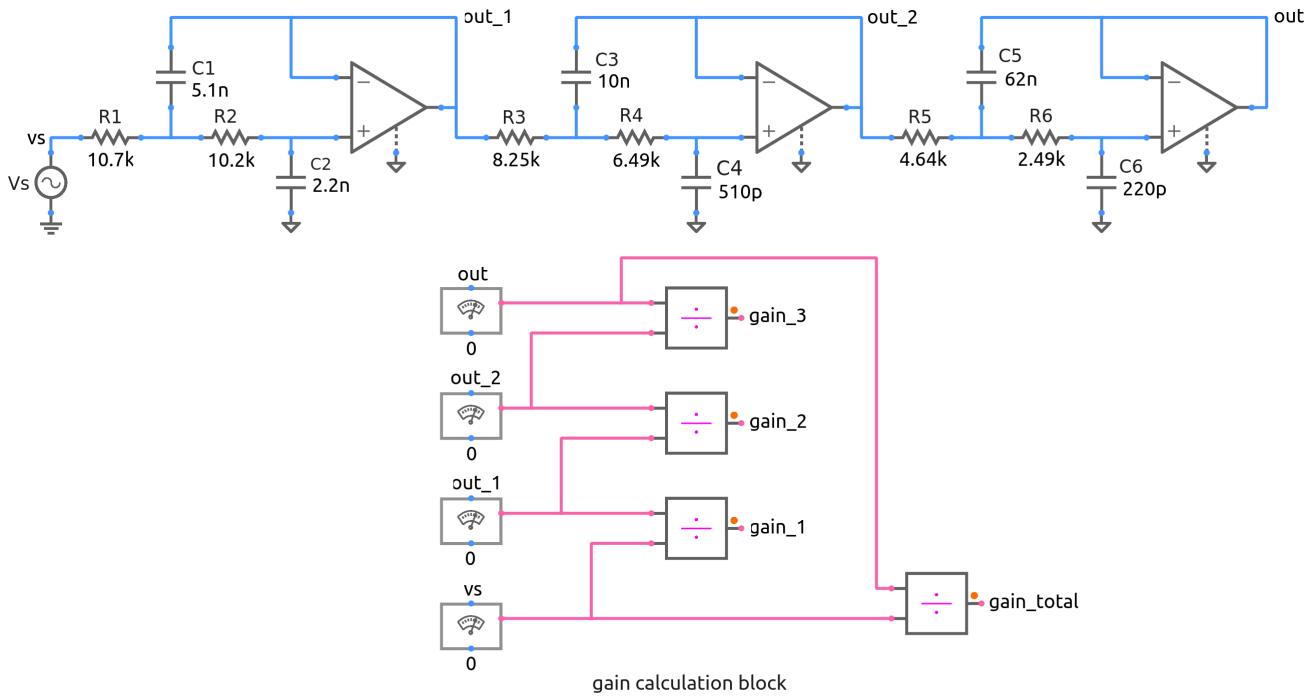


ee101_op_filter_6.sqproj



Ref: S. Franco: Design with Op Amps and analog integrated circuits

Figure 1: Circuit diagram.

A sixth-order Chebyshev low-pass filter [1] is shown in Fig. 1.

Exercise Set

1. Plot the magnitude frequency response (log-log plot), and verify that the circuit is functioning as a 6th-order low-pass filter.
2. Plot the gain of each of the three stages and the total gain versus frequency (see Fig. 2), and observe how the individual contributions add to give the total gain.

Reference

1. S. Franco, *Design with Operation Amplifiers and Analog Integrated Circuits*, McGraw-Hill, 1998.

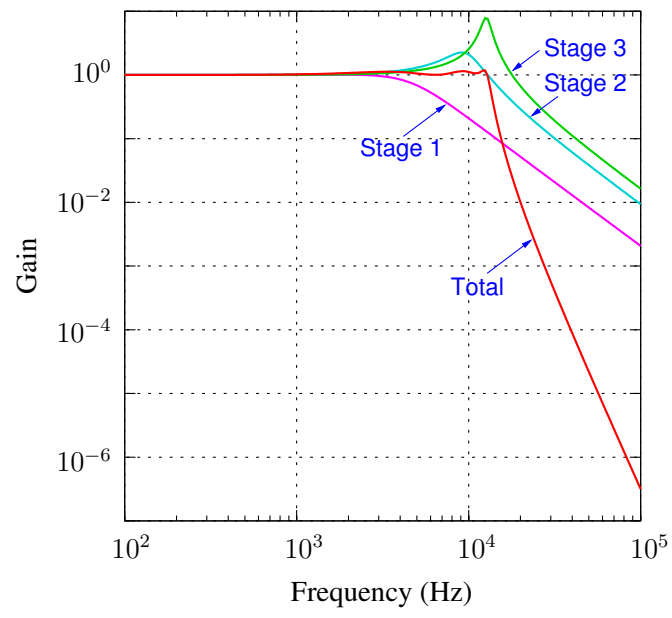


Figure 2: Gain versus frequency.