}L_{5}+C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{2}L_{4}L_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{2}L_{4}L_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{2}C_{4}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{4}L_{5}R_{5}+C_{4}C_{5}L_{4}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{4}C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{4}C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{4}C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}\right)+s^{4}\left(-C_{2}C_{5}L_{5}L_{5}R_{5$  $\overline{2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}s^{6}+2R_{5}q_{m}+s^{5}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{5}+4C_{2}C_{4}L_{2}L_{5}R_{5}+2C_{2}C_{4}L_{2}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{2}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{2}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{2}L_{5}R_{5}q_{m}+s^{5}\left(2C_{2}C_{4}C_{5}L_{4}L_{5}R_{5}+4C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}\right)+s^{4}\left(2C_{2}C_{4}L_{2}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_{4}L_{5}R_{5}q_{m}+2C_{2}C_{4}L_$ 

10.407 INVALID-ORDER-407  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $\frac{R_5g_m + s^6 \left(C_2C_4C_5L_2L_4L_5R_5g_m - C_2C_4C_5L_2L_4L_5\right) + s^5 \left(C_2C_4C_5L_4L_5R_5 + C_2C_4L_2L_4R_5g_m - C_2C_4L_2L_4R_5g_m - C_2C_4L_2L_5R_5g_m - C_2C_5L_2L_5 + C_4C_5L_4L_5\right) + s^3 \left(C_2C_4L_4R_5 + C_2C_5L_5R_5 + C_2L_4L_5g_m + C_2C_4L_4L_5g_m - C_4C_5L_4L_5\right) + s^4 \left(C_2C_4L_4L_5g_m - C_4C_5L_4L_5g_m - C_4C_5L_4L_5\right) + s^4 \left(C_2C_4L_4L_5g_m - C_4C_5L_4L_5g_m - C_4C_5L_4L_5\right) + s^4 \left(C_4C_4L_4L_5g_m - C_4C_5L_4L_5g_m + C_4C_5L_4L_5\right) + s^4 \left(C_4C_4L_4L_5g_m - C_4C_5L_4L_5g_m + C_4C_5L_4L_5g_m + C_4C_5L_4L_5\right) + s^4 \left(C_4C_4L_4L_5g_m - C_4C_5L_4L_5g_m + C_4C_5L_5L_5g_m + C_4C_5L_5L_5g_m + C_4C_5L_5L_5g_m + C_4C_5L_5L_5g_m$ 

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10.408 INVALID-ORDER-408 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
10.409 INVALID-ORDER-409 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
                                                                                                                                                                                                                                                                         H(s) = \frac{C_2L_4R_5s^2 + s^3\left(C_2L_2L_4R_5g_m - C_2L_2L_4\right) + s\left(L_4R_5g_m - L_4\right)}{2R_5g_m + s^4\left(2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4\right) + s^3\left(2C_2C_4L_4R_5 + 2C_2L_2L_4g_m\right) + s^2\left(2C_2L_2R_5g_m + 2C_2L_2 + 4C_2L_4 + 2C_4L_4R_5g_m + 2C_4L_4\right) + s\left(2C_2R_5 + 2L_4g_m\right) + s^2\left(2C_2L_2R_5g_m + 2C_2L_2 + 4C_2L_4 + 2C_4L_4R_5g_m + 2C_4L_4\right) + s\left(2C_2R_5 + 2L_4g_m\right) + s^2\left(2C_2R_5g_m + 2C_2R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m
10.410 INVALID-ORDER-410 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                           H(s) = \frac{-C_2C_5L_2L_4s^4 + C_2L_2L_4g_ms^3 + L_4g_ms + s^2\left(C_2L_4 - C_5L_4\right)}{2C_2C_4C_5L_2L_4s^5 + 2g_m + s^4\left(2C_2C_4L_2L_4g_m + 2C_2C_5L_2L_4g_m\right) + s^3\left(2C_2C_4L_4 + 2C_2C_5L_2 + 4C_2C_5L_4 + 2C_4C_5L_4\right) + s^2\left(2C_2L_2g_m + 2C_4L_4g_m + 2C_5L_4g_m\right) + s\left(2C_2 + 2C_5\right)}
10.411 INVALID-ORDER-411 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_4R_5s^4 + s^3\left(C_2L_2L_4R_5g_m - C_2L_2L_4\right) + s^2\left(C_2L_4R_5 - C_5L_4R_5\right) + s\left(L_4R_5g_m - L_4\right)}{2C_2C_4L_2L_4R_5s^5 + 2R_5g_m + s^4\left(2C_2C_4L_2L_4R_5g_m + 2C_2C_5L_2L_4R_5g_m\right) + s^3\left(2C_2C_4L_4R_5 + 2C_2C_5L_2R_5 + 4C_2C_5L_4R_5\right) + s^2\left(2C_2L_2R_5g_m + 2C_2L_2 + 4C_2L_4 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_5L_4R_5g_m\right) + s\left(2C_2R_5 + 2C_5L_4R_5 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_5L_4R_5g_m\right) + s\left(2C_4R_5 - 2C_5L_4R_5 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_4L_4R_5g_m\right) + s\left(2C_4R_5 - 2C_5L_4R_5 + 2C_4L_4R_5g_m + 2C_4L_4 + 2C_4L_4R_5g_m\right) + s\left(2C_4R_5 - 2C_5L_4R_5 - 2C_5L_4R_5\right) + s\left(2C_4R_5 - 2C_5L_4R_5 - 2C_5L_4R_5\right) + s\left(2C_4R_5 - 2C_5L_4R_5\right) + s\left(2C_4R_5
10.412 INVALID-ORDER-412 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{L_4 g_m s + s^4 \left(C_2 C_5 L_2 L_4 R_5 g_m - C_2 C_5 L_2 L_4\right) + s^3 \left(C_2 C_5 L_4 R_5 + C_2 L_2 L_4 g_m\right) + s^2 \left(C_2 L_4 + C_5 L_4 R_5 g_m - C_5 L_4\right)}{2 g_m + s^5 \left(2 C_2 C_4 C_5 L_2 L_4 R_5 g_m + 2 C_2 C_4 L_2 L_4 g_m\right) + s^3 \left(2 C_2 C_4 L_4 + 2 C_2 C_5 L_2 R_5 g_m + 2 C_2 C_5 L_4 + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_2 C_5 R_5 + 2 C_2 L_2 g_m + 2 C_4 L_4 g_m\right) + s \left(2 C_2 C_4 L_4 L_4 g_m + 2 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4 R_5 g_m + 2 C_4 C_5 L_4\right) + s^2 \left(2 C_2 C_5 R_5 + 2 C_4 L_4 g_m + 2 C_5 L_4 g_m\right) + s \left(2 C_2 C_4 L_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m\right) + s^2 \left(2 C_4 L_4 R_5 g_m\right) 
10.413 INVALID-ORDER-413 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                    \frac{C_{2}C_{5}L_{2}L_{4}L_{5}g_{m}s^{5}+L_{4}g_{m}s+s^{4}\left(-C_{2}C_{5}L_{2}L_{4}+C_{2}C_{5}L_{4}L_{5}g_{m}\right)+s^{3}\left(C_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}-C_{5}L_{4}\right)}{2C_{2}C_{4}C_{5}L_{2}L_{4}+2C_{2}C_{5}L_{2}L_{4}g_{m}+2C_{2}C_{5}L_{2}L_{5}g_{m}+2C_{4}C_{5}L_{4}L_{5}g_{m}\right)+s^{3}\left(2C_{2}C_{4}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{5}+2C_{4}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{4}+2C_{2}C_{5}L_{5}L_{5}+2C_{4}C_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{5}+2C_{5}L_{5}L_{
10.414 INVALID-ORDER-414 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)
H(s) = \frac{-C_2C_5L_2L_4L_5s^5 + C_2L_2L_4L_5g_ms^4 + L_4L_5g_ms^2 - L_4s + s^3\left(-C_2L_2L_4 + C_2L_4L_5 - C_5L_4L_5\right)}{2C_2C_4C_5L_2L_4L_5s^6 + s^5\left(2C_2C_4L_2L_4L_5g_m + 2C_2C_5L_2L_4L_5g_m\right) + s^4\left(2C_2C_4L_2L_4 + 2C_2C_4L_4L_5 + 2C_2C_5L_2L_5 + 4C_2C_5L_4L_5\right) + s^3\left(2C_2L_2L_4g_m + 2C_2L_4L_5g_m + 2C_4L_4L_5g_m\right) + s^2\left(2C_2L_2 + 4C_2L_4 + 2C_2L_5 + 2C_4L_4 + 2C_5L_5\right) + s^2\left(2C_2L_4L_5g_m + 2C_4L_4L_5g_m + 2C_4L_4L_5g_m\right) + s^2\left(2C_4L_4L_5g_m + 2C_4L_5g_m\right) + s^2\left(2C_4L_4L_5g_m + 2C_4L_5L_5g_m\right) + s^2\left(2C_4L_4L_5g_
10.415 INVALID-ORDER-415 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                    \frac{C_{2}C_{5}L_{2}L_{4}L_{5}g_{m}s^{5}+L_{4}g_{m}s+s^{4}\left(C_{2}C_{5}L_{2}L_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{4}+C_{2}C_{5}L_{4}L_{5}\right)+s^{3}\left(C_{2}C_{5}L_{4}R_{5}+C_{2}L_{2}L_{4}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{4}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_{5}L_{4}L_{5}g_{m}+C_
10.416 INVALID-ORDER-416 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_{2}C_{5}L_{2}L_{4}L_{5}R_{5}s^{5}-L_{4}R_{5}s+s^{4}\left(C_{2}L_{2}L_{4}L_{5}R_{5}g_{m}-C_{2}L_{2}L_{4}L_{5}\right)+s^{3}\left(-C_{2}L_{2}L_{4}R_{5}+C_{2}L_{4}L_{5}R_{5}-C_{5}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}\right)+s^{2}\left(-C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}R_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{4}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5}+C_{2}L_{5
                                                    -C_2C_5L_2L_4L_5R_5s^6 - L_4R_5s + s - (C_2L_2L_4L_5R_5g_m - C_2L_2L_4L_5) + s^4 - (C_2L_2L_4R_5 + C_2L_4L_5R_5 - C_5L_4L_5R_5) + s^4 - (C_2L_2L_4L_5R_5 - C_5L_4L_5R_5) + s^4 - (C_2L_4L_5R_5 - C_5L_4L_5R_5) + s^4 
10.417 INVALID-ORDER-417 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   s^{5}\left(C_{2}C_{5}L_{2}L_{4}L_{5}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{4}L_{5}\right)+s^{4}\left(C_{2}C_{5}L_{4}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{2}L_{4}+C_{2}L_{5}R_{5}+C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_{5}g_{m}-C_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(C_{2}L_{4}R_
                                                    \frac{2R_5g_m + s^6 \left(2C_2C_4C_5L_2L_4L_5g_m + 2C_2C_4L_2L_4L_5g_m + 2C_2C_4L_2L_4L_5g_m + 2C_2C_4L_2L_4L_5g_m + 2C_2C_5L_2L_5R_5g_m + 2C_2C_5L_2L_5R_5g_m + 2C_2C_5L_4L_5R_5g_m + 2C_2C_5L_5R_5g_m + 2
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10.418 INVALID-ORDER-418 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
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 $H(s) = \frac{s^5 \left(C_2 C_5 L_2 L_4 L_5 R_5 g_m - C_2 C_5 L_2 L_4 L_5\right) + s^4 \left(-C_2 C_5 L_2 L_4 R_5 + C_2 C_5 L_4 L_5 R_5\right) + s^3 \left(C_2 L_2 L_4 R_5 g_m - C_2 C_5 L_2 L_4 R_5 g_m + C_2 C_5 L_4 L_5 R_5 g_m + C_2 C_5 L_5 L_5 R_5 g_m + C_5 R_5 g_m + C_5$ 

10.419 INVALID-ORDER-419  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$ 

 $H(s) = \frac{R_5 g_m + s^4 \left(C_2 C_4 L_2 L_4 R_5 g_m - C_2 C_4 L_2 L_4\right) + s^3 \left(C_2 C_4 L_2 R_4 R_5 g_m - C_2 C_4 L_2 R_4 + C_2 C_4 L_4 R_5\right) + s^2 \left(C_2 C_4 R_4 R_5 + C_2 L_2 R_5 g_m - C_2 L_2 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_2 R_5 + C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2 C_2 C_4 L_2 L_4 g_m s^4 + 2 g_m + s^3 \left(2 C_2 C_4 L_2 R_4 g_m + 2 C_2 C_4 L_2 R_5 g_m + 2 C_2 C_4 L_2 + 4 C_2 C_4 L_4\right) + s^2 \left(4 C_2 C_4 R_4 + 2 C_2 C_4 R_5 + 2 C_2 L_2 g_m + 2 C_4 L_4 g_m\right) + s \left(4 C_2 + 2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 g_m\right) - 2 C_4 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_5 g_m\right) - 2 C_4 R_5 g_m + 2 C_4 R_5$ 

10.420 INVALID-ORDER-420  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4s^5 + g_m + s^4\left(-C_2C_4C_5L_2R_4 + C_2C_4L_2L_4g_m\right) + s^3\left(C_2C_4L_2R_4g_m + C_2C_4L_4 - C_2C_5L_2 - C_4C_5L_4\right) + s^2\left(C_2C_4R_4 + C_2L_2g_m - C_4C_5R_4 + C_4L_4g_m\right) + s\left(C_2 + C_4R_4g_m - C_5\right)}{2C_2C_4C_5L_2L_4g_ms^5 + s^4\left(2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2 + 4C_2C_4C_5L_4\right) + s^3\left(4C_2C_4C_5R_4 + 2C_2C_4L_2g_m + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4 + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4G_3R_4 + 2C_4C_5R_4g_m + 2C_4C_5R_4g_m + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4 + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4g_m\right) + s$ 

10.421 INVALID-ORDER-421  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_5s^5 + R_5g_m + s^4\left(-C_2C_4C_5L_2R_4R_5 + C_2C_4L_2L_4R_5g_m - C_2C_4L_2R_4 + C_2C_4L_2R_4 + C_2C_4L_2R_5 - C_4C_5L_2R_5 - C_4C_5L_4R_5\right) + s^2\left(C_2C_4R_4R_5 + C_2L_2R_5g_m - C_2L_2 - C_4C_5R_4R_5 + C_2C_4L_2R_4 + C_2C_4L_4R_5g_m + S_4C_2C_4L_4R_5 - C_2C_4L_4R_5 - C_4C_5L_4R_5 - C_4C_5L_4R_$ 

10.422 INVALID-ORDER-422  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4\right) + s^4 \left(C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4 + C_2 C_4 C_5 L_4 R_5 + C_2 C_4 L_2 L_4 g_m\right) + s^3 \left(C_2 C_4 C_5 R_4 R_5 + C_2 C_4 L_2 R_4 g_m + C_2 C_4 L_2 R_4 g_m + C_2 C_4 L_2 R_5 g_m - C_2 C_5 L_2 + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4\right) + s^2 \left(C_2 C_4 R_4 + C_2 C_5 R_5 + C_2 L_2 g_m + C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4 R_5 g_m -$ 

10.423 INVALID-ORDER-423  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(-C_2C_4C_5L_2L_4 + C_2C_4C_5L_2L_5R_4g_m + C_2C_4C_5L_2L_5R_4g_m + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4 + C_2C_4C_5L_2R_4g_m + C_2C_4L_2G_m + C_4C_5L_4G_m + C$ 

**10.424** INVALID-ORDER-424  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5s^6 + s^5\left(-C_2C_4C_5L_2L_5R_4 + C_2C_4L_2L_4E_5g_m\right) + s^4\left(-C_2C_4L_2L_4 + C_2C_4L_2L_5R_4g_m + C_2C_4L_4L_5 - C_2C_5L_2L_5 - C_4C_5L_4L_5\right) + s^3\left(-C_2C_4L_2R_4 + C_2C_4L_5R_4 + C_2L_4L_5g_m - C_4C_5L_5R_4 + C_4L_4L_5g_m\right) + s^4\left(-C_2C_4L_2L_4G_m + C_2C_4L_4L_5G_m + C_2C_4L_4L_5 - C_4C_5L_4L_5\right) + s^3\left(-C_2C_4L_2R_4 + C_2C_4L_5R_4 + C_2L_4L_5g_m - C_4C_5L_5R_4 + C_4L_4L_5g_m\right) + s^4\left(-C_2C_4L_4L_5g_m + C_4C_5L_4L_5g_m + C_4C_5L_4L_5g_m + C_4C_5L_4L_5g_m\right) + s^4\left(-C_4C_4L_4L_5G_m + C_4C_4L_4L_5G_m + C_4C_5L_4L_5g_m\right) + s^4\left(-C_4C_4L_4L_5G_m + C_4C_4L_4L_5G_m + C_4C_4L_4L_5g_m\right) + s^4\left(-C_4C_4L_4L_5G_m + C_4C_4L_5L_5G_m\right) + s^4\left(-C_4C_4L_5L_5G_m + C_4C_4L_5L_5G_m\right) + s^4\left(-C_4C_4L_5L_5G_m + C_4C_4L_5L_5G_m\right) + s^4\left(-C_4C_4L_5L_5G_m + C_4C_4L_5L_5G_m\right) + s^4\left(-C_4C_4L_5L_5G_m + C_4C_4L$ 

10.425 INVALID-ORDER-425  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(C_2C_4C_5L_2L_4R_5g_m - C_2C_4C_5L_2L_4 + C_2C_4C_5L_4L_5\right) + s^4\left(C_2C_4C_5L_2R_4R_5g_m - C_2C_4C_5L_2R_4 + C_2C_4C_5L_4R_5 + C_2C_4C_5L_4R_5$ 

10.426 INVALID-ORDER-426  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_5s^6 - R_5 + s^5\left(-C_2C_4C_5L_2L_5R_4R_5 + C_2C_4L_2L_4L_5\right) + s^4\left(-C_2C_4L_2L_4R_5 + C_2C_4L_2L_5R_4R_5g_m - C_2C_4L_2L_5R_4g_m - C_2C_4L_2L_5R_5g_m - C_2C_4L_2L_5R_5g$ 

10.427 INVALID-ORDER-427  $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{R_5 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_5 g_m - C_2 C_4 C_5 L_2 L_4 L_5\right) + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_4 L_2 L_4 L_5 g_m\right) + s^4 \left(C_2 C_4 C_5 L_2 L_4 R_5 g_m - C_2 C_4 L_4 L_5 R_5 g_m - C_2 C_4 L_5 L_5 R_5 g_m - C_2 C_5 L_5 R_5 g_m - C_2 C_5 L_5 R_5 g_m - C_2 C_5$ 

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10.428 INVALID-ORDER-428 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
H(s) = \frac{R_5g_m + s^6\left(C_2C_4C_5L_2L_4L_5R_5g_m - C_2C_4C_5L_2L_4R_5 + C_2C_4C_5L_2L_4R_5 + C_2C_4C_5L_2L_5R_4R_5g_m - C_2C_4C_5L_2L_5R_4R_5g_m - C_2C_4C_5L_2L_5R_4R_5g_m - C_2C_4C_5L_2L_5R_4R_5g_m - C_2C_4C_5L_2L_5R_4R_5 + C_2C_4C_5L_2L_4R_5g_m - C_2C_4C_5L_4R_5g_m - C_
10.429 INVALID-ORDER-429 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right)
H(s) = \frac{C_2L_4R_4R_5s^2 + s^3\left(C_2L_2L_4R_4R_5g_m - C_2L_2L_4R_4\right) + s\left(L_4R_4R_5g_m - L_4R_4\right)}{2R_4R_5g_m + 2R_4 + s^4\left(2C_2C_4L_2L_4R_4g_m + 2C_2L_4L_4R_4g_m + 2C_2L_2L_4R_5g_m + 2C_2L_2L_4\right) + s^2\left(2C_2L_2R_4R_5g_m + 2C_2L_4R_5g_m + 2C_4L_4R_4\right) + s\left(2C_2R_4R_5g_m + 2C_4L_4R_4g_m + 2C_4L_4R_4g_
10.430 INVALID-ORDER-430 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_4R_4s^4 + C_2L_2L_4R_4g_ms^3 + L_4R_4g_ms + s^2\left(C_2L_4R_4 - C_5L_4R_4\right)}{2C_2C_4C_5L_2L_4R_4s^5 + 2R_4g_m + s^4\left(2C_2C_4L_2L_4R_4g_m + 2C_2C_5L_2L_4\right) + s^3\left(2C_2C_4L_4R_4 + 2C_2C_5L_2R_4 + 4C_2C_5L_4R_4\right) + s^2\left(2C_2L_2R_4g_m + 2C_4L_4R_4g_m + 2C_5L_4R_4g_m + 2
10.431 INVALID-ORDER-431 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -C_{2}C_{5}L_{2}L_{4}R_{4}R_{5}s^{4} + s^{3}\left(C_{2}L_{2}L_{4}R_{4}R_{5}g_{m} - C_{2}L_{2}L_{4}R_{4}\right) + s^{2}\left(C_{2}L_{4}R_{4}R_{5} - C_{5}L_{4}R_{4}R_{5}\right) + s\left(L_{4}R_{4}R_{5}g_{m} - C_{2}L_{2}L_{4}R_{4}\right) + s\left(L_{4}R_{4}R_{5}g_{m} - C_{2}L_{4}R_{4}R_{5}\right) + s\left(L_{4}R_{4}R_{5}g_{m} - C_{2}L_{4}R_{5}\right) + s\left(L_{4}R_{4}R_{5}g_{m} - C_{2}L_{4}R_{5}\right) + s\left(L_{4}R_{5}g_{m} - C_{2}L_{4}R_{5}\right) + s\left(L_{4}R_{5}g_{m} - C_{2}L_{5}R_{5}\right) + s\left(L_{4}R_{5}g_
                                                 \frac{-C_2C_5L_2L_4R_4R_5s^5 + s^*(C_2L_2L_4R_4R_5g_m - C_2L_2L_4R_4) + s^*(C_2L_4R_4R_5g_m - C_2L_4R_4R_5) + s(L_4R_4R_5g_m - C_2L_4R_4R_5g_m - C_2L_4R_4R_5g_m - C_2L_4R_4R_5g_m - C_2L_4R_4R_5g_m + 2C_2L_4R_4R_5g_m + 2C_2L_4R_4R_5g_m + 2C_2L_4R_4R_5g_m + 2C_2L_4R_4R_5g_m + 2C_2L_4R_4R_5g_m + 2C_2L_4R_4g_m + 2C_2L_4R_4
10.432 INVALID-ORDER-432 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               L_{4}R_{4}g_{m}s + s^{4}\left(C_{2}C_{5}L_{2}L_{4}R_{4}R_{5}g_{m} - C_{2}C_{5}L_{2}L_{4}R_{4}\right) + s^{3}\left(C_{2}C_{5}L_{4}R_{4}R_{5} + C_{2}L_{2}L_{4}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{4}R_{4} + C_{2}L_{4}R_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{4}R_{5} + C_{2}L_{4}R_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{4}R_{5} + C_{2}L_{4}R_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{4} + C_{2}L_{4}R_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{4}R_{5} + C_{2}L_{4}R_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{4} + C_{2}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{5} + C_{2}L_{4}R_{5}\right) + s^{2}\left(C_{2}L_{4}R_{5} + C_{2}L_{5}L_{5}\right) + s^{2}\left(C_{2}L_{5}L_{5}R_{5}\right) + s^{2}\left(C_{2}L_{5}R_{5} + C_{2}L_{5}R_{5}\right) + s^{2}\left(C_{2}R_{5}R_{5} + C_{2}R_{5}R_{5}\right) + s^{2}\left(C_{2}R_{5}R_{5} + C_{2}R_{5}\right) + s^{
                                                 10.433 INVALID-ORDER-433 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C_{2}C_{5}L_{2}L_{4}L_{5}R_{4}g_{m}s^{5} + L_{4}R_{4}g_{m}s + s^{4}\left(-C_{2}C_{5}L_{2}L_{4}R_{4} + C_{2}C_{5}L_{4}L_{5}R_{4}\right) + s^{3}\left(C_{2}L_{2}L_{4}R_{4}g_{m} + C_{5}L_{4}L_{5}R_{4}g_{m}\right)
                                                 \frac{C_2C_5L_2L_4L_5R_4y_ms + L_4R_4y_ms + s + (-C_2C_5L_2L_4R_4 + C_2C_5L_4L_5R_4) + s + (-C_2C_5L_4L_5R_4y_m) + (-C_2C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m) + s + (-C_2C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m) + s + (-C_2C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m) + s + (-C_2C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m) + s + (-C_2C_5L_4L_5R_4y_m + C_2C_5L_4L_5R_4y_m + C_5L_4L_5R_4y_m) + s + (-C_2C_5L_4L_5R_4y_m + C_2C_5L_4L_5R_4y_m + C_2C_5L_4L_5R_4y_m) + s + (-C_2C_5L_4L_5R_4y_m + C_2C_5L_4L_5R_4y_m + C_2C_5L_4L_5R
10.434 INVALID-ORDER-434 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_4L_5R_4s^5 + C_2L_2L_4L_5R_4g_ms^4 + L_4L_5R_4g_ms^2 - L_4R_4s + s^3\left(-C_2L_2L_4R_4 + C_2L_4L_5R_4 - C_2L_4L_5R_4s^6 + 2R_4 + s^5\left(2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4 + 2C_2C_4L_4L_5R_4 + 2C
10.435 INVALID-ORDER-435 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C_2C_5L_2L_4L_5R_4g_ms^5 + L_4R_4g_ms + s^4(C_2C_5L_2L_4R_4g_ms^5)
                                                 \frac{c_2c_3L_2L_4L_5R_4g_ms^6 + 2R_4g_m + s^5\left(2C_2C_4C_5L_2L_4R_4g_m + s^5\left(2C_2C_4C_5L_2L_4R_4g_m + s^5\left(2C_2C_4C_5L_2L_4R_4g_m + s^5\left(2C_2C_4C_5L_4L_5g_m\right) + s^4\left(2C_2C_4C_5L_4L_5g_m\right) + s^4\left(2C_2C_4C_5L_4L_4R_4g_m + 2C_2C_5L_2L_4R_5g_m + 2C_2C_5L_4R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5R
10.436 INVALID-ORDER-436 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                 \frac{1}{2C_2C_4C_5L_2L_4L_5R_4R_5s^6 + 2R_4R_5 + s^5\left(2C_2C_4L_2L_4L_5R_4R_5g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R
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 $H(s) = \frac{1}{2R_4R_5g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_4R_5g_m + 2C_2C_4C_5L_2L_4L_5R_4\right) + s^5\left(2C_2C_4C_5L_4L_5R_4R_5 + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_5g_m + 2C_2C_5L_2L_4L_5\right) + s^4\left(2C_2C_4L_2L_4R_4R_5g_m + 2C_2C_4L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_5L_4L_5R_4g_m + 2C_2C_5L_5L_5L_5R_4g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m$ 

10.437 INVALID-ORDER-437  $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_{2s}}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$ 

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10.438 INVALID-ORDER-438 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
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 $H(s) = \frac{1}{2R_4R_5g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4R_4g_m + 2C_2C_5L_4R_4g_m + 2C_2C_5L_4$ 

**10.439** INVALID-ORDER-439 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$$

 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_4 L_2 L_4 R_4 g_m - C_2 C_4 L_2 L_4 R_4 \right) + s^3 \left(C_2 C_4 L_4 R_4 g_m - C_2 L_2 L_4 \right) + s^2 \left(C_2 L_2 R_4 g_m - C_2 L_2 L_4 \right) + s^2 \left(C_2 L_2 R_4 g_m - C_2 L_2 R_4 \right) + s^2 \left(C_2 L_2 R_4 g_m - C_4 L_4 R_4 \right) + s \left(C_2 R_4 R_5 + L_4 R_5 g_m - L_4 \right)}{2 R_4 g_m + 2 R_5 g_m + s^4 \left(2 C_2 C_4 L_2 L_4 R_5 g_m + 2 C_2 C_4 L_2 L_4 \right) + s^3 \left(4 C_2 C_4 L_4 R_4 + 2 C_2 C_4 L_4 R_5 + 2 C_2 L_2 L_4 g_m \right) + s^2 \left(2 C_2 L_2 R_4 g_m + 2 C_2 L_2 + 4 C_2 L_4 + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 \right) + s \left(4 C_2 R_4 + 2 C_4 L_4 R_5 g_m +$ 

10.440 INVALID-ORDER-440 
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_4s^5 + R_4g_m + s^4\left(C_2C_4L_2L_4R_4g_m - C_2C_5L_2L_4\right) + s^3\left(C_2C_4L_4R_4 - C_2C_5L_2R_4 + C_2L_2L_4g_m - C_4C_5L_4R_4\right) + s^2\left(C_2L_2R_4g_m + C_2L_4 + C_4L_4R_4g_m - C_5L_4\right) + s\left(C_2R_4 - C_5R_4 + L_4g_m\right)}{2g_m + s^5\left(2C_2C_4C_5L_2L_4R_4g_m + 2C_2C_4L_2L_4g_m + 2C_2C_5L_2L_4g_m\right) + s^3\left(2C_2C_4L_4 + 2C_2C_5L_2R_4g_m + 2C_2C_5L_2 + 4C_2C_5L_4 + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_4L_4g_m + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_4L_4g_m + 2C_4C_5L_4\right) + s^2\left(4C_2C_5R_4 + 2C_4C_5L_4R_4g_m + 2C_4C_5L_4\right) + s^2\left(4C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(4C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(4C_4C_5R_4\right) + s^2\left(4C_4C_5R_4\right)$ 

