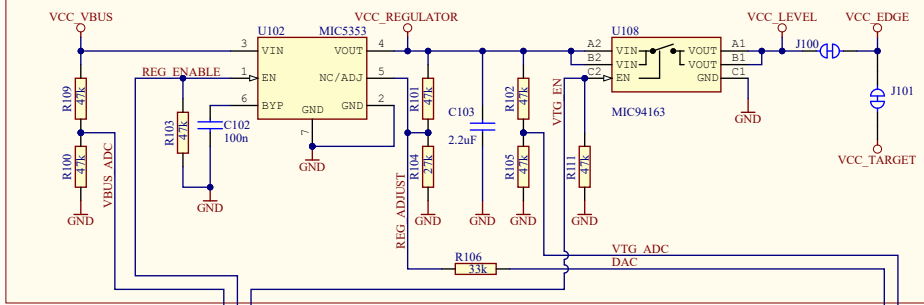


TARGET ADJUSTABLE REGULATOR



Adjustable output and limitations:

- The onboard debugger can adjust the output voltage of the regulator between 1.25V and 5.1V to the target.
- The level shifters have a minimal voltage level of 1.65V and will limit the minimum operating voltage allowed for the target to still allow communication.
- The output switch has a minimal voltage level of 1.70V and will limit the minimum voltage delivered to the target.
- Firmware configuration will limit the voltage range to be within the target specification.
- Firmware feedback loop will adjust the output voltage accuracy to within 0.5%.

J100:

- Cut-strap used for full separation of target power from the level shifters and on-board regulators.
- For current measurements using an external power supply, this strap could be cut for more accurate measurements. Leakage back through the switch is in the micro ampere range.

J101:

- For current measurements using the on-board power supply, this strap must be cut and an ammeter connected across.

MIC5353:

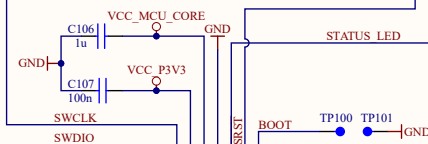
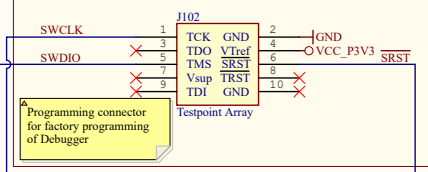
Vin: 2.6V to 6V
 Vout: 1.25V to 5.1V
 Imax: 500mA
 Dropout (typical): 50mV@150mA, 160mV @ 500mA
 Accuracy: 2% initial
 Thermal shutdown and current limit
 Maximum output voltage is limited by the input voltage and the dropout voltage in the regulator. (Vmax = Vin - dropout)

Interface	ICSP TARGET	UPDI TARGET
CDC TX	UART RX	UART RX
CDC RX	UART TX	UART TX
DBG0	DAT	UPDI
DBG1	CLK	GPIO
DBG2	GPIO	GPIO
DBG3	MCLR	RESET
VCC	-	-

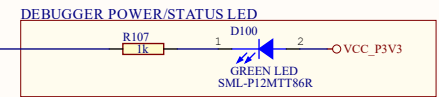
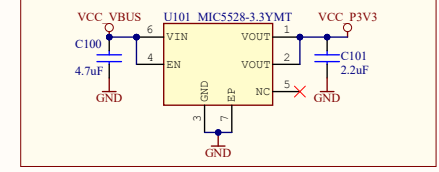
MIC5528:

Vin: 2.5V to 5.5V
 Vout: Fixed 3.3V
 Imax: 500mA
 Dropout: 260mV @ 500mA

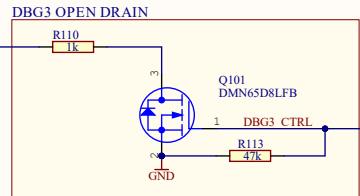
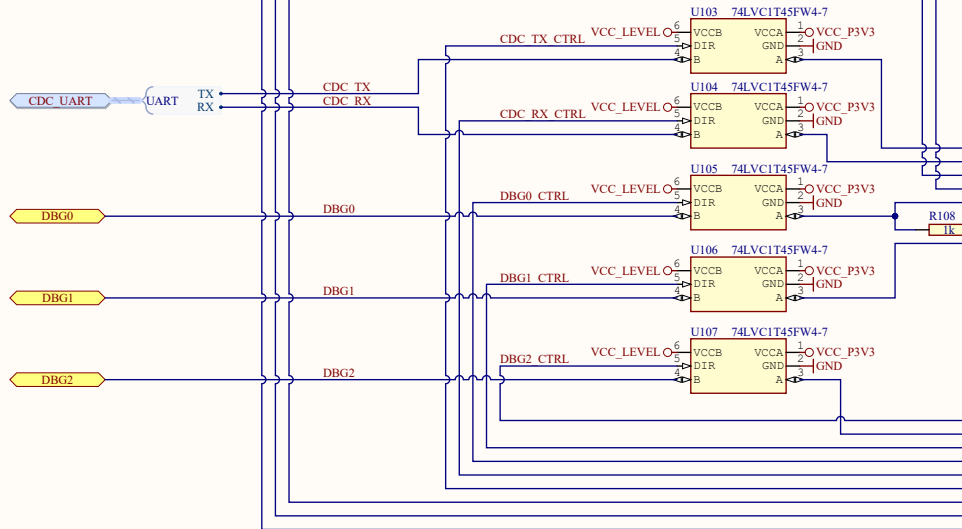
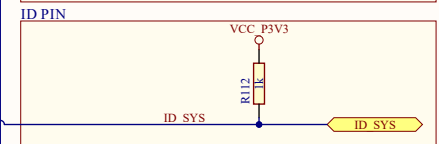
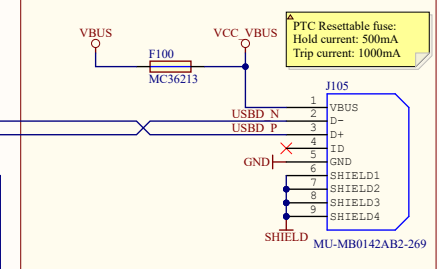
DEBUGGER TESTPOINTS



DEBUGGER REGULATOR



DEBUGGER USB MICRO-B CONNECTOR



R113:

Pull down to prevent DBG3_CTRL from floating when debugger is not powered.

Drawn By: ML
 Engineer: TF
 Project Title: PIC18F47Q10 Curiosity Nano
 Sheet Title: Debugger
 Size: A3
 PCB Assembly Number: A09-3246
 PCB Number: A08-2972
 File: PIC18F47Q10_Curiosity_Nano_Debugger.SchDoc

MICROCHIP
 Designed with **Altium** Debugger
 PCB Revision: 5
 PCB Revision: 3
 Date: 8/9/2022
 Page: 3 of 4