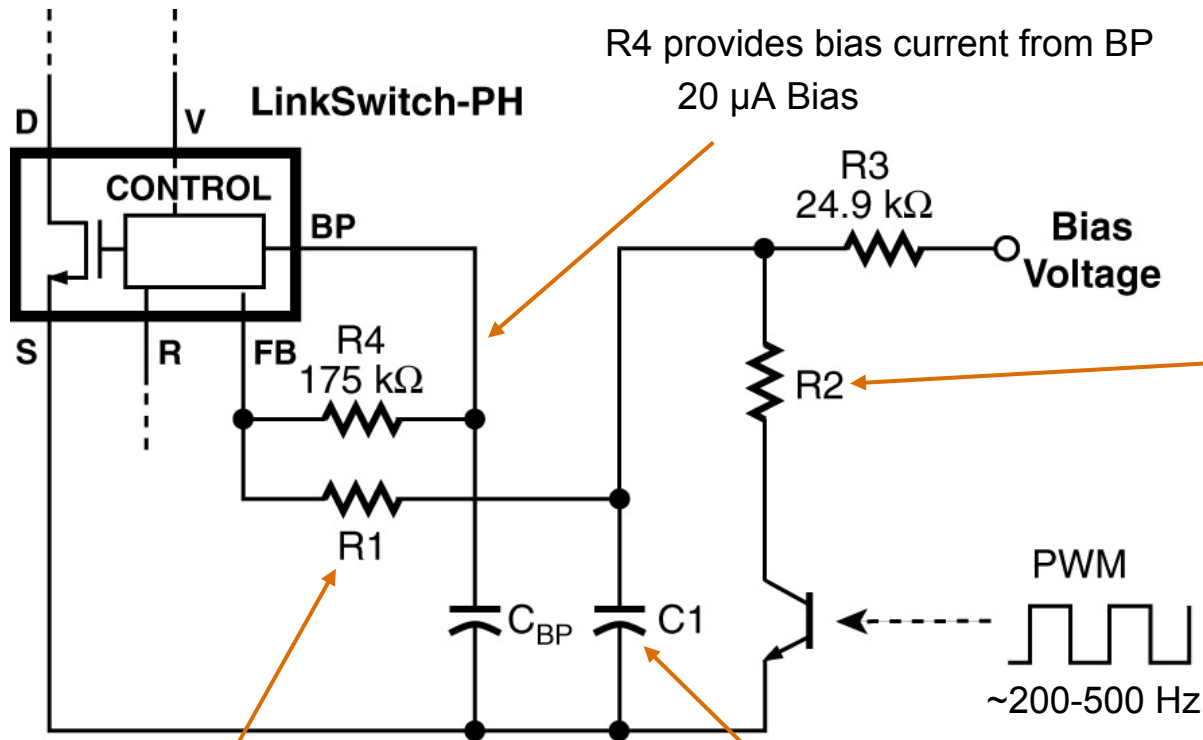


PWM Signal Reduces FB Pin Current to Control Output Current (PWM-Analog)



$$2.5 = V_{BIAS(FD)} \cdot \frac{R2}{R2 + R3}$$

$$2.5(R2 + R3) = V_{BIAS(FD)} \cdot R2$$

$$R2 = \frac{2.5 \cdot R3}{V_{BIAS(FD)} - 2.5}$$

Where:

$V_{BIAS(FD)}$ = Bias voltage at full dimming, assume $V_{BIAS}/3$

$$R1 = ((V_{BIAS} - V_{FB}) / (I_{FB} - 20 \mu A)) - R3$$

Where:

V_{BIAS} = Bias voltage (from PIXIs)

I_{FB} = FB pin current (from PIXIs)

V_{FB} = FB pin voltage (2.4 V_{TYP})

20 μA is the current through R4

$$C1 \geq 5 / (f_{PWM} \cdot R2)$$

Where:

f_{PWM} = PWM Frequency

Dimming range can be increased by simultaneously decreasing FB Pin current and increasing V Pin current