10.441 INVALID-ORDER-441 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5}{C_5 R_5 s + 1}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_4R_5s^5 + R_4R_5g_m - R_4 + s^4\left(C_2C_4L_2L_4R_4g_m - C_2C_5L_2L_4R_5\right) + s^3\left(C_2C_4L_4R_4R_5 - C_2C_5L_2R_4R_5 + C_2L_2L_4R_5g_m - C_2L_2L_4 - C_4C_5L_4R_5g_m - C_2L_4R_5g_m + s^2\left(2C_4L_4R_4g_m + 2C_2C_4L_4R_4g_m + 2C_2C_4L_4R_4g_m + 2C_2C_4L_4R_5g_m + s^3\left(4C_2C_4L_4R_4g_m + s^3(4C_2C_4L_4R_4g_m + s$ 

10.442 INVALID-ORDER-442 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

 $H(s) = \frac{R_4 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_4 \right) + s^4 \left(C_2 C_4 C_5 L_4 R_4 R_5 + C_2 C_4 L_2 L_4 R_4 g_m + C_2 C_5 L_2 L_4 R_5 g_m - C_2 C_5 L_2 L_4 \right) + s^3 \left(C_2 C_4 L_4 R_4 R_5 g_m - C_2 C_5 L_2 R_4 R_5 g_m - C_4 C_5 L_4 R_5 g_m - C_4 C_5 L_4 R_5 g_m + C_4 C$ 

## 10.443 INVALID-ORDER-443 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + \frac{1}{C_5 s}, \ \infty\right)$

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(-C_2C_4C_5L_2L_4R_4 + C_2C_5L_2L_4E_5g_m\right) + s^4\left(C_2C_4L_2L_4R_4g_m - C_2C_5L_2L_4 + C_2C_5L_2L_4E_5g_m\right) + s^4\left(C_2C_4L_4R_4g_m - C_2C_5L_2L_4E_5g_m\right) + s^4\left(C_2C_4L_4R_4g_m + C_2C_5L_4L_5R_4g_m\right) + s^4\left(C_2C_4L_4R_4g_m - C_2C_5L_4L_5R_4g_m\right) + s^4\left(C_2C_4L_4R_4g_m - C_2C_5L_4R_4g_m\right) + s^4\left(C_2C_4L_4R_4g_m - C_2C_5L_4R_4g_m\right) + s^4\left(C_2C_4L_4R_4g_m + C_2C_5L_4R_4g_m\right) + s^4\left(C_2C_4L_4R_4g_m - C_4C_5L_4R_4g_m\right) + s^4\left(C_2C_4L_4R_4g_m + C_4C_5L_4R_4g_m\right) + s^4\left(C_4C_4L_4R_4g_m - C_4C_4L_4R_4g_m\right) + s^4\left(C_4C_4L_4R_4g_m - C_4C_4L_4R_4g_m\right) + s^4\left(C_4C_4L_4R_4g_m - C$ 

## 10.444 INVALID-ORDER-444 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_4s^6 - R_4 + s^5\left(C_2C_4L_2L_4L_5R_4g_m - C_2C_5L_2L_4L_5\right) + s^4\left(-C_2C_4L_2L_4R_4 + C_2C_4L_4L_5R_4 - C_2C_5L_2L_4L_5g_m - C_4C_5L_4L_5R_4\right) + s^3\left(-C_2L_2L_4L_5R_4 + C_2C_4L_4L_5R_4 + C_2C_4L_4$ 

10.445 INVALID-ORDER-445 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m - C_2C_4C_5L_2L_4R_4 + C_2C_5L_2L_4R_5g_m - C_2C_5L_2L_4R_5g_m + C_2C_5L_2L_4R_5g_m - C_2C_5L_2L_4R_5g_m - C_2C_5L_2L_4R_5g_m - C_2C_5L_2L_4R_5g_m + C_2C_5L_4L_5R_4g_m + C_2C_5L_4L_5R_4g_m + S^2\left(C_2C_4C_5L_4L_5R_4g_m + C_2C_5L_4L_5R_4g_m + C_2C_5$ 

## 10.446 INVALID-ORDER-446 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_4R_5s^6 - R_4R_5 + s^5\left(C_2C_4L_2L_4L_5R_4R_5g_m - C_2C_4L_2L_4L_5R_4 - C_2C_5L_2L_4L_5R_5\right) - r^2\left(C_4C_5L_4L_5R_4R_5g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_4L_5R_5g_m + 2C_4C_4L_4L_5R_5g_m + 2$ 

10.447 INVALID-ORDER-447 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)$$

 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_4 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_4 g_m - C_2 C_4 L_2 L_4 L_5 R_4 g_m - C_2 C_4 L_2 L_4 L_5 R_4 g_m - C_2 C_4 L_2 L_4 L_5 R_4 g_m - C_2 C_5 L_2 L_4 L_5 R_5 g_m - C_2 C_4 L_2 L_4 R_4 R_5 g_m - C_2 C_4 L_2 L_4 R_5 g_m + C_2 C_4 L_4 L_5 R_5 g_m + C_2 C_4 L_5 L_4 L_5 R_5 g_m + C_2 C_4 L_5 L_5 R_5 g_m + C_2 C_5 L_5 L$ 

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10.448 INVALID-ORDER-448 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R_4 R_5 g_m - R_4 + s^6 \left( C_2 C_4 C_5 L_2 L_4 L_5 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_4 \right) + s^5 \left( -C_2 C_4 C_5 L_2 L_4 R_4 R_5 + C_2 C_4 C_5 L_4 L_5 R_4 R_5 + C_2 C_5 L_2 L_4 L_5 R_5 g_m \right) + s^5 \left( -C_2 C_4 C_5 L_2 L_4 R_4 R_5 + C_2 C_4 C_5 L_4 L_5 R_4 R_5 + C_2 C_5 L_2 L_4 L_5 R_5 g_m \right)
 H(s) = \frac{R_4 R_5 g_m - R_4 + s - (C_2 C_4 C_5 L_2 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_2 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_2 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_2 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_2 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_4 C_5 L_4 L_5 R_4) + s - (C_2 C_
 10.449 INVALID-ORDER-449 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty\right)
 H(s) = \frac{C_2C_4L_4R_4R_5s^3 + C_2R_4R_5s + R_4R_5g_m - R_4 + s^4\left(C_2C_4L_2L_4R_4g_m - C_2L_2R_4R_5g_m - C_2L_2R_4 + C_4L_4R_4g_m - C_4L_4R_4\right)}{2R_4g_m + 2R_5g_m + s^4\left(2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4\right) + s^3\left(2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4 + 4C_2C_4L_4R_5\right) + s^2\left(2C_2C_4R_4R_5 + 2C_2L_2R_4g_m + 2C_2L_2R_5g_m + 2C_2L_2 + 2C_4L_4R_5g_m 
 10.450 INVALID-ORDER-450 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{1}{C_5 s}, \ \infty\right)
 H(s) = \frac{-C_2C_4C_5L_2L_4R_4s^5 + C_2C_4L_2L_4R_4g_ms^4 + R_4g_m + s^3\left(C_2C_4L_4R_4 - C_2C_5L_2R_4 - C_4C_5L_4R_4\right) + s^2\left(C_2L_2R_4g_m + C_4L_4R_4g_m\right) + s\left(C_2R_4 - C_5R_4\right)}{2g_m + s^5\left(2C_2C_4C_5L_2L_4R_4g_m + 2C_2C_4L_2L_4g_m\right) + s^3\left(2C_2C_4L_2R_4g_m + 2C_2C_5L_2R_4g_m + 2C_2C_5L_2R_4g_m + 2C_4C_5L_4\right) + s^2\left(2C_2C_4R_4 + 4C_2C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(2C_4C_5L_4R_4g_m + 2C_4C_5L_4R_4g_m + 2C_4C_5L_4R_4g
 10.451 INVALID-ORDER-451 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -C_{2}C_{4}C_{5}L_{2}L_{4}R_{4}R_{5}s^{5}+R_{4}R_{5}g_{m}-R_{4}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{4}R_{5}g_{m}-C_{2}C_{4}L_{2}L_{4}R_{4}\right)+s^{3}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}g_{m}-C_{2}C_{4}L_{2}L_{4}R_{4}R_{5}\right)+s^{3}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{4}R_{5}-C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{5}+C_{2}C_{5}L_{2}R_{4}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{5}+C_{2}C_{5}L_{2}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{5}+C_{2}C_{5}L_{2}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{5}+C_{2}C_{5}L_{2}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{4}R_{5}+C_{2}C_{5}L_{2}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{5}L_{5}+C_{2}C_{5}L_{5}R_{5}\right)+s^{2}\left(C_{2}C_{4}L_{5}L_{5}+C_{5}C_{5}L_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}+C_{5}C_{5}L_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}+C_{5}C_{5}L_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}L_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{2}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{5}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^{2}\left(C_{5}C_{5}R_{5}+C_{5}C_{5}R_{5}\right)+s^
                                                      \frac{-C_2C_4C_5L_2L_4R_4R_5s^* + R_4R_5g_m - R_4 + s + (C_2C_4L_2L_4R_4r_5g_m - C_2C_4L_2L_4R_4r_5) + s + (C_2C_4L_2L_4R_4r_5) + s + (C_2C_4L_2L_4R_4r_5) + s + (C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g
10.452 INVALID-ORDER-452 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)
 H(s) = \frac{R_4 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_4 R_5 + C_2 C_4 L_2 L_4 R_4 g_m\right) + s^3 \left(C_2 C_4 L_4 R_4 + C_2 C_5 L_2 R_4 R_5 g_m - C_2 C_5 L_2 R_4 + C_4 C_5 L_4 R_5 g_m - C_2 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 L_2 L_4 R_5 g_m + 2 C_2 C
```

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(-C_2C_4C_5L_2L_4R_4 + C_2C_4C_5L_4L_5R_4\right) + s^4\left(C_2C_4L_2L_4R_4g_m + C_2C_5L_2L_5R_4g_m + C_4C_5L_4L_5R_4g_m\right) + s^3\left(C_2C_4L_4R_4 - C_4C_5L_4L_5g_ms^6 + 2g_m + s^5\left(2C_2C_4C_5L_2L_4R_4g_m + 2C_2C_4C_5L_4L_5g_m\right) + s^3\left(2C_2C_4L_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m\right) + s^3\left(2C_2C_4L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m\right) + s^3\left(2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m\right) + s^3\left(2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4R_4g_m + 2C_2C_4C_5L_4$ 

10.454 INVALID-ORDER-454 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_4g_ms^5 + L_5R_4g_ms^5 + L_5R_4g_m$ 

10.455 INVALID-ORDER-455 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4R_5g_m - C_2C_4C_5L_2L_4R_4 + C_2C_4C_5L_4R_4 + C_2C_4C_5L_4R_4R_5 + C_2C_4L_5L_4R_4 + C_2C_4C_5L_4R_4R_5 + C_2C_4C_5L_4R_4 + C_2C_4C_5L_4R_4R_5 + C_2C_4C_5L_4R_4 + C_2C_4C_5L_4R_5 + C_2C_4C_5L_4R_5 + C_2C_4C_5L_4R_5 + C_$ 

10.456 INVALID-ORDER-456 
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$$

 $I(s) = \frac{-C_2C_4C_5L_2L_4L_5R_4R_5s^6 - R_2C_4C_5L_2L_4L_5R_4R_5g_m + 2C_2C_4C_5L_2L_4L_5R_4s^6 + 4C_2C_4C_5L_4L_5R_4R_5 + 4C_2C_4C_5L_4L_5R_4g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_2L_4R_5g_m + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5g_m$ 

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10.457 INVALID-ORDER-457 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \ \infty\right)
10.458 INVALID-ORDER-458 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R_4R_5g_m - R_4 +
                      \frac{1}{2R_4g_m + 2R_5g_m + s^6\left(2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_2L_4L_5R_5g_m + 2C_2C_4C_5L_2L_4R_5g_m + 2C_2C_4C_5L_2L_4R_5g_m + 2C_2C_4C_5L_2L_4R_5g_m + 2C_2C_4C_5L_2L_4R_5g_m + 2C_2C_4C_5L_2L_4R_5g_m + 2C_2C_4C_5L_4L_5R_4g_m + 2C_2C_4C_5L_4L_5R_5g_m + 2C_2C_4C_5L_4L_5R_5g_m + 2C_2C_4C_5L_4L_5R_4g_m + 2C_2C_4C_5L_4L_5R_5g_m + 2C_2C_4C_5L_4C_5L_4C_5L_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_
10.459 INVALID-ORDER-459 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                        H(s) = \frac{-C_2C_5L_2R_4s^3 + R_4g_m + s^2\left(-C_2C_5R_2R_4 + C_2L_2R_4g_m\right) + s\left(C_2R_2R_4g_m + C_2R_4 - C_5R_4\right)}{2q_m + s^3\left(2C_2C_5L_2R_4g_m + 2C_2C_5L_2\right) + s^2\left(2C_2C_5R_2R_4g_m + 2C_2C_5R_2 + 4C_2C_5R_4 + 2C_2L_2g_m\right) + s\left(2C_2R_2g_m + 2C_2 + 2C_5R_4g_m + 2C_5\right)}
10.460 INVALID-ORDER-460 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
```

$$\begin{aligned} \textbf{10.461} \quad \textbf{INVALID-ORDER-461} \ \ Z(s) &= \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ R_5 + \frac{1}{C_5 s}, \ \infty \right) \\ H(s) &= \frac{R_4 g_m + s^3 \left( C_2 C_5 L_2 R_4 R_5 g_m - C_2 C_5 L_2 R_4 \right) + s^2 \left( C_2 C_5 R_2 R_4 R_5 g_m - C_2 C_5 R_2 R_4 + C_2 C_5 R_4 R_5 + C_2 L_2 R_4 g_m \right) + s \left( C_2 R_2 R_4 g_m + C_2 R_4 + C_5 R_4 R_5 g_m - C_5 R_4 \right) }{2 g_m + s^3 \left( 2 C_2 C_5 L_2 R_4 g_m + 2 C_2 C_5 L_2 R_5 g_m + 2 C_2 C_5 L_2 \right) + s^2 \left( 2 C_2 C_5 R_2 R_4 g_m + 2 C_2 C_5 R_2 R_5 g_m + 2 C_2 C_5 R_2 + 4 C_2 C_5 R_4 + 2 C_2 C_5 R_5 + 2 C_2 L_2 g_m \right) + s \left( 2 C_2 R_2 g_m + 2 C_2 + 2 C_5 R_4 g_m + 2 C_5 R_5 g_m + 2$$

$$\begin{aligned} \textbf{10.463} \quad \textbf{INVALID-ORDER-463} \ \ Z(s) &= \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \infty \right) \\ & \quad H(s) &= \frac{-C_2 C_5 L_2 L_5 R_4 s^4 - R_4 + s^3 \left( -C_2 C_5 L_5 R_2 R_4 + C_2 L_2 L_5 R_4 g_m \right) + s^2 \left( -C_2 L_2 R_4 + C_2 L_5 R_2 g_m + C_2 L_5 R_4 \right) + s \left( -C_2 R_2 R_4 + L_5 R_4 g_m \right) }{2 R_4 g_m + s^4 \left( 2 C_2 C_5 L_2 L_5 R_4 g_m + 2 C_2 C_5 L_5 R_2 R_4 g_m + 2 C_2 C_5 L_5 R_2 + 4 C_2 C_5 L_5 R_4 \right) + s^2 \left( 2 C_2 L_2 R_4 g_m + 2 C_2 L_5 R_2 g_m + 2 C_2 L_5 R_4 g_m + 2 C_2 L_5 \right) + s \left( 2 C_2 R_2 R_4 g_m + 2 C_2 R_4 + 4 C_2 R_4 g_m + 2 C_2 L_5 R_4 g_m + 2$$

10.464 INVALID-ORDER-464 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

$$H(s) = \frac{C_2C_5L_2L_5R_4g_ms^4 + R_4g_m + s^3\left(C_2C_5L_2R_4R_5g_m - C_2C_5L_2R_4 + C_2C_5L_5R_4g_m + C_2C_5L_5R_4g_m + C_2C_5R_2R_4 + C_2C_5R_2R_4g_m + C_2C_5R_2R_4 + C_2C_5R_4R_5 + C_2L_2R_4g_m + C_5L_5R_4g_m + s\left(C_2R_2R_4g_m + C_2R_4 + C_5R_4R_5g_m - C_5R_4\right)}{2C_2C_5L_2L_5g_ms^4 + 2g_m + s^3\left(2C_2C_5L_2R_4g_m + 2C_2C_5L_2R_5g_m + 2C_2C_5L_5\right) + s^2\left(2C_2C_5R_2R_4g_m + 2C_2C_5R_2R_5g_m + 2C_2C_5R_2 + 4C_2C_5R_5 + 2C_2L_2g_m + 2C_5L_5g_m\right) + s\left(2C_2R_2g_m + 2C_2C_5R_4g_m + 2C_2C_5R_5g_m + 2C_2C_5R_5g_m\right) + s\left(2C_2R_2g_m + 2C_2C_5R_4g_m + 2C_2C_5R_5g_m + 2C_2C_5R_5$$

10.465 INVALID-ORDER-465 
$$Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ R_4, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2E_3R_4R_5s^4 - R_4R_5 + s^3\left(-C_2C_5L_5R_2R_4R_5 + C_2L_2E_5R_4R_5g_m - C_2L_2E_5R_4\right) + s^2\left(-C_2L_2R_4R_5 + C_2L_5R_2R_4R_5g_m - C_2L_5R_2R_4 + C_2L_5R_4R_5 - C_5L_5R_4R_5\right) + s^2\left(2C_2L_2R_4R_5g_m + 2C_2L_5R_4R_5g_m + 2C_2L_5R_4R_5g_m + 2C_2L_5R_4R_5g_m + 2C_2L_5R_4R_5g_m + 2C_2L_5R_5g_m + 2C_$$

