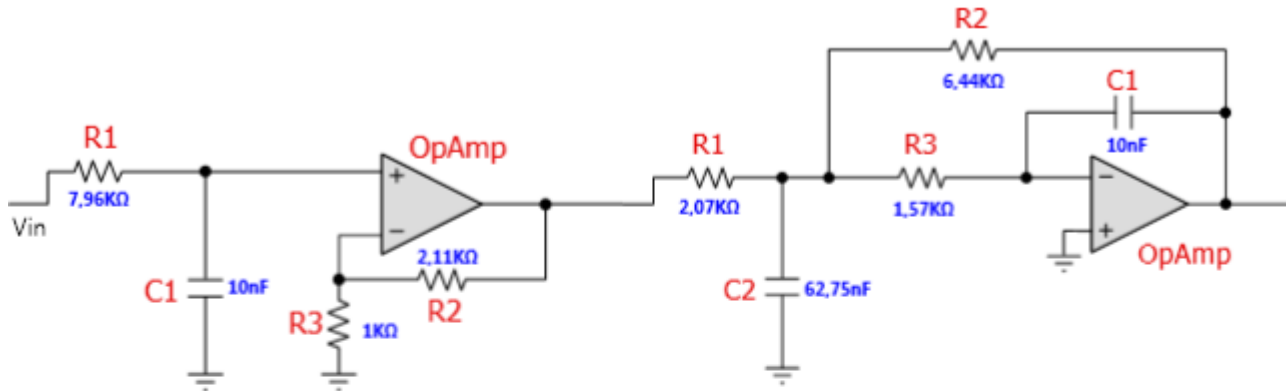


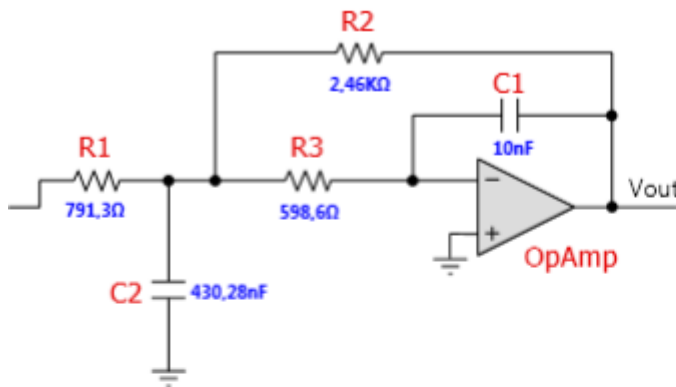
FilterPro Design Report Schematic

Design Name: Lowpass, Multiple Feedback, Butterworth **Part:** Ideal Opamp **Order:** 5 **Stages:** 3
Gain: 29,99 V/V (29,5404751952985 dB) **Allowable PassBand Ripple:** 1 dB **Passband Frequency:** 2 kHz
Corner Frequency Attenuation: 26,54 dB



Filter Stage: 1
 Passband Gain(Ao): 3.107
 Cutoff Frequency(fn): 2 kHz
 QualityFactor (Q): 0,5
 Filter Response: Butterworth
 Circuit Topology: RealPole
 Min GBW reqd.: 310,7 kHz

Filter Stage: 2
 Passband Gain(Ao) : 3.107
 Cutoff Frequency(fn): 2 kHz
 QualityFactor (Q): 0,62
 Filter Response: Butterworth
 Circuit Topology: MultipleFeedback
 Min GBW reqd.: 385,268 kHz

