Filter Table: None

Generated by MacAnalog-Symbolix

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Filter Order	Z Combo	Transfer Function	Valid	Filter Type	Parameters
None	$\left(R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	$\frac{L_L R_1 R_L g_m s}{(R_1 g_m + 1)(C_L L_L R_L s^2 + L_L s + R_L)}$	Yes	BP	Q: $C_L R_L \sqrt{\frac{1}{C_L L_L}}$; wo: $\sqrt{\frac{1}{C_L L_L}}$; bandwidth: $\frac{1}{C_L R_L}$; K-LP: 0; K-HP: 0; K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$; Qz: 0; Wz: None;
None	$\left(L_1s, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$	$\frac{L_1 R_L g_m s}{(C_L R_L s + 1)(L_1 g_m s + 1)}$	Yes	BP	Q: $\frac{C_L L_1 R_L g_m \sqrt{\frac{1}{C_L L_1 R_L g_m}}}{C_L R_L + L_1 g_m}$; wo: $\sqrt{\frac{1}{C_L L_1 R_L g_m}}$; bandwidth: $\frac{C_L R_L + L_1 g_m}{C_L L_1 R_L g_m}$; K-LP: 0; K-HP: 0; K-BP: $\frac{L_1 R_L g_m}{C_L R_L + L_1 g_m}$; Qz: 0; Wz: None;
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$\frac{L_1 R_L g_m s}{C_1 L_1 s^2 + L_1 g_m s + 1}$	Yes	BP .	Q: $\frac{C_1\sqrt{\frac{1}{C_1L_1}}}{g_m}$; wo: $\sqrt{\frac{1}{C_1L_1}}$; bandwidth: $\frac{g_m}{C_1}$; K-LP: 0; K-HP: 0; K-BP: R_L ; Qz: 0; Wz: None;
None	$\left(rac{1}{C_1s+rac{1}{R_1}+rac{1}{L_1s}}, \infty, \infty, \infty, \infty, R_L ight)$	$\frac{L_1 R_1 R_L g_m s}{C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1}$	Yes	BP	Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$; K-LP: 0; K-HP: 0; K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$; Qz: 0; Wz: None;
None	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$	$\frac{R_L g_m}{(C_1 s + g_m)(C_L R_L s + 1)}$	Yes	LP	Q: $\frac{C_1C_LR_L\sqrt{\frac{g_m}{C_1C_LR_L}}}{C_1+C_LR_Lg_m}$; wo: $\sqrt{\frac{g_m}{C_1C_LR_L}}$; bandwidth: $\frac{C_1+C_LR_Lg_m}{C_1C_LR_L}$; K-LP: R_L ; K-HP: 0; K-BP: 0; Qz: None; Wz: None;
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)$	$\frac{R_1 R_L g_m}{(C_L R_L s + 1)(C_1 R_1 s + R_1 g_m + 1)}$	Yes	LP	Q: $\frac{C_1C_LR_1R_L\sqrt{\frac{R_1g_m+1}{C_1C_LR_1R_L}}}{C_1R_1+C_LR_1R_Lg_m+C_LR_L}$; wo: $\sqrt{\frac{R_1g_m+1}{C_1C_LR_1R_L}}$; bandwidth: $\frac{C_1R_1+C_LR_1R_Lg_m+C_LR_L}{C_1C_LR_1R_L}$; K-LP: $\frac{R_1R_Lg_m}{R_1g_m+1}$; K-HP: 0; K-BP: 0; Qz: None; Wz: None;
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{L_1 g_m}{C_L(C_1 L_1 s^2 + L_1 g_m s + 1)}$	Yes	LP	Q: $\frac{C_1\sqrt{\frac{1}{C_1L_1}}}{g_m}$; wo: $\sqrt{\frac{1}{C_1L_1}}$; bandwidth: $\frac{g_m}{C_1}$; K-LP: $\frac{L_1g_m}{C_L}$; K-HP: 0; K-BP: 0; Qz: None; Wz: None;
None	$\left(\frac{1}{C_1s+\frac{1}{R_1}+\frac{1}{L_1s}}, \infty, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	$\frac{L_1 R_1 g_m}{C_L(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$	Yes	LP	Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$; K-LP: $\frac{L_1 g_m}{C_L}$; K-HP: 0; K-BP: 0; Qz: None; Wz: None;
None	$\left(R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	$\frac{R_1 R_L g_m \left(C_L L_L s^2 + 1\right)}{(R_1 g_m + 1)(C_L L_L s^2 + C_L R_L s + 1)}$	Yes	BS	Q: $\frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L}$; wo: $\sqrt{\frac{1}{C_L L_L}}$; bandwidth: $\frac{R_L}{L_L}$; K-LP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$; K-HP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$; K-BP: 0; Qz: None; Wz: $\sqrt{\frac{1}{C_L L_L}}$;