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10.466 INVALID-ORDER-466 Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, R_4, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)
```

$$H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_5 L_5 R_2 R_4 R_5 g_m - C_2 L_2 R_5 R_4 R_5 g_m - C_2 L_2 R_5 R_4 R_5 g_m - C_2 L_2 R_5 R_5 g_m - C_2$$

10.467 INVALID-ORDER-467 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty\right)$$

 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_5 L_2 R_4 R_5 R_5 - C_2 C_5 L_2 R$ 

**10.468** INVALID-ORDER-468 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)$$

$$H(s) = \frac{R_5g_m + s^2\left(C_2L_2R_5g_m - C_2L_2\right) + s\left(C_2R_2R_5g_m - C_2R_2 + C_2R_5\right) - 1}{2g_m + s^3\left(2C_2C_4L_2R_5g_m + 2C_2C_4L_2\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_2 + 2C_2C_4R_5 + 2C_2L_2g_m\right) + s\left(2C_2R_2g_m + 4C_2 + 2C_4R_5g_m + 2C_4\right)}$$

**10.469** INVALID-ORDER-469 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2s^3 + g_m + s^2\left(-C_2C_5R_2 + C_2L_2g_m\right) + s\left(C_2R_2g_m + C_2 - C_5\right)}{2C_2C_4C_5L_2s^4 + s^3\left(2C_2C_4C_5R_2 + 2C_2C_4L_2g_m + 2C_2C_5L_2g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.470 INVALID-ORDER-470 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2R_5s^3 + R_5g_m + s^2\left(-C_2C_5R_2R_5 + C_2L_2R_5g_m - C_2L_2\right) + s\left(C_2R_2R_5g_m - C_2R_2 + C_2R_5 - C_5R_5\right) - 1}{2C_2C_4C_5L_2R_5s^4 + 2g_m + s^3\left(2C_2C_4C_5R_2R_5 + 2C_2C_4L_2 + 2C_2C_5L_2R_5g_m\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_5 + 2C_2C_4R_5 + 2C_2C_5R_5g_m + 4C_2C_5R_5\right) + s\left(2C_2R_2g_m + 4C_2 + 2C_4R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_2C_4R_2R_5g_m + 2C_2C_4R_5 + 2C_2C_4R_5g_m + 4C_2C_5R_5 + 2C_2L_2g_m + 2C_4C_5R_5\right) + s\left(2C_2R_2g_m + 4C_2 + 2C_4R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_2C_4R_5g_m + 2C_2C_4R_5g_m + 2C_2C_4R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_2C_4R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_2C_4R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4C_5R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left(2C_4R_5g_m + 2C_4C_5R_5g_m\right) + s^2\left($$

10.471 INVALID-ORDER-471 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{g_m + s^3 \left(C_2 C_5 L_2 R_5 g_m - C_2 C_5 L_2\right) + s^2 \left(C_2 C_5 R_2 R_5 g_m - C_2 C_5 R_2 + C_2 C_5 R_5 + C_2 L_2 g_m\right) + s \left(C_2 R_2 g_m + C_2 + C_5 R_5 g_m - C_5\right)}{s^4 \left(2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 R_2 R_5 g_m + 2 C_2 C_4 C_5 R_2 + 2 C_2 C_4 L_2 g_m + 2 C_2 C_4 L_2 g_m\right) + s^2 \left(2 C_2 C_4 R_2 g_m + 2 C_2 C_4 R_2 g_m + 4 C_2 C_5 R_2 g_m + 4 C_2 C_5 R_2 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2 g_m + 4 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2 g_m + 4 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2 g_m + 4 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_5 g_m + 2 C_4 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_4 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m + 2 C_5 R_5 g_m\right) + s^2 \left(2 C_5 R_5 g_m\right) + s^2 \left(2$$

10.472 INVALID-ORDER-472 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{C_2C_5L_2L_5g_ms^4 + g_m + s^3\left(-C_2C_5L_2 + C_2C_5L_5R_2g_m + C_2C_5L_5\right) + s^2\left(-C_2C_5R_2 + C_2L_2g_m + C_5L_5g_m\right) + s\left(C_2R_2g_m + C_2 - C_5\right)}{2C_2C_4C_5L_2L_5g_ms^5 + s^4\left(2C_2C_4C_5L_2 + 2C_2C_4C_5L_5\right) + s^3\left(2C_2C_4C_5R_2 + 2C_2C_4L_2g_m + 2C_4C_5L_5g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5\right) + s\left(2C_4g_m + 2C_5g_m\right)}$$

10.473 INVALID-ORDER-473 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2L_5s^4 + s^3\left(-C_2C_5L_5R_2 + C_2L_2L_5g_m\right) + s^2\left(-C_2L_2 + C_2L_5R_2g_m + C_2L_5 - C_5L_5\right) + s\left(-C_2R_2 + L_5g_m\right) - 1}{2C_2C_4C_5L_2L_5s^5 + 2g_m + s^4\left(2C_2C_4L_5L_5g_m + 2C_2C_4L_5g_m + 2C_2C_4L_5R_2g_m + 2C_2C_4L_5 + 2C_2C_5L_5R_2g_m + 4C_2C_5L_5\right) + s^2\left(2C_2C_4R_2 + 2C_2L_2g_m + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(2C_2R_2g_m + 4C_2C_5L_5\right) + s\left(2C_2C_4R_2 + 2C_2L_2g_m + 2C_4L_5g_m + 2C_5L_5g_m\right) + s\left(2C_2R_2g_m + 2C_4L_5g_m + 2C_4L_5g_m\right) + s\left(2C_2R_2g_m + 2C_4L_5g_m\right) + s\left(2C_2R_2g_m\right) + s\left(2C_2R_2g_m\right) + s\left(2C_2R_2g_m\right)$$

**10.474** INVALID-ORDER-474 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

$$H(s) = \frac{C_2C_5L_2L_5g_ms^4 + g_m + s^3\left(C_2C_5L_2R_5g_m - C_2C_5L_2 + C_2C_5L_5R_2g_m + C_2C_5L_5\right) + s^2\left(C_2C_5R_2R_5g_m - C_2C_5R_2 + C_2C_5R_5 + C_2L_2g_m + C_5L_5g_m\right) + s\left(C_2R_2g_m + C_2 + C_5R_5g_m - C_5\right)}{2C_2C_4C_5L_2L_5g_ms^5 + s^4\left(2C_2C_4C_5L_2R_5g_m + 2C_2C_4C_5L_5\right) + s^3\left(2C_2C_4C_5R_2R_5g_m + 2C_2C_4C_5R_2 + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_2R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_2R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_2R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5\right) + s^2\left(2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5g_m + 2C_2C_4C_5R_5g_m$$

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10.475 INVALID-ORDER-475 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)
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 $H(s) = \frac{-C_2C_5L_2L_5R_5s^4 - R_5 + s^3\left(-C_2C_5L_5R_2R_5 + C_2L_2L_5R_5g_m - C_2L_2L_5\right) + s^2\left(-C_2L_2R_5 + C_2L_5R_2g_m - C_2L_5R_2 + C_2L_5R_5 - C_5L_5R_5\right) + s\left(-C_2R_2R_5 + C_2L_5R_5g_m + s^4\left(2C_2C_4C_5L_5R_5g_m + s^4\left(2C_2C_4L_5R_5g_m + 2C_2C_4L_5R_5g_m + 2C_2C_4L_5R_$ 

10.476 INVALID-ORDER-476 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

 $H(s) = \frac{R_5g_m + s^4 \left( C_2C_5L_2L_5R_5g_m - C_2C_5L_2L_5 \right) + s^3 \left( C_2C_5L_5R_2R_5g_m - C_2C_5L_5R_2 + C_2C_5L_5R_5 + C_2L_2L_5g_m \right) + s^2 \left( C_2L_2R_5g_m - C_2L_2 + C_2L_5R_2g_m + C_2L_5 + C_5L_5R_5g_m - C_5L_5R_5 + C_5L_5R_5g_m - C_5L_5R_5g_m - C_5R_5g_m - C_5R$ 

10.477 INVALID-ORDER-477 
$$Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)$$

 $H(s) = \frac{R_5g_m + s^4\left(C_2C_5L_2L_5R_5g_m - C_2C_5L_2L_5\right) + s^3\left(-C_2C_5L_2R_5 + C_2C_5L_5R_2R_5g_m - C_2C_5L_5R_2 + C_2C_5L_5R_5\right) + s^2\left(-C_2C_5R_2R_5 + C_2L_2R_5g_m - C_2L_2R_5g_m$ 

10.478 INVALID-ORDER-478 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, R_5, \infty\right)$$

 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^2 \left(C_2 L_2 R_4 R_5 g_m - C_2 L_2 R_4\right) + s \left(C_2 R_2 R_4 R_5 g_m - C_2 R_2 R_4 + C_2 R_4 R_5\right)}{2 R_4 g_m + 2 R_5 g_m + s^3 \left(2 C_2 C_4 L_2 R_4 R_5 g_m + 2 C_2 C_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 R_2 R_4 + 2 C_2 C_4 R_4 R_5 + 2 C_2 L_2 R_4 g_m + 2 C_2 L_2 R_5 g_m + 2 C_2 R_2 R_4 g_m + 2 C_2 R_2 R_4 g_m + 2 C_2 R_2 R_4 g_m + 2 C_2 R_4 R_5 g_m + 2 C_2 R_4 R_5 g_m + 2 C_4 R_5 g_m + 2 C_4 R_4 R_5 g_m + 2 C_4 R_5 g_m + 2$ 

10.479 INVALID-ORDER-479 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{-C_2C_5L_2R_4s^3 + R_4g_m + s^2\left(-C_2C_5R_2R_4 + C_2L_2R_4g_m\right) + s\left(C_2R_2R_4g_m + C_2R_4 - C_5R_4\right)}{2C_2C_4C_5L_2R_4s^4 + 2g_m + s^3\left(2C_2C_4C_5R_2R_4 + 2C_2C_5L_2R_4g_m + 2C_2C_5L_2\right) + s^2\left(2C_2C_4R_2R_4g_m + 2C_2C_5R_2R_4g_m + 2C_2C_5R_2 + 4C_2C_5R_4 + 2C_2C_5R_4\right) + s\left(2C_2R_2g_m + 2C_4C_5R_4\right) + s\left(2C_2R_2g_m + 2C_4R_4\right) + s\left(2C_2R_2g_m + 2C_4C_5R_4\right) + s\left(2C_2R_2g_m + 2C_4C_5R_4\right) + s\left(2C_2R_2g_m + 2C_4C_5R_4\right) + s\left(2C_2R_2g_m + 2C_4R_4\right) + s\left(2C_2R_4g_m + 2C_4R_4\right) + s\left(2C_2R_4g_m + 2C_4R_4\right) + s\left(2C_2R_4g_m + 2C_4R_4\right) + s\left(2C_2R_4g_m + 2C_4R_4\right) + s\left(2C_4R_4g_m +$ 

10.480 INVALID-ORDER-480 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

 $H(s) = \frac{-C_2C_5L_2R_4R_5s^3 + R_4R_5g_m - R_4 + s^2\left(-C_2C_5R_2R_4R_5 + C_2L_2R_4R_5g_m - C_2L_2R_4\right) + s\left(C_2R_2R_4R_5g_m - C_2R_2R_4 + C_2R_4R_5g_m - C_2R_2R_4 + C_2R_4R_5g_m - C_2R_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4R_2R_4R_5g_m + 2C_2C_4R_2R_4R_5g_m + 2C_2C_4R_2R_4R_5g_m + 2C_2C_4R_4R_5g_m + 2C_2C_5R_2R_4R_5g_m + 2C_2C_5R_2R_4R_5g_m + 2C_2C_4R_4R_5g_m + 2$ 

10.481 INVALID-ORDER-481 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{R_4}{C_4 R_4 s + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

10.482 INVALID-ORDER-482 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_4g_ms^4 + R_4g_m + s^3\left(-C_2C_5L_2R_4 + C_2C_5L_5R_2R_4g_m + C_2C_5L_5R_4\right) + s^2\left(-C_2C_5R_2R_4 + C_2L_2R_4g_m + C_5L_5R_4g_m\right) + s\left(C_2R_2R_4g_m + C_2C_5L_5R_4g_m +$ 

10.483 INVALID-ORDER-483 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

 $H(s) = \frac{-C_2C_5L_2L_5R_4s^4 - R_4 + s^3\left(-C_2C_5L_5R_2R_4 + C_2L_2L_5R_4g_m\right) + s^2\left(-C_2L_2R_4 + C_2L_5R_2R_4g_m + C_2L_5R_4 - C_5L_5R_4\right) + s\left(-C_2C_5L_5R_4s^5 + 2R_4g_m + s^4\left(2C_2C_4L_5R_4s^5 + 2R_4g_m + 2C_2C_5L_5R_4s^6 + 2C_2C_5L_5R_5R_5s^6 + 2C_2C_5L_5R_5s^6 + 2C_2C_5L_5R_5s^6 + 2C_2C_5L_5R_5s^6 + 2C_2C_5L_5R_5s^6 + 2C_2C_5L$ 

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10.484 INVALID-ORDER-484 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)
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 $H(s) = \frac{C_2C_5L_2L_5R_4g_ms^4 + R_4g_m + s^3\left(C_2C_5L_2R_4R_5g_m - C_2C_5L_2R_4 + C_2C_5L_5R_2R_4g_m + C_2C_5L_5R_4\right) + s^2\left(C_2C_4C_5L_2R_4g_ms^5 + 2g_m + s^4\left(2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_2R_4g_m + 2C_2C_5L_2R_4g_m +$ 

10.485 INVALID-ORDER-485  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$ 

 $-C_2C_5L_2L_5R_4R_5s^4 - R_4R_5 + s^3(-C_2C_5L_5R_2R_4R_5)$ 

 $H(s) = \frac{C_2 C_3 L_2 L_5 R_4 R_5 s^5 + 2 R_4 R_5 g_m + 2 R_5 + s^4 \left(2 C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m + 2 C_2 C_4 L_2 L_5 R_4 R_5 g_m + 2 C_2 C_4 L_2 L_5 R_4 R_5 g_m + 2 C_2 C_4 L_2 L_5 R_4 R_5 g_m + 2 C_2 C_4 L_5 R_5 g_m + 2 C_2 C_5 L_5 R_5 g_m + 2 C_2 C_5 L_5 R_5 g_m + 2 C_2 C_5 L_5 R_5 g_m +$ 

**10.486** INVALID-ORDER-486  $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

 $R_4R_5g_m - R_4 + s^4(C_2C_5L_2L_5R_4R_5g_m - C_2C_5R_4R_5g_m)$ 

 $H(s) = \frac{R_1R_2g_m - R_4 + s \cdot (2C_2C_4C_5L_2L_5R_4R_5g_m + 2C_2C_4C_5L_2L_5R_4R_5g_m + 2C_2C_4C_5L_2R_4R_5g_m + 2C_2C_4C_5L_5R_4R_5g_m + 2C_2C_4C_5L_5R_5R_5g_m + 2C_2C_4C_5L_5R_5R_5g_m + 2C_2C_4C_5L_5R_5g_m + 2C_2C_4C_5L_5R_5g_m + 2C_2C_4C_5L_5R_5g_m + 2C_2C_4C_5L_5R_$ 

10.487 INVALID-ORDER-487  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$ 

 $R_4 R_5 a_m - R_4 + s^4$ 

10.488 INVALID-ORDER-488  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5, \infty\right)$ 

 $H(s) = \frac{R_5 g_m + s^3 \left(C_2 C_4 L_2 R_4 R_5 g_m - C_2 C_4 L_2 R_4\right) + s^2 \left(C_2 C_4 R_2 R_4 R_5 g_m - C_2 C_4 R_2 R_4 + C_2 C_4 R_4 R_5 + C_2 L_2 R_5 g_m - C_2 L_2\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5 + C_4 R_4 R_5 g_m - C_4 R_4\right) - 1}{2 g_m + s^3 \left(2 C_2 C_4 L_2 R_4 g_m + 2 C_2 C_4 L_2 R_5 g_m + 2 C_2 C_4 R_2 R_4 g_m + 2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_5 + 2 C_2 L_2 g_m\right) + s \left(2 C_2 R_2 g_m + 4 C_2 C_4 R_4 g_m + 2 C_4 R_5 g_m + 2 C_4 R_$ 

10.489 INVALID-ORDER-489  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2R_4s^4 + g_m + s^3\left(-C_2C_4C_5R_2R_4 + C_2C_4L_2R_4g_m - C_2C_5L_2\right) + s^2\left(C_2C_4R_2R_4g_m + C_2C_4R_4 - C_2C_5R_2 + C_2L_2g_m - C_4C_5R_4\right) + s\left(C_2R_2g_m + C_2 + C_4R_4g_m - C_5\right)}{s^4\left(2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5R_2 + 4C_2C_4C_5R_2 + 4C_2C_4C_5R_4 + 2C_2C_4L_2g_m + 2C_2C_5L_2g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4 + 2C_2C_5R_2g_m + 4C_2C_5 + 2C_4C_5R_4g_m + 2C_4C_5\right) + s\left(2C_4g_m + 2C_4G_5R_4g_m +$ 

**10.490** INVALID-ORDER-490  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2R_4R_5s^4 + R_5g_m + s^3\left(-C_2C_4C_5R_2R_4R_5 + C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4 - C_2C_5L_2R_5\right) + s^2\left(C_2C_4R_2R_4R_5g_m - C_2C_4R_2R_4 + C_2C_4R_4R_5 - C_2C_5R_2R_5 + C_2L_2R_5g_m - C_2L_2 - C_4C_5R_4R_5\right)}{2g_m + s^4\left(2C_2C_4C_5L_2R_4R_5g_m + 2C_2C_4L_2R_5g_m + 2C_2C_4L_2R_5g_m + 2C_2C_4L_2R_5g_m + 2C_2C_4R_2R_4g_m + 2C_2C_4R_4g_m + 2C_2C_4R$ 

10.491 INVALID-ORDER-491  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{g_m + s^4 \left(C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4\right) + s^3 \left(C_2 C_4 C_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 R_2 R_4 + C_2 C_4 C_5 R_2 R_4 + C_2 C_4 C_5 R_2 R_4 R_5 g_m - C_2 C_5 L_2\right) + s^2 \left(C_2 C_4 R_2 R_4 g_m + C_2 C_5 R_2 R_5 g_m - C_2 C_5 R_2 + C_2 C_5 R_5 + C_2 L_2 g_m + C_4 C_5 R_4 R_5 g_m - C_4 C_5 R_4\right) + s^2 \left(2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 R_2 R_5 g_m + 2 C_2 C_4 C_5 R_5 g_m + 2 C$ 

**10.492** INVALID-ORDER-492  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_2L_5R_4g_ms^5 + g_m + s^4\left(-C_2C_4C_5L_2R_4 + C_2C_4C_5L_5R_2g_m + C_2C_5L_5g_m\right) + s^3\left(-C_2C_4C_5R_2R_4 + C_2C_5L_5R_2g_m + C_2C_5L_5 + C_4C_5L_5R_4g_m\right) + s^2\left(C_2C_4R_2R_4g_m + C_2C_4R_4 - C_2C_5R_2 + C_2L_2g_m - C_4C_5R_2R_4\right)}{2C_2C_4C_5L_2L_5g_ms^5 + s^4\left(2C_2C_4C_5L_2R_4g_m + 2C_2C_4C_5L_5R_2g_m + 2C_2C_4C_5L_5\right) + s^3\left(2C_2C_4C_5R_2R_4g_m + 2C_2C_4C_5R_2R_4g_m + 2C_2C_4C_5L_2g_m + 2C_2C_4C_5L_2g_m + 2C_2C_4C_5L_2g_m + 2C_2C_4C_5L_2g_m + 2C_2C_4C_5R_2g_m + 2C_2C_4C_5R_2g_m$ 

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10.493 INVALID-ORDER-493 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
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 $H(s) = \frac{-C_2C_4C_5L_2L_5R_4s^5 + s^4\left(-C_2C_4C_5L_5R_2R_4 + C_2C_4L_2L_5R_4g_m - C_2C_5L_2L_5\right) + s^3\left(-C_2C_4L_2R_4 + C_2C_4L_5R_4g_m + C_2C_4L_5R_4g_m + C_2C_4L_5R_4 + C_2C_4L_5R_4g_m + C$ 

**10.494** INVALID-ORDER-494 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

 $H(s) = \frac{C_2C_4C_5L_2L_5R_4g_ms^5 + g_m + s^4\left(C_2C_4C_5L_2R_4R_5g_m - C_2C_4C_5L_2R_4 + C_2C_4C_5L_5R_4 + C_2C_4C_5L_2R_4g_m + C_2C_$ 

10.495 INVALID-ORDER-495 
$$Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_5R_4R_5s^5 - R_5 + s^4\left(-C_2C_4C_5L_2R_4R_5g_m - C_2C_4L_2L_5R_4 - C_2C_5L_2L_5R_5\right) + s^3\left(-C_2C_4L_2R_4R_5 + C_2C_4L_5R_2R_4R_5g_m - C_2C_4L_2L_5R_4R_5g_m - C_2C_4L_2L_5R_4R_5g_m + 2C_2C_4L_2L_5R_4g_m + 2C_2C_4L_2L_5R_4g_m + 2C_2C_4L_2L_5R_4g_m + 2C_2C_4L_2L_5R_5g_m + 2C_2C_4L_2L_5R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R$ 

10.496 INVALID-ORDER-496 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

 $H(s) = \frac{R_5 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_4 C_5 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_5 R_2 R_4 + C_2 C_4 C_5 L_5 R_2 R_4 + C_2 C_4 C_5 L_5 R_2 R_4 G_m + C_2 C_4 L_5 R_4 G_m - C_2 C_4 L_5 R_4 G_m - C_2 C_4 L_5 R_4 G_m + C_2 C_4 L_5 R_4 G_m - C_2 C_4 L$ 

10.497 INVALID-ORDER-497 
$$Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

10.498 INVALID-ORDER-498 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5, \infty\right)$$

 $H(s) = \frac{R_5 g_m + s^4 \left(C_2 C_4 L_2 L_4 R_5 g_m - C_2 C_4 L_2 L_4\right) + s^3 \left(C_2 C_4 L_4 R_2 R_5 g_m - C_2 C_4 L_4 R_2 + C_2 C_4 L_4 R_5\right) + s^2 \left(C_2 L_2 R_5 g_m - C_2 L_2 + C_4 L_4 R_5 g_m - C_4 L_4\right) + s \left(C_2 R_2 R_5 g_m - C_2 R_2 + C_2 R_5\right) - 1}{2 C_2 C_4 L_2 L_4 g_m s^4 + 2 g_m + s^3 \left(2 C_2 C_4 L_2 R_5 g_m + 2 C_2 C_4 L_4 R_2 g_m + 4 C_2 C_4 L_4\right) + s^2 \left(2 C_2 C_4 R_2 R_5 g_m + 2 C_2 C_4 R_5 + 2 C_2 C_4 R_5 + 2 C_2 L_2 g_m + 2 C_4 L_4 g_m\right) + s \left(2 C_2 R_2 g_m + 4 C_2 + 2 C_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_$ 

**10.499** INVALID-ORDER-499 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4s^5 + g_m + s^4\left(-C_2C_4C_5L_4R_2 + C_2C_4L_2L_4g_m\right) + s^3\left(C_2C_4L_4R_2g_m + C_2C_4L_4 - C_2C_5L_2 - C_4C_5L_4\right) + s^2\left(-C_2C_5R_2 + C_2L_2g_m + C_4L_4g_m\right) + s\left(C_2R_2g_m + C_2 - C_5\right)}{2C_2C_4C_5L_2L_4g_ms^5 + s^4\left(2C_2C_4C_5L_2 + 2C_2C_4C_5L_4R_2g_m + 4C_2C_4C_5L_4\right) + s^3\left(2C_2C_4C_5R_2 + 2C_2C_4L_2g_m + 2C_4C_5L_4g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4R_2g_m + 2C_2C_4R_2g_m + 2C_2C_4R_2g_m + 2C_2C_4R_2g_m + 2C_2C_4R_2g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4R_2g_m + 2C_2C_4R_2g_m + 2C_2C_4R_2g_m\right) + s^2\left(2C_2C_4R_2g_m + 2C_2C_4R_2g_m\right) + s^2\left(2C_2C_4R_2g_m\right) + s^2\left(2C_2C_4R_2g_m\right) + s^2\left(2C_2C_4R$ 

10.500 INVALID-ORDER-500 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_5s^5 + R_5g_m + s^4\left(-C_2C_4C_5L_4R_2R_5 + C_2C_4L_2L_4R_5g_m - C_2C_4L_2L_4\right) + s^3\left(C_2C_4L_4R_2 + C_2C_4L_4R_5 - C_2C_5L_2R_5 - C_4C_5L_4R_5\right) + s^2\left(-C_2C_5R_2R_5 + C_2L_2R_5g_m - C_2C_4L_4R_5g_m + S^4\left(2C_2C_4C_5L_4R_5g_m + S^4\left(2C_2C_4C_5L_4R_5g_m + S^4\left(2C_2C_4C_5L_4R_5g_m + S^4\left(2C_2C_4L_4R_5g_m - C_2C_4L_4R_5g_m + S^4\left(2C_2C_4L_4R_5g_m + S^4\left(2C_4C_5L_4R_5g_m + S^4c_4C_5L_4R_5g_m + S^4c_4C_5L_4R_5$ 

10.501 INVALID-ORDER-501 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$$

 $H(s) = \frac{g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4\right) + s^4 \left(C_2 C_4 C_5 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_4 R_5 + C_2 C_4 L_2 L_4 g_m\right) + s^3 \left(C_2 C_4 L_4 R_2 g_m + C_2 C_4 L_4 + C_2 C_5 L_2 R_5 g_m - C_2 C_5 L_2 + C_4 C_5 L_4 R_5 g_m - C_2 C_5 R_2 R_5 g_m - C_2 C_5 R_2 + C_2 C_5 R_5 + C_2 L_2 g_m}{2 C_2 C_4 C_5 L_2 L_4 g_m s^5 + s^4 \left(2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_4 R_2 g_m + 2 C_2 C_4 C_5 R_2 R_5 g_m + 2 C_2 C_4 R_5 R_5 g_m + 2 C_2 C_4 R_5$ 

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10.502 INVALID-ORDER-502 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
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$$H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(-C_2C_4C_5L_2L_4 + C_2C_4C_5L_4L_5g_m + C_2C_4L_5g_m + C_2C_4L_4L_5g_m + C_2C_5L_2g_m + C_2C_5L_5g_m + C_4C_5L_4L_5g_m + S^3\left(C_2C_4L_4R_2g_m + C_2C_4L_4 - C_2C_5L_2 + C_2C_5L_5R_2g_m + C_2C_5L_5 - C_4C_5L_4\right) + s^2\left(-C_2C_5R_2 + C_2C_5R_2 + C_2C_5R_2g_m + C_2C_5R_2 + C_2C_5R_2g_m + C_2$$

**10.503** INVALID-ORDER-503 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_2L_4L_5s^6 + s^5\left(-C_2C_4C_5L_4L_5g_m + s^4\left(-C_2C_4L_2L_4 + C_2C_4L_4L_5g_m + C_2C_4L_4L_5 - C_2C_5L_2L_5 - C_4C_5L_4L_5\right) + s^3\left(-C_2C_4L_4R_2 - C_2C_5L_5R_2 + C_2L_2L_5g_m + C_4L_4L_5g_m\right)}{2C_2C_4C_5L_2L_4L_5g_ms^6 + 2g_m + s^5\left(2C_2C_4C_5L_4L_5R_2g_m + 4C_2C_4L_5R_2g_m + 4C_2C_4L_4L_5g_m + 2C_2C_4L_2L_5g_m + 2C_4C_5L_4L_5g_m\right) + s^4\left(2C_2C_4C_5L_4L_5g_m + 2C_4C_4L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_2C_4C_5L_4L_5g_m + 2C_4C_4L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_4L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_4L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_4L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_5L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_4L_4L_5g_m + 2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_4L_4L_5g_m\right) + s^4\left(2C_4C_4L_4L_5g_m\right)$$

10.504 INVALID-ORDER-504 
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + \frac{1}{C_4 s}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$$

$$H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(C_2C_4C_5L_2L_4R_5g_m - C_2C_4C_5L_4L_5g_m + C_2C_4C_5L_4L_5g_m + C_2C_4C_5L_4R_5g_m - C_2C_4C_5L_4R_5g_m - C_2C_4C_5L_4R_5g_m - C_2C_4C_5L_4R_5g_m - C_2C_4C_5L_4R_5g_m + C_2C_4L_5g_m + C_2C_4L_5g_m + C_2C_4C_5L_4g_m + C_2C_4C_5L_4g_$$

**10.505** INVALID-ORDER-505 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_5s^6 - R_5 + s^5\left(-C_2C_4C_5L_4L_5R_2g_m - C_2C_4L_2L_4L_5\right) + s^4\left(-C_2C_4L_2L_4R_5 + C_2C_4L_4L_5R_2g_m - C_2C_4L_4L_5R_2g_m - C_2C_4L_4L_5R_5g_m - C_2C_4L_4L_5R_5g_m + C_2C_4L_4L_5R_5g$$

**10.506** INVALID-ORDER-506 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$$

$$H(s) = \frac{R_5 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_5 g_m - C_2 C_4 C_5 L_2 L_4 L_5\right) + s^5 \left(C_2 C_4 C_5 L_4 L_5 R_2 g_m - C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_5 g_m - C_2 C_4 L_2 L_4 R_5 g_m + C_2 C_4 L_4 L_5 R_2 g_m + C_2 C_4 L_4 L_5 R_5 g_m - C_2 C_5 L_2 L_5 R_5 g_m - C_2 C_5 L_2 L_5 R_5 g_m - C_2 C_5 L_2 L_5 R_5 g_m - C_2 C_5 L_4 L_5 R_5 g_m - C_2 C_5 L_4 L_5 R_5 g_m - C_2 C_4 L_5 L_4 L_5 R_5 g_m + C_2 C_4 L_5 L_5 R_5 g_m + C_2 C_5 L_5 R_5 g_m$$

10.507 INVALID-ORDER-507 
$$Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

$$H(s) = \frac{R_5g_m + s^6\left(C_2C_4C_5L_2L_4L_5R_5g_m - C_2C_4C_5L_2L_4R_5 + C_2C_4C_5L_4L_5R_2g_m - C_2C_4C_5L_4L_5R_2 + C_2C_4C_5L_4L_5R_5 + s^4\left(-C_2C_4C_5L_4R_2R_5 + C_2C_4C_5L_4R_5g_m - C_2C_4C_5L_4L_5R_2 + C_2C_4C_5L_4R_5 + C_$$

**10.508** INVALID-ORDER-508 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)$$

$$H(s) = \frac{s^3 \left(C_2 L_2 L_4 R_5 g_m - C_2 L_2 L_4\right) + s^2 \left(C_2 L_4 R_2 R_5 g_m - C_2 L_4 R_5\right) + s \left(L_4 R_5 g_m - L_4\right)}{2 R_5 g_m + s^4 \left(2 C_2 C_4 L_2 L_4 R_5 g_m + 2 C_2 C_4 L_4 R_5 g_m + 2 C_2 C_4 L_4 R_5 + 2 C_2 L_4 L_4 R_5 g_m + 2 C_2 R_5 g_$$

10.509 INVALID-ORDER-509 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2L_4s^4 + L_4g_ms + s^3\left(-C_2C_5L_4R_2 + C_2L_2L_4g_m\right) + s^2\left(C_2L_4R_2g_m + C_2L_4 - C_5L_4\right)}{2C_2C_4C_5L_2L_4s^5 + 2g_m + s^4\left(2C_2C_4L_2L_4g_m + 2C_2C_4L_4L_4g_m + 2C_2C_5L_2 + 2C_2C_5L_4R_2g_m + 4C_2C_5L_4 + 2C_4C_5L_4\right) + s^2\left(2C_2C_5R_2 + 2C_4L_4g_m + 2C_4L_4g_m + 2C_5L_4g_m\right) + s^2\left(2C_4C_5L_4R_2g_m + 2C_4L_4g_m + 2C_4L_4g_m + 2C_4L_4g_m\right) + s^2\left(2C_4C_5L_4R_2g_m + 2C_4C_5L_4g_m\right) + s^2\left(2C_4C_5L_4R_2g_m + 2C_4C_5L_4R_2g_m\right) + s^2\left(2C_4C_5L_4R_2g_m$$

10.510 INVALID-ORDER-510 
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2L_4R_5s^4 + s^3\left(-C_2C_5L_4R_2R_5 + C_2L_2L_4R_5g_m - C_2L_2L_4\right) + s^2\left(C_2L_4R_2R_5g_m - C_2L_4R_2 + C_2L_4R_5 - C_5L_4R_5\right) + s^2\left(2C_4C_5L_4R_5s^5 + 2R_5g_m + s^4\left(2C_2C_4C_5L_4R_5s^5 + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5g_m + 2C_2C_4L_4R_5 + 2C_2C_5L_4R_5 + 2C_2C$$

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 \begin{aligned} &\mathbf{10.511} \quad \mathbf{INVALID\text{-}ORDER\text{-}511} \ Z(s) = \left( \infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty \right) \\ & H(s) = \frac{L_4g_ms + s^4 \left( C_2C_5L_2L_4R_5g_m - C_2C_5L_2L_4 \right) + s^3 \left( C_2C_5L_4R_2R_5g_m - C_2C_5L_4R_5 + C_2L_2L_4g_m \right) + s^2 \left( C_2L_4R_2g_m + C_2L_4 + C_5L_4R_5g_m - C_2C_5L_2L_4 \right) + s^3 \left( C_2C_5L_4R_2R_5g_m - C_2C_5L_4R_5 + C_2L_2L_4g_m \right) + s^2 \left( C_2L_4R_2g_m + C_2L_4 + C_5L_4R_5g_m - C_2C_5L_2L_4 \right) + s^3 \left( C_2C_5L_4R_5g_m + C_2C_5L_4R_5 + C_2L_2L_4g_m \right) + s^3 \left( C_2C_5L_4R_2g_m + C_2C_5L_4R_5g_m + C_2C_5L
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10.513 INVALID-ORDER-513  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_4L_5s^5 - L_4s + s^4\left(-C_2C_5L_4L_5g_m + s^3\left(-C_2L_2L_4 + C_2L_4L_5g_m + C_2L_4L_5 - C_5L_4L_5\right) + s^2\left(-C_2C_5L_4L_5s^6 + s^5\left(2C_2C_4C_5L_4L_5s^6 + s^5\left(2C_2C_4L_4L_5g_m + 2C_2C_4L_4L_5g_m + 2C_2C_5L_4L_5g_m + 2C_2C_5L_5g_m + 2C_2C_5$ 

10.514 INVALID-ORDER-514  $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{L_4 s}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_5L_2L_4L_5g_ms^5 + L_4g_ms + s^4\left(C_2C_5L_2L_4R_5g_m - C_2C_5L_2L_4 + C_2C_5L_4L_5R_2g_m + C_2C_5L_4L_5\right) + s^3\left(C_2C_4C_5L_2L_4L_5g_ms^6 + 2g_m + s^5\left(2C_2C_4C_5L_4L_5g_m + 2C_2C_4C_5L_4L_5\right) + s^4\left(2C_2C_4C_5L_4R_5g_m + 2C_2C_4C_5L_4R_5 + 2C_$ 

10.515 INVALID-ORDER-515  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_4L_5R_5s^5 - L_4R_5s + s^4\left(-C_2C_5L_4L_5R_2s^5 - L_4R_5s + s^4\left(-C_2C_5L_4L_5R_5s^5 - L_4R_5s^5 - L_4R_5s + s^4\left(-C_2C_5L_4L_5R_5s^5 - L_4R_5s + s^4\left(-C_2C_5L_4L_5R_5s^5 - L_4R_5s + s^4\left(-C_2C_5L_4L_5R_5s^5 - L_4R_5s^5 - L_4R_5$ 

10.516 INVALID-ORDER-516  $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4s}{C_4L_4s^2 + 1}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{s^5 \left(C_2 C_5 L_2 L_4 L_5 R_5 g_m - C_2 C_5 L_2 L_4 L_5\right) + s^4 \left(C_2 C_2 L_4 L_5 R_5 g_m - C_2 C_5 L_2 L_4 L_5\right) + s^4 \left(C_2 C_4 L_5 L_4 L_5 R_5 g_m + 2 C_2 C_4 L_5 L_4 L_5 R_5 g_m + 2 C_2 C_4 L_5 L_5 R_5 g_m + 2 C_2 C_5 L_5 L_5 R_5 g_m + 2 C_5 L_5 L_5 R$ 

10.517 INVALID-ORDER-517  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4s}{C_4L_4s^2 + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)$ 

**10.518** INVALID-ORDER-518  $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ R_5, \ \infty\right)$ 

**10.519** INVALID-ORDER-519  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4s^5 + g_m + s^4\left(-C_2C_4C_5L_2R_4 - C_2C_4C_5L_4R_2 + C_2C_4L_2L_4g_m\right) + s^3\left(-C_2C_4C_5R_2R_4 + C_2C_4L_2R_4g_m + C_2C_4L_4R_2g_m + C_2C_4L_4R_2g_m + C_2C_4L_4R_2g_m + C_2C_4R_4g_m + C_2C$ 

- 10.520 INVALID-ORDER-520  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)$
- $H(s) = \frac{-C_2C_4C_5L_2L_4R_5s^5 + R_5g_m + s^4\left(-C_2C_4C_5L_2R_4R_5 C_2C_4C_5L_4R_2R_5 + C_2C_4L_2L_4R_5g_m C_2C_4L_2R_4R_5g_m C_2C_4L_2R_4 + C_2C_4L_2R_4R_5g_m C_2C_4L_2R_4 + C_2C_4L_2R_4R_5g_m C_2C_4L_2R_4 + C_2C_4L_4R_2R_5g_m C_2C_4L_4R_2R_5g_m C_2C_4L_4R_2R_5g_m C_2C_4L_4R_2R_5g_m C_2C_4L_4R_2R_5g_m C_2C_4L_4R_2R_5g_m C_2C_4L_4R_2R_5g_m C_2C_4L_4R_5g_m C_2C_4L_5R_5g_m C_2C_4L_4R_5g_m C_2C_4L_5R_5g_m C_2C_4L_5R_5g_m C_2C_4L_5R_5g_m C_2C_4L_5R_5g_m C_2$
- 10.521 INVALID-ORDER-521  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)$
- $H(s) = \frac{g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_5 g_m C_2 C_4 C_5 L_2 L_4\right) + s^4 \left(C_2 C_4 C_5 L_2 R_4 R_5 g_m C_2 C_4 C_5 L_4 R_5 g_m C_2 C_4 C$
- 10.522 INVALID-ORDER-522  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)$
- $H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(-C_2C_4C_5L_2L_4 + C_2C_4C_5L_2L_5g_m + C_2C_4C_5L_4L_5g_m + C_2C_4C_5L_4L_5g_m + C_2C_4C_5L_4L_5g_m + C_2C_4C_5L_4L_5g_m + C_2C_4C_5L_4R_2 + C_2C_4C_5L_4R_2 + C_2C_4C_5L_5R_4 + C_2C_4C_5L_2L_4g_m + C_2C_4C_5L_2L_5g_m + C_4C_5L_4L_5g_m + s^3\left(-C_2C_4C_5L_2R_4g_m + C_2C_4C_5L_4R_2 + C_2C$
- 10.523 INVALID-ORDER-523  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$
- $H(s) = \frac{-C_2C_4C_5L_2L_4L_5s^6 + s^5\left(-C_2C_4C_5L_2L_5R_4 C_2C_4C_5L_4L_5R_2 + C_2C_4L_2L_4 + C_2C_4L_2L_4 + C_2C_4L_2L_5R_4g_m + C_2C_4L_4L_5R_2g_m + C_2C_4L_4L_5 C_4C_5L_4L_5\right) + s^3\left(-C_4C_5L_4L_5g_ms^6 + 2g_m + s^5\left(2C_2C_4C_5L_2L_5R_4g_m + 2C_2C_4C_5L_4L_5R_2g_m + 4C_2C_4C_5L_4L_5\right) + s^4\left(2C_2C_4C_5L_5R_2R_4g_m + 2C_2C_4C_5L_5R_4 + 2C_2C_4L_2L_4g_m + 2C_2C_4L_2L_5g_m + 2C_2C_5L_2L_5g_m + 2C_4C_5L_4L_5g_m\right) + s^3\left(2C_2C_4C_5L_4L_5g_ms^6 + 2g_m + s^5\left(2C_2C_4C_5L_4L_5R_2g_m + 4C_2C_4C_5L_4L_5\right) + s^4\left(2C_2C_4C_5L_5R_4g_m + 2C_2C_4L_4L_5g_m + 2C_2C_4L_4L_5g_m + 2C_2C_4L_4L_5g_m\right) + s^4\left(-C_2C_4C_5L_4L_5g_m + 2C_2C_4C_5L_4L_5g_m + 2C_2C_4L_4L_5g_m + 2C_2C_4L_4L_5g_m + 2C_2C_4L_4L_5g_m + 2C_2C_4L_4L_5g_m + 2C_2C_4C_5L_4L_5g_m + 2C_2C_4C_5L_4L_5g_m\right) + s^4\left(-C_2C_4C_5L_4L_5g_m + 2C_2C_4C_5L_4L_5g_m + 2C_2C_4C_5L_5g_m + 2C_2C_4C_5L$
