1 Value selection for active low pass filter

Gain	f_{cutoff} (kHz)	R_5 (kΩ)	R_6 (kΩ)	R_7 (kΩ)	C_{12} (pF)	C_{13} (pF)
1	10	1.54	1.54	11.1	10000	910
1	20	4.99	5.0	4.64	2200	750
1	30	1.01	1.01	1.1	6800	2200
0.5	10	5.0	2.5	17.4	4700	750
0.5	20	2.0	1.01	10.7	5600	620
0.5	30	3.88	1.96	6.34	2200	620
0.25	10	2.21	0.562	18.7	15000	820
0.25	20	2.7	0.681	10.7	6800	750
0.25	30	1.82	0.464	6.57	6800	820

The active filter uses a low-pass multiple-feedback (MFB) architecture and the table gives the values to create a second order Bessel filter. All the resistors and capacitors are currently in stock at Digikey. See Active Low-Pass Filter Design[1] for the formula used and comparison between different filter type and circuit topology.

2 Other tweaks

1. R_8 and C_{14} can be used for additional filter.

2. If a higher cutoff frequency is needed, reduce or remove C_2 to increase the input cutoff frequency.

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[1] http://www.ti.com/lit/an/sloa049b/sloa049b.pdf