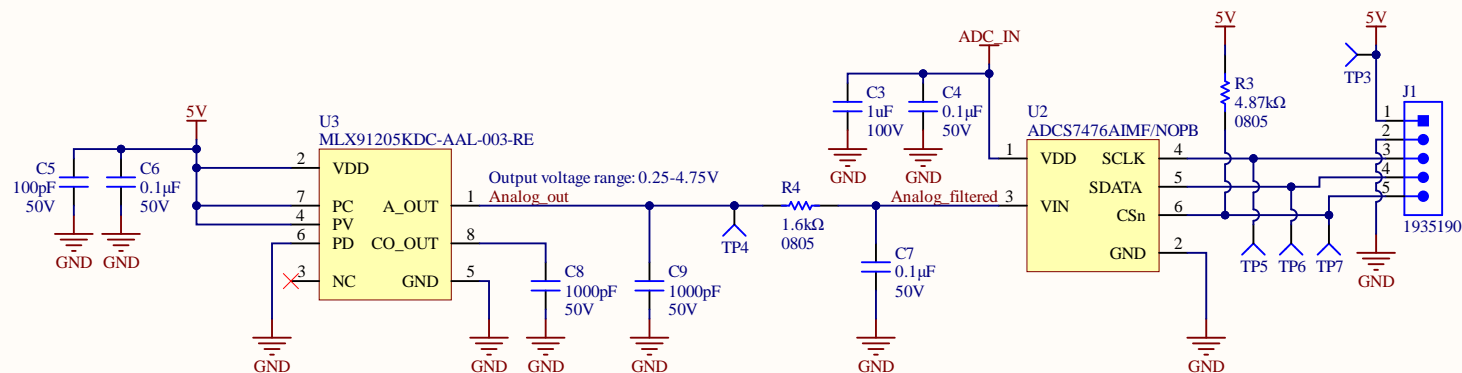


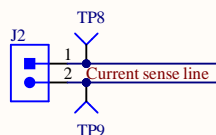
Δ Voltage Reference:
 Vadj (initial output voltage): 1.1840V
 Target output voltage: 4.75V-4.85V

$V_{out} = (1 + R1/R2) V_{adj}$
 $V_{out} = (1 + 4.87k/1.6k) 1.1840V$
 $V_{out} = 4.788V$



Δ Low-pass filter:
 ADC sample rate = 1 MSPS
 Target cut off frequency = 1 kHz

$f_c = 1/(2 \pi R C)$
 $f_c = 1/(2 \pi 1.6k 0.1u)$
 $f_c = 994.7 \text{ Hz}$



Title Hall Effect Current Sensor

Size: Letter Drawn By: Kyle Hong

Date: 10/1/2020

Sheet 1 of 1

File: C:\Users\kyleh\Desktop\Works\UWRT\MarsRover2021-hardware\Projects\Hall Effect Current Sensor\Rev1