- 10.524 INVALID-ORDER-524  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$
- $H(s) = \frac{C_2C_4C_5L_2L_4L_5g_ms^6 + g_m + s^5\left(C_2C_4C_5L_2L_4R_5g_m C_2C_4C_5L_2L_4R_5g_m C_2C_4C_5L_4R_5g_m C_2C_4C_5L_4R_5g_$
- 10.525 INVALID-ORDER-525  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$
- $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_5s^6 R_5 + s^5\left(-C_2C_4C_5L_2L_5R_4R_5 C_2C_4C_5L_4L_5R_2g_m C_2C_4L_2L_4L_5\right) + s^4\left(-C_2C_4C_5L_5R_2R_4R_5 C_2C_4C_5L_4L_5R_5g_m + s^5\left(2C_2C_4C_5L_4L_5R_5g_m + s^5\left(2C_4C_5L_4L_5R_5g_m + s^5\left(2C_4C_5L_4L_5R_5g_m + s^5\left(2C_4C_5L_4L_5R_5g_m + s^5\left(2C_4C_5L_4L_5R_5g_m + s^5\left(2C_4C_5L_4L_5R_5g_m + s^5c_4C_4C_5L_4L_5R_5g_m + s^5c_4C_4C_5L_4L_5R_5g_m + s^5c_4C_4C_5L_4L_5R_5g_m + s^5c_4C_4C_5L_4L_5R_5g_m + s^5c_4C_4C_5L_4L_5R_5g_m + s^5c_4C_4C_5L_5R_5g_m + s^5c_4C_5L_5R_5g_m + s^5c_4C_4C_5L_5R_5g_m + s^5c_4C_5L_5R_5g_m + s^5c_4C_5L$
- 10.526 INVALID-ORDER-526  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, L_4 s + R_4 + \frac{1}{C_4 s}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)$
- $H(s) = \frac{R_5 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_5 g_m C_2 C_4 C_5 L_2 L_4 L_5\right) + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m C_2 C_4 C_5 L_4 L_5 R_2 R_5 g_m C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_2 + C_2 C_4 C_5 L_4 L_5 R_3 + C_2 C_4 C_5 L_4 L_5 R_3 C_2 C_4 C_5 L_4 L_5 R_4 R_5 C_2 C_4 C_5 L_4 L_5 R_5 C_2 C_4 C_5 L_4 L_5 R_5 C_2 C_4 C_5 L_4 L_5 R_5 C_2 C_4 C_5 L_5 R_4 R_5 C_2 C_4 C_5 L_5 R_4 R_5 C_2 C_4 C_5 L_5 R_5 R_5 C_2 C_4 C_5 L_5 R_5 R_5 C_2 C_4 C_5 L_5 R_5 R_5 C_2 C_4 C$
- 10.527 INVALID-ORDER-527  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$
- 10.528 INVALID-ORDER-528  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5, \infty\right)$
- $H(s) = \frac{s^3 \left( C_2 L_2 L_4 R_4 R_5 g_m C_2 L_2 L_4 R_4 \right) + s^2 \left( C_2 L_4 R_2 R_4 R_5 g_m C_2 L_4 R_2 R_4 + C_2 L_4 R_4 R_5 \right) + s \left( L_4 R_4 R_5 g_m L_4 R_4 \right)}{2 R_4 R_5 g_m + 2 R_4 + s^4 \left( 2 C_2 C_4 L_2 L_4 R_4 R_5 g_m + 2 C_2 L_4 L_4 R_4 R_5 g_m + 2 C_2 L_4 L_4 R_4 g_m + 2 C_2 L_4 L_4 R_5 g_m + 2 C_2 L_4 R_4 g_m + 2 C_2 L_4 R_4 R_5 g_m + 2 C_2 L_4 R_5 g$

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10.529 INVALID-ORDER-529 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{1}{C_5 s}, \infty\right)
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 $-C_{2}C_{5}L_{2}L_{4}R_{4}s^{4} + L_{4}R_{4}g_{m}s + s^{3}\left(-C_{2}C_{5}L_{4}R_{2}R_{4} + C_{2}L_{2}L_{4}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{4}R_{2}R_{4}g_{m} + C_{2}L_{4}R_{4} - C_{5}L_{4}R_{4}\right)$  $H(s) = \frac{-C_2C_5L_2L_4R_4s^4 + L_4R_4g_ms + s^3\left(-C_2C_5L_4R_2R_4 + C_2L_2L_4R_4g_m\right) + s^2\left(C_2L_4R_2R_4g_m + C_2L_4R_4 - C_5L_4R_4\right)}{2C_2C_4L_2L_4R_4s^5 + 2R_4g_m + s^4\left(2C_2C_4L_4R_4g_m + 2C_2C_5L_4R_4 + 2C_2C_5L_4R_$ 

10.530 INVALID-ORDER-530  $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{R_5}{C_5R_5s + 1}, \infty\right)$ 

10.531 INVALID-ORDER-531  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{L_4 R_4 g_m s + s^* \left(C_2 C_5 L_2 L_4 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_4 R_5 g_m - C_2 C_4 C_5 L_4 R_4 R_5 g_m - C_2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_4 R_4 R_5 g_m + 2 C_2 C_4 L_4 R_4 R_5 g_m + 2 C_2 C_4 L_4 R_4 R_5 g_m + 2 C_2 C_5 L_2 L_4 R_4 g_m + 2 C_2 C_5 L_2 L_4 R_5 g_m + 2 C_2 C_5 L_5 L_5 R_5 g_m + 2 C_2 C_5 L_5 L_5 R_5 g_m + 2 C_5 L_5 L$ 

10.532 INVALID-ORDER-532  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_5L_2L_4L_5R_4g_ms^5 + L_4R_4g_ms + s^5(-C_2C_5L_2L_4L_5R_4g_ms^5 + L_4R_4g_ms + s^5(-C_2C_5L_2L_4L_5R_4g_ms^6 + 2R_4g_ms^6 + 2R_4g_m$ 

10.533 INVALID-ORDER-533  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

10.534 INVALID-ORDER-534  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{L_4 R_4 s}{C_4 L_4 R_4 s^2 + L_4 s + R_4}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{1}{2C_2C_4C_5L_2L_4L_5R_4g_ms^6 + 2R_4g_m + s^5\left(2C_2C_4C_5L_2L_4R_4R_5g_m + 2C_2C_4C_5L_4L_5R_4g_m + 2C_2C_4C_5L_4L_5g_m\right) + s^4\left(2C_2C_4C_5L_4R_2R_4R_5g_m + 2C_2C_4C_5L_4R_4R_5g_m + 2C_2C_4C_5L_4R_4g_m + 2C_$ 

10.535 INVALID-ORDER-535  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$ 

 $\overline{2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{4}R_{5}s^{6} + 2R_{4}R_{5} + s^{5}\left(2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}R_{5} + 2C_{2}C_{4}L_{2}L_{4}L_{5}R_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{2}L_{4}L_{5}R_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5}g_{m} + 2C_{2}C$ 

**10.536** INVALID-ORDER-536  $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

 $\overline{2R_4R_5g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_4L_5R_4g_m + 2C_2C_4L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_5L_4L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m +$ 

10.537 INVALID-ORDER-537  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)$ 

 $H(s) = \frac{1}{2R_4R_5g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_4R_5g_m + 2C_2C_4C_5L_2L_4L_5R_4\right) + s^5\left(2C_2C_4C_5L_2L_4R_4R_5 + 2C_2C_4C_5L_4L_5R_2R_4 + 2C_2C_4C_5L_4L_5R_4R_5 + 2C_2C_5L_2L_4L_5R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_5L_4L_5R_4g_m + 2C_2C_5L_5L_4L_5R_5g_m + 2C_2C_5L_5L_5L_5L_5R_5g_m + 2C_5C_5L_5L_5L_5R_5g_m + 2C_5C_5L_5L_5L_5R_5g_m + 2C_5C_5L_5L_5L_5R_5g_m + 2C_5C_5L_5L_5L_5R_5g_m + 2C_5C_5L_5L_5L_5R_5g_m + 2C_5C_5L_5L_5L_5R_5g_m$ 

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10.538 INVALID-ORDER-538 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
H(s) = \frac{R_4 R_5 g_m - R_4 + s^4 \left(C_2 C_4 L_2 L_4 R_4 R_5 g_m - C_2 C_4 L_2 L_4 R_5 g_m - C_2 C_4 L_4 R_4 R_5 g_m - C_2 L_4 R_5 g_m - C
10.539 INVALID-ORDER-539 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)
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10.540 INVALID-ORDER-540  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty\right)$ 

 $-C_{2}C_{4}C_{5}L_{2}L_{4}R_{4}R_{5}s^{5} + R_{4}R_{5}g_{m} - R_{4} + s^{4}\left(-C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}R_{5} + C_{2}C_{4}L_{2}L_{4}R_{4}R_{5}g_{m} - C_{2}C_{4}L_{2}L_{4}R_{4} - C_{2}C_{5}L_{2}L_{4}R_{5}\right) + s^{3}\left(C_{2}C_{4}L_{4}R_{2}R_{5}g_{m} + 2C_{2}C_{4}L_{2}L_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m} + 2C_{2$ 

 $-C_2C_4C_5L_2L_4R_4s^5 + R_4g_m + s^4\left(-C_2C_4C_5L_4R_2R_4 + C_2C_4L_2L_4R_4g_m - C_2C_5L_2L_4\right) + s^3\left(C_2C_4L_4R_2R_4g_m + C_2C_5L_2R_4 - C_2C_5L_4R_2 + C_2L_2L_4g_m - C_4C_5L_4R_4\right) + s^2\left(-C_2C_5R_2R_4 + C_2L_2R_4g_m - C_4C_5L_4R_4\right) + s^2\left(-C_2C_5R_2R_4 + C_2L_2R_4g_m - C_4C_5L_4R_4\right) + s^2\left(-C_2C_5R_2R_4 + C_2C_5L_4R_4\right) + s^2\left(-C_2C_5R_4R_4 + C_2C_4L_4R_4g_m + 2C_2C_5L_4R_4\right) + s^2\left(-C_2C_5R_4R_4 + C_2C_4L_4R_4g_m + 2C_2C_4L_4R_4g_m + 2C_2C_5L_4R_4\right) + s^2\left(-C_2C_5R_4R_4 + C_2C_4L_4R_4g_m + 2C_2C_5L_4R_4\right) + s^2\left(-C_2C_5R_4R_4 + C_2C_4R_4R_4g_m + 2C_2C_5L_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4 + C_4C_4R_4R_4\right) + s^2\left(-C_4C_5R_4R_4\right) + s$ 

10.541 INVALID-ORDER-541  $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ R_5 + \frac{1}{C_5 s}, \ \infty\right)$ 

 $H(s) = \frac{R_4 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_4 g_m + C_2 C_4 L_5 L_4 R_4 g_m + C_2 C_4 L_5 L_4 R_5 g_m - C_2 C_4 C_5 L_4 R_4 g_m + C_2 C_4 L_4 R_4 g_m + C_4 L_4 R_4 g_m$ 

10.542 INVALID-ORDER-542  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(-C_2C_4C_5L_2L_4R_4 + C_2C_4C_5L_4L_5R_2g_m + C_2C_5L_2L_4R_4 + C_2C_4L_5R_4g_m + C_2C_5L_4L_5R_4g_m + C_2C_5L_4L_5R_4g_m$ 

10.543 INVALID-ORDER-543  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$ 

 $-C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{4}s^{6}-R_{4}+s^{5}\left(-C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}+C_{2}C_{4}L_{2}L_{4}L_{5}R_{4}g_{m}-C_{2}C_{5}L_{2}L_{4}L_{5}\right)+s^{4}\left(-C_{2}C_{4}L_{2}L_{4}R_{4}+C_{2}C_{4}L_{4}L_{5}R_{2}R_{4}g_{m}+C_{2}C_{4}L_{4}L_{5}R_{4}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{4}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}R_{5}g_{m}+C_{2}C_{4}L_{5}g_{m}+C_{2}C_{4}L_{5}g_{m}+C_{2}C_{4}L_{5}g_{m}+C_$  $\frac{c_2c_4c_3L_2L_4c_3r_4c_4-c_2c_4L_2L_4c_3r_4-c_2c_4L_2L_4c_3r_4c_4-c_2c_4L_2L_4c_3r_4-c_2c_4L_2L_4c_4r_4-c_2c_4L_2L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4c_4r_4-c_2c_4L_4$ 

10.544 INVALID-ORDER-544  $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \infty\right)$ 

 $H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m - C_2C_4C_5L_4L_5R_4g_m + C_2C_4C_5L_4L_5g_m\right) + s^4\left(C_2C_4C_5L_4R_2R_4g_m - C_2C_4C_5L_4R_2R_4 + C_2C_4C_5L_4R_4g_m + C_2C_4C_5L_4R_4g_m + C_2C_4C_5L_4L_5g_m\right) + s^4\left(C_2C_4C_5L_4R_2R_4g_m - C_2C_4C_5L_4R_4g_m + C_2C_4C_5L_4R_4g_m + C_2C_4C_5L_4R_5g_m - C_2C_4C_5L_4R_5g_m + C_2C_4C_5L_4$ 

10.545 INVALID-ORDER-545  $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \frac{C_4 L_4 R_4 s^2 + L_4 s + R_4}{C_4 L_4 s^2 + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty\right)$ 

 $-C_2C_4C_5L_2L_4L_5R_4R_5s^6 - R_4R_5 + s^5(-C_2C_4C_5L_4L_5R_4R_5s^6)$ 

 $H(s) = \frac{1}{2R_4R_5g_m + 2R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4L_5L_4L_5R_2g_m + 2C_2C_4L_2L_4L_5R_5g_m + 2C_2C_4L_4L_5R_5g_m + 2C_2C_4L_5L_4L_5R_5g_m + 2C_2C_4L_5L_5R_5g_m + 2C_2C_4L_5L_$ 

10.546 INVALID-ORDER-546  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)$ 

 $H(s) = \frac{R_4 R_5 g_m - R_4 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_4 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_4 g_m - C_2 C_4 C_5 L_4 L_5 R_2 R_4 + C_2 C_4 C_5 L_4 L_5 R_2 R_4 + C_2 C_4 C_5 L_4 L_5 R_4 g_m + C_2 C_5 L_2 L_4 L_5 R_5 g_m - C_2 C_5 L_2 L_4 L_5 \right) + s^4 \left(C_2 C_4 L_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_2 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_4 g_m + 2 C_2 C_4 C_5 L_4 L_5 R_5 g_$ 

10.547 INVALID-ORDER-547  $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)$ 

 $\frac{2R_4g_m + 2R_5g_m + s^6\left(2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_2L_4L_5R_5g_m + 2C_2C_4C_5L_2L_4R_5g_m + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4C_5L_4L_5R_3g_m + 2C_2C_4C_5L_4C_5L_4C_5L_4C_5L_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_$ 

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10.549 INVALID-ORDER-549 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{-C_2C_4C_5L_2L_4R_4s^5 + R_4g_m + s^4\left(-C_2C_4C_5L_4R_2R_4 + C_2C_4L_2L_4R_4g_m\right) + s^3\left(C_2C_4L_4R_2R_4g_m + C_2C_4L_4R_4 - C_2C_5L_2R_4 - C_4C_5L_4R_4\right) + s^2\left(-C_2C_4C_5L_4R_4g_m + s^5\left(2C_2C_4C_5L_4R_4g_m + 2C_2C_4L_4R_4g_m + 
10.550 INVALID-ORDER-550 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -C_2C_4C_5L_2L_4R_4R_5s^5 + R_4R_5g_m - R_4 + s^4(-C_2C_4)
H(s) = \frac{-C_2C_4C_5L_2L_4R_4R_5s + R_4R_5g_m + S_5\left(2C_2C_4C_5L_2L_4R_4R_5g_m + 2C_2C_4C_5L_2R_4R_5 + R_4R_5g_m + R_4 + S_4C_2C_4C_5L_4R_4R_5g_m + R_4 + S_4C_2C_4C_5L_4R_4R_5g_m + R_4R_5g_m + R_4R
10.551 INVALID-ORDER-551 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R_{4}g_{m} + s^{5} \left(C_{2}C_{4}C_{5}L_{2}L_{4}R_{4}g_{m} - C_{2}C_{4}C_{5}L_{2}L_{4}R_{4}\right) + s^{4} \left(C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}R_{5}g_{m} - C_{2}C_{4}C_{5}L_{4}R_{2}R_{4} + C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}R_{5}g_{m} - C_{2}C_{4}C_{5}L_{4}R_{2}R_{4} + C_{2}C_{4}C_{5}L_{4}R_{2}R_{4}R_{5}g_{m} + 2C_{2}C_{4}C_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{4}C_
10.552 INVALID-ORDER-552 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^5 + R_4g_m + s^5\left(-C_2C_4C_5L_2L_4R_4 + C_2C_4C_5L_4L_5R_2R_4g_m + C_2C_4C_5L_4L_5R_4\right) + s^5\left(-C_2C_4C_5L_4L_5R_4g_m + s^5\left(-C_2C_4C_5L_4R_4 + s^5\left(-C_2C_4C_5L_4L_5R_4g_m + s^5\left(-C_2C_4C_5L_4R_4g_m + s^5\left(-C_2C_4C_5L_4R_4g_m + s^5\left(-C_2C_4C_5L_4R_4g_m + s^5c_4C_4C_5L_4R_4g_m + s^5c_4C_5L_4R_4g_m + s^5c_4C_4C_5L_4R_4g_m + s^5c_4C_5L_4R_4g_m + s^5c_4C_
10.553 INVALID-ORDER-553 Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)
                                         -C_2C_4C_5L_2L_4L_5R_4s^\circ - R_4 + s^\circ (-C_2C_4C_5L_4L_5R_2R_4 + C_2C_4C_5L_4L_5R_4s^\circ - R_4 + s^\circ (-C_2C_4C_5L_4L_5R_2R_4 + C_2C_4C_5L_4L_5R_4s^\circ - R_4 + s^\circ (-C_2C_4C_5L_4L_5R_4s^\circ - R_4 + s^\circ (-C_2C_4C_5L_4
10.554 INVALID-ORDER-554 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4R_5g_m - C_2C_4C_5L_2L_4R_6g_m\right) + r^2\left(C_4C_5L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(C_4C_5L_4L_4R_4R_5g_m - C_4C_5L_4L_4R_6g_m\right)\right)
H(s) = \frac{C_2C_4C_5L_2L_4L_5R_4g_ms^6 + R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4R_5g_m - C_2C_4C_5L_2L_4R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m + s^5\left(C_2C_4C_5L_2L_4R_4g_m + s^5\left(C_2C_4C_5L_4L_5R_4g_m + s^5\left(C_2C_4C_5L_4L_5R_4g_m + s^5\left(C_2C_4C_5L_4L_5R_4g_m + s^5\left(C_2C_4C_5L_4R_4g_m + s^5c_4C_4C_5L_4R_4g_m + s^5c_4
10.555 INVALID-ORDER-555 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)
                                         \overline{2R_{4}R_{5}g_{m}+2R_{5}+s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{4}g_{m}+2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}\right)+s^{5}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{4}R_{5}+2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{5}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{4}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{5}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}R_{5}g_{m}+2C_{2}C_{4}L_{5}L_{5}
10.556 INVALID-ORDER-556 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \frac{C_5 L_5 R_5 s^2 + L_5 s + R_5}{C_5 L_5 s^2 + 1}, \infty\right)
                                         \overline{2R_{4}g_{m}+2R_{5}g_{m}+s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{4}g_{m}+2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}g_{m}+2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}\right)+s^{5}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{4}+2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}g_{m}+2C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+4C_{2}C_{4}C_{5}L_{4
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10.548 INVALID-ORDER-548  $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \frac{R_4 \left(C_4 L_4 s^2 + 1\right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, R_5, \infty\right)$ 

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10.557 INVALID-ORDER-557 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)
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 $H(s) = \frac{1}{2R_4g_m + 2R_5g_m + s^6\left(2C_2C_4C_5L_2L_4L_5R_4g_m + 2C_2C_4C_5L_2L_4L_5R_5g_m + 2C_2C_4C_5L_2L_4R_5 + 2C_2C_4C_5L_2L_4R_5 + 2C_2C_4C_5L_2L_5R_4R_5g_m + 2C_2C_4C_5L_4L_5R_2R_4g_m + 2C_2C_4C_5L_4L_5R_2R_4g_m + 2C_2C_4C_5L_4L_5R_2R_4g_m + 2C_2C_4C_5L_4L_5R_4g_m + 2C_2C_4C_5L_4L_5R_5g_m + 2C_2C_4C_5L_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L_5R_5g_m + 2C_2C_4C_5L_5L$ 

10.558 INVALID-ORDER-558  $Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4, \frac{1}{C_5 s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2R_2R_4s^3 + R_2R_4g_m + R_4 + s^2\left(C_2L_2R_2R_4g_m + C_2L_2R_4 - C_5L_2R_4\right) + s\left(-C_5R_2R_4 + L_2R_4g_m\right)}{2R_2g_m + s^3\left(2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2 + 4C_2C_5L_2R_4\right) + s^2\left(2C_2L_2R_2g_m + 2C_2L_2 + 2C_5L_2R_4g_m + 2C_5L_2\right) + s\left(2C_5R_2R_4g_m + 2C_5R_2 + 4C_5R_4 + 2L_2g_m\right) + 2C_5R_4g_m + 2C_5R_5g_m + 2C_5R_5$ 

10.559 INVALID-ORDER-559  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4, \frac{R_5}{C_5R_5s + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4 + C_2L_2R_4R_5\right) + s\left(-C_5R_2R_4R_5 + L_2R_4R_5g_m - L_2R_4\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(2C_2C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2L_2R_2R_5g_m + 2C_2L_2R_2 + 4C_2L_2R_4 + 2C_2L_2R_5 + 2C_5L_2R_4R_5g_m + 2C_5L_2R_5\right) + s\left(2C_5R_2R_4R_5g_m + 2C_5R_2R_4R_5g_m + 2C_5R_4R_5g_m + 2C_5R_$ 

10.560 INVALID-ORDER-560  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^3\left(C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_2R_4 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4g_m + C_2L_2R_4 + C_5L_2R_4R_5g_m - C_5L_2R_4\right) + s\left(C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5 + L_2R_4g_m\right)}{2R_2g_m + s^3\left(2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2R_5g_m + 2C_2C_5L_2R_2 + 4C_2C_5L_2R_4 + 2C_2C_5L_2R_3\right) + s^2\left(2C_2L_2R_2g_m + 2C_2L_2 + 2C_5L_2R_3g_m + 2C_5L_2R_5g_m + 2C_5R_2R_4g_m + 2C_5R_2R_5g_m + 2C_5R_2R_5g_m + 2C_5R_2R_5g_m + 2C_5R_2R_5g_m + 2C_5R_2R_5g_m + 2C_5R_2R_5g_m + 2C_5R_5R_5g_m + 2C_5R$ 

10.561 INVALID-ORDER-561  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_2C_5L_2L_5R_2g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2R_4g_m + C_5L_2R_4g_m + C_5L_2R_4g_m + C_5L_5R_4g_m + C_$ 

10.562 INVALID-ORDER-562  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_5R_2R_4s^4 - R_2R_4 + s^3\left(C_2L_2L_5R_2R_4g_m + C_2L_2L_5R_4 - C_5L_2L_5R_4\right) + s^2\left(-C_2L_2R_2R_4 - C_5L_5R_2R_4 + L_2L_5R_4g_m\right) + s\left(-L_2R_4 + L_5R_2R_4g_m + L_5R_4\right)}{2R_2R_4g_m + 2R_2 + 4R_4 + s^4\left(2C_2C_5L_2L_5R_2g_m + 2C_2L_2L_5R_2g_m + 2C_2L_2L_5 + 2C_5L_2L_5R_4g_m + 2C_5L_2L_5\right) + s^2\left(2C_2L_2R_2R_4g_m + 2C_2L_2R_4 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_2\right) + s^2\left(2C_2L_2R_2R_4g_m + 2C_2L_2R_4 + 2C_5L_5R_2R_4g_m + 2C_5L_5R_4g_m + 2C_5L$ 

10.563 INVALID-ORDER-563  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_2C_5L_2L_5R_2g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_4R_5g_m - C_2C_5L_2R_4R_5g_m - C_5L_2R_4R_5g_m - C_5L_2R_$ 

10.564 INVALID-ORDER-564  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ R_4, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$ 

10.565 INVALID-ORDER-565  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_5L_2L_5R_2R_4R_5g_m - C_2C_5L_2L_5R_2R_4 + C_2C_5L_2L_5R_4R_5\right) + s^3\left(C_2L_2L_5R_2R_4g_m + C_2L_2L_5R_4 + C_5L_2L_5R_4R_5g_m - C_5L_2L_5R_4\right) + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m - C_2L_2R_4R_5g_m - C_2L_2$ 

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10.566 INVALID-ORDER-566 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, R_4, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H(s) = \frac{1}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^4 (2C_2C_5L_2L_5R_2+4C_2C_5L_2L_5R_2+4C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2L_5R_3+C_2C_5L_2
10.567 INVALID-ORDER-567 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, R_5, \infty\right)
                                                                                                                                                                                                                       H(s) = \frac{R_2R_5g_m - R_2 + R_5 + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_5\right) + s\left(L_2R_5g_m - L_2\right)}{2R_2g_m + s^3\left(2C_2C_4L_2R_2R_5g_m + 2C_2C_4L_2R_2 + 2C_2C_4L_2R_5\right) + s^2\left(2C_2L_2R_2g_m + 4C_2L_2 + 2C_4L_2R_5g_m + 2C_4R_2 + 2C_4R_2 + 2C_4R_5 + 2L_2g_m\right) + 4C_4R_5 + 2C_4R_5 + 
10.568 INVALID-ORDER-568 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                               H(s) = \frac{-C_2C_5L_2R_2s^3 + R_2g_m + s^2\left(C_2L_2R_2g_m + C_2L_2 - C_5L_2\right) + s\left(-C_5R_2 + L_2g_m\right) + 1}{2C_2C_4C_5L_2R_2s^4 + s^3\left(2C_2C_4L_2R_2g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_2g_m + 4C_2C_5L_2 + 2C_4C_5L_2\right) + s^2\left(2C_4C_5R_2 + 2C_4L_2g_m + 2C_5L_2g_m\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}
10.569 INVALID-ORDER-569 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{1}{C_4s}, \frac{R_5}{C_5R_5s + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2R_2R_5s^3 + R_2R_5g_m - R_2 + R_5 + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_5 - C_5L_2R_5\right) + s\left(-C_5R_2R_5 + L_2R_5g_m - L_2\right)}{2C_2C_4C_5L_2R_2R_5s^4 + 2R_2g_m + s^3\left(2C_2C_4L_2R_2R_5g_m + 2C_2C_4L_2R_2 + 2C_2C_4L_2R_5 + 2C_4C_5L_2R_5\right) + s^2\left(2C_2L_2R_2g_m + 4C_2L_2 + 2C_4C_5R_2R_5 + 2C_4L_2R_5g_m + 2C_4L_2 + 2C_5L_2R_5g_m\right) + s\left(2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5g_m + 2C_4R_5 + 2C_4R_5g_m\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_2R_5g_m\right) + s\left(2C_4R_2R_5g_m + 2C_4R_5g_m\right) + s\left(2C_4R_2R_5g_m\right) + s\left(2C_4R_2R_5g_m\right) + s\left(2C_4R_2R_5g_m\right) + s\left(2C_4R_2R_5g_m\right) + s\left(2C_4R_5g_m\right) + s\left(2C_4R_5g_m\right)
10.570 INVALID-ORDER-570 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, R_5 + \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{R_2g_m + s^3\left(C_2C_5L_2R_2R_5g_m - C_2C_5L_2R_2 + C_2C_5L_2R_5\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 + C_5L_2R_5g_m - C_5R_2 + C_5R_5 + L_2g_m\right) + 1}{s^4\left(2C_2C_4C_5L_2R_5g_m + 2C_2C_4L_2R_2g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_2g_m + 4C_2C_5L_2 + 2C_4C_5L_2R_5g_m + 2C_4C_5L_2\right) + s^2\left(2C_4C_5R_2R_5g_m - C_5R_2 + C_5R_5 + L_2g_m\right) + s\left(2C_4R_2g_m + 2C_4C_5L_2R_2g_m + 2C_4C_5L_2R_5g_m + 2C_4C_5L_2R_5g_m + 2C_4C_5R_5g_m + 2C_4C_5R_
10.571 INVALID-ORDER-571 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                         \frac{R_{2}g_{m}+s^{4}\left(C_{2}C_{5}L_{2}L_{5}R_{2}g_{m}+C_{2}C_{5}L_{2}L_{5}\right)+s^{3}\left(-C_{2}C_{5}L_{2}R_{2}+C_{5}L_{2}L_{5}g_{m}\right)+s^{2}\left(C_{2}L_{2}R_{2}g_{m}+C_{2}L_{2}-C_{5}L_{2}+C_{5}L_{5}R_{2}g_{m}+C_{5}L_{5}\right)+s\left(-C_{5}R_{2}+L_{2}g_{m}\right)+1}{s^{5}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}g_{m}+2C_{2}C_{4}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_{5}L_{2}+2C_{4}C_
10.572 INVALID-ORDER-572 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_5R_2s^4 - R_2 + s^3\left(C_2L_2L_5R_2g_m + C_2L_2L_5 - C_5L_2L_5\right) + s^2\left(-C_2L_2R_2 - C_5L_5R_2 + L_2L_5g_m\right) + s\left(-L_2 + L_5R_2g_m + L_5\right)}{2C_2C_4C_5L_2L_5R_2g_m + s^4\left(2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2L_5 + 2C_4C_5L_2L_5\right) + s^3\left(2C_2C_4L_2R_2 + 2C_4L_2L_5g_m + 2C_5L_2L_5g_m\right) + s^2\left(2C_2L_2R_2g_m + 4C_2L_2 + 2C_4L_2 + 2C_4L_5R_2g_m + 2C_4L_5 + 2C_5L_5R_2g_m\right)}
10.573 INVALID-ORDER-573 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{1}{C_4 s}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                         \frac{R_{2}g_{m}+s^{4}\left(C_{2}C_{5}L_{2}L_{5}R_{2}g_{m}+C_{2}C_{5}L_{2}L_{5}\right)+s^{3}\left(C_{2}C_{5}L_{2}R_{5}g_{m}-C_{2}C_{5}L_{2}R_{5}g_{m}-C_{2}C_{5}L_{2}R_{5}g_{m}+C_{2}L_{2}+C_{5}L_{2}R_{5}g_{m}+C_{5}L_{2}+C_{5}L_{2}R_{5}g_{m}+C_{5}L_{5}\right)+s\left(C_{5}R_{2}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C_{5}L_{5}R_{5}g_{m}+C
10.574 INVALID-ORDER-574 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{1}{C_4s}, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \frac{C_2C_5L_2L_5R_2R_5s^5 + 2R_2R_5g_m + 4R_5 + s^4\left(2C_2C_4L_2L_5R_2R_5g_m + 2C_2C_4L_2L_5R_2 + 2C_2C_4L_2L_5R_5 + 2C_4C_5L_2L_5R_5 + 2C_4C_5L_2L_5R_5 + 2C_4C_5L_2L_5R_5 + 2C_4C_5L_2L_5R_2g_m + 4C_2L_2L_5 + 2C_4C_5L_2L_5R_2g_m + 4C_2L_2L_5R_2g_m + 4C_2L_2L_2R_2g_m + 4C_2L_2L_2R_2g_m + 4C_2L_2L_2R
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 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^4 \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m - C_2 C_5 L_2 L_5 R_2 + C_2 C_5 L_2 L_5 R_2 g_m + C_2 L_2 L_5 + C_5 L_2 L_5 R_2 g_m - C_5 L_2 L_5 \right) + s^2 \left(C_2 L_2 R_2 R_5 g_m - C_5 L_2 L_5 R_2 g_m + C_2 L_2 L_5 R_2 g_$ 

10.575 INVALID-ORDER-575  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{1}{C_4s}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

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10.576 INVALID-ORDER-576 Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R_{2}R_{5}g_{m}-R_{2}+R_{5}+s^{4}\left(C_{2}C_{5}L_{2}L_{5}R_{2}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{5}L_{2}L_{5}R_{5}\right)+s^{3}\left(-C_{2}C_{5}L_{2}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}g_{m}-C_{5}L_{2}R_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{2}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}R_{5}+C_{5}L_{5}L_{5}+C_{5}L_{5}L_{5}+C_{5}L_{5}L_{5}+C_{5}L_{5}L_{5}+C_{5}L_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}L_{5}+C_{5}
H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^* (C_2 C_5 L_2 L_5 R_2 R_5 g_m - C_2 C_5 L_2 L_5 R_2 + C_2 C_5 L_2 L_5 R_5) + s^* (-C_2 C_5 L_2 L_5 R_5 g_m - C_5 L_2}{2 R_2 g_m + s^5 (2 C_2 C_4 C_5 L_2 L_5 R_2 g_m + 2 C_4 C_5 L_2 L_5 R_2 g_m + 2 C_4 C_5 L_2 L_5 R_5 g_m + 2 C_4 C_5 L_2 L_5 R
10.577 INVALID-ORDER-577 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4}{C_4R_4s + 1}, R_5, \infty\right)
                                                        \frac{R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{2}\left(C_{2}L_{2}R_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}\right)+s\left(L_{2}R_{4}R_{5}g_{m}-L_{2}R_{4}\right)}{2R_{2}R_{4}g_{m}+2R_{2}R_{5}g_{m}+2R_{2}+4R_{4}+2R_{5}+s^{3}\left(2C_{2}L_{2}R_{2}R_{4}R_{5}g_{m}+2C_{2}L_{2}R_{2}R_{4}g_{m}+2C_{2}L_{2}R_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C_{2}L_{2}R_{4}+2C
10.578 INVALID-ORDER-578 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{-C_2C_5L_2R_2R_4s^3 + R_2R_4g_m + R_4 + s^2\left(C_2L_2R_2R_4g_m + C_2L_2R_4 - C_5L_2R_4\right) + s\left(-C_5R_2R_4 + L_2R_4g_m\right)}{2C_2C_4C_5L_2R_2R_4s^4 + 2R_2g_m + s^3\left(2C_2C_4L_2R_2R_4g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_4 + 2C_4C_5L_2R_4\right) + s^2\left(2C_2L_2R_2g_m + 2C_2L_2 + 2C_4C_5R_2R_4 + 2C_4L_2R_4g_m + 2C_5L_2\right) + s\left(2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_4R_4\right)}
10.579 INVALID-ORDER-579 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -C_{2}C_{5}L_{2}R_{2}R_{4}R_{5}s^{3}+R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{2}\left(C_{2}L_{2}R_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{4}R_{5}g
                                                        \frac{-C_2C_5L_2R_2R_4R_5s^2 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^-(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4 + C_2L_2R_4}{2C_2C_4C_5L_2R_2R_4R_5s^4 + 2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(2C_2C_4L_2R_2R_4R_5g_m + 2C_2C_4L_2R_4R_5 + 2C_2C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_4R_5 + 4C_2C_5L_2R_4R_5 + 4C_2C_5L_2R
