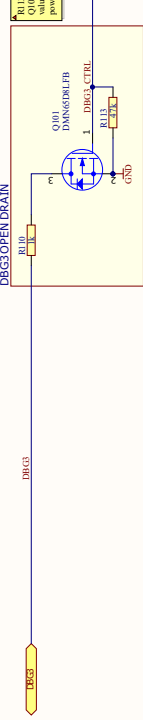
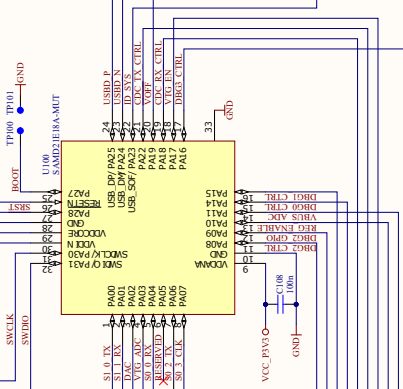
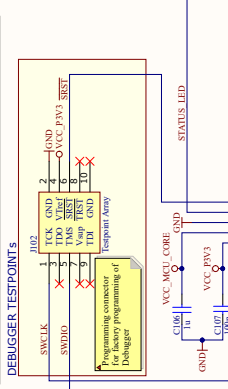
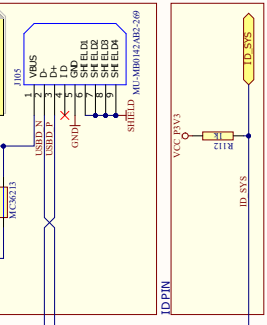
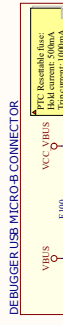
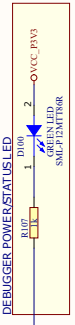
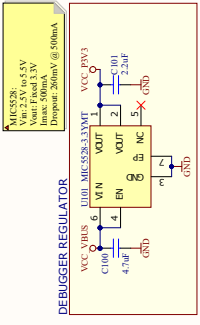


Adjustable output and limitations:
 - The REGU002 can output the current with the regulator between 1.2V and 1.1V to the target.
 - The REGU002 can output the current with the regulator between 1.0V and 0.9V to the target.
 - The level shifts have a minimal voltage level of 1.65V and will limit the minimum operating voltage allowed for the target.
 - The MIC5358 has a minimal voltage level of 1.70V and will limit the minimum voltage allowed to the target.
 - Firmware configuration will limit the voltage range to be within the target specification.

Pin:
 - Current sense for full separation of target power from the level shifts and on-board regulators.
 - For current measurement using an external power supply, this strap could be cut for more accurate measurements. Leakage back through the switch is in the micro-amp range.
 - I2C is open-drain for a 1521 (00nF) 10kΩ pull-up resistor that can be used for easy current measurement to the target microcontroller and the LED / Button. To use the footprint.
 - Cut the trace between the holes, and mount a pin-header.

MIC5358:
 V_{IN}: 1.25V to 5.1V
 V_{OUT}: 500mA with 50mV/dec (Slew: 160mV @ 500mA)
 Accuracy: 2% initial
 Thermal shutdown and current limit
 Maximum output voltage is limited by the input voltage and the dropout voltage in the regulator.
 (V_{IN} > V_{OUT} + dropout)

REF Pin	IC SP	TARGET
UPDI	TARGET	TARGET
CDC TX	UART RX	UART RX
CDC RX	UART TX	UART TX
DBG0	DAT	UPDI
DBG1	CLK	GPO
DBG2	GPO	GPO
DBG3	MCLR	RESET
VCC	-	-



R113 is required to pull the Q01 gate to a defined level. This can be achieved by using a pull-up resistor powered.