

Design a circuit using ideal op amps, resistors, and capacitors that implements the following transfer function:

$$G = \frac{-100}{\left[1 + \frac{s}{2\pi(2000\text{Hz})}\right] \left[1 + \frac{s}{2\pi(4000\text{Hz})}\right] \left[1 + \frac{2\pi(50\text{Hz})}{s}\right]}$$

Be sure to include the component values.

Hint: Each factor in the denominator is a first-order low-pass or high-pass function. Consider implementing each factor using a common circuit and then cascading them.