10.580 INVALID-ORDER-580 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4}{C_4R_4s + 1}, R_5 + \frac{1}{C_5s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R_2R_4g_m + R_4 + s^3\left(C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_2R_4 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4g_m + C_2L_2R_4 + C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4 + C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4 + C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4 + C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_4R_5\right) + s^2\left(C
                                                        \frac{R_2R_4g_m + R_4 + s^3\left(C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_2R_4 + C_2C_5L_2R_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4g_m + C_2L_2R_4 + C_5L_2R_4R_5\right)}{2R_2g_m + s^4\left(2C_2C_4C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_4R_5g_m + 2C_2C_5L_2R_5g_m + 2C_2C_5L_2R_5g
10.581 INVALID-ORDER-581 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4}{C_4R_4s + 1}, L_5s + \frac{1}{C_5s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R_{2}R_{4}g_{m} + R_{4} + s^{4}\left(C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}g_{m} + C_{2}C_{5}L_{2}L_{5}R_{4}\right) + s^{3}\left(-C_{2}C_{5}L_{2}R_{2}R_{4} + C_{5}L_{2}L_{5}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{2}R_{4}g_{m} + C_{5}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m} + C_{5}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m}\right) + s^{2}\left(C_{2}L_{2}R_{4}g_{m}\right) + s^{2}
                                                        \frac{R_2R_4g_m + R_4 + s^* \left( C_2C_5L_2L_5R_2R_4g_m + C_2C_5L_2L_5R_4l_l + s^* \left( -C_2C_5L_2R_2R_4 + C_5L_2L_5R_4g_m \right) + s \cdot \left( C_2L_2R_2R_4g_m + C_2C_5L_2R_2R_4 + C_5L_2R_4g_m \right) + s \cdot \left( C_2L_2R_2R_4g_m + C_2C_5L_2R_4 + C_5L_2R_4g_m + C_2C_5L_2R_4 + C_5L_2R_4g_m + C_4C_5L_2R_4g_m + C_4C_5L_4R_4g_m + C_4C_5L_4R_4g_m
10.582 INVALID-ORDER-582 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_5R_2R_4s^4 - R_2R_4 + s^3\left(C_2L_2L_5R_2R_4g_m + C_2L_2L_5R_4 - C_5L_2L_5R_4\right) + s^2\left(-C_2L_2R_2R_4 - C_5L_2L_5R_2R_4g_m + 2C_2L_5R_2R_4g_m + 2C_2L_5R_4g_m +
10.583 INVALID-ORDER-583 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_3 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R_2R_4g_m + R_4 + s^4(C_2C_5L_2L_5R_2R_4g_m + C_2C_5L_2L_5R_4) + s^3(C_2C_5L_2L_5R_4)
                                                        \frac{R_2R_4g_m + R_4 + s \cdot (C_2C_5L_2L_5R_2R_4g_m + C_2C_5L_2L_5R_4) + s \cdot (C_2C_5L_2L_5R_4) + s \cdot (C_2C_5L_2L_5R_4) + s \cdot (C_2C_5L_2R_4R_5g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2R_4g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2L_5R_4
10.584 INVALID-ORDER-584 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{R_4}{C_4 R_4 s + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                        \frac{2C_2C_3L_2L_5}{2C_2C_4C_5L_2L_5R_2R_4R_5s^5 + 2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^4\left(2C_2C_4L_2L_5R_2R_4R_5g_m + 2C_2C_4L_2L_5R_2R_4R_5g_m + 2C_2C_5L_2L_5R_2R_4R_5g_m + 2C_2C_5L_2L_5R_2R_4R_5g_m + 2C_2C_5L_2L_5R_4R_5 + s^4\left(2C_2C_4L_2L_5R_2R_4R_5g_m + 2C_2C_4L_2L_5R_4R_5 + s^4\left(2C_2C_4L_2L_5R_2R_4R_5g_m + 2C_2C_4L_2L_5R_4R_5 + s^4\left(2C_2C_4L_2L_5R_2R_4R_5g_m + 2C_2C_4L_2L_5R_4R_5 + s^4\left(2C_2C_4L_2L_5R_4R_5 + s^4c_2C_5L_2L_5R_4R_5 + s^4c_2C_5L_2
10.585 INVALID-ORDER-585 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4}{C_4R_4s + 1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)
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 $\frac{2}{2R_2R_4q_m + 2R_2R_5q_m + 2R_2 + 4R_4 + 2R_5 + s^5\left(2C_2C_4C_5L_2L_5R_2R_4R_5q_m + 2C_2C_4C_5L_2L_5R_2R_4q_m + 2C_2C_4L_2L_5R_4q_m + 2C_2C_5L_2L_5R_2R_4q_m + 2C_2C_5L_2L_5R_4q_m + 2C_2C_5L_2L_5R_$ 

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10.586 INVALID-ORDER-586 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4}{C_4R_4s + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)
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 $H(s) = \frac{1}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^5\left(2C_2C_4C_5L_2L_5R_2R_4R_5g_m + 2C_2C_4C_5L_2L_5R_2R_4R_5\right) + s^4\left(2C_2C_4C_5L_2L_5R_2R_4R_5 + 2C_2C_5L_2L_5R_2R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2$ 

10.587 INVALID-ORDER-587 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4 + \frac{1}{C_4s}, R_5, \infty\right)$$

 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^3 \left(C_2 C_4 L_2 R_2 R_4 R_5 g_m - C_2 C_4 L_2 R_2 R_4 + C_2 C_4 L_2 R_4 R_5 \right) + s^2 \left(C_2 L_2 R_2 R_5 g_m - C_2 L_2 R_2 + C_2 L_2 R_5 + C_4 L_2 R_4 R_5 g_m - C_4 L_2 R_4 \right) + s \left(C_4 R_2 R_4 R_5 g_m - C_4 R_2 R_4 + C_4 R_4 R_5 + L_2 R_5 g_m - L_2 \right)}{2 R_2 g_m + s^3 \left(2 C_2 C_4 L_2 R_2 R_4 g_m + 2 C_2 C_4 L_2 R_2 + 4 C_2 C_4 L_2 R_4 + 2 C_2 C_4 L_2 R_5 \right) + s^2 \left(2 C_2 L_2 R_2 g_m + 4 C_2 L_2 + 2 C_4 L_2 R_5 g_m + 2 C_4 L_2 R_5 g_m + 2 C_4 R_2 R_5 g_m + 2 C_4 R_5 g_m + 2 C_$ 

10.588 INVALID-ORDER-588 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4 + \frac{1}{C_4s}, \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2R_2R_4s^4 + R_2g_m + s^3\left(C_2C_4L_2R_2R_4g_m + C_2C_5L_2R_2 - C_4C_5L_2R_4\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 - C_4C_5R_2R_4 + C_4L_2R_4g_m - C_5L_2\right) + s\left(C_4R_2R_4g_m + C_4R_4 - C_5R_2 + L_2g_m\right) + 1}{s^4\left(2C_2C_4C_5L_2R_2R_4g_m + 2C_2C_4C_5L_2R_4\right) + s^3\left(2C_2C_4L_2R_2g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_2g_m + 4C_2C_5L_2 + 2C_4C_5L_2\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4C_5R_2 + 4C_4C_5R_4 + 2C_4L_2g_m + 2C_5L_2g_m\right) + s\left(2C_4R_2g_m + 2C_4C_5L_2R_4g_m + 2C_4C_5L_2\right) + s^2\left(2C_4C_5R_2R_4g_m + 2C_4C_5R_4 + 2C_4C_5R_4 + 2C_4C_5R_4\right) + s^2\left(2C_4C_5R_4g_m + 2C_4C_5R_4g_m + 2C_4C_5R_4g_m + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4g_m + 2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4g_m\right) + s^2\left(2C_4C_5R_4g_m\right) + s^2\left(2C$ 

10.589 INVALID-ORDER-589 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4 + \frac{1}{C_4s}, \frac{R_5}{C_5R_5s + 1}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2R_2R_4R_5s^4 + R_2R_5g_m - R_2 + R_5 + s^3\left(C_2C_4L_2R_2R_4R_5g_m - C_2C_4L_2R_2R_4 + C_2C_4L_2R_4R_5 - C_4C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2R_5g_m - C_2L_2R_2R_5g_m + C_2L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_5g_m + C_2L_2R_4R_5g_m + C_2C_4L_2R_2R_5g_m + C_2C_4L$ 

**10.590** INVALID-ORDER-590 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4 + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^4 \left(C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 + C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 L_2 R_4 R_5 g_m - C_2 C_5 L_2 R_2 + C_2 C_5 L_2 R_5 g_m - C_2 C_5 L_2 R_5 + C_4 C_5 L_2 R_4 R_5 g_m - C_4 C_5 L_2 R_4 R_5 g_m - C_4 C_5 R_2 R_4 R_5 g_m - C_4 C_5 R_4 R_5 g_m - C_4 R_5 R_5 g_m - C_4$ 

10.591 INVALID-ORDER-591 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, R_4 + \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_4 \right) + s^4 \left(-C_2 C_4 C_5 L_2 R_2 R_4 + C_2 C_5 L_2 L_5 R_2 g_m + C_2 C_5 L_2 L_5 R_4 g_m \right) + s^3 \left(C_2 C_4 L_2 R_2 R_4 g_m + C_2 C_5 L_2 R_2 - C_4 C_5 L_2 R_4 + C_4 C_5 L_2 R_4 g_m + C_4 C_5 L_2 R_4 g_$ 

10.592 INVALID-ORDER-592 
$$Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, R_4 + \frac{1}{C_4 s}, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_5R_2R_4s^5 - R_2 + s^4\left(C_2C_4L_2L_5R_2R_4g_m + C_2C_4L_2L_5R_2 - C_4C_5L_2L_5R_4\right) + s^3\left(-C_2C_4L_2R_2R_4 + C_2L_2L_5R_2g_m + C_2L_2L_5 - C_4C_5L_2L_5R_4\right) + s^4\left(2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2L_5R_2g_m + 2C_2C_4L_2R_2R_4g_m + 2C_2C_4L_2R_4g_m + 2C_4C_5L_2R_4g_m + 2C_4C_5L$ 

10.593 INVALID-ORDER-593 
$$Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_4 g_m + C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_5 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_5 R_5 g_m - C_2 C_4 R_5 R_5 g_m - C_2 C_5 R_5 R_5 g$ 

## 10.594 INVALID-ORDER-594 $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$

 $H(s) = \frac{-C_2C_4C_5L_2L_5R_2R_4R_5s^5 - R_2R_5 + s^4\left(C_2C_4L_2L_5R_2R_4R_5g_m - C_2C_4L_2L_5R_2R_4 + C_2C_4L_2L_5R_4R_5 - C_2C_5L_2L_5R_2R_4R_5g_m - C_2C_4L_2L_5R_2R_4R_5g_m - C_2C_4L_2L_5R_2R_4R_5g_m + C_2C_4L_2L_5R_4R_5g_m + C_2C_4L_2L_5R_5g_m$ 

10.595 INVALID-ORDER-595 
$$Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)$$

 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_4 R_5 g_m - C_2 C_4 L_5 L_5 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 L_5 L_5 R_4 R_5 g_m - C_4 C_5 L_2 L_5 R_4 R_5 g_m - C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5 R_5 g_m - C_4 C_5 L_4 L_5$ 

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 \begin{aligned} & \textbf{10.596} & \textbf{INVALID-ORDER-596} \ Z(s) = \left( \infty, \ \frac{C_2 L_2 R_3 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ R_4 + \frac{1}{C_4 s}, \ \frac{R_5 (C_5 L_5 s^2 + 1)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \infty \right) \\ & H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^5 \left( C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 \right) + s^4 \left( -C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 + C_2 C_5 L_2 L_5 R_2 R_5 g_m - C_2 C_5 L_2 L_5 R_2 R_5 g_m - C_2 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_2 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_2 R_5 g_m + 2 C_4 C_5 L_2 R_2 R_5 g_m - C_4 L_4 R_5 g_m + 2 C_4 L_4 R
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10.599 INVALID-ORDER-599 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5}{C_5R_5s + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_5s^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_5 - C_4C_5L_2L_4R_5\right) + s^3\left(-C_2C_5L_2R_2R_5 - C_4C_5L_4R_2R_5 + C_4L_2L_4R_5g_m - C_4C_5L_4R_5g_m\right)}{2R_2g_m + s^5\left(2C_2C_4C_5L_2L_4R_5g_m + 4C_2C_4L_2L_4R_5g_m + 4C_2C_4L_2L_4R_5g_m + 4C_2C_4L_2R_5g_m + 4C_2C_4L_2R$$

**10.600** INVALID-ORDER-600 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)$$

$$H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_2 L_4 R_5 \right) + s^4 \left(C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_4 L_2 L_4 + C_4 C_5 L_2 L_4 R_5 g_m - C_4 C_5 L_2 R_2 + C_2 C_5 L_2 R_5 + C_4 C_5 L_4 R_2 R_5 g_m - C_4 C_5 L_4 R_5 + C_4 L_2 L_4 g_m \right) + s^2 \left(C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_5 g_m + 2 C_2 C_4 C_5 L_4 R_2 g_m + 2 C_2 C_4 C_5 L_4 R_2 g_m + 2 C_4$$

10.601 INVALID-ORDER-601 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)$$

$$H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 L_5\right) + s^5 \left(-C_2 C_4 C_5 L_2 L_4 R_2 + C_4 C_5 L_2 L_4 R_2 + C_4 C_5 L_2 L_4 R_2 g_m + C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_5 L_2 L_5 - C_4 C_5 L_2 L_4 + C_4 C_5 L_4 L_5 R_2 g_m + C_4 C_5 L_4 R_2 + C_4 C_5 L_4 R_2 g_m + C_4 C_5 L_4$$

10.602 INVALID-ORDER-602 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2s^6 - R_2 + s^5\left(C_2C_4L_2L_4L_5R_2g_m + C_2C_4L_2L_4L_5 - C_4C_5L_2L_4R_2 - C_2C_5L_2L_5R_2 - C_4C_5L_4L_5R_2 + C_4L_2L_4L_5g_m\right) + s^3\left(C_2L_2L_5R_2g_m + C_2C_4L_2L_4R_2g_m + s^6\left(2C_2C_4C_5L_2L_4L_5R_2g_m + 4C_2C_4L_2L_4R_2g_m + 4C_2C_4L_2L_4R_2g_m + 4C_2C_4L_2L_5R_2g_m +$$

10.603 INVALID-ORDER-603 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$$

$$H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 R_2 g_m - C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_2 L_4 R_5 + C_4 C_5 L_2 L_4 R_5 g_m + C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_4 L_5 L_4 R_5 g_m - C_4 C_5 L_2 L_4 R_5 g_m + C_4 C_5 L_4 L_5 R_2 g_m$$

10.604 INVALID-ORDER-604 
$$Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$$

$$H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2R_5s^6 - R_2R_5 + s^5\left(C_2C_4L_2L_4L_5R_2R_5g_m - C_2C_4L_2L_4L_5R_2 + C_2C_4L_2L_4L_5R_5 - C_4C_5L_2L_4L_5R_5 - C_4C_5L_2L_4L_5R_5g_m + 4C_2C_4L_2L_4L_5R_5g_m + 4C_2C_4L_2L_4L_5R_5g_m + 4C_2C_4L_2L_4L_5R_5g_m + 4C_2C_4L_2L_4R_5 + 2C_2C_4L_2L_4R_5R_5g_m + 4C_2C_4L_2L_4R_5 + 2C_2C_4L_2L_4R_5 + 2C_2C_4L_4L_4R_5 + 2C_2C_4L_4L_4R_5 + 2C_2C_4L_4L_4R_5 + 2C_2C_4L_4L_4R_5 + 2C_2C_4L_4L_4R_5 + 2C_2C_4L_4L_4R_5 + 2C_2C_4L_$$

10.605 INVALID-ORDER-605 
$$Z(s) = \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \infty\right)$$

$$H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 L_2 L_4 L_5 R_2 g_m - C_4 C_5 L_2 L_4 L_5 R_2 g_m - C_2 C_4 L_2 L_4 R_2 + C_2 C_4 L_2 L_4 R_5 + C_2 C_5 L_2 L_5 R_2 R_5 g_m - C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_4 C_5 L_5 L_5 R_2 g$$

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10.606 INVALID-ORDER-606 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \infty\right)
H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_5 \right) + s^5 \left(-C_2 C_4 C_5 L_2 L_4 R_2 R_5 + C_4 C_5 L_2 L_4 L_5 R_5 g_m - C_4 C_5 L_2 L_4 L_5 R_5 g_m - C_4 C_5 L_2 L_4 L_5 R_2 g_m + s^6 \left(2 C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_2 L_4 R_2 g_m + 4 C_2 C_4 C_5 L_4 R_2 g_m + 4 C_2
10.607 INVALID-ORDER-607 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5, \infty\right)
                                                         \frac{s^3 \left(C_2 L_2 L_4 R_2 R_5 g_m - C_2 L_2 L_4 R_5 + s^2 \left(L_2 L_4 R_5 g_m - L_2 L_4\right) + s \left(L_4 R_2 R_5 g_m - L_4 R_2 + L_4 R_5\right)}{2 R_2 R_5 g_m + 2 R_2 + 2 R_5 + s^4 \left(2 C_2 C_4 L_2 L_4 R_2 + 2 C_2 C_4 L_2 L_4 R_5\right) + s^3 \left(2 C_2 L_2 L_4 R_2 g_m + 4 C_2 L_2 L_4 + 2 C_4 L_2 L_4\right) + s^2 \left(2 C_2 L_2 R_2 R_5 g_m + 2 C_2 L_2 R_5 + 2 C_4 L_4 R_2 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_2 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C_4 L_4 R_5 g_m + 2 C_4 L_4 R_5\right) + s^2 \left(2 C
10.608 INVALID-ORDER-608 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{1}{C_5 s}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_4R_2s^4 + s^3\left(C_2L_2L_4R_2g_m + C_2L_2L_4 - C_5L_2L_4\right) + s^2\left(-C_5L_4R_2 + L_2L_4g_m\right) + s\left(L_4R_2g_m + L_4\right)}{2C_2C_4L_2L_4R_2s^5 + 2R_2g_m + s^4\left(2C_2C_4L_2L_4R_2g_m + 2C_2C_4L_2L_4 + 2C_2C_5L_2L_4 + 2C_4C_5L_2L_4\right) + s^3\left(2C_2C_5L_2R_2 + 2C_4L_4R_2g_m + 2C_4
10.609 INVALID-ORDER-609 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{R_5}{C_5 R_5 s + 1}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \frac{- \cup_2 \cup_5 L_2 L_4 R_2 R_5 s^- + s^- (\cup_2 L_2 L_4 R_2 R_5 g_m - \cup_2 L_2 L_4 R_2 - \cup_5 L_2 L_4 R_5 - \cup_5 L_2 L_4 R_5) + s^- (\cup_2 L_2 L_4 R_2 R_5 g_m + 2 C_2 C_4 L_2 L_4 R_5 - \cup_5 L_2 L_4 R_5) + s^- (\cup_2 L_2 L_4 R_2 R_5 g_m + 2 C_2 L_4 L_4 R_5 - \cup_5 L_2 L_4 R_5) + s^- (\cup_2 L_2 L_4 R_5 g_m + 2 C_2 L_4 L_4 R_5 g_m
10.610 INVALID-ORDER-610 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s^{4}\left(C_{2}C_{5}L_{2}L_{4}R_{2}R_{5}g_{m}-C_{2}C_{5}L_{2}L_{4}R_{2}+C_{2}C_{5}L_{2}L_{4}R_{5}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{2}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{2}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{2}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{2}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{2}L_{4}+C_{5}L_{2}L_{4}R_{5}g_{m}-C_{5}L_{2}L_{4}\right)+s^{3}\left(C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}L_{4}R_{5}g_{m}+C_{2}
                                                         \frac{s^{4} \left(C_{2} C_{5} L_{2} L_{4} R_{2} R_{5} g_{m}-C_{2} C_{5} L_{2} L_{4} R_{2}+C_{2} C_{5} L_{2} L_{4} R_{5} g_{m}+C_{2} L_{2} L_{4}+C_{5} L_{2} L_{4} R_{5} g_{m}-C_{5} L_{2} L_{4} +C_{5} L_{2} L_{4} R_{5} g_{m}+C_{5} L_{5} L_{5}
10.611 INVALID-ORDER-611 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          s^{5}\left(C_{2}C_{5}L_{2}L_{4}L_{5}R_{2}g_{m}+C_{2}C_{5}L_{2}L_{4}L_{5}\right)+s^{4}\left(-C_{2}C_{5}L_{2}L_{4}R_{2}+C_{5}L_{2}L_{4}L_{5}g_{m}\right)+s^{3}\left(C_{2}L_{2}L_{4}R_{2}g_{m}+C_{2}L_{2}L_{4}-C_{5}L_{2}L_{4}R_{5}g_{m}\right)+s^{2}\left(-C_{2}C_{5}L_{2}L_{4}R_{5}g_{m}+C_{2}L_{5}L_{5}R_{5}g_{m}+C_{2}L_{5}L_{5}R_{5}g_{m}+C_{2}L_{5}R_{5}g_{m}+C_{2}L_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g_{m}+C_{2}R_{5}g
                                                         \frac{s^{\circ} \left( C_2 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_5 L_2 L_4 L_5 \right) + s^{\circ} \left( -C_2 C_5 L_2 L_4 R_2 + C_5 L_2 L_4 L_5 g_m \right) + s^{\circ} \left( C_2 L_2 L_4 R_2 g_m + C_2 L_2 L_4 L_5 g_m \right) + s^{\circ} \left( C_2 L_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m \right) + s^{\circ} \left( C_2 L_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m \right) + s^{\circ} \left( C_2 L_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m \right) + s^{\circ} \left( C_2 L_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m + C_2 L_4 L_5 g_m + C_2 L_4 L_5 g_m \right) + s^{\circ} \left( C_2 L_2 L_4 R_2 g_m + C_2 L_4 L_5 g_m + C_2 L_
10.612 INVALID-ORDER-612 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{L_4s}{C_4L_4s^2 + 1}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_4L_5R_2s^5 - L_4R_2s + s^4\left(C_2L_2L_4L_5R_2g_m + C_2L_2L_4L_5 - C_5L_2L_4L_5\right) + s^3\left(-C_2L_2L_4R_2 - C_5L_2L_4L_5R_2g_m + C_5L_2L_4L_5\right) + s^4\left(2C_2C_4L_2L_4L_5R_2s^6 + 2R_2 + s^5\left(2C_2C_4L_2L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5\right) + s^4\left(2C_2C_4L_2L_4R_2 + 2C_2C_5L_4L_5R_2 + 2C_4C_5L_4L_5R_2g_m + 2C_5L_2L_4L_5\right) + s^3\left(2C_2L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^4\left(2C_4C_4L_4L_5R_2g_m + 2C_4C_5L_4L_5R_2g_m + 2C_5L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^4\left(2C_4C_4L_4L_5R_2g_m + 2C_4C_5L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^4\left(2C_4C_4L_4L_5R_2g_m + 2C_4C_5L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^4\left(2C_4C_4L_4L_5R_2g_m + 2C_4C_5L_4L_5\right) + s^4\left(2C_4C_4L_4L_5R_4R_4\right) + s^4\left(2C_4C_4L
10.613 INVALID-ORDER-613 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, L_5 s + R_5 + \frac{1}{C_5 s}, \infty\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 s^{5} \left(C_{2} C_{5} L_{2} L_{4} L_{5} R_{2} g_{m}+C_{2} C_{5} L_{2} L_{4} L_{5}\right)+s^{4} \left(C_{2} C_{5} L_{2} L_{4} R_{2} R_{5} g_{m}-C_{2} C_{5} L_{2} L_{4} L_{5}\right)+s^{4} \left(C_{2} C_{5} L_{2} L_{4} R_{5} R_{5} g_{m}-C_{2} C_{5} L_{5} 
                                                         \frac{3 \left( 22C_{3}L_{2}L_{4}L_{5}R_{2}g_{m} + 2C_{2}C_{5}L_{2}L_{4}L_{5}R_{2}g_{m} + 2C_{2}C_{5}L_{2}L_{4}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{2}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5
10.614 INVALID-ORDER-614 Z(s) = \left(\infty, \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \infty, \frac{L_4 s}{C_4 L_4 s^2 + 1}, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \infty\right)
                                                         \frac{2C_2C_4C_5L_2L_4L_5R_2R_5s^6 + 2R_2R_5 + s^5\left(2C_2C_4L_2L_4L_5R_2R_5g_m + 2C_2C_4L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_5 + s^4\left(2C_2C_4L_2L_4R_2R_5 + 2C_2C_5L_2L_4L_5R_2g_m + 4C_2L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_5 + s^4\left(2C_2C_4L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_5 + s^4\left(2C_2C_4L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_5 + s^4\left(2C_2C_4L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_2 + s^4\left(2C_2C_4L_2L_4L_5R_2 + 2C_2C_5L_2L_4L_5R_2 + s^4\left(2C_2C_4L_2L_4L_5R_2 + 2C_2C_5L_4L_5R_2 + s^4\left(2C_2C_4L_4L_5R_2 + 2C_2C_5L_4L_5R_2 + s^4\left(2C_2C_4L_4L_5R_2 + 2C_2C_5L_4L_5R_2 + s^4\left(2C_2C_4L_4L_5R_2 + 2C_2C_5L_4L_5R_2 + s^4\left(2C_4C_4L_4L_5R_2 + 2C_4C_5L_4L_5R_2 + s^4\left(2C_4C_4L_4L_5R_2 + 2C_4C_5L_4L_5R_2 + s^4\left(2C_4C_4L_4L_5R_2 + s^4c_4C_5L_4L_5R_2 + s^4c_4C_5L_5L_5R_2 + s^4c_4C_5L_5L_5R_2 + s^4c_4C_5L_5L_5R_2 + s^4c_4C_5L_5L_5R_2 + s^4c_4C_5L_5L_5R_2 + s^4c_4C_5L
10.615 INVALID-ORDER-615 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2 + 1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)
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 $\frac{2R_{2}R_{5}q_{m}+2R_{2}+2R_{5}+s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}q_{m}+2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}q_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}q_{m}+4C_{2}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}q_{m}+2C_{4}C_{5}L_{4}L_{5}R_{5}q_{m}+$ 

10.619 INVALID-ORDER-619  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_5s^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(-C_2C_4C_5L_2R_2R_4R_5 + C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_5 - C_4C_5L_2L_4R_5\right) + s^3\left(C_2C_4L_2R_2R_4R_5g_m - C_2C_4L_2L_4R_5g_m - C_2C_4L_2L_4R_2g_m + s^5\left(2C_2C_4C_5L_2L_4R_2g_m + 4C_2C_4L_2L_4R_2g_m + 4C_2C_4L_2L_4R_2g_m + s^5\left(2C_2C_4L_2R_2R_4g_m + 2C_2C_4L_2R_2R_3g_m + 2C_2C_4L_2R_2R_3g_m + s^5\left(2C_2C_4L_2R_2R_4g_m + 2C_2C_4L_2R_2R_3g_m + s^5\left(2C_2C_4L_2R_2R_4g_m + s^5c_2C_4L_2R_4g_m + s^5\left(2C_2C_4L_2R_2R_4g_m + s^5c_2C_4L_2R_4g_m + s^5c_2C_4L_2R_4$ 

10.620 INVALID-ORDER-620  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 g_m - C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_2 L_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_4 C_5 L_2 L_4 R_5 g_m - C_4 C_5 L_4$ 

10.621 INVALID-ORDER-621  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

10.622 INVALID-ORDER-622  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2s^6 - R_2 + s^5\left(-C_2C_4C_5L_2L_5R_2R_4 + C_2C_4L_2L_4L_5 - C_4C_5L_2L_4L_5\right) + s^4\left(-C_2C_4L_2L_4R_2 + C_2C_4L_2L_5R_2R_4g_m + C_2C_4L_2L_5R_4 - C_2C_5L_2L_5R_4 - C_2C_5L_2L_5R_4 + C_2C_4L_5L_5R_2g_m + s^6\left(2C_2C_4C_5L_2L_4L_5R_2g_m + 4C_2C_4C_5L_2L_5R_2g_m + 4C_2C_4L_2L_5R_2g_m + 4C_2C_4L_2L_5R$ 

10.623 INVALID-ORDER-623  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 L_5\right) + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_5 + C_2 C_4 C_5 L_4 R_5 + C_2 C_4 C_5$ 

10.624 INVALID-ORDER-624  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$ 

 $T(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2R_5s^6 - R_2R_5 + s^5\left(-C_2C_4C_5L_2L_5R_2R_4R_5 + C_2C_4L_2L_4L_5R_2R_5g_m - C_2C_4C_5L_2L_4R_5R_5g_m + s^6\left(2C_2C_4C_5L_2L_4R_5R_2R_5g_m + s^6\left(2C_2C_4C_5L_2L_4R_5R_5g_m + s^6\left(2C_2C_4C_5L_4R_5R_5g_m + s^6\left(2C_4C_5L_4R_5R_5g_m + s^6c_4C_4R_5R_5g_m + s^6c_4C_$ 

10.625 INVALID-ORDER-625  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 L_2 L_4 L_5 R_2 g_m + C_2 C_4 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_5 g_m + C_4 C_5 L_2 L_5 R_4 R_5 g_m + C_4 C_5 L_2 L_5 R_4 R_5 g_m + C_4 C_5 L_2 L_5 R_2 R_5 g_m + C_4 C_5 L_2 L_5 R_2 R_5 g_m + C_4 C_5 L_2 L_5 R_2 R_5 g_m + C_4 C_5 L_2 L_5 R_4 R_5 g_m + C_4 C_5 L_4 L_5 R_5 g_m + C_4 C_5 L_5 R_5 g_m + C_4 C_5 L_5 R_5 g_m + C_4 C_5 L_5 R_5 g_m + C_5 C_5 L_5 R_5$ 

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 \begin{aligned} \textbf{10.626} \quad \textbf{INVALID-ORDER-626} \ \ Z(s) &= \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ L_4 s + R_4 + \frac{1}{C_4 s}, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \infty \right) \\ &= \frac{R_2 R_5 g_m - R_2 + R_5 + s^6 \left( C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 R_2 R_5 + C_2 C_4 C_5 L_2 L_4 R_2 R_5 - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m + C_2 C_4 C_5 L_2 L_5 R_2 R_5 g_m + C_2 C_4 C_5
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 $H(s) = \frac{s^3 \left(C_2 L_2 L_4 R_2 R_4 R_5 g_m - C_2 L_2 L_4 R_2 R_4 + C_2 L_2 L_4 R_4 R_5 \right) + s^2 \left(L_2 L_4 R_4 R_5 g_m - L_2 L_4 R_4 \right) + s \left(L_4 R_4 R_5 g_m - L_2 L_4 R_4 R_5 g_m + 2 L_2 L_4 R_2 R_4 R_5 g_m + 2 L_2 L_4 R_4 R_5 g_m + 2 L_4 L_4 R$ 

10.628 INVALID-ORDER-628  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_4R_2R_4s^4 + s^3\left(C_2L_2L_4R_2R_4g_m + C_2L_2L_4R_4 - C_5L_2L_4R_4\right) + s^2\left(-C_5L_4R_2R_4 + L_2L_4R_4\right)}{2C_2C_4C_5L_2L_4R_2R_4s^5 + 2R_2R_4g_m + 2C_4L_2L_4R_2R_4g_m + 2C_2C_5L_2L_4R_2 + 4C_2C_5L_2L_4R_4 + 2C_4C_5L_2L_4R_4 + 2C_4C_5L_2L_4R_4 + 2C_4C_5L_2L_4R_4 + 2C_4C_5L_2L_4R_4 + 2C_4C_5L_4R_4 + 2C_4C_5L_4R_4$ 

10.629 INVALID-ORDER-629  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty\right)$ 

 $H(s) = \frac{1}{2C_2C_4C_5L_2L_4R_2R_4R_5s^5 + 2R_2R_4R_5g_m + 2R_2R_4 + 2R_4R_5 + s^4\left(2C_2C_4L_2L_4R_2R_4R_5g_m + 2C_2C_4L_2L_4R_2R_4 + 2C_2C_4L_2L_4R_2R_4R_5g_m + 2C_2C_5L_2L_4R_2R_5 + 4C_2C_5L_2L_4R_4R_5 + 2C_4C_5L_2L_4R_4R_5 + s^4\left(2C_2C_4L_2L_4R_2R_4R_5g_m + 2C_2C_4L_2L_4R_4R_5 + 2C_2C_5L_2L_4R_2R_5 + 4C_2C_5L_2L_4R_4R_5 + 2C_4C_5L_2L_4R_4R_5 + 2C_4C_5L_2L_4R_4R_5 + 2C_4C_5L_2L_4R_4R_5 + 2C_4C_5L_2L_4R_4R_5 + 2C_4C_5L_2L_4R_4R_5 + 2C_4C_5L_4R_4R_5 + 2C_4C_5L_4R_5 + 2C_4C_5L_4R_5 + 2C_4C_5L_5L_5R_5 + 2C_5L_5L_5R_5 + 2C_5L_5L_5R_5 + 2C_5L_5L_5R_5 + 2C_5L_5L_5R_5 + 2C_5L_5L_5$ 

10.630 INVALID-ORDER-630  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4g_m + 2R_4 + s^5\left(2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_4L_2L_4R_2R_4g_m + 2C_2C_5L_2L_4R_2R_4g_m + 2C_2C_5L_2L_4R_4g_m + 2C_2C_5L_4R_4g_m +$ 

**10.631** INVALID-ORDER-631  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2g_m + 2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_5L_2L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5R_4g_m\right) + s^4\left(2C_2C_4L_2L_4R_2R_4g_m + 2C_2C_5L_2L_4R_2R_4g_m + 2C_2C_5L_2R_4R_4g_m + 2C_2C_5L_2R_4R_4g_m + 2C_$ 

10.632 INVALID-ORDER-632  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{1}{2C_2C_4C_5L_2L_4L_5R_2R_4s^6 + 2R_2R_4 + s^5\left(2C_2C_4L_2L_4L_5R_2R_4g_m + 2C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_2L_4L_5R_4 + 2C_4C_5L_2L_4L_5R_4 + 2C_4C_5L_4L_5R_4 + 2C_4C_5L_5L_5R_4 + 2C_4C_5L_5L_5R_4 + 2C_4C_5L_5L_5R_5 + 2C_5L_5L_5L_5R_5 + 2C_$ 

10.633 INVALID-ORDER-633  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2g_m + 2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_4C_5L_2L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5R_2g_m + 2C_2C_4L_5L_4L_5R_2g_m + 2C_2C_4L_5L_4R_2g_m + 2C_2C_4L_5L_4R_2g$ 

10.634 INVALID-ORDER-634  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$ 

 $H(s) = \frac{1}{2C_2C_4C_5L_2L_4L_5R_2R_4R_5s^6 + 2R_2R_4R_5s^6 + 2R_2R_4R_5s^6$ 

10.635 INVALID-ORDER-635  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2 + L_4s + R_4}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)$ 

10.637 INVALID-ORDER-637  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, R_5, \infty\right)$ 

 $H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_4L_2L_4R_2R_4F_5g_m - C_2C_4L_2L_4R_2R_5g_m - C_2L_2L_4R_5 + C_4L_2L_4R_4F_5g_m - C_4L_4R_4F_5g_m - C_$ 

10.638 INVALID-ORDER-638  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_4L_2L_4R_2g_m + C_2C_5L_2L_4R_2 - C_4C_5L_2L_4R_4\right) + s^3\left(-C_2C_5L_2R_2R_4 + C_2L_2L_4R_2g_m + C_2L_2L_4 - C_4C_5L_4R_2g_m + C_4L_2L_4R_4g_m + C_4L_4R_4g_m + C_4L_$ 

10.639 INVALID-ORDER-639  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \frac{R_5}{C_5R_5s + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_4R_5s^5 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_4L_2L_4R_2R_4R_5g_m - C_2C_4L_2L_4R_2R_4R_5g_m - C_2C_4L_2L_4R_2R_4R_5g_m - C_2C_4L_2L_4R_2R_4R_5g_m - C_2C_4L_2L_4R_2R_4g_m + 2C_2C_4L_2L_4R_2R_5g_m + 2C_2C_4L_2L_4R_2 + 4C_2C_4L_2L_4R_2 + 4C_2$ 