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$\frac{R_L g_m \left(C_1 L_1 s^2 + 1\right)}{C_1 L_1 g_m s^2 + C_1 s + g_m}$	Yes	BS	Q: $L_1 g_m \sqrt{\frac{1}{C_1 L_1}}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{1}{L_1 g_m}$; K-LP: R_L ; K-HP: R_L ; K-BP: 0; Qz: None; Wz: $\sqrt{\frac{1}{C_1 L_1}}$;
None	$\left(\frac{R_1\left(L_1s+\frac{1}{C_1s}\right)}{L_1s+R_1+\frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, R_L\right)$	$\frac{R_1R_Lg_m\!\left(C_1L_1s^2\!+\!1\right)}{C_1L_1R_1g_ms^2\!+\!C_1L_1s^2\!+\!C_1R_1s\!+\!R_1g_m\!+\!1}$	Yes	BS	Q: $\frac{L_1\sqrt{\frac{1}{C_1L_1}}(R_1g_m+1)}{R_1}$; wo: $\sqrt{\frac{1}{C_1L_1}}$; bandwidth: $\frac{R_1}{L_1(R_1g_m+1)}$; K-LP: $\frac{R_1R_Lg_m}{R_1g_m+1}$; K-HP: $\frac{R_1R_Lg_m}{R_1g_m+1}$; K-BP: 0; Qz: None; Wz: $\sqrt{\frac{1}{C_1L_1}}$;
	, , ,	$R_L g_m \left(C_1 L_1 s^2 + C_1 R_1 s + 1 \right)$	7.7	Q.D.	'
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$C_1L_1g_m\dot{s}^2 + C_1R_1g_m\dot{s} + C_1\dot{s} + g_m$	Yes	GE	Q: $\frac{L_1 g_m \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_{m+1}}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{R_1 g_m + 1}{L_1 g_m}$; K-LP: R_L ; K-HP: R_L ; K-BP: $\frac{R_1 R_L g_m}{R_1 g_{m+1}}$; Qz: $\frac{L_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1}$; Wz: $\sqrt{\frac{1}{C_1 L_1}}$;
None	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$\frac{R_L g_m \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1}$	Yes	GE	Q: $\frac{C_1\sqrt{\frac{1}{C_1L_1}}(R_1g_m+1)}{g_m}$; wo: $\sqrt{\frac{1}{C_1L_1}}$; bandwidth: $\frac{g_m}{C_1(R_1g_m+1)}$; K-LP: $\frac{R_1R_Lg_m}{R_1g_m+1}$; K-HP: $\frac{R_1R_Lg_m}{R_1g_m+1}$; K-BP: R_L ; Qz: $C_1R_1\sqrt{\frac{1}{C_1L_1}}$; Wz: $\sqrt{\frac{1}{C_1L_1}}$;
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_L R_L s + 1}\right)$	$\frac{R_L g_m(C_1 R_1 s + 1)}{(C_L R_L s + 1)(C_1 R_1 g_m s + C_1 s + g_m)}$	Yes	INVALID-NUMER	Q: $\frac{C_1C_LR_L\sqrt{\frac{g_m}{C_1C_LR_L(R_1g_m+1)}(R_1g_m+1)}(R_1g_m+1)}{C_1R_1g_m+C_1+C_LR_Lg_m}$; wo: $\sqrt{\frac{g_m}{C_1C_LR_L(R_1g_m+1)}}$; bandwidth: $\frac{C_1R_1g_m+C_1+C_LR_Lg_m}{C_1C_LR_L(R_1g_m+1)}$; K-LP: R_L ; K-HP: 0; K-BP: $\frac{C_1R_1R_Lg_m}{C_1R_1g_m+C_1+C_LR_Lg_m}$; Qz: 0; Wz: None;
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$		Yes	INVALID-NUMER	$Q: \frac{C_1\sqrt{\frac{1}{C_1L_1}}}{g_m}; \text{ wo: } \sqrt{\frac{1}{C_1L_1}}; \text{ bandwidth: } \frac{g_m}{C_1}; \text{ K-LP: } \frac{L_1g_m}{C_L}; \text{ K-HP: 0; K-BP: } R_L; \text{ Qz: 0; Wz: None;}$
		$\frac{L_1 g_m (C_L R_L s + 1)}{C_L (C_1 L_1 s^2 + L_1 g_m s + 1)}$			
None	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	$\frac{L_1 R_1 g_m (C_L R_L s + 1)}{C_L (C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$	Yes	INVALID-NUMER	Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$; K-LP: $\frac{L_1 g_m}{C_L}$; K-HP: 0; K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$; Qz: 0; Wz: None;
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, L_Ls + \frac{1}{C_Ls}\right)$	$\frac{L_1 g_m \left(C_L L_L s^2 + 1\right)}{C_L \left(C_1 L_1 s^2 + L_1 g_m s + 1\right)}$	No	INVALID-WZ	Q: $\frac{C_1\sqrt{\frac{1}{C_1L_1}}}{g_m}$; wo: $\sqrt{\frac{1}{C_1L_1}}$; bandwidth: $\frac{g_m}{C_1}$; K-LP: $\frac{L_1g_m}{C_L}$; K-HP: $\frac{L_Lg_m}{C_1}$; K-BP: 0; Qz: None; Wz: $\sqrt{\frac{1}{C_LL_L}}$;
