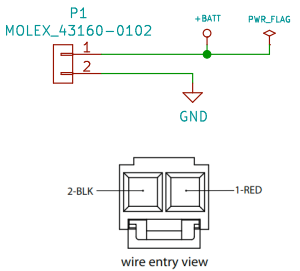


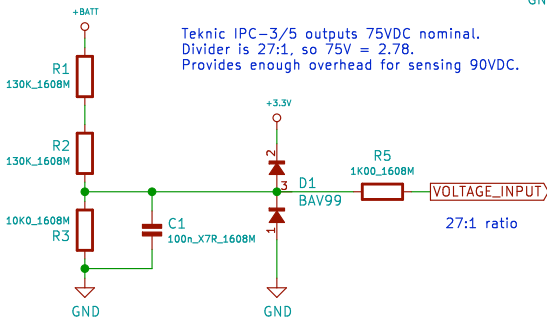
15–80VDC Input Power

SABRE 2-pin connector

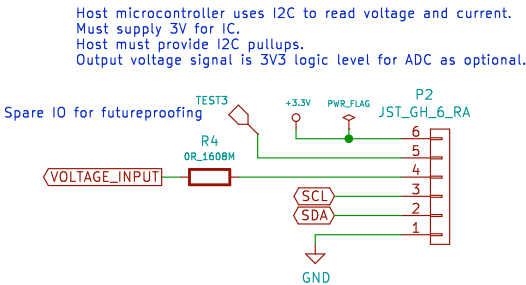


Pin	Color	Name
1	RED	V+
2	BLK	GND

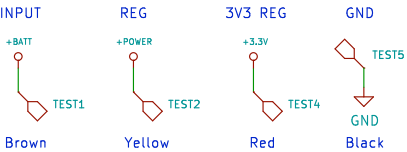
Input Monitoring



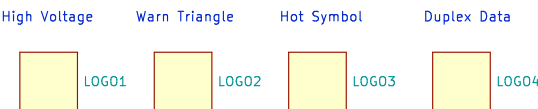
Data Connector



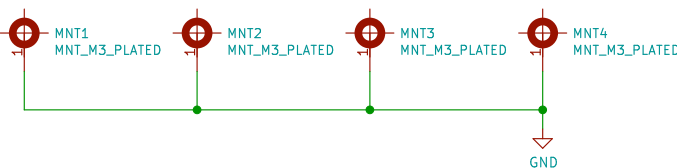
Testpoints



Logos and Symbols

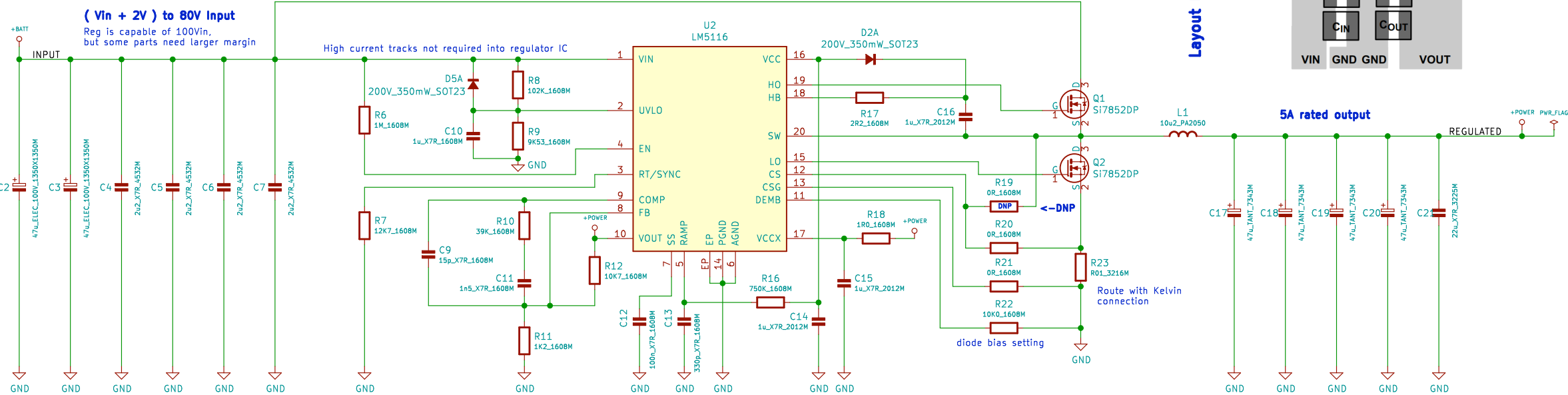


Mounting Holes

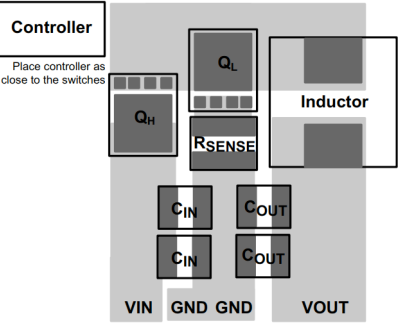


Main Regulation

Follows the TI AN-1713 application note for the LM5116.
250kHz, should achieve >90% efficiency at operating voltage.



Layout Recommendation