**10.640** INVALID-ORDER-640  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2 R_4 g_m + R_4 + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 R_4 g_m - C_2 C_4 C_5 L_2 L_4 R_2 R_4 + C_2 C_4 C_5 L_2 L_4 R_2 R_4 + C_2 C_4 C_5 L_2 L_4 R_2 R_4 + C_2 C_4 L_2 L_4 R_2 R_4 g_m + C_2 C_4 L_2 L_4 R_2 R_5 g_m - C_2 C_5 L_2 L_4 R_2 + C_2 C_5 L_2 L_4 R_5 g_m - C_4 C_5 L_2 L_4 R_4 R_5 g_m - C_4 C_5 L_2 L_4 R_5 g_m - C_4 C_5 L_4 R_5 g_m - C_4 C$ 

10.641 INVALID-ORDER-641  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^6\left(C_2C_4C_5L_2L_4L_5R_2g_m + C_2C_4C_5L_2L_4L_5R_4g_m + C_2C_4L_5L_4L_5R_4g_m + C_2C_5L_2L_4R_2R_4 + C_2C_5L_2L_4R_2R_4 + C_2C_5L_2L_4L_5R_4g_m + S^4\left(C_2C_4L_2L_4R_2R_4g_m + C_2C_4L_2L_4R_4 - C_2C_5L_2L_4R_2 + C_2$ 

10.642 INVALID-ORDER-642  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2R_4s^6 - R_2R_4 + s^5\left(C_2C_4L_2L_4L_5R_2R_4g_m + C_2C_4L_2L_4L_5R_4 - C_2C_5L_2L_4L_5R_2 - C_2C_4L_2L_4L_5R_2R_4g_m + C_2C_4L_4L_5R_4g_m + C_2C_4L_4L_5R$ 

10.643 INVALID-ORDER-643  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^6\left(C_2C_4C_5L_2L_4L_5R_2g_m + C_2C_4C_5L_2L_4L_5R_4g_m + C_2C_4C_5L_2L_4R_2R_4g_m + C_2C_4C_5L_2L_4R_2R_4R_5g_m - C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_5R_2g_m + C_2C_5L_2L_4L_5R_2g_m + C_2C_5L_2L_4L_5R_4g_m + s^4\left(C_2C_4L_2L_4R_2R_4g_m + C_2C_4L_2L_4R_2R_4g_m + C_2C_4C_5L_2L_4R_2R_4g_m + C_2C_4C_5L_4R_2R_4g_m + C_2C_4C_5L_4R_4R_4g_m + C_2C_4C_5L_4R_4g_m +$ 

10.644 INVALID-ORDER-644  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_4R_5g_m + 2C_2C_4C_5L_2L_4L_5R_2R_5 + 4C_2C_4C_5L_2L_4L_5R_2R_4R_5\right) + s^5\left(2C_2C_4L_2L_4L_5R_2R_4g_m + 2C_2C_4L_2L_4L_5R_2 + 4C_2C_4L_2L_4L_5R_4 + 2C_2C_4L_2L_4L_5R_4 + 2C_2C_4L_4L_5R_4 + 2C_4C_5L_4L_5R_4 + 2C_4C_4L_4L_5R_4 + 2C_4C_4L_5L_5R_4 + 2C_4C_4L_5L_5R_4 + 2C_4C_5L_5L_5R_4 + 2C_4C_5L_5L_5L_5R_5 + 2C_4C_5L_5L_5L_5R_5 + 2C_5C_$ 

10.645 INVALID-ORDER-645  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)$ 

 $H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^6\left(C_2C_4C_5L_2L_4L_5R_2R_4R_5g_m - C_2C_4C_5L_2L_4L_5R_2R_4 + C_2C_4C_5L_2L_4L_5R_2R_4g_m + C_2C_4L_2L_4L_5R_4 + C_2C_4L_2L_4L_5R_4 + C_2C_5L_2L_4L_5R_2R_4g_m + C_2C_4L_2L_4L_5R_4 + C_2C_5L_2L_4L_5R_2R_4g_m - C_2C_5L_2L_4L_5R_2R_4g_m - C_2C_5L_2L_4L_5R_2R_4g_m + C_2C_4L_5R_4R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2g_m + 2C_2C_4C_5L_4L_5R_2g_m +$ 

10.646 INVALID-ORDER-646  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{C_4L_4R_4s^2 + L_4s + R_4}{C_4L_4s^2 + 1}, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \infty\right)$ 

 $H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_5g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_5 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_5 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_$ 

10.647 INVALID-ORDER-647  $Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ R_5, \ \infty \right)$ 

 $R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}+C_{2}C_{4}L_{2}L_{4}R_{4}R_{5}\right)+s^{3}\left(C_{4}L_{2}L_{4}R_{4}R_{5}g_{m}-C_{4}L_{2}L_{4}R_{4}R_{5}\right)+s^{2}\left(C_{4}L_{2}L_{4}R_{4}R_{5}g_{m}-C_{4}L_{2}L_{4}R_{4}R_{5}g_{m}-C_{4}L_{2}L_{4}R_{4}R_{5}\right)+s^{2}\left(C_{4}L_{2}L_{4}R_{4}R_{5}g_{m}-C_{4}L_{2}L_{4}R_{4}R_{5}\right)+s^{2}\left(C_{4}L_{2}L_{4}R_{4}R_{5}g_{m}-C_{4}L_{4}R_{4}R_{5}g_{m}-C_{4$  $H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_4R_5\right) + s^3\left(C_4L_2L_4R_4R_5g_m - C_4L_2L_4R_4\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2+4R_4 + 2R_5 + s^4\left(2C_2C_4L_2L_4R_2R_4g_m + 2C_2C_4L_2L_4R_2\right) + s^3\left(2C_2C_4L_2R_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_4L_2L_4R_5g_m + 2C_4L_4R_5g_m + 2C_4L_4R_5$ 

10.648 INVALID-ORDER-648  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_4L_2L_4R_2R_4g_m + C_2C_4L_2L_4R_4 - C_4C_5L_2L_4R_4\right) + s^3\left(-C_2C_5L_2R_2R_4 - C_4C_5L_2L_4R_4\right) + s^3\left(-C_2C_5L_2R_2R_4 + 2C_2C_4L_2L_4R_4g_m + 2C_4C_5L_2L_4R_4g_m + 2C_4C_5L_2L_4R_4g_m + 2C_4C_5L_2L_4R_4g_m + 2C_4C_5L_2L_4R_4g_m + 2C_4C_5L_2L_4R_4g_m + 2C_4C_5L_2R_4g_m + 2C_4C_5L_2R_$ 

10.649 INVALID-ORDER-649  $Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{R_5}{C_5R_5s + 1}, \ \infty\right)$ 

10.650 INVALID-ORDER-650  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2 R_4 g_m + R_4 + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_2 R_4 + C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 C_5 L_2 R_4 R_5 g_m + 2 C_2 C_4 R_5 R$ 

10.651 INVALID-ORDER-651  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $\frac{R_{2}R_{4}g_{m}+R_{4}+s^{6}\left(C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{4}\right)+s^{5}\left(-C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{4}\right)+s^{5}\left(-C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}L_{5}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{5}L_{4}R_{4}R_{4}g_{m}+C_{2}C_{4}C_{$ 

10.652 INVALID-ORDER-652  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4(C_4L_4s^2 + 1)}{C_4L_4s^2 + C_4R_4s + 1}, \frac{L_5s}{C_5L_5s^2 + 1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5}{2R_2R_4g_m + 2R_2 + 4R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4L_5L_4L_5R_2 + 4C_2C_4L_5L_5R_2 + 4C_2C_4L_5L$ 

10.653 INVALID-ORDER-653  $Z(s) = \left(\infty, \frac{C_2L_2R_2s^2+L_2s+R_2}{C_2L_2s^2+1}, \infty, \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, L_5s+R_5+\frac{1}{C_5s}, \infty\right)$ 

10.654 INVALID-ORDER-654  $Z(s) = \left( \infty, \ \frac{C_2 L_2 R_2 s^2 + L_2 s + R_2}{C_2 L_2 s^2 + 1}, \ \infty, \ \frac{R_4 \left( C_4 L_4 s^2 + 1 \right)}{C_4 L_4 s^2 + C_4 R_4 s + 1}, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \infty \right)$ 

 $\overline{2R_{2}R_{4}R_{5}g_{m}+2R_{2}R_{5}+4R_{4}R_{5}+s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{5}+4C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{5}+4C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+4C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+4C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+4C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5}+2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{4}L_{5}R_{4}R_{5}+2C_{2}C_{4}L_{5}L_{5}R_{4}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{5}L_{5}R_{4}R_{5}+2C_{2}C_{4}L_{5}L_{5}R_{5}\right)+s^{5}\left(2C_{2}C_{4}L_{5}L_{5}R_{5}+2C_{2}C_{4}L_{5}L_{5}R_{5}\right)+s^{5}\left(2C_{4}L_{5}L_{5}R_{5}+2C_{4}L_{5}L$ 

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10.655 INVALID-ORDER-655 Z(s) = \left(\infty, \ \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \ \frac{C_5L_5R_5s^2 + L_5s + R_5}{C_5L_5s^2 + 1}, \ \infty\right)
H(s) = \frac{1}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_2 + 4C_2C_4C_5L_4L_5R_4 + 4C_2C_4C_5L_5L_5R_5 + 4C_2C_4C_5L_5L_5R_5 + 4C_2C_4C_5L_5L_5R_5 + 4C_2C_4C_5L_5L_5R_5 + 4C_2C_4C_5L_5L_5R_5 +
10.656 INVALID-ORDER-656 Z(s) = \left(\infty, \frac{C_2L_2R_2s^2 + L_2s + R_2}{C_2L_2s^2 + 1}, \infty, \frac{R_4\left(C_4L_4s^2 + 1\right)}{C_4L_4s^2 + C_4R_4s + 1}, \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \infty\right)
H(s) = \frac{1}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_5 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_3 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_3 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_3 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_3 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_3 + s^6 \left(2C_2C_4C_5L_4L_5R_3 + s^6 \left(2C_4C_5L_4L_5R_3 + s^6 c_4C_5L_4L_5R_3 + s^6 c_4C_5L_4L_
10.657 INVALID-ORDER-657 Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \frac{1}{C_5s}, \infty\right)
                                                                                                                                                                                                                                                                                     10.658 INVALID-ORDER-658 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)
                                               -C_{2}C_{5}L_{2}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{2}\left(C_{2}L_{2}R_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)\\ -C_{2}C_{5}L_{2}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{2}\left(C_{2}L_{2}R_{2}R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)\\ -C_{2}C_{5}L_{2}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)\\ -C_{2}C_{5}L_{2}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)\\ -C_{2}C_{5}L_{2}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}g_{m}-C_{2}L_{2}R_{2}R_{4}+C_{2}L_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{2}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{4}R_{5}-C_{5}R_{4}R_{5}\right)+s\left(C_{2}R_{2}R_{5}+C_{5}R_{5}R_{5}+C_{5}R_{5}R_{5}\right)+s\left(C_{
10.659 INVALID-ORDER-659 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, R_5 + \frac{1}{C_5s}, \infty\right)
                                                             H(s) = \frac{R_2R_4g_m + R_4 + s^3\left(C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_2R_4 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2C_5R_2R_4R_5 + C_2L_2R_2R_4g_m + C_2L_2R_4\right) + s\left(C_2R_2R_4 + C_5R_2R_4R_5g_m - C_5R_2R_4 + C_5R_4R_5\right)}{2R_2g_m + s^3\left(2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_2R_5g_m + 2C_2C_5L_2R_2 + 4C_2C_5L_2R_4 + 2C_2C_5L_2R_5\right) + s^2\left(4C_2C_5R_2R_4 + 2C_2C_5R_2R_5 + 2C_2L_2R_2g_m + 2C_2L_2\right) + s\left(2C_2R_2 + 2C_5R_2R_4g_m + 2C_5R_2R_5g_m + 2C_5R_2R_4 + 2C_5R_5\right) + s^2\left(4C_2C_5R_2R_4 + 2C_2C_5R_2R_5 + 2C_2L_2R_2g_m + 2C_2L_2\right) + s\left(2C_2R_2 + 2C_5R_2R_4g_m + 2C_5R_2R_5g_m + 2C_5R_2R_4 + 2C_5R_5\right) + s^2\left(4C_2C_5R_2R_4 + 2C_2C_5R_2R_5 + 2C_2L_2R_2g_m + 2C_2L_2\right) + s\left(2C_2R_2R_4 + 2C_5R_2R_4g_m + 2C_5R_4g_m + 2C_
10.660 INVALID-ORDER-660 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, L_5s + \frac{1}{C_5s}, \infty\right)
                                                 H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_2C_5L_2L_5R_2g_m + C_2C_5L_2L_5R_4g_m + C_2C_5L_2R_2R_4 + C_2C_5L_2R_2R_4 + C_2C_5L_2R_2R_4 + C_2L_2R_4g_m + C_2L_2R_4 + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s^2\left(C_2L_2R_2R_4g_m + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s^2\left(C_2L_2R_2R_4g_m + C_5L_5R_2R_4 + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s^2\left(C_2L_2R_2R_4g_m + C_5L_5R_2R_4 + C_5L_5R_4R_4 +
10.661 INVALID-ORDER-661 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)
H(s) = \frac{-C_2C_5L_2L_5R_2R_4s^4 - R_2R_4 + s^3\left(C_2L_2L_5R_2R_4g_m + C_2L_2L_5R_4\right) + s^2\left(-C_2L_2R_2R_4 + C_2L_5R_2R_4 - C_5L_5R_2R_4\right) + s\left(L_5R_2R_4g_m + L_5R_4\right)}{2R_2R_4g_m + 2R_2 + 4R_4 + s^4\left(2C_2C_5L_2L_5R_2 + 4C_2C_5L_2L_5R_2 + 4C_2C_5L_2L_5R_2\right) + s^2\left(2C_2L_2R_2R_4g_m + 2C_2L_2R_2 + 4C_2L_2R_4 + 2C_2L_5R_2 + 4C_5L_5R_2\right) + s^2\left(2C_2L_2R_2R_4g_m + 2C_2L_2R_4 + 2C_2L_2R_4 + 2C_2L_2R_4 + 2C_2L_2R_4\right) + s\left(4C_2R_2R_4 + 2C_2L_5R_4\right) + s\left(4C_2R_2R_4 + 2C_2L_5R_4\right) + s\left(4C_2R_2R_4 + 2C_2L_5R_4\right) + s\left(4C_2R_4R_4 + 2C_2R_4R_4\right) + s\left(4C_2R_4R_4 + 2C
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10.662 INVALID-ORDER-662 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, L_5s+R_5+\frac{1}{C_5s}, \infty\right)$$

$$H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_2C_5L_2L_5R_2R_4g_m + C_2C_5L_2R_2R_4g_m + C_2C_5L_2R_2R_4R_5 - C_2C_5L_2R_2R_4 + C_2C_5L_2R_4R_5 + C_2C_5L_2R_4R_5 + C_2C_5L_2R_4R_5 + C_2L_2R_2R_4g_m + C_2L_2R_4 + C_5L_5R_2R_4g_m + C_5L_5R_4\right) + s\left(C_2R_2R_4 + C_5R_2R_4R_5 - C_2C_5L_2R_4R_5 + C_2C_5L_2R_4R_5 +$$

**10.663** INVALID-ORDER-663 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$$

$$H(s) = \frac{-C_2C_5L_2L_5R_2R_4R_5s^4 - R_2R_4R_5s^4 - R_2R_4R_5s^4 - R_2R_4R_5g_m - C_2L_2L_5R_2R_4 + C_2L_2L_5R_2R_4 + C_2L_2L_5R_2R_4R_5 + s^2\left(-C_2L_2R_2R_4R_5 + C_2L_5R_2R_4R_5 - C_5L_5R_2R_4R_5 - C_5L_5R_2R_4R_5 + s^2\left(-C_2L_2R_2R_4R_5 + s^2\left(2C_2L_2R_2R_4R_5 + s^2\right)\right\right)\right)\right)\right)\right)}$$

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H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_5L_2L_5R_2R_4R_5g_m - C_2C_5L_2L_5R_2R_4 + C_2C_5L_2L_5R_2R_4R_5 + s^3\left(C_2C_5L_5R_2R_4R_5 + C_2L_2L_5R_2R_4g_m + C_2L_2L_5R_4\right) + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m + C_2L_2R_2R_4g_m + C_2L_2R_4g_m +
10.665 INVALID-ORDER-665 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)
H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_5L_2L_5R_2R_4R_5g_m - C_2C_5L_2L_5R_2R_4 + C_2C_5L_2L_5R_4R_5\right) + s^3\left(-C_2C_5L_2R_2R_4R_5 + C_2C_5L_2R_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4R_5 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4R_5 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_2R_4R_5 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_4R_5 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2L_2R_4R_5\right) + s
10.666 INVALID-ORDER-666 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{1}{C_4s}, R_5, \infty\right)
                                                                                                                                                                                                                                                                                         H(s) = \frac{C_2R_2R_5s + R_2R_5g_m - R_2 + R_5 + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_5\right)}{2R_2q_m + s^3\left(2C_2C_4L_2R_2R_5q_m + 2C_2C_4L_2R_2 + 2C_2C_4L_2R_5\right) + s^2\left(2C_2C_4R_2R_5 + 2C_2L_2R_2q_m + 4C_2L_2\right) + s\left(4C_2R_2 + 2C_4R_2R_5q_m + 2C_4R_2 + 2C_4R_5\right) + 4C_4R_5 + 3C_4R_5 +
10.667 INVALID-ORDER-667 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)
                                                                                                                                                                                                                                                                    H(s) = \frac{-C_2C_5L_2R_2s^3 + R_2g_m + s^2\left(C_2L_2R_2g_m + C_2L_2\right) + s\left(C_2R_2 - C_5R_2\right) + 1}{2C_2C_4C_5L_2R_2s^4 + s^3\left(2C_2C_4L_2R_2g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_2g_m + 4C_2C_5L_2\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2\right) + s\left(2C_4R_2g_m + 2C_4 + 2C_5R_2g_m + 4C_5\right)}
10.668 INVALID-ORDER-668 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)
H(s) = \frac{-C_2C_5L_2R_2R_5s^3 + R_2R_5g_m - R_2 + R_5 + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_5\right) + s\left(C_2R_2R_5 - C_5R_2R_5\right)}{2C_2C_4C_5L_2R_2S^4 + 2R_2g_m + s^3\left(2C_2C_4L_2R_2 + 2C_2C_4L_2R_2 + 2C_2C_4L_2R_5 + 4C_2C_5L_2R_5\right) + s^2\left(2C_2C_4R_2R_5 + 4C_2C_5R_2R_5 + 4C_2C_5R_2R_5\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5 + 2C_5R_2R_5g_m + 4C_2C_5R_2R_5\right)}
10.669 INVALID-ORDER-669 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)
H(s) = \frac{R_2 g_m + s^3 \left(C_2 C_5 L_2 R_2 R_5 g_m - C_2 C_5 L_2 R_2 + C_2 C_5 L_2 R_5\right) + s^2 \left(C_2 C_5 R_2 R_5 + C_2 L_2 R_2 g_m + C_2 L_2\right) + s \left(C_2 R_2 + C_5 R_2 R_5 g_m - C_5 R_2 + C_5 R_5\right) + 1}{s^4 \left(2 C_2 C_4 C_5 L_2 R_2 + 2 C_2 C_4 C_5 L_2 R_5\right) + s^3 \left(2 C_2 C_4 C_5 R_2 R_5 + 2 C_2 C_4 L_2 R_2 g_m + 2 C_2 C_4 L_2 + 2 C_2 C_5 L_2 R_2 g_m + 4 C_2 C_5 L_2\right) + s^2 \left(2 C_2 C_4 R_2 + 4 C_2 C_5 R_2 + 2 C_4 C_5 R_2 + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 C_5 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_m + 2 C_4 R_2\right) + s \left(2 C_4 R_2 g_
10.670 INVALID-ORDER-670 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{1}{C_4s}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)
H(s) = \frac{R_2 g_m + s^4 \left(C_2 C_5 L_2 L_5 R_2 g_m + C_2 C_5 L_2 L_5\right) + s^3 \left(-C_2 C_5 L_2 R_2 + C_2 C_5 L_5 R_2\right) + s^2 \left(C_2 L_2 R_2 g_m + C_2 L_2 + C_5 L_5 R_2 g_m + C_5 L_5\right) + s \left(C_2 R_2 - C_5 R_2\right) + 1}{s^5 \left(2C_2 C_4 C_5 L_2 L_5 R_2 g_m + 2C_2 C_4 C_5 L_5 R_2\right) + s^3 \left(2C_2 C_4 L_2 R_2 g_m + 2C_2 C_4 L_2 + 2C_2 C_5 L_2 R_2 g_m + 4C_2 C_5 L_2 + 2C_4 C_5 L_5\right) + s^2 \left(2C_2 C_4 R_2 + 4C_2 C_5 R_2 + 2C_4 C_5 R_2\right) + s \left(2C_4 R_2 g_m + 2C_4 C_5 R_2\right) + s \left(2C_4 R_2 g_m + 2C_4 C_5 R_2\right) + s \left(2C_4 R_2 g_m + 2C_4 C_5 R_2\right) + s \left(2C_4 R_2 g_m + 2C_4 R_2 g_m + 2C_4 R_2\right) + s \left(2C_4 R_2 g_m + 2C_4 R_
10.671 INVALID-ORDER-671 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{1}{C_4s}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)
                                                -C_{2}C_{5}L_{2}L_{5}R_{2}s^{4}-R_{2}+s^{3}\left(C_{2}L_{2}L_{5}R_{2}g_{m}+C_{2}L_{5}\right)+s^{2}\left(-C_{2}L_{2}R_{2}+C_{2}L_{5}R_{2}g_{m}+L_{5}\right)\\ -2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}s^{4}-R_{2}+s^{3}\left(C_{2}L_{2}L_{5}R_{2}g_{m}+C_{2}L_{5}\right)+s^{2}\left(-C_{2}L_{2}R_{2}+C_{2}L_{5}R_{2}+C_{5}L_{5}R_{2}\right)+s\left(L_{5}R_{2}g_{m}+L_{5}\right)\\ -2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}s^{4}-R_{2}+s^{3}\left(C_{2}L_{2}L_{5}R_{2}g_{m}+C_{2}L_{5}\right)+s^{2}\left(-C_{2}L_{2}R_{2}+C_{2}L_{5}R_{2}+C_{5}L_{5}R_{2}\right)+s\left(L_{5}R_{2}g_{m}+L_{5}\right)\\ -2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}s^{4}-R_{2}+s^{3}\left(C_{2}L_{2}L_{5}R_{2}g_{m}+C_{2}L_{5}\right)+s^{2}\left(-C_{2}L_{2}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}\right)+s\left(L_{5}R_{2}g_{m}+L_{5}\right)\\ -2C_{2}C_{4}L_{5}L_{5}R_{2}s^{4}-R_{2}+s^{3}\left(C_{2}L_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}+C_{2}L_{5}R_{2}
10.672 INVALID-ORDER-672 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{1}{C_4s}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)
H(s) = \frac{R_2g_m + s^4 \left(C_2C_5L_2L_5R_2g_m + C_2C_5L_2L_5\right) + s^3 \left(C_2C_5L_2R_2R_5g_m - C_2C_5L_2R_2 + C_2C_5L_2R_5 + C_2L_2R_2g_m + C_2L_2 + C_5L_5R_2g_m + C_5L_5\right) + s \left(C_2R_2 + C_5R_2g_m + C_
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10.664 INVALID-ORDER-664  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{C_2R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4 + C_2L_2R_4R_5\right)}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^3\left(2C_2C_4L_2R_2R_4R_5g_m + 2C_2C_4L_2R_2R_4 + 2C_2L_2R_2R_4R_5\right) + s^2\left(2C_2C_4R_2R_4R_5 + 2C_2L_2R_2R_4R_5 + 2C_2L_2R_2R_4R_5\right) + s^2\left(2C_2C_4R_2R_4R_5 + 2C_2L_2R_2R_4R_5 + 2C_2L_2R_2R_4 + 2C_2L_2R_4 +$ 

10.677 INVALID-ORDER-677  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2R_2R_4s^3 + R_2R_4g_m + R_4 + s^2\left(C_2L_2R_2R_4g_m + C_2L_2R_4\right) + s\left(C_2R_2R_4 - C_5R_2R_4\right)}{2C_2C_4C_5L_2R_2R_4s^4 + 2R_2g_m + s^3\left(2C_2C_4L_2R_2R_4g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_4\right) + s^2\left(2C_2C_4R_2R_4 + 4C_2C_5R_2R_4 + 4C_2C_5R_2R_4 + 2C_2L_2R_2g_m + 2C_2L_2 + 2C_4C_5R_2R_4\right) + s\left(2C_2R_2 + 2C_4R_2R_4g_m + 2C_4R_4 + 2C_5R_2R_4g_m + 2C_5R_2R_4\right)}$ 

10.678 INVALID-ORDER-678  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{R_5}{C_5R_5s+1}, \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2R_2R_4R_5s^3 + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2L_2R_2R_4R_5g_m - C_2L_2R_2R_4 + C_2L_2R_4R_5\right) + s\left(C_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m + 2C_2C_4L_2R_4R_5g_m + 2C_2C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4R_5 + 4C_2C_5L_2R_4R_5\right) + s\left(C_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^2\left(C_2R_2R_4R_5g_m - C_2L_2R_2R_4R_5g_m + 2C_2L_2R_4R_5\right) + s\left(C_2R_4R_5g_m - R_2R_4R_5g_m + 2C_2R_4R_5g_m +$ 

10.679 INVALID-ORDER-679  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^3\left(C_2C_5L_2R_2R_4R_5g_m - C_2C_5L_2R_2R_4 + C_2C_5L_2R_4R_5\right) + s^2\left(C_2C_5R_2R_4R_5 + C_2L_2R_2R_4g_m + C_2L_2R_4\right) + s^2\left(C_2C_5R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4R_5g_m + 2C_2C_5L_2R_2R_4g_m + 2C_2C_5L_2R_4g_m + 2C_2C_5L_2R_4g$ 

**10.680** INVALID-ORDER-680  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

 $H(s) = \frac{R_2 R_4 g_m + R_4 + s^4 \left(C_2 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_5 L_2 L_5 R_4\right) + s^3 \left(-C_2 C_5 L_2 R_2 R_4 + C_2 C_5 L_5 R_2 R_4\right) + s^2 \left(C_2 L_2 R_2 R_4 g_m + C_2 L_2 R_4 g_m + C_2 L_2 R_4 g_m + C_2 L_2 R_4 g_m + C_2 L_4 R_4 g_m + C_2 L_4 R_4 g_m + C_4 L_5 R_5 g_m + C_$ 

10.681 INVALID-ORDER-681  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_5R_2R_4s^4 - R_2R_4 + s^3\left(C_2L_2L_5R_2R_4g_m + C_2L_2L_5R_4\right) + s^2\left(-C_2L_2R_2R_4 + C_2L_5R_2R_4 - C_5L_5R_2R_4\right)}{2C_2C_4C_5L_2L_5R_2R_4s^5 + 2R_2R_4g_m + 2C_2L_4L_5R_2R_4g_m + 2C_2L_4L_5R_4g_m + 2C_4L_4L_5R_4g_m + 2C_4L_4L_5R_4$ 

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10.682 INVALID-ORDER-682 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)
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 $R_2R_4g_m + R_4 + s^4(C_2C_5L_2L_5R_2R_4g_m + C_2C_5L_2L_5R_4) + s^3(C_2C_5L_2R_2R_4R_4)$ 

 $H(s) = \frac{R_2R_4g_m + R_4 + s^4\left(C_2C_5L_2L_5R_2R_4g_m + C_2C_5L_2L_5R_4\right) + s^3\left(C_2C_5L_2R_2R_4R_5 + s^4\left(C_2C_5L_2L_5R_4R_5 + s^4c_2C_5L_2L_5R_4R_5 + s^4c_2C_5L_2R_4R_5 + s^4c_2C_5L_2R_4R_$ 

10.683 INVALID-ORDER-683 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$$

 $H(s) = \frac{C_2C_3L_2L_5R_2R_4R_5s^5 + 2R_2R_4R_5g_m + 2R_2R_5 + 4R_4R_5 + s^4\left(2C_2C_4L_2L_5R_2R_4R_5g_m + 2C_2C_4L_2L_5R_2R_4 + 2C_2C_4L_2L_5R_2R_4 + 2C_2C_4L_2L_5R_4R_5 + 4C_2C_5L_2L_5R_4R_5\right) + s^3\left(2C_2C_4L_2R_2R_4R_5 + 4C_2C_4L_2L_5R_4R_5 + 4C_2C_4L_2L_5R_4R_5 + 4C_2C_5L_2L_5R_4R_5 + 4C_2C_5L_2L_5R_5R_5 + 4C_2C_5L_5R_5R_5 + 4C_2C_5L_5R_5R_5R_5 + 4C_2C_5L_5R_5R_5 + 4C_2C_5L_5R_5R_5 + 4C_2C_5L_5R_5R_5 + 4C_2C_5L_5R_5R_5 + 4C_2C_5L_5R$ 

10.684 INVALID-ORDER-684 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4}{C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$$

 $\frac{R_2R_4R_5g_m - R_2R_4R_5g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^5\left(2C_2C_4C_5L_2L_5R_2R_4R_5g_m + 2C_2C_4C_5L_2L_5R_2R_4R_5\right) + s^4\left(2C_2C_4C_5L_5R_2R_4R_5 + 2C_2C_4L_2L_5R_2R_4g_m + 2C_2C_5L_2L_5R_2R_4g_m + 2C_2C_5L_2L_5R_4g_m + 2C_2C_5L_2L_5R_4g_m$ 

10.685 INVALID-ORDER-685 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4}{C_4R_4s+1}, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

 $\overline{2R_{2}R_{4}g_{m}+2R_{2}R_{5}g_{m}+2R_{2}+4R_{4}+2R_{5}+s^{5}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}g_{m}+2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}+2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}\right)+s^{4}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}\right)+s^{4}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}g_{m}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}\right)+s^{4}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}\right)+s^{4}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}\right)+s^{4}\left(2C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_$ 

**10.686** INVALID-ORDER-686 
$$Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, R_5, \infty\right)$$

 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^3 \left(C_2 C_4 L_2 R_2 R_4 R_5 g_m - C_2 C_4 L_2 R_2 R_4 + C_2 C_4 L_2 R_4 R_5\right) + s^2 \left(C_2 C_4 R_2 R_4 R_5 + C_2 L_2 R_2 g_m - C_2 L_2 R_2 + C_2 L_2 R_5\right) + s \left(C_2 R_2 R_5 + C_4 R_2 R_4 R_5 g_m - C_4 R_2 R_4 + C_4 R_4 R_5\right)}{2 R_2 g_m + s^3 \left(2 C_2 C_4 L_2 R_2 R_4 g_m + 2 C_2 C_4 L_2 R_2 g_m + 4 C_2 C_4 L_2 R_2 + 4 C_2 C_4 L_2 R_2 + 4 C_2 C_4 L_2 R_4 + 2 C_2 C_4 L_2 R_5\right) + s^2 \left(4 C_2 C_4 R_2 R_4 + 2 C_2 C_4 R_2 R_5 + 2 C_2 L_2 R_2 g_m + 4 C_2 L_2\right) + s \left(4 C_2 R_2 R_4 g_m + 2 C_4 R_2 R_5 g_m + 2 C_4 R_2 R_5 g_m + 2 C_4 R_4 R_5\right) + s^2 \left(4 C_4 R_4 R_5 R_5 g_m + 2 C_4 R_4 R_5 g_m + 2 C_4 R_4 R_5 g_m + 2 C_4 R_5 R_5 g_m$ 

10.687 INVALID-ORDER-687 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2R_2R_4s^4 + R_2g_m + s^3\left(C_2C_4L_2R_2R_4g_m + C_2C_5L_2R_2\right) + s^2\left(C_2C_4R_2R_4 + C_2L_2R_2g_m + C_2L_2 - C_4C_5R_2R_4\right) + s\left(C_2R_2 + C_4R_2R_4g_m + C_4R_4 - C_5R_2\right) + 1}{s^4\left(2C_2C_4C_5L_2R_2R_4g_m + 2C_2C_4L_2R_2g_m + 2C_2C_4L_2R_2g_m + 2C_2C_4L_2 + 2C_2C_5L_2R_2g_m + 4C_2C_5L_2\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2R_4g_m + 2C_4C_5R_2 + 4C_4C_5R_2\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 4C_4C_5R_2 + 4C_4C_5R_2\right) + s^2\left(2C_4C_5R_2R_4 + 4C_4C_5R_2 + 4C_4C_5R_2\right) + s^2\left(2C_4C_5R_2R_4 + 4C_4C_5R_2 + 4C_4C_5R_2\right) + s^2\left(2C_4C_5R_2R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4C_5R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4C_5R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4R_4R_4 + 4C_4C_5R_4\right) + s^2\left(2C_4R_4R_4R_4 + 4C_4C_4R_4\right) + s^2\left(2C_4R_4R_4R_4 + 4C_4C_4R_4\right) + s^2\left(2C_4R_4R$ 

10.688 INVALID-ORDER-688 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2R_2R_4R_5s^4 + R_2R_5g_m - R_2 + R_5 + s^3\left(C_2C_4L_2R_2R_4R_5g_m - C_2C_4L_2R_2R_4 + C_2C_4L_2R_4 + C_2C_4L$ 

**10.689** INVALID-ORDER-689 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{R_2g_m + s^4 \left(C_2C_4C_5L_2R_2R_4R_5g_m - C_2C_4C_5L_2R_2R_4 + C_2C_4C_5L_2R_2R_4 + C_2C_4C_5L_2R_4R_5\right) + s^3 \left(C_2C_4C_5R_2R_4R_5 + C_2C_4L_2R_2R_4g_m + C_2C_4L_2R_2R_4g_m - C_2C_5L_2R_5\right) + s^2 \left(C_2C_4R_2R_4 + C_2C_5R_2R_5 + C_2L_2R_2g_m + C_2L_2 + C_4C_5R_2R_4R_5g_m - C_4C_5R_2R_4R_5g_m - C_4C_5R_2R_4R_5g_m - C_4C_5R_2R_4R_5g_m - C_4C_5R_2R_4R_5g_m - C_4C_5R_2R_4g_m + C_4C_5R_4g_m + C_4C_5R_4g_m$ 

**10.690** INVALID-ORDER-690 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, R_4 + \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)$$

 $=\frac{R_2g_m + s^5 \left(C_2C_4C_5L_2L_5R_2R_4g_m + C_2C_4C_5L_2L_5R_4\right) + s^4 \left(-C_2C_4C_5L_2R_2R_4 + C_2C_4C_5L_2R_2R_4 + C_2C_5L_2L_5\right) + s^3 \left(C_2C_4L_2R_2R_4g_m + C_2C_5L_2R_2 + C_2C_5L_2R_2 + C_2C_5L_5R_2 + C_4C_5L_5R_2R_4g_m + C_4C_5L_5R_4\right) + s^2 \left(C_2C_4R_2R_4 + C_2C_4C_5L_2R_2R_4 + C_2C_4C_5L_2R_2R_4 + C_2C_4L_2R_2R_4 + C_2C_4L_2$ 

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 \begin{aligned} \textbf{10.691} \quad \textbf{INVALID-ORDER-691} \ \ Z(s) &= \left( \infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty \right) \\ & \quad -C_2C_4C_5L_2L_5R_2R_4s^5 - R_2 + s^4\left(C_2C_4L_2L_5R_2R_4g_m + C_2C_4L_2L_5R_4 - C_2C_5L_2L_5R_2\right) + s^3\left(-C_2C_4L_2R_2R_4 + C_2C_4L_5R_2R_4 + C_2L_2L_5R_2g_m + C_2L_2L_5 - C_4C_5L_5R_2R_4\right) \\ & \quad -C_2C_4C_5L_2L_5R_2R_4s^5 - R_2 + s^4\left(C_2C_4L_2L_5R_2R_4g_m + C_2C_4L_2L_5R_4 - C_2C_5L_2L_5R_2\right) + s^3\left(-C_2C_4L_2R_2R_4 + C_2C_4L_5R_2R_4 + C_2L_2L_5R_2g_m + C_2L_2L_5 - C_4C_5L_5R_2R_4\right) \\ & \quad -C_2C_4C_5L_2L_5R_2R_4s^5 - R_2 + s^4\left(C_2C_4L_2L_5R_2R_4g_m + C_2C_4L_2L_5R_4 - C_2C_5L_2L_5R_2\right) + s^3\left(-C_2C_4L_2R_2R_4 + C_2C_4L_5R_2R_4 + C_2L_4R_4 + C_2
```