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls+R_L+\frac{1}{C_Ls}\right)$	$\frac{L_1 g_m \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_L \left(C_1 L_1 s^2 + L_1 g_m s + 1\right)}$	No	INVALID-WZ	$Q: \frac{C_1\sqrt{\frac{1}{C_1L_1}}}{g_m}; \text{ wo: } \sqrt{\frac{1}{C_1L_1}}; \text{ bandwidth: } \frac{g_m}{C_1}; \text{ K-LP: } \frac{L_1g_m}{C_L}; \text{ K-HP: } \frac{L_Lg_m}{C_1}; \text{ K-BP: } R_L; \text{ Qz: } \frac{L_L\sqrt{\frac{1}{C_1L_1}}}{R_L}; \text{ Wz: } \sqrt{\frac{1}{C_LL_L}};$
					V V
None	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$	$\frac{L_1 R_1 g_m \left(C_L L_L s^2 + 1\right)}{C_L \left(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1\right)}$	No	INVALID-WZ	Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$; K-LP: $\frac{L_1 g_m}{C_L}$; K-HP: $\frac{L_L g_m}{C_1}$; K-BP: 0; Qz: None; Wz: $\sqrt{\frac{1}{C_L L_L}}$;
None	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	$rac{L_1R_1g_mig(C_LL_Ls^2\!+\!C_LR_Ls\!+\!1ig)}{C_L(C_1L_1R_1s^2\!+\!L_1R_1g_ms\!+\!L_1s\!+\!R_1)}$	No	INVALID-WZ	Q: $\frac{C_1 R_1 \sqrt{\frac{1}{C_1 L_1}}}{R_1 g_m + 1}$; wo: $\sqrt{\frac{1}{C_1 L_1}}$; bandwidth: $\frac{R_1 g_m + 1}{C_1 R_1}$; K-LP: $\frac{L_1 g_m}{C_L}$; K-HP: $\frac{L_L g_m}{C_1}$; K-BP: $\frac{R_1 R_L g_m}{R_1 g_m + 1}$; Qz: $\frac{L_L \sqrt{\frac{1}{C_1 L_1}}}{R_L}$; Wz: $\sqrt{\frac{1}{C_L L_L}}$;
None	$\frac{\left(C_1s + \frac{1}{R_1} + \frac{1}{L_1s}, \cdots, \infty, \infty, \infty, \infty, L_Ls + C_Ls\right)}{\left(R_1, \infty, \infty, \infty, \infty, \infty, R_L\right)}$	$\frac{C_L(C_1L_1R_1s^2 + L_1R_1g_ms + L_1s + R_1)}{\frac{R_1R_Lg_m}{R_1g_m + 1}}$	No	INVALID - ORDER	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
None	$\left(R_1, \infty, \infty, \infty, \infty, \frac{1}{C_L s}\right)$	$\frac{R_1g_m+1}{R_1g_m}$ $\frac{C_Ls(R_1g_m+1)}{C_Ls(R_1g_m+1)}$	No	INVALID - ORDER	NONE
None	$\left(R_1, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	$\frac{R_1 R_L g_m}{(R_1 g_m + 1)(C_L R_L s + 1)}$	No	INVALID-ORDER	NONE
None	$\left(R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	$\frac{R_{1}g_{m}(C_{L}R_{L}s+1)}{C_{L}s(R_{1}g_{m}+1)}$	No	INVALID-ORDER	NONE
None	$\left(R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_{L s}}\right)$	$R_1g_m\left(C_LL_Ls^2+1\right)$	No	INVALID-ORDER	NONE
None	$\left(R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	$\frac{C_L s(R_1 g_m + 1)}{L_L R_1 g_m s}$ $\frac{L_L R_1 g_m s}{(R_1 g_m + 1)(C_L L_L s^2 + 1)}$	No	INVALID - ORDER $INVALID - ORDER$	NONE
None	$\frac{\left(R_1, \infty, \infty, \infty, \infty, \sum_{LLs^2+1}\right)}{\left(R_1, \infty, \infty, \infty, \infty, \sum_{Ls} + R_L + \frac{1}{C_Ls}\right)}$	$R_1 g_m \left(C_L L_L s^2 + C_L R_L s + 1 \right)$	No	INVALID - ORDER	NONE
		$C_L s(R_1 g_m + 1) $ $R_1 g_m \left(C_L L_L R_L s^2 + L_L s + R_L \right)$			
None	$\left(R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	$R_1g_m+1)(C_LL_Ls^2+1)$	No	INVALID ORDER	NONE NONE
None None	$(L_1s, \infty, \infty, \infty, \infty, R_L)$ $\left(L_1s, \infty, \infty, \infty, \infty, \frac{1}{C_Ls}\right)$	$rac{L_1R_Lg_ms}{L_1g_ms+1} \ L_1g_m$	No No	INVALID - ORDER $INVALID - ORDER$	NONE NONE
None	$\frac{\left(L_{1}s,\ \infty,\ \infty,\ \infty,\ \infty,\ \frac{1}{C_{L}s}\right)}{\left(L_{1}s,\ \infty,\ \infty,\ \infty,\ \infty,\ R_{L}+\frac{1}{C_{L}s}\right)}$	$rac{L_1g_m}{C_L(L_1g_ms+1)} \ L_1g_m(C_LR_Ls+1)$	No	INVALID - ORDER $INVALID - ORDER$	NONE
		$\overline{\frac{C_L(L_1g_ms+1)}{C_L(L_Ls^2+1)}}$			