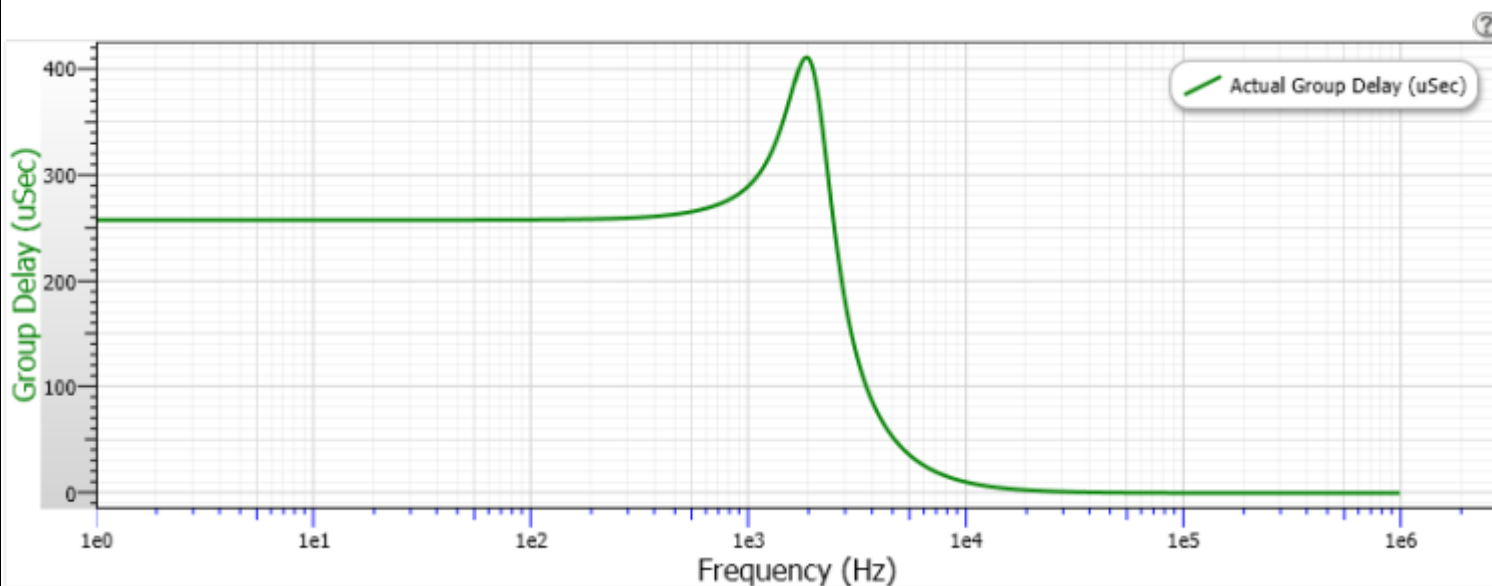
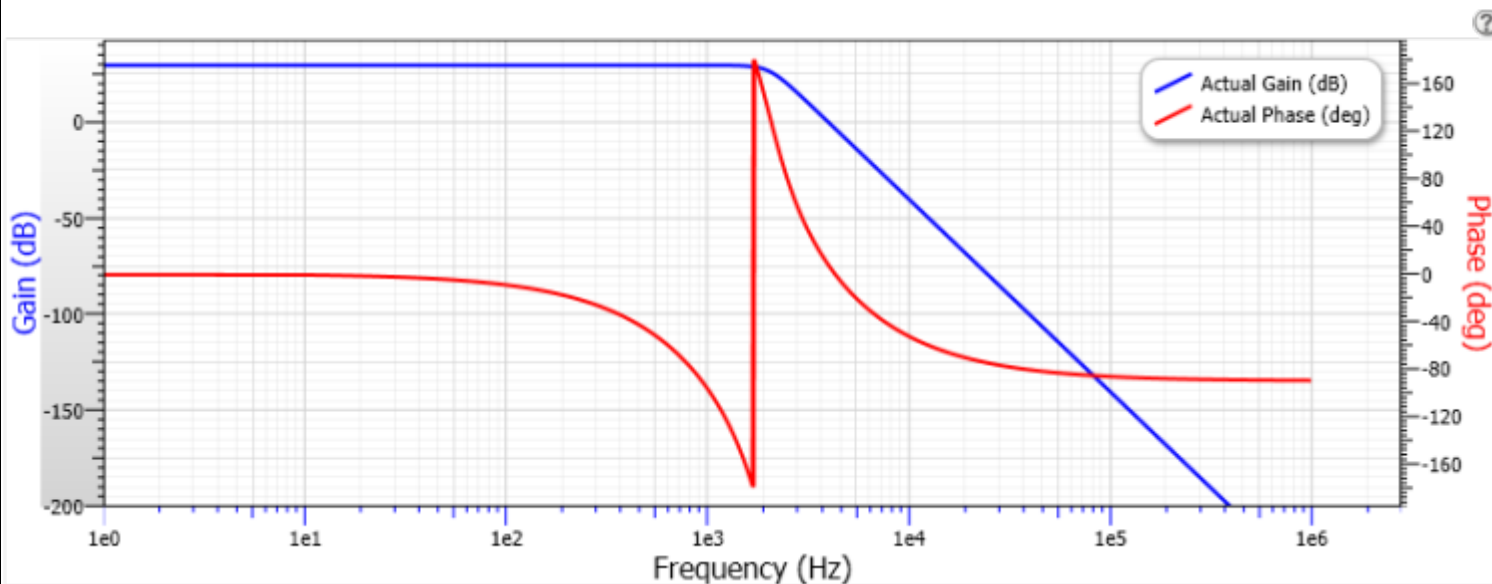