$$H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_2 R_4 g_m + C_2 C_4 C_5 L_2 R_2 R_4 R_5 - C_2 C_4 C_5 L_2 R_2 R_5 R_5 - C_2 C_4 C_5 L_2 R_5 R_5 -$$

10.693 INVALID-ORDER-693 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_5R_2R_4R_5s^5 - R_2R_5 + s^4\left(C_2C_4L_2L_5R_2R_4R_5g_m - C_2C_4L_2L_5R_2R_4 + C_2C_4L_2L_5R_2R_4 + C_2C_4L_2L_5R_2R_4R_5g_m - C_2C_4L_2L_5R_2R_4g_m - C_2C_4L_2L_5R_4g_m - C_2C_4L_2L_5R_4g_m$ 

10.694 INVALID-ORDER-694 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$$

 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^5 \left(C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 L_2 L_5 R_2 R_4 R_5 + C_2 C_4 L_2 L_5 R_2 R_4 g_m + C_2 C_4 L_2 L_5 R_2 R_4 g_m - C_2 C_5 L_2 L_5 R_2 + C_2 C_5 L_2 L_5 R_3 + s^3 \left(C_2 C_4 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_5 L_2 L_5 R_2 R_5 g_m - C_2 C_5 L_2 L_5 R_5 g_m - C_2$ 

10.695 INVALID-ORDER-695 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ R_4 + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

**10.696** INVALID-ORDER-696 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, R_5, \infty\right)$$

 $H(s) = \frac{C_2C_4L_4R_2R_5s^3 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5 + s^4\left(C_2C_4L_2L_4R_2R_5g_m - C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_5\right) + s^2\left(C_2L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_5 + C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5\right)}{2R_2g_m + s^4\left(2C_2C_4L_2L_4R_2g_m + 4C_2C_4L_2L_4\right) + s^3\left(2C_2C_4L_2R_2R_5g_m + 2C_2C_4L_2R_5 + 4C_2C_4L_4R_2\right) + s^2\left(2C_2C_4R_2R_5 + 2C_2L_2R_2g_m + 4C_2L_2 + 2C_4L_4R_2g_m + 4C_4L_4\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + s^2\left(2C_2C_4R_2R_5 + 2C_4L_4R_2g_m + 4C_4L_4\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + s^2\left(2C_2C_4R_2R_5 + 2C_4R_2R_5g_m + 4C_4R_4\right) + s\left(4C_2R_2 + 2C_4R_2R_5g_m + 2C_4R_2 + 2C_4R_5\right) + s^2\left(2C_4R_2R_5g_m + 4C_4R_4\right) + s\left(4C_4R_4R_5\right) + s^2\left(4C_4R_4R_5\right) + s^2\left(4C_4R_5\right) + s^2\left(4$ 

10.697 INVALID-ORDER-697 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2s^5 + R_2g_m + s^4\left(C_2C_4L_2L_4R_2g_m + C_2C_4L_2L_4\right) + s^3\left(C_2C_4L_4R_2 - C_2C_5L_2R_2 - C_4C_5L_4R_2\right) + s^2\left(C_2L_2R_2g_m + C_2L_2 + C_4L_4R_2g_m + C_4L_4\right) + s\left(C_2R_2 - C_5R_2\right) + 1}{s^5\left(2C_2C_4C_5L_2L_4\right) + s^4\left(2C_2C_4C_5L_2R_2 + 4C_2C_4C_5L_4R_2\right) + s^3\left(2C_2C_4L_2R_2g_m + 2C_2C_5L_2R_2g_m + 4C_2C_5L_2 + 2C_4C_5L_4R_2g_m + 4C_4C_5L_4\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5L_4R_2g_m + 4C_4C_5L_4\right) + s^2\left(2C_2C_4R_2 + 4C_2C_5R_2 + 2C_4C_5R_2\right) + s\left(2C_4R_2g_m + 2C_4R_2g_m + 2C_4C_5R_2\right) + s\left(2C_4R_2g_m + 2C_4R_2g_m + 2C_4R_2g_m\right) + s\left(2C_4R_2g_m + 2C_4R_2g_m\right) +$ 

10.698 INVALID-ORDER-698 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, \frac{R_5}{C_5R_5s+1}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_5s^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(C_2C_4L_2L_4R_2R_5g_m - C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_2 + S^3\left(C_2C_4L_4R_2R_5 - C_2C_5L_2R_2R_5 - C_4C_5L_4R_2R_5\right) + s^2\left(C_2C_4C_5L_4R_2R_5 + S^3\left(C_2C_4L_4R_2R_5 + S^3\left(C_2C_4L_4R_2R_5 + S^3\left(C_2C_4L_4R_2R_5 + S^3\left(C_2C_4L_4R_2R_5 - C_4C_5L_4R_2R_5 + S^3\left(C_2C_4L_4R_2R_5 + S^3\left(C_2C_4L_4R_4R_4 + S^3\left(C_2C_4L_4R_4R_4 + S^3\left(C_2C_4L_4R_4R_4 + S^3\left(C_2C_4L_4R_4R_4 + S^3\left(C_4C_4L_4R_4R_4 + S^3\left(C_4C_4L_4R_4R_$ 

**10.699** INVALID-ORDER-699 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, R_5 + \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 L_5 L_4 R_2 + C_2 C_4 L_5 L_4 R_5\right) + s^4 \left(C_2 C_4 C_5 L_4 R_2 R_5 + C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_5 L_2 R_5 + C_4 C_5 L_4 R_2 R_5 g_m - C_4 C_5 L_4 R_2 + C_4 C_5 L_4 R_5\right) + s^2 \left(C_2 C_5 R_2 R_5 + C_4 C_5 L_4 R_2 R_5 g_m + C_4 C_5 L_4 R_5 R_5 g_m + C_4 C_5 L_4 R_5 R_5 g_m + C_4 C_5 L_4 R_5 g_m + C_4 C$ 

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10.700 INVALID-ORDER-700 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + \frac{1}{C_4s}, L_5s + \frac{1}{C_5s}, \infty\right)
H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 L_5\right) + s^5 \left(-C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_4 L_5 R_2\right) + s^4 \left(C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_5 L_2 L_5 R_2 g_m + C_4 C_5 L_4 L_5\right) + s^3 \left(C_2 C_4 L_4 R_2 - C_2 C_5 L_2 R_2 + C_2 C_5 L_2 R_2 + C_2 C_5 L_2 R_2 + C_2 C_5 L_2 R_2\right) + s^4 \left(C_2 C_4 L_4 R_2 g_m + C_2 C_4 L_5 L_4 R_2 g_m + C_4 C_5 L_4 L_5 R_2 g_m + C_4 C_5 L_4 L_5 R_2 g_m + C_4 C_5 L_4 R_2 g_m + C_4 C_5
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10.701 INVALID-ORDER-701 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2s^6 - R_2 + s^5\left(C_2C_4L_2L_4L_5R_2g_m + C_2C_4L_2L_4R_2 + C_2C_4L_4L_5R_2 - C_4C_5L_4L_5R_2 - C_4C_5L_4L_5R_2\right) + s^3\left(C_2L_2L_5R_2g_m + C_2L_4L_5R_2g_m + C_2C_4L_4L_5R_2 - C_4C_5L_4L_5R_2\right) + s^3\left(C_2L_4L_5R_2g_m + C_4C_5L_4L_5R_2\right) + s^4\left(2C_2C_4L_2L_4R_2g_m + 4C_2C_4L_4L_5R_2g_m + 4C_2C_4L_4L$ 

10.702 INVALID-ORDER-702 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ L_5s + R_5 + \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_4 L_5 R_2\right) + s^4 \left(C_2 C_4 C_5 L_4 L_4 R_2 g_m + C_2 C_4 L_2 L_4 R_2 g_m + C_2 C_5 L_2 L_5 R_2 g_m + C_2 C_5 L_2 L_5 + C_4 C_5 L_4 L_5 R_2 g_m + C_4 C_5 L_4 R_2 R_5 g_m + C_4 C_5 L_4 R_2 R_5 g_m + C_4 C_5 L_4 R_2 R_5 g_m + C_4 C_5 L_4 R_5 R_5 g_m + C_4 C_5 L_5 R_5 g_m + C_4 C_5 L_5 R_5 R_5 g_m + C_5 L_5 R_5 g_m + C_5 L_5 R_5 g_m + C_5 L_5 R_5 g_m +$ 

10.703 INVALID-ORDER-703 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$$

 $\frac{C_2C_4C_5L_2L_4L_5R_2G_m + C_2C_4L_2L_4L_5R_2G_m + C_2C_4L_2L_4R_2G_m + C_2C_$ 

10.704 INVALID-ORDER-704 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$$

 $\frac{R_2R_5g_m - R_2 + R_5 + s^6 \left(C_2C_4C_5L_2L_4L_5R_2g_m - C_2C_4C_5L_2L_4L_5R_2 + C_2C_4C_5L_2L_4L_5R_2 + C_2C_4L_5L_4L_5R_2 + C_2C_4L_2L_4L_5R_2 + C_2C_4L_2L_4L_5R_2 + C_2C_4L_2L_4L_5R_2 + C_2C_4L_2L_4R_2 + C_2C_4L_4L_4R_2 + C_2C_4L_4L_4R_4 + C_2C_4L_4L_4R_4 + C_2C_4L_4L_4R_4 + C_2C_4L_4L_4R_4 + C_2C_4L_4L_4R_4 + C_2C_4L_4L_4R_4 +$ 

10.705 INVALID-ORDER-705 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + \frac{1}{C_4s}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

 $R_{2}R_{5}g_{m}-R_{2}+R_{5}+s^{6}\left(C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{5}\right)+s^{5}\left(-C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{5}+C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}\right)+s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{5}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{5}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{5}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{5}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{5}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{5}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{5}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{5}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{5}L_{5}R_{5}+C_{2}C_{4}C_{5}L_{5}L_$ 

10.706 INVALID-ORDER-706 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, R_5, \infty\right)$$

 $H(s) = \frac{C_2L_4R_2R_5s^2 + s^3\left(C_2L_2L_4R_2R_5g_m - C_2L_2L_4R_2 + C_2L_2L_4R_5\right) + s\left(L_4R_2R_5g_m - L_4R_2 + L_4R_5\right)}{2R_2R_5g_m + 2R_2 + 2R_5 + s^4\left(2C_2C_4L_2L_4R_2 + 2C_2C_4L_2L_4R_2 + 2C_2C_4L_2L_4R_5\right) + s^3\left(2C_2C_4L_4R_2g_m + 4C_2L_2L_4\right) + s^2\left(2C_2L_2R_5g_m + 2C_2L_2R_5 + 4C_2L_4R_2 + 2C_4L_4R_2 + 2C_4L_4R_2 + 2C_4L_4R_2\right) + s^2\left(2C_2R_2R_5g_m + 2C_2L_2R_5g_m + 2C_2L_2R_5 + 4C_2L_4R_2 + 2C_4L_4R_2 + 2C_4L_4R_2\right) + s^2\left(2C_2R_5g_m + 2C_4R_5g_m + 2C_4R_5g_$ 

10.707 INVALID-ORDER-707 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, \frac{1}{C_5s}, \infty\right)$$

 $-C_{2}C_{5}L_{2}L_{4}R_{2}s^{4} + s^{3}\left(C_{2}L_{2}L_{4}R_{2}g_{m} + C_{2}L_{2}L_{4}\right) + s^{2}\left(C_{2}L_{4}R_{2} - C_{5}L_{4}R_{2}\right) + s\left(L_{4}R_{2}g_{m} + L_{4}\right) \\ -2C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}s^{5} + 2R_{2}g_{m} + s^{4}\left(2C_{2}C_{4}L_{2}L_{4} + 2C_{2}C_{5}L_{2}L_{4} + 2C_{2}C_{5}L_{2}L_{4}\right) + s^{3}\left(2C_{2}C_{4}L_{4}R_{2} + 2C_{2}C_{5}L_{2}R_{2} + 4C_{2}C_{5}L_{4}R_{2}\right) + s^{2}\left(2C_{2}L_{2}R_{2}g_{m} + 2C_{4}L_{4}R_{2}g_{m} + 2C_{4}L_{4} + 2C_{5}L_{4}R_{2}g_{m} + 4C_{5}L_{4}\right) + s\left(2C_{2}R_{2} + 2C_{4}L_{4}R_{2}g_{m} + 2$ 