None	$\left(L_1s, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$	$C_L(L_1g_ms+1)$ $L_1L_Lg_ms^2$	No	INVALID - ORDER	NONE
None	$\left(L_1s, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$	$\frac{\frac{L_{1}L_{Lgm}}{(C_{L}L_{L}s^{2}+1)(L_{1}g_{m}s+1)}}{L_{1}g_{m}(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1)}$	No	INVALID - ORDER	NONE
None	$\left(L_1 s, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	$C_L(L_1g_ms+1)$	No	INVALID-ORDER	NONE
None	$\left(L_1 s, \; \infty, \; \infty, \; \infty, \; \infty, \; rac{1}{C_L s + rac{1}{R_L} + rac{1}{L_L s}} ight)$	$\frac{L_1L_LR_Lg_ms^2}{(L_1g_ms+1)(C_LL_LR_Ls^2+L_Ls+R_L)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	$rac{L_{1}g_{m}s\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L} ight)}{\left(C_{L}L_{L}s^{2}+1 ight)\left(L_{1}g_{m}s+1 ight)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$	$L_1R_Lg_ms(C_LL_Ls^2+1)$	No	INVALID-ORDER	NONE
		$\frac{(L_{1}g_{m}s+1)(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1)}{R_{1}g_{m}}$			
None	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$\frac{R_L g_m}{C_1 s + g_m}$	No	INVALID - ORDER	NONE
None	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{g_m}{C_L s(C_1 s + g_m)}$	No	INVALID - ORDER	NONE
None	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	$rac{g_m(C_LR_Ls+1)}{C_Ls(C_1s+g_m)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$	$\frac{g_m \left(C_L L_L s^2 + 1\right)}{C_L s(C_1 s + g_m)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	$rac{L_L g_m s}{(C_1 s + g_m)(C_L L_L s^2 + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	$rac{g_mig(C_LL_Ls^2+C_LR_Ls+1ig)}{C_Ls(C_1s+g_m)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_1 s}, \infty, \infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$	$\frac{L_L R_L g_m s}{(C_1 s + g_m)(C_L L_L R_L s^2 + L_L s + R_L)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_1s}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	$g_m \left(C_L L_L R_L s^2 + L_L s + R_L \right)$	No	INVALID-ORDER	NONE
	$\left(\frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$	$\frac{(\hat{C}_1 s + g_m)(C_L L_L s^2 + 1)}{R_L g_m \left(C_L L_L s^2 + 1\right)}$			
None		$\overline{(C_1s+g_m)(C_L^{'}L_Ls^2+C_L\overset{'}{R}_Ls+1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$\frac{R_{1}R_{L}g_{m}}{C_{1}R_{1}s+R_{1}g_{m}+1}$	No	INVALID - ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{R_1g_m}{C_Ls(C_1R_1s+R_1g_m+1)}$ $R_1g_1(C_2R_1s+1)$	No	INVALID - ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$	$rac{R_1 g_m (C_L R_L s + 1)}{C_L s (C_1 R_1 s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$	$\frac{R_1 g_m \left(C_L L_L s^2 + 1\right)}{C_L s \left(C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1}\right)$	$\frac{L_L R_1 g_m s}{(C_L L_L s^2 + 1)(C_1 R_1 s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$	$\frac{R_1g_m\!\left(C_LL_Ls^2\!+\!C_LR_Ls\!+\!1\right)}{C_Ls\!\left(C_1R_1s\!+\!R_1g_m\!+\!1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \infty, \infty, \infty, \infty, \frac{1}{C_Ls+\frac{1}{R_I}+\frac{1}{L_Is}}\right)$	$\frac{L_L R_1 R_L g_m s}{(C_1 R_1 s + R_1 g_m + 1)(C_L L_L R_L s^2 + L_L s + R_L)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	$R_1g_m\left(C_LL_LR_Ls^2+L_Ls+R_L\right)$	No	INVALID-ORDER	NONE