Filter Stage: 3
 Passband Gain(Ao) : 3.107
 Cutoff Frequency(fn): 2 kHz
 QualityFactor (Q): 1,62
 Filter Response: Butterworth
 Circuit Topology: MultipleFeedback
 Min GBW reqd.: 1,0067 MHz

FilterPro Design Report

Frequency and Phase Responses

Design Name: Lowpass, Multiple Feedback, Butterworth **Part:** Ideal Opamp **Order:** 5 **Stages:** 3
Gain: 29,99 V/V (29,5404751952985 dB) **Allowable PassBand Ripple:** 1 dB **Passband Frequency:** 2 kHz
Corner Frequency Attenuation: 26,54 dB



FilterPro Design Report

Bill of Materials

Design Name: Lowpass, Multiple Feedback, Butterworth **Part:** Ideal Opamp **Order:** 5 **Stages:** 3
Gain: 29,99 V/V (29,5404751952985 dB) **Allowable PassBand Ripple:** 1 dB **Passband Frequency:** 2 kHz
Corner Frequency Attenuation: 26,54 dB

Element ID	Quantity	Part Number	Value	Tolerance	Description	Manufacturer
R1 (Stage 1)	1	Standard	7,96K Ω	Exact: 0%	Resistor	
C1 (Stage 1)	1	Standard	10nF	Exact: 0%	Capacitor	
OpAmp (Stage 1)	1	Standard			Ideal OpAmp	
R2 (Stage 1)	1	Standard	2,11K Ω	Exact: 0%	Resistor	
R3 (Stage 1)	1	Standard	1K Ω	Exact: 0%	Resistor	
R1 (Stage 2)	1	Standard	2,07K Ω	Exact: 0%	Resistor	
R2 (Stage 2)	1	Standard	6,44K Ω	Exact: 0%	Resistor	
R3 (Stage 2)	1	Standard	1,57K Ω	Exact: 0%	Resistor	
C1 (Stage 2)	1	Standard	10nF	Exact: 0%	Capacitor	
C2 (Stage 2)	1	Standard	62,75nF	Exact: 0%	Capacitor	
OpAmp (Stage 2)	1	Standard			Ideal OpAmp	
R1 (Stage 3)	1	Standard	791,3 Ω	Exact: 0%	Resistor	
R2 (Stage 3)	1	Standard	2,46K Ω	Exact: 0%	Resistor	
R3 (Stage 3)	1	Standard	598,6 Ω	Exact: 0%	Resistor	
C1 (Stage 3)	1	Standard	10nF	Exact: 0%	Capacitor	
C2 (Stage 3)	1	Standard	430,28nF	Exact: 0%	Capacitor	
OpAmp (Stage 3)	1	Standard			Ideal OpAmp	

FilterPro Design Report

Design Notes

Design Name: Lowpass, Multiple Feedback, Butterworth **Part:** Ideal Opamp **Order:** 5 **Stages:** 3
Gain: 29,99 V/V (29,5404751952985 dB) **Allowable PassBand Ripple:** 1 dB **Passband Frequency:** 2 kHz
Corner Frequency Attenuation: 26,54 dB

