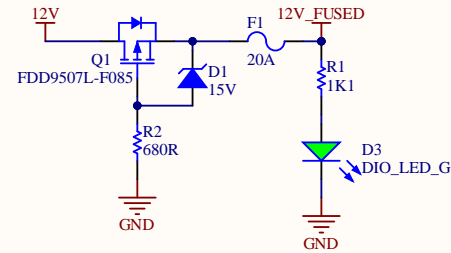


Reverse Polarity Protection



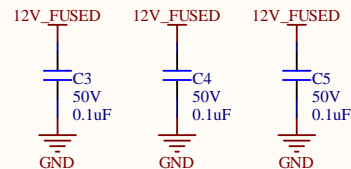
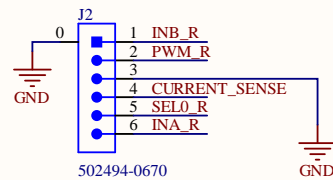
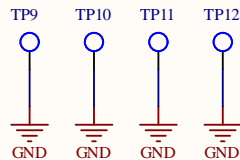
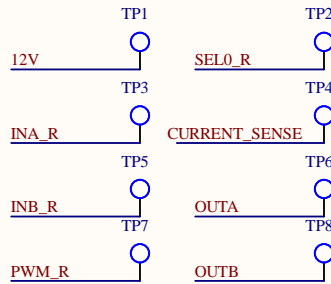
MCU IO current limit resistors
 - $R = (V_{io} - V_{cc}) / I_{max} = (3.3V - 12V) / (-25mA) = 348 \text{ Ohm}$ as a minimum
 - Use 680 Ohm for safety and BOM optimization

Current Sense output RC filter
 - values from the chip application note

Current Sense output voltage resistor
 - current range
 + Saturation condition: 4.6mA
 + Fault condition: 730mA (not configured yet)
 - $R = 3.3V / 4.6mA = 717.39 \text{ Ohm}$
 - Use 680 Ohm so that max voltage = 3.128 V

Reverse polarity protection
 - From data sheet

Test Points



Motor Driver

