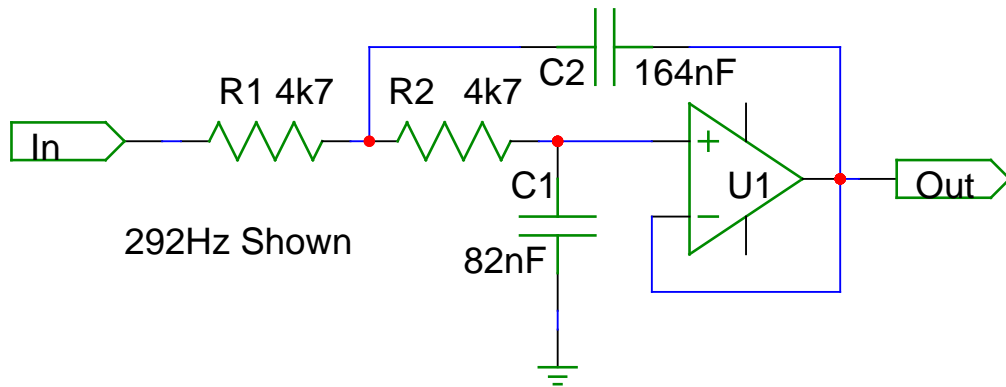


Low and High Pass Filtering



2nd Order Low Pass Filter

Sallen-Key (unity gain) / Butterworth Math ($Q=0.707$)

$\text{Freq} = 0.707 / (2 * \text{PI} * R1 * C1)$

$R1 = R2$

$C2 = 2 * C1$

damping = $1 / Q$

Chebyshev ($Q=1$): $C2 = 4 * C1$

sub-Bessel ($Q=0.5$): $C2 = C1$

2nd Order High Pass Filter

Inverse of above filter (same equation).

$C1 = C2$

$R2 = 2 * R1$

