

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)

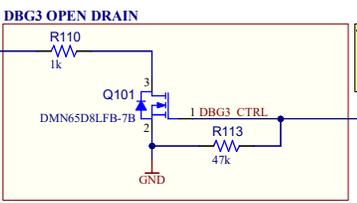
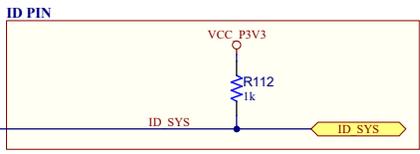
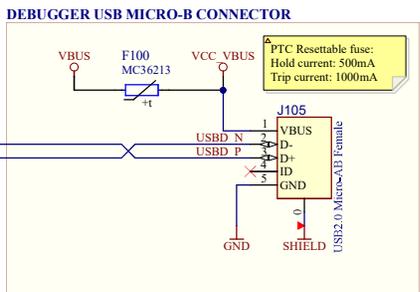
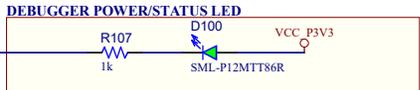
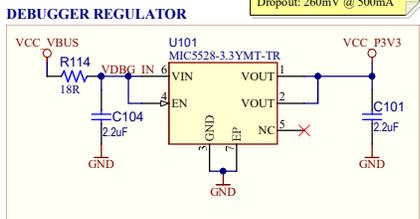
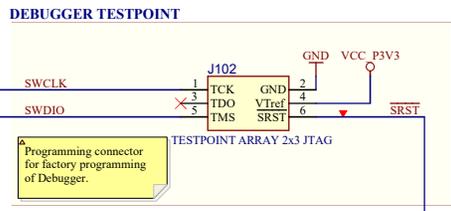
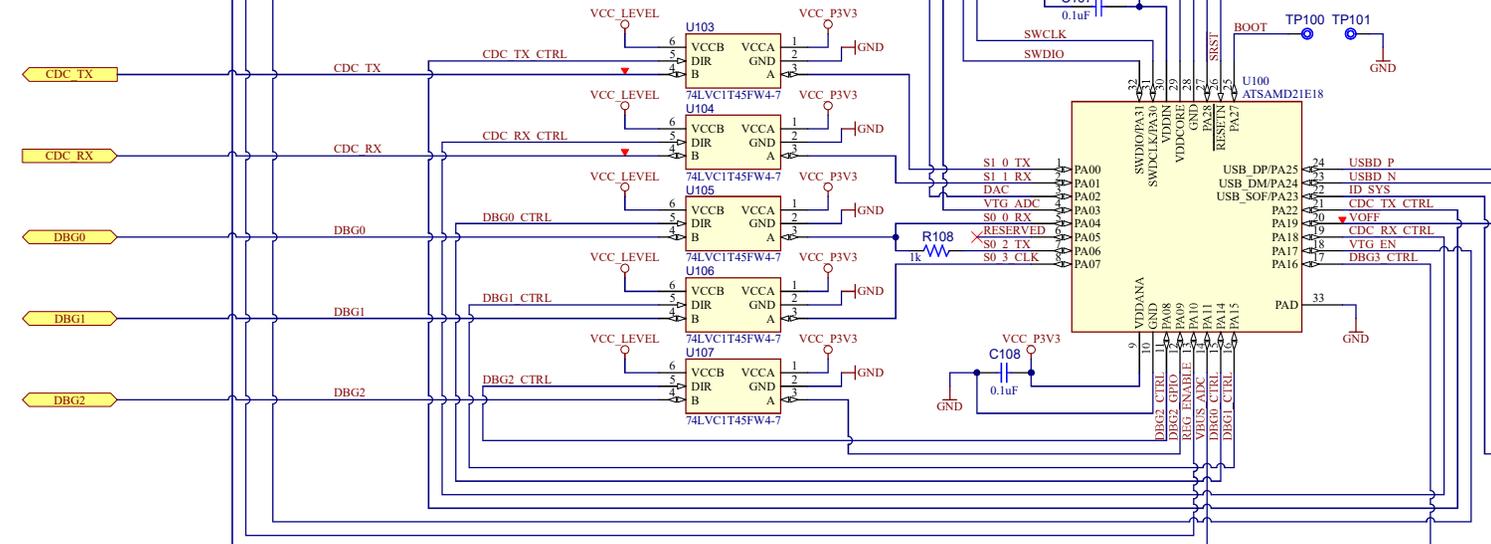
Interface	ICSP TARGET	UPDI TARGET	SWD TARGET
CDC TX	UART RX	UART RX	UART RX
CDC RX	UART TX	UART TX	UART TX
DBG0	DAT	UPDI	SWDAT
DBG1	CLK	GPIO	SWCLK
DBG2	GPIO	GPIO	SWO/GPIO
DBG3	MCLR	RESET	RESET
VCC	-	-	-

MIC5528:
 Vin: 2.5V to 5.5V
 Vout: Fixed 3.3V
 Imax: 500mA
 Dropout: 260mV @ 500mA

TP103
TP104
 TP103 and TP104 are MTG Holes in the corners of the PCB in the DEBUGGER section labelled "GND" on the silkscreen.

Adjustable output and limitations:
 - The DEBUGGER can adjust the output voltage of the regulator between 1.25V and 5.1V to the target.
 - The voltage output is limited by the input (USB), which can vary between 4.40V to 5.25V
 - 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 MIC94163 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.

DEBUGGER



R113 is required to pull the Q101 gate to a defined value when the U100 is not powered

Project Owner: P Bredveld
 PCB Layout Contact: V Leksas
 PartNumber: EV01G21A
 Project Title: **PIC18F56Q71 Curiosity Nano Debugger**
 Variant: Default Assembly
 Sheet Title: Debugger
 Size: A3
 SCH #: 02-00412
 Rev: 1
 Date: 2021-12-10
 PCB #: 04-11519
 Rev: 1
 Sheet: 3 of 4
 File: PIC18F56Q71_Curiosity_Nano_Debugger_SchDoc