10.708 INVALID-ORDER-708 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$$

 $\frac{C_2C_5L_2L_4R_2R_5s^5 + 2R_2R_5g_m + C_2L_2L_4R_5) + s \cdot (C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5g_m + C_2L_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_4R_2R_5g_m + C_2L_4R_2R_5g_m + C_2L_4R_2R_5) + s \cdot (C_2L_4R_2R_5g_m + C_2L_4R_2R_5g_m + C_2L_4R_2R_5g$ 

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10.709 INVALID-ORDER-709 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)
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 $s^{4} \left(C_{2} C_{5} L_{2} L_{4} R_{2} R_{5} g_{m}-C_{2} C_{5} L_{2} L_{4} R_{2}+C_{2} C_{5} L_{2} L_{4} R_{5}\right)+s^{3} \left(C_{2} C_{5} L_{4} R_{2} R_{5}+C_{2} L_{2} L_{4} R_{2} g_{m}+C_{2} L_{2} L_{4}\right)+s^{2} \left(C_{2} L_{4} R_{2}+C_{5} L_{4} R_{5}\right)+s^{3} \left(C_{2} C_{5} L_{4} R_{2} R_{5}+C_{2} L_{2} L_{4} R_{2} g_{m}+C_{2} L_{2} L_{4}\right)+s^{2} \left(C_{2} L_{4} R_{2}+C_{5} L_{4} R_{5}\right)+s^{3} \left(C_{2} C_{5} L_{4} R_{2} R_{5}+C_{2} L_{4} R_{2} g_{m}+C_{2} L_{2} L_{4}\right)+s^{2} \left(C_{2} L_{4} R_{2}+C_{5} L_{4} R_{5}\right)+s^{3} \left(C_{2} C_{5} L_{4} R_{2} R_{5}+C_{2} L_{4} R_{2} R_{5}\right)+s^{2} \left(C_{2} L_{4} R_{2}+C_{5} L_{4} R_{5}\right)+s^{2} \left(C_{2} L_{4} R_{2}+C_{5} L_{4} R_{5}\right)+s^{2} \left(C_{2} L_{4} R_{5}+C_{5} L_{5} L_{5} L_{5} L_{5}\right)+s^{2} \left(C_{2} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5}\right)+s^{2} \left(C_{2} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5}\right)+s^{2} \left(C_{2} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5} L_{5}\right)+s^{2} \left(C_{2} L_{5} L_{5}\right)+s^{2} \left(C_{2} L_{5} L_$  $H(s) = \frac{s^4 \left(C_2 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_5 L_2 L_4 R_2 + C_2 C_5 L_2 L_4 R_2 + C_2 C_5 L_2 L_4 R_2 g_m + C_2 L_4 R_2 g_m +$ 

10.710 INVALID-ORDER-710 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{s^5 \left(C_2 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_5 L_2 L_4 L_5\right) + s^4 \left(-C_2 C_5 L_2 L_4 R_2 + C_2 C_5 L_4 L_5 R_2\right) + s^3 \left(C_2 L_2 L_4 R_2 g_m + C_2 L_2 L_4 + C_5 L_4 L_5 R_2 g_m + C_4 L_5 L_5 L_5 R_2 g_m + C_4 L_5 L_5 R_2 g_m + C_5 L_5 L_5 L_5 R_5 R_5 R_5 R_5 R_5 R_5 R_$ 

10.711 INVALID-ORDER-711 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$$

 $-C_{2}C_{5}L_{2}L_{4}L_{5}R_{2}s^{5}-L_{4}R_{2}s+s^{4}\left(C_{2}L_{2}L_{4}L_{5}R_{2}g_{m}+C_{2}L_{2}L_{4}L_{5}\right)+s^{3}\left(-C_{2}L_{2}L_{4}R_{2}+C_{2}L_{4}L_{5}R_{2}-C_{5}L_{4}L_{5}R_{2}\right)+c^{2}R_{2}R_{2}R_{2}R_{2}+c^{2}R_{2}R_{2}R_{2}+c^{2}R_{2}R_{2}R_{2}+c^{2}R_{2}+c^{$  $H(s) = \frac{-C_2C_5L_2L_4L_5R_2s^3 - L_4R_2s + s^4\left(C_2L_2L_4L_5R_2g_m + C_2L_2L_4L_5\right) + s^3\left(-C_2L_2L_4R_2 + C_2L_4L_5R_2 - C_5L_4L_5R_2\right)}{2C_2C_4C_5L_2L_4L_5R_2s^6 + 2R_2 + s^5\left(2C_2C_4L_2L_4L_5R_2g_m + 2C_2C_5L_4L_5\right) + s^4\left(2C_2C_4L_2L_4R_2 + 2C_2C_4L_4L_5R_2 + 2C_2C_5L_4L_5R_2 + 2C_2C_5L_4L_5R_2\right) + s^3\left(2C_2L_2L_4R_2g_m + 4C_2L_2L_4 + 2C_2L_4L_5R_2g_m + 2C_2C_4L_4L_5R_2\right)}$ 

10.712 INVALID-ORDER-712 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{L_4s}{C_4L_4s^2+1}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$$

 $\frac{s^{\circ} \left( C_{2}C_{5}L_{2}L_{4}L_{5}R_{2}g_{m} + C_{2}C_{5}L_{2}L_{4}L_{5}\right) + s^{\circ} \left( C_{2}C_{5}L_{2}L_{4}R_{5}g_{m} - C_{2}C_{5}L_{2}L_{4}R_{5}g_{m} + 2C_{2}C_{4}C_{5}L_{2}L_{4}R_{5}g_{m} + 2C_{2}C_{4}C_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{4}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m} + 2C_{2}C_{5}L_{5}L_{5}R_{5}g_{m$ 

10.713 INVALID-ORDER-713 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$$

 $H(s) = \frac{-c_2c_5L_2L_4L_5R_2s_6 + 2R_2R_5 + s^5\left(2C_2C_4L_2L_4L_5R_2s_6 + 2C_2C_4L_2L_4L_5R_2 + 2C_2C_4L_2L_4L_5R_2 + 2C_2C_4L_4L_5R_2 + 2C_4C_4L_4L_5R_2 + 2C_4C_4$ 

10.714 INVALID-ORDER-714 
$$Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$$

 $\frac{s^{5} \left(C_{2} C_{5} L_{2} L_{4} L_{5} R_{5} R_{5}$ 

10.715 INVALID-ORDER-715 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4s}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

 $H(s) = \frac{1}{2R_2R_5g_m + 2R_2 + 2R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_5g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 2C_2C_4C_5L_2L_4R_2R_5 + 2C_2C_4C_5L_4L_5R_2R_5 + 2C_2C_4L_5L_4L_5R_2g_m + 4C_2C_5L_2L_4L_5\right) + s^4\left(2C_2C_4L_2L_4R_2R_5g_m + 2C_2C_4L_2L_4R_2R_5 + 2C_2C_4L_2L_4R_5 + 2C_2C_4L_2L_4$ 

10.716 INVALID-ORDER-716 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, R_5, \infty\right)$$

 $\frac{R_2R_5g_m - R_2 + R_5 + s^4 \left(C_2C_4L_2L_4R_2R_5g_m - C_2C_4L_2L_4R_2 + C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + C_2C_4L_2R_2R_5g_m - C_2L_2R_2 + C_2L_2R_5 + C_4L_4R_2R_5g_m - C_4L_4R_2 + C_4L_4R_5 \right) + s^2 \left(C_2C_4R_2R_4R_5 + C_2C_4L_2R_4R_5 +$ 

10.717 INVALID-ORDER-717 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{1}{C_5s}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2s^5 + R_2g_m + s^4\left(-C_2C_4C_5L_2R_2R_4 + C_2C_4L_2L_4R_2g_m + C_2C_4L_2R_4 + C_2C_4L_4R_4 + C_2$ 

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10.718 INVALID-ORDER-718 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{R_5}{C_5R_5s+1}, \infty\right)
```

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_5s^5 + R_2R_5g_m - R_2 + R_5 + s^4\left(-C_2C_4C_5L_2R_2R_4R_5 + C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_2 + S_3g_m - C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_2 + S_3g_m - C_2C_4L_2L_4R_2 + S_3g_m - S_3g_m -$ 

10.719 INVALID-ORDER-719 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^5 \left(C_2 C_4 C_5 L_2 L_4 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 R_4 R_5 + C_2 C_4 C_5 L_2 R_4 R_5 + C_2 C_4 C_5 L_2 R_4 R_5 + C_2 C_4 L_2 L_4 R_2 g_m + C_2 L_4 L_4 R$ 

10.720 INVALID-ORDER-720 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ L_5s + \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2 g_m + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 R_2 + C_2 C_4 C_5 L_2 L_5 R_2 R_4 + C_2 C_4 C_5 L_2 L_4 R_2 g_m + C_2 C_4 L_2 L_4 + C_2 C_5 L_2 L_5 R_2 g_m + C_2 C_5 L_2 L_5 R_2 g_m + C_2 C_4 C_5 L_2 R_2 R_4 +$ 

10.721 INVALID-ORDER-721 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{L_5s}{C_5L_5s^2+1}, \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2s^6 - R_2 + s^5\left(-C_2C_4C_5L_2L_5R_2R_4 + C_2C_4L_2L_4L_5\right) + s^4\left(-C_2C_4L_2L_4R_2 + C_2C_4L_2L_5R_2R_4g_m + C_2C_4L_2L_5R_4 + C_2C_4L_2L_5R_4 + C_2C_4L_2L_4R_2g_m + C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_2 + C_2C_4L_2L_4R_2 + C_2C_4L_2L_5R_4 + C_2C_4L_2L_5R_4 + C_2C_4C_5L_4L_5R_2 + C_2C_4L_2L_4R_2g_m + C_2C_4L_2L_4R$ 

10.722 INVALID-ORDER-722 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s+R_4+\frac{1}{C_4s}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2g_m + s^6 \left(C_2C_4C_5L_2L_4L_5R_2g_m + C_2C_4C_5L_2L_4R_5 + s^5 \left(C_2C_4C_5L_2L_4R_2 + C_2C_4C_5L_2L_4R_5 + C_2C_4C_5L_2L_5R_4 + C_2C_4C_5L_2L_5R_5 + C_2C_4C_5L_2L$ 

10.723 INVALID-ORDER-723 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$$

10.724 INVALID-ORDER-724 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ L_4s + R_4 + \frac{1}{C_4s}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$$

 $H(s) = \frac{R_2 R_5 g_m - R_2 + R_5 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 R_5 g_m - C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 g_m - C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 + C_2 C_4 C_5 L_2 L_5 R_2 R_4 R_5 + C_2 C_4 C_5 L_2 L_4 L_5 R_2 R_5 + C_2 C_4 L_2 L_4 L_5 R_2 g_m + C_2 C_4 L_2 L_4 L_5 \right) + s^4 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 R_4 R_5 + C_2 C_4 C_5 L_2 L_5 R_2 R_5 + C_2 C_4 C_5 L_2 L_5 R_5 R_5 + C_2 C_4 C_5 L_2 L_5 R_5 R_5 + C_2 C_4 C_5 L_2$ 

10.725 INVALID-ORDER-725 
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, L_4s + R_4 + \frac{1}{C_4s}, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \infty\right)$$

10.726 INVALID-ORDER-726 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5, \ \infty\right)$$

 $H(s) = \frac{C_2L_4R_2R_4R_5s^2 + s^3\left(C_2L_2L_4R_2R_4R_5g_m - C_2L_2L_4R_2R_4 + C_2L_2L_4R_4R_5\right) + s\left(L_4R_2R_4R_5g_m - L_4R_2R_4 + C_2L_2L_4R_2R_4 + C_2L_2L_4R_2R_4 + C_2L_2L_4R_2R_4 + C_2L_2L_4R_2R_4R_5\right) + s\left(L_4R_2R_4R_5g_m - L_4R_2R_4R_5 + s^4\left(2C_2C_4L_4L_4R_2R_4R_5 + s^4\left(2C_2C_4L_4L_4R_2R_4R_5 + s^4\left(2C_2C_4L_4R_2R_4R_5 + s^4\left(2C_2C_4L_4R_4R_5 + s^4\left(2C_4C_4R_4R_5 + s^4\left(2C_4C_4R_4R_5 + s^4\left(2C_4C_4R_4R_5 + s^4\left(2C_4R_4R_5 + s^4\left(2C_4C_4R_4R_5 + s^4\left(2C_4R_4R_5 + s^4\left(2C_4R_4R_4R_5 + s^4\right) + s^4\left(2C_4R_4R_4R_5 + s^4\left(2C_4R_4R_4R_5 + s^4\right) + s^4\left(2C_4R_4R_4$ 

10.727 INVALID-ORDER-727  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_4R_2R_4s^4 + s^3\left(C_2L_2L_4R_2R_4g_m + C_2L_2L_4R_4\right) + s^2\left(C_2L_4R_2R_4 - C_5L_4R_2R_4\right) + s\left(L_4R_2R_4g_m + L_4R_2R_4g_m + L_4R_4R_4\right) + s\left(L_4R_2R_4g_m + L_4R_4R_4R_4 + 2C_4R_4R_4R_4\right) + s\left(L_4R_2R_4g_m + L_4R_4R_4R_4 + 2C_4R_4R_4R_4\right) + s\left(L_4R_4R_4R_4 + 2C_4R_4R_4R_4 + 2C_4R_4R_4R_4\right) + s\left(L_4R_4R_4R_4R_4 + 2C_4R_4R_4R_4 + 2C_4R_4R_4R_4\right) + s\left(L_4R_4R_4R_4 + 2C_4R_4R_4R_4 + 2C_4R_4R_4\right) + s\left(L_4R_4R_4R_4 + 2C_4R_4R_4R_4 + 2C_4R_4R_4\right) + s\left(L_4R_4R_4R_4 + 2C_4R_4R_4 + 2C_4R_4R_4\right) +$ 

10.728 INVALID-ORDER-728  $Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_4R_2R_4}{2C_2C_4C_5L_2L_4R_2R_4R_5s^5 + 2R_2R_4R_5g_m + 2R_2R_4 + 2R_4R_5 + s^4\left(2C_2C_4L_2L_4R_2R_4 + 2C_2C_4L_2L_4R_2R_4 + 2C_2C_5L_2L_4R_2R_4 + 2C_2C_5L_4R_2R_4 + 2C_2C_5L_4R_4R_5 + 2C_2C_5L_4R_5 + 2C_2C_5L_4R_5 + 2C_2C_5L_4R_5 + 2C_2C_5L_4R_5 + 2C_2C_5L_4R_5 + 2C_2C_5L_4R_5 + 2C_2C_5L_4R_5$ 

10.729 INVALID-ORDER-729  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{s^4 \left( C_2 C_5 L_2 C_4 C_5 L_2 L_4 R_2 R_4 G_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 G_m + 2 C_2 C_4 C_5 L_2 L_4 R_2 R_4 G_m + 2 C_2 C_4 L_2 L_4 R_2 R_4 G_m + 2 C_2 C_5 L_2 L_4 R_2 G_m + 2 C_2 C_5 L_2 L_4$ 

10.730 INVALID-ORDER-730  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{s \cdot ( \cup_2 \cup_5 \bot_2}{2R_2R_4q_m + 2R_4 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4q_m + 2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_5L_2L_4L_5R_2q_m + 2C_2C_5L_2L_4L_5\right) + s^4 \left(2C_2C_4L_2L_4R_2R_4q_m + 2C_2C_5L_2L_4R_2R_4q_m + 2C_2C_5$ 

10.731 INVALID-ORDER-731  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_5L_2L_4L_5R_2R_4}{2C_2C_4C_5L_2L_4L_5R_2R_4s^6 + 2R_2R_4 + s^5\left(2C_2C_4L_2L_4L_5R_2R_4g_m + 2C_2C_5L_2L_4L_5R_2R_4g_m + 2C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_2L_4L_5R_2 + 4C_2C_5L_4L_5R_2 + 4C_2C_5L_5L_5R_2 + 4C_2C_5L_5$ 

10.732 INVALID-ORDER-732  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4g_m + 2R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2g_m + 2C_2C_4C_5L_2L_4L_5R_4\right) + s^5\left(2C_2C_4C_5L_2L_4R_2R_4R_5g_m + 2C_2C_4C_5L_2L_4R_2R_4 + 2C_2C_4C_5L_4L_5R_2R_4 + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5\right) + s^4\left(2C_2C_4C_5L_4L_5R_4R_5g_m + 2C_2C_4C_5L_4R_2R_4R_5g_m + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_5L_4L_5R_2g_m + 2C_2C_5L_4L_5R_2g_m + 2C_2C_4C_5L_4L_5R_2g_m + 2C_2C_4C_5L_4R_2g_m + 2C_2C$ 

10.733 INVALID-ORDER-733  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$ 

10.734 INVALID-ORDER-734  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4R_5g_m + 2R_2R_4 + 2R_4R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_4R_5g_m + 2C_2C_4C_5L_2L_4L_5R_2R_4 + 2C_2C_4C_5L_2L_4L_5R_2R_4R_5\right) + s^5\left(2C_2C_4C_5L_4L_5R_2R_4g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_2R_4g_m + 2C_2C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_5L_2L_4L_5R_2g_m + 2C_2C_5L_2L_4L_5R_2g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_4L_2L_4L_5R_4g_m + 2C_2C_4L_4L_5R_4g_m + 2C_2C_5L_4L_5R_4g_m + 2C_2C_5L_5L_4L_5R_4g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C_2C_5L_5L_5L_5R_5g_m + 2C_2C_5L_5L_5R_5g_m + 2C$ 

10.735 INVALID-ORDER-735  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{L_4R_4s}{C_4L_4R_4s^2+L_4s+R_4}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$ 

 $H(s) = \frac{1}{2R_2R_4R_5g_m + 2R_2R_4 + 2R_4R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_4R_5g_m + 2C_2C_4C_5L_2L_4L_5R_2R_4 + 2C_2C_4C_5L_2L_4L_5R_2R_4R_5 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2R_4R_5 + 2C_2C_4C_5L_2L_4L_5R_2R_4R_5 + 2C_2C_5L_2L_4L_5R_2R_4R_5 + 2C_2C_5L_2L_4L_5R_4R_5 + 2C_2C_5L_2L_4L_5R_2R_4R_5 + 2C_2C_5L_2L_4L_5R_4R_5 + 2C_2C_5L_5L_5L_5R_5R_5 + 2C_2C_5L_5L_5L_5R_5R_5 + 2C_2C_5L_5L_5L_5R_5R_5R_5 + 2C_2C_5L_5L_5L_5R_5R_5R_5 + 2C_2C_5L_5L_5L$ 

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10.736 INVALID-ORDER-736 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, R_5, \infty\right)
```

 $H(s) = \frac{R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_4L_2L_4R_2R_4F_5g_m - C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2L_2L_4R_2 + C_2L_2L_$ 

10.737 INVALID-ORDER-737 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_4L_2L_4R_2R_4g_m + C_2C_5L_2L_4R_2\right) + s^3\left(C_2C_4L_4R_2R_4 - C_2C_5L_2R_2R_4 + C_2L_2L_4R_2g_m + C_2L_2L_4 - C_4C_5L_4R_2R_4\right) + s^2\left(C_2C_4L_4R_2R_4 - C_2C_5L_2L_4R_2R_4 + C_2C_5L_2R_4R_4 + C_2C_5L_2R_4R_4 + C_2C_5L_4R_2R_4 + C_2C_5L_4R_4 + C_2C_5L_4R_$ 

10.738 INVALID-ORDER-738 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$$

 $-C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}R_{5}s^{5}+R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}R_{5}+s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}+s^{4}R_{5}R_{4}R_{5}+s^{4}R_{5}R_{4}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}R_{5}R_{5}+s^{4}$  $-C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}R_{5}s^{5} + R_{2}R_{4}R_{5}g_{m} - R_{2}R_{4} + R_{4}R_{5} + s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m} - R_{2}R_{4}R_{5}g_{m} - R_{2}R_{4} + R_{4}R_{5} + s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m} - R_{2}R_{4}R_{5}g_{m} - R_{2}R_{4} + R_{4}R_{5} + s^{4}\left(C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}R_{5}g_{m} - R_{2}R_{4}R_{5}g_{m} - R_{2}R_$ 

10.739 INVALID-ORDER-739 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ R_5 + \frac{1}{C_5s}, \ \infty\right)$$

 $\frac{R_{2}R_{4}g_{m}+R_{4}+s^{5}\left(C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}g_{m}-C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}R_{4}+C_{2}C_{4}L_{2}L_{4}R_{2}R_{4}+C_{2}C_{4}L_{2}L_{4}R_{2}+C_{2}C_{5}L_{2}L_{4}R_{2}+C_{2}C_{5}L_{2}L_{4}R_{5}\right)+s^{4}\left(C_{2}C_{4}C_{5}L_{2}L_{4}R_{2}+C_{2}C_{4}L_{2}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{2}+C_{2}C_{5}L_{4}L_{4}R_{5}+C_{2}C_{5}L_{4}L_{4}R_{5}+C_{2}C_{5}L_{4}L_{4}R_{5}+C_{2}C_{5}L_{4}L_{4}R_{5}+C_{2}C_{5}L_{4}L_{4}R_{5}$ 

10.740 INVALID-ORDER-740 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s+\frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2 R_4 g_m + R_4 + s^6 \left(C_2 C_4 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_4 C_5 L_2 L_4 R_2 R_4 + C_2 C_4 L_5 L_4 L_5 R_2 g_m + C_2 C_5 L_2 L_4 R_2 R_4 + C_2 C_5 L_2 L_4 R_2 R_4 + C_2 C_5 L_2 L_4 L_5 R_2 g_m + C_2 C_5 L_2 L_4 R_2 R_4 + C_2 C_5 L_4 R$ 

10.741 INVALID-ORDER-741 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$$

 $\frac{-C_2C_4C_5L_2L_4L_5R_2R_4s^6 - R_2R_4 + s^5\left(C_2C_4L_2L_4L_5R_2R_4g_m + C_2C_4L_2L_4L_5R_4 - C_2C_5L_2L_4L_5R_2R_4g_m + C_2C_4L_2L_4L_5R_2R_4g_m + C_2C_4L_2L_4L_5R_4 - C_2C_5L_2L_4L_5R_2g_m + C_2C_4L_2L_4L_5R_2g_m + C_2C_4L_2L_4R_2g_m + C_2C_$ 

10.742 INVALID-ORDER-742 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ L_5s+R_5+\frac{1}{C_5s}, \ \infty\right)$$

 $H(s) = \frac{R_2R_4g_m + R_4 + s^6\left(C_2C_4C_5L_2L_4L_5R_2g_m + C_2C_4C_5L_2L_4L_5R_2g_m + C_2C_4C_5L_2L_4R_2R_4R_5 + C_2C_4C_5L_2L_4R_2R_4R_5 + C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_2R_4 + C_2C_4C_5L_2L_4R_2 + C_2C_4C_5L_4R_2 +$ 

10.743 INVALID-ORDER-743 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \infty\right)$$

 $\overline{2R_{2}R_{4}R_{5}g_{m}+2R_{2}R_{5}+4R_{4}R_{5}+s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}g_{m}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{5}+4C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{4}R_{5}\right)+s^{5}\left(4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}R_{4}R_{5}+2C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}R_{5}g_{m}+2C_{2}C_{4}L_{4}L_{5}R_{2}R_{5}g_{m}+2C_{2}C_{4}L_{4}L_{5}R_{2}R_{5}g_{m}+2C_{2}C_{4}L_{4}L_{5}R_{2}R_{5}g_{m}+2C_{2}C_{4}L_{4}L_{5}R_{2}R_{5}g_{m}+2C_{2}C_{4}L_{4}L_{5}$ 

10.744 INVALID-ORDER-744 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$$

 $\frac{R_{2}R_{4}R_{5}g_{m}-R_{2}R_{4}+R_{4}R_{5}+s^{6}\left(C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}+R_{5}+s^{6}\left(C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+R_{5}+c_{2}C_{4}L_{2}L_{4}L_{5}R_{2}+R_{4}g_{m}+C_{2}C_{4}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}+C_{2}C_{4}C_{5}L_{4}L_{5}R_{2}+C_{2}C_{4}C$ 

10.745 INVALID-ORDER-745  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{C_4L_4R_4s^2+L_4s+R_4}{C_4L_4s^2+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$ 

 $H(s) = \frac{1621441639m}{2R_2R_4g_m + 2R_2R_5g_m + 2R_2 + 4R_4 + 2R_5 + s^6 \left(2C_2C_4C_5L_2L_4L_5R_2R_4g_m + 2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_5 \right) + s^5 \left(2C_2C_4C_5L_2L_4R_2R_4R_5g_m + 2C_2C_4C_5L_2L_4R_2R_4R_5g_m + 2C_2C_4C_5L_2L_4R_2R_5g_m + 2C_2C_4C_5L_4R_3R_5g_m + 2C_2C_4C_5L_4R_3R_5g_m + 2C_2C_4C_5L_4R_3R_5g_m + 2C_2C_4C_5L_4R_5g_m + 2C$ 

10.746 INVALID-ORDER-746  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, R_5, \infty\right)$ 

 $H(s) = \frac{C_2C_4L_4R_2R_4R_5s^3 + C_2R_2R_4R_5s + R_2R_4R_5g_m - R_2R_4 + R_4R_5 + s^4\left(C_2C_4L_2L_4R_2R_4R_5g_m - C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2R_4 + C_2C_4L_2L_4R_2 + 4C_2C_4L_2L_4R_2 + 4C_2C_4L_2L_4R_2 + 4C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4R_5 + C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m - C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5g_m + 2C_2C_4L_2R_4R_5 + s^4\left(C_2C_4L_2R_4R_5 + s^4c_4C_4R_4R_5 + s^4c$ 

10.747 INVALID-ORDER-747  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{1}{C_5s}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4R_2R_4s^5 + R_2R_4g_m + R_4 + s^4\left(C_2C_4L_2L_4R_2R_4g_m + C_2C_4L_2L_4R_4\right) + s^3\left(C_2C_4L_4R_2R_4 - C_2C_5L_2R_2R_4 - C_4C_5L_4R_4\right) + s^4\left(2C_2C_4C_5L_2R_4R_4 + s^4\left(2C_2C_4C_5L_4R_2R_4 + 2C_2C_4L_4R_4\right) + s^3\left(2C_2C_4L_2R_4R_4 + 2C_2C_4L_4R_4\right) + s^4\left(2C_2C_4C_5L_4R_4 + 2C_2C_4L_4R_4\right) + s^4\left(2C_2C_4C_5L_4R_4\right) + s^4\left(2C_4C_5L_4R_4\right) + s^4\left($ 

10.748 INVALID-ORDER-748  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5}{C_5R_5s+1}, \ \infty\right)$ 

10.749 INVALID-ORDER-749  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, R_5 + \frac{1}{C_5s}, \infty\right)$ 

10.750 INVALID-ORDER-750  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, L_5s + \frac{1}{C_5s}, \infty\right)$ 

10.751 INVALID-ORDER-751  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{L_5s}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{-C_2C_4C_5L_2L_4L_5R_2R_4}{2R_2R_4g_m + 2R_2 + 4R_4 + s^6\left(2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4C_5L_2L_4L_5R_4\right) + s^5\left(2C_2C_4C_5L_2L_4L_5R_2 + 4C_2C_4L_5L_4L_5R_2 + 4C_2C_4L_5L_5R_2 +$ 

10.752 INVALID-ORDER-752  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, L_5s + R_5 + \frac{1}{C_5s}, \infty\right)$ 

 $\frac{R_2R_4g_m + R_4 + s + c_2C_4C_5L_2L_4F_5R_2g_m + R_4 + s + c_2C_4C_5L_2L_4F_5R_2R_4g_m + R_4 + s + c_2C_4C_5L_4R_2R_4g_m + R_4 + s + c_2C_4C_5L_4R_4R_4 + R_4R_4g_m + R_4 + s + c_2C_4C_5L_4R_4R_4 + R_4R_4g_m + R$ 

10.753 INVALID-ORDER-753  $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \frac{R_4(C_4L_4s^2+1)}{C_4L_4s^2+C_4R_4s+1}, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \infty\right)$ 

10.754 INVALID-ORDER-754  $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{C_5L_5R_5s^2+L_5s+R_5}{C_5L_5s^2+1}, \ \infty\right)$ 

 $H(s) = \frac{1}{2R_{2}R_{4}g_{m} + 2R_{2}R_{5}g_{m} + 2R_{2} + 4R_{4} + 2R_{5} + s^{6}\left(2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2}R_{4}g_{m} + 2C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2} + 4C_{2}C_{4}C_{5}L_{2}L_{4}L_{5}R_{2} + 4C_{2}C_{4}C_{5}L_{4}L_{5}R_{2} + 4C_{2}C_{4}C_{5}L_{4}L_{5}R_{4} + 4C_{2}C_{4}C_{5}L_{4}L_{5}R_{4} + 4C_{2}C_{4}C_{5}L_{4}L_{5}R_{4} + 4C_{2}C_{4}C_{5}L_{4}L_{5}R$ 

10.755 INVALID-ORDER-755 
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \frac{R_4\left(C_4L_4s^2+1\right)}{C_4L_4s^2+C_4R_4s+1}, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \infty\right)$$

## 11 PolynomialError