		$\frac{\overline{(C_L L_L s^2 + 1)(C_1 R_1 s + R_1 g_m + 1)}}{R_1 R_L g_m (C_L L_L s^2 + 1)}$			
None	$\left(\frac{R_1}{C_1R_1s+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$	$\overline{(C_1R_1s + R_1g_m + 1)(C_LL_Ls^2 + C_LR_Ls + 1)}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L\right)$	$\frac{R_L g_m(C_1 R_1 s+1)}{C_1 R_1 g_m s+C_1 s+g_m}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s}\right)$	$\frac{g_m(C_1R_1s+1)}{C_Ls(C_1R_1g_ms+C_1s+g_m)}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_L s}\right)$	$rac{g_m(C_1R_1s+1)(C_LR_Ls+1)}{C_Ls(C_1R_1g_ms+C_1s+g_m)}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_L s + \frac{1}{C_L s}\right)$	$\frac{g_m(C_1R_1s+1)\big(C_LL_Ls^2+1\big)}{C_Ls(C_1R_1g_ms+C_1s+g_m)}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	$\frac{L_L g_m s(C_1 R_1 s + 1)}{(C_L L_L s^2 + 1)(C_1 R_1 g_m s + C_1 s + g_m)}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \infty, \infty, \infty, \infty, L_L s + R_L + \frac{1}{C_L s}\right)$	$\frac{g_m(C_1R_1s+1)(C_LL_Ls^2+C_LR_Ls+1)}{C_Ls(C_1R_1g_ms+C_1s+g_m)}$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right)$	$L_L R_L g_m s(C_1 R_1 s + 1)$	No	INVALID-ORDER	NONE
		$\frac{(C_1 R_1 g_m s + C_1 s + g_m)(C_L L_L R_L s^2 + L_L s + R_L)}{g_m (C_1 R_1 s + 1)(C_L L_L R_L s^2 + L_L s + R_L)}$			
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	$(C_L L_L s^2 + 1)(C_1 R_1 g_m s + C_1 s + g_m)$	No	INVALID-ORDER	NONE
None	$\left(R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	$\frac{R_L g_m (C_1 R_1 s + 1) \left(C_L L_L s^2 + 1\right)}{(C_L L_L s^2 + C_L R_L s + 1) \left(C_1 R_1 g_m s + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{g_m \left(C_1 L_1 s^2 + 1\right)}{C_L s \left(C_1 L_1 g_m s^2 + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)$	$\frac{R_{L}g_{m}(C_{1}L_{1}s^{2}+1)}{(C_{L}R_{L}s+1)(C_{1}L_{1}g_{m}s^{2}+C_{1}s+g_{m})}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$	$g_m(C_1L_1s^2+1)(C_LR_Ls+1)$	No	INVALID-ORDER	NONE
None	$\frac{\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)}{\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)}$	$\frac{\overline{C_L s(C_1 L_1 g_m s^2 + C_1 s + g_m)}}{g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}$	No	INVALID - ORDER	NONE
		$\frac{\overline{C_L s(C_1 L_1 g_m s^2 + C_1 s + g_m)}}{L_L g_m s(C_1 L_1 s^2 + 1)}$			
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	$\frac{-L_{Sm}(c_{1}L_{1}s_{1}+c_{1})}{(C_{L}L_{L}s^{2}+1)(C_{1}L_{1}g_{m}s^{2}+C_{1}s+g_{m})}$ $g_{m}(C_{1}L_{1}s^{2}+1)(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1)$	No	INVALID - ORDER	NONE
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	$C_L s(C_1 L_1 g_m s^2 + C_1 s + g_m)$	No	INVALID-ORDER	NONE
None	$\left(L_1 s + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	$\frac{L_L R_L g_m s \left(C_1 L_1 s^2 + 1\right)}{\left(C_1 L_1 g_m s^2 + C_1 s + g_m\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	$\frac{g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{\left(C_L L_L s^2 + 1\right) \left(C_1 L_1 g_m s^2 + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$	$R_{L}q_{m}(C_{1}L_{1}s^{2}+1)(C_{L}L_{L}s^{2}+1)$	No	INVALID-ORDER	NONE
		$\frac{C_L L_L s^2 + C_L R_L s + 1)(C_1 L_1 g_m s^2 + C_1 s + g_m)}{L_1 R_L g_m s}$			
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{R_L}{C_LR_Ls+1}\right)$	$\frac{L_{1}L_{L}g_{m}s}{(C_{L}R_{L}s+1)(C_{1}L_{1}s^{2}+L_{1}g_{m}s+1)}$	No	INVALID-ORDER	NONE

