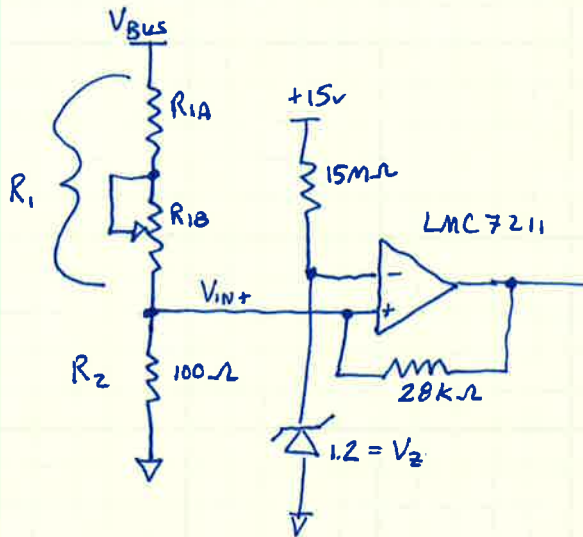


$$48v < V_{Bus} < 60v$$

$$V_{BusNom} = 48v \text{ or } 54v$$



$$V_{Bus} = 48v$$

$$\text{Want } V_{IN+} = 1.2v \therefore I_{R2} = 12mA$$

$$48v - 1.2v = 46.8v$$

$$\frac{46.8v}{12mA} = 3.9k = R_1$$

$$V_{Bus} = 54v$$

$$54v - 1.2v = 52.8v$$

$$\frac{52.8v}{12mA} = 4.4k\Omega = R_1$$

$$V_{BusMax} = 60v$$

$$60v - 1.2v = 58.8v$$

$$\frac{58.8v}{12mA} = 4.9k = R_1$$

$\therefore$  Minimum pot value =  $1k\Omega$  Bourns 1W : 50, 100, 200, 500, 1k, 2k, 5k...  
Want to retain the ability to lower pot below 1.2 threshold at any bus voltage.

$$\text{Try } R_{1A} = 3k\Omega, R_{1B} = 2k\Omega \text{ pot}$$

min:

$$\frac{48v}{3.1k\Omega} = 15.5mA \therefore V_{IN+} = 1.55v$$

max:

$$\frac{48v}{5.1k\Omega} = 9.4mA \therefore V_{IN+} = 0.94v$$

min:

$$\frac{54v}{3.1k\Omega} = 17.4mA \therefore V_{IN+} = 1.74v$$

max:

$$\frac{54v}{5.1k\Omega} = 10.6mA \therefore V_{IN+} = 1.06v$$

min:

$$\frac{60v}{3.1k\Omega} = 19.4mA \therefore V_{IN+} = 1.94v$$

max:

$$\frac{60v}{5.1k\Omega} = 11.7mA \therefore V_{IN+} = 1.17v$$

$$R_{1A} : \text{Ohmite } 41F3KDE \quad 3k\Omega \quad 1W \quad 40 \text{ Series} \quad 1\% \quad 20ppm$$

$$R_{1B} : \text{Bourns } 3520W-1-202 \quad 2k\Omega \quad 1W \quad 25T \quad \text{Top Adj.} \quad 5\% \quad 50ppm \quad 3520 \text{ Series}$$

$$R_2 : \text{Ohmite } 41F100E \quad 100\Omega \quad 1W \quad 40 \text{ series} \quad 1\% \quad 20ppm$$