5A rated output

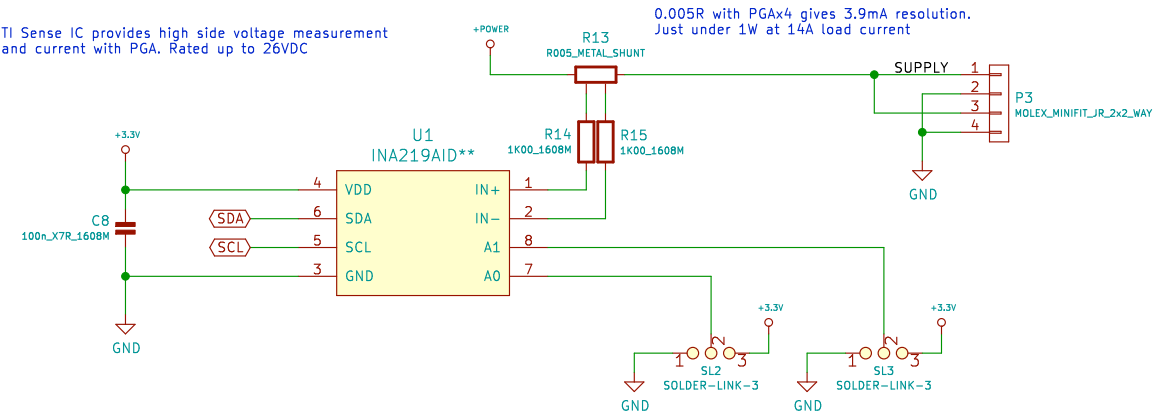
As drawn, provides 12V output

To provide 24V output, change:

R12 to 22.1k
R10 to 48.7k
C11 750pF
C9 to 300pF

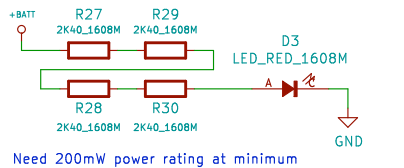
Output Voltage & Current Monitor

TI Sense IC provides high side voltage measurement
and current with PGA. Rated up to 26VDC

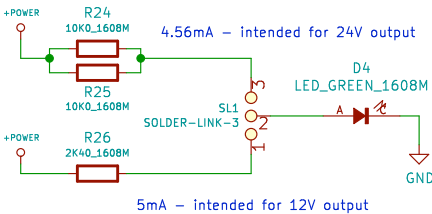


Supply Indicator LED

50V input with 5mA output is 10k (ish)



Output Indicator LED



Scott Rapson
20181113
Wide input DC-DC Regulator
Scott Rapson

Sheet: /
File: wide-input-reg.sch

Title: Power Regulation

Size: A3 Date: 2018-07-29
KiCad E.D.A. kicad (5.1.0-0)

Rev: 1.0.0
Id: 1/1