2

None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	$\frac{L_1 L_L g_m s^2}{(C_L L_L s^2 + 1)(C_1 L_1 s^2 + L_1 g_m s + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1 s}{C_1 L_1 s^2 + 1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	$\frac{L_{1}L_{L}R_{L}g_{m}s^{2}}{(C_{1}L_{1}s^{2}+L_{1}g_{m}s+1)(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L})}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$	$\frac{L_{1}g_{m}s\left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)}{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{1}L_{1}s^{2}+L_{1}g_{m}s+1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$	$\frac{L_1 R_L g_m s \left(C_L L_L s^2 + 1\right)}{\left(C_1 L_1 s^2 + L_1 g_m s + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{g_m(C_1L_1s^2 + C_1R_1s + 1)}{C_Ls(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls + 1}\right)$	$\frac{R_L g_m \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{\left(C_L R_L s + 1\right) \left(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$	$\frac{g_m(C_L R_L s+1) \left(C_1 L_1 s^2 + C_1 R_1 s+1\right)}{C_L s \left(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$	$\frac{g_m(C_L L_L s^2 + 1)(C_1 L_1 s^2 + C_1 R_1 s + 1)}{C_L s(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	$\frac{L_L g_m s \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{\left(C_L L_L s^2 + 1\right) \left(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \infty, \infty, \infty, \infty, L_Ls + R_L + \frac{1}{C_Ls}\right)$	$\frac{g_m(C_1L_1s^2 + C_1R_1s + 1)(C_LL_Ls^2 + C_LR_Ls + 1)}{C_Ls(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$	No	INVALID-ORDER	NONE
None	$\left(L_1 s + R_1 + \frac{1}{C_1 s}, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	$\frac{L_L R_L g_m s \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	$\frac{g_m(C_1L_1s^2 + C_1R_1s + 1)(C_LL_LR_Ls^2 + L_Ls + R_L)}{(C_LL_Ls^2 + 1)(C_1L_1g_ms^2 + C_1R_1g_ms + C_1s + g_m)}$	No	INVALID-ORDER	NONE
None	$\left(L_1s + R_1 + \frac{1}{C_1s}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$	$\frac{R_L g_m \left(C_L L_L s^2 + 1\right) \left(C_1 L_1 s^2 + C_1 R_1 s + 1\right)}{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_1 L_1 g_m s^2 + C_1 R_1 g_m s + C_1 s + g_m\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_1 s + \frac{1}{R_1} + \frac{1}{L_1 s}}, \infty, \infty, \infty, \infty, \frac{R_L}{C_L R_L s + 1}\right)$	$\frac{L_1 R_1 R_L g_m s}{(C_L R_L s + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right)$	$\frac{L_{1}L_{L}R_{1}g_{m}s^{2}}{(C_{L}L_{L}s^{2}+1)(C_{1}L_{1}R_{1}s^{2}+L_{1}R_{1}g_{m}s+L_{1}s+R_{1})}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right)$	$\frac{L_1L_LR_1R_Lg_ms^2}{(C_LL_LR_Ls^2 + L_Ls + R_L)(C_1L_1R_1s^2 + L_1R_1g_ms + L_1s + R_1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right)$	$\frac{L_1 R_1 g_m s \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{(C_L L_L s^2 + 1)(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{1}{C_{1}s + \frac{1}{R_{1}} + \frac{1}{L_{1}s}}, \infty, \infty, \infty, \infty, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)$	$\frac{L_1 R_1 R_L g_m s \left(C_L L_L s^2 + 1\right)}{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 R_1 g_m s + L_1 s + R_1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{g_m(C_1L_1R_1s^2 + L_1s + R_1)}{C_Ls(C_1L_1R_1g_ms^2 + C_1L_1s^2 + L_1g_ms + R_1g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls+1}\right)$	$\frac{R_L g_m \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{(C_L R_L s + 1)(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$	$\frac{g_m(C_L R_L s+1) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{C_L s(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$	$\frac{g_m(C_L L_L s^2 + 1)(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_L s(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1} + R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	$\frac{L_L g_m s \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{\left(C_L L_L s^2 + 1\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1s}{C_1L_1s^2+1}+R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls+R_L+\frac{1}{C_Ls}\right)$	$\frac{g_m(C_L L_L s^2 + C_L R_L s + 1)(C_1 L_1 R_1 s^2 + L_1 s + R_1)}{C_L s(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	$\frac{L_L R_L g_m s \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_1 s}{C_1 L_1 s^2 + 1} + R_1, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	$\frac{g_m \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{\left(C_L L_L s^2 + 1\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{L_{1}s}{C_{1}L_{1}s^{2}+1} + R_{1}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)$	$\frac{R_L g_m \left(C_L L_L s^2 + 1\right) \left(C_1 L_1 R_1 s^2 + L_1 s + R_1\right)}{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + L_1 g_m s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{1}{C_Ls}\right)$	$\frac{R_1 g_m \left(C_1 L_1 s^2 + 1\right)}{C_L s \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{R_L}{C_LR_Ls + 1}\right)$	$\frac{R_1 R_L g_m \left(C_1 L_1 s^2 + 1\right)}{(C_L R_L s + 1) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ R_L + \frac{1}{C_Ls}\right)$	$\frac{R_1 g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L R_L s + 1\right)}{C_L s \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + \frac{1}{C_Ls}\right)$	$\frac{R_1 g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{C_L s \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	$\frac{L_L R_1 g_m s \left(C_1 L_1 s^2 + 1\right)}{(C_L L_L s^2 + 1)(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \ \infty, \ \infty, \ \infty, \ \infty, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	$\frac{R_1 g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{C_L s \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$ \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) $	$\frac{L_L R_1 R_L g_m s \left(C_1 L_1 s^2 + 1\right)}{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$\left(\frac{R_1(L_1s + \frac{1}{C_1s})}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	$\frac{R_1 g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{\left(C_L L_L s^2 + 1\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE
None	$ \left(\frac{R_1\left(L_1s + \frac{1}{C_1s}\right)}{L_1s + R_1 + \frac{1}{C_1s}}, \infty, \infty, \infty, \infty, \infty, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) $	$\frac{R_1 R_L g_m \left(C_1 L_1 s^2 + 1\right) \left(C_L L_L s^2 + 1\right)}{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_1 L_1 R_1 g_m s^2 + C_1 L_1 s^2 + C_1 R_1 s + R_1 g_m + 1\right)}$	No	INVALID-ORDER	NONE