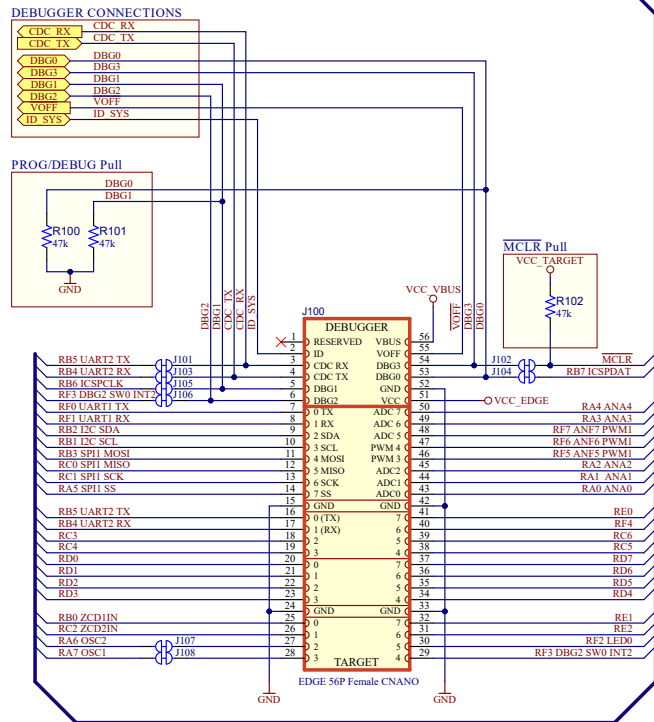
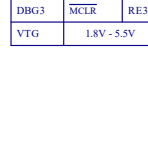
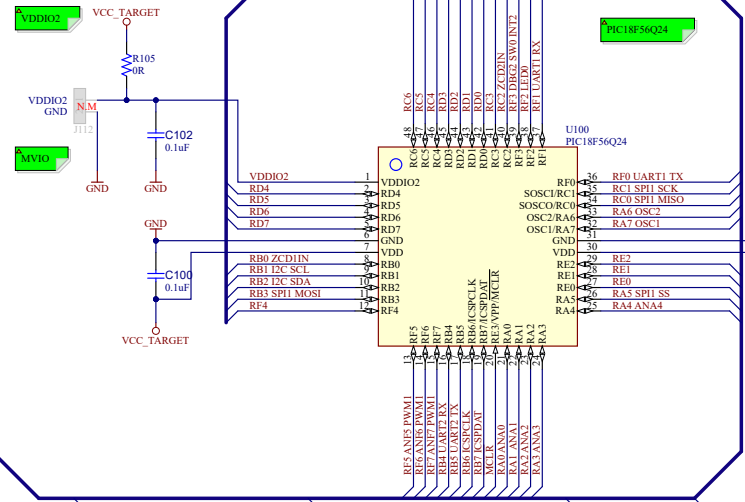


PIC18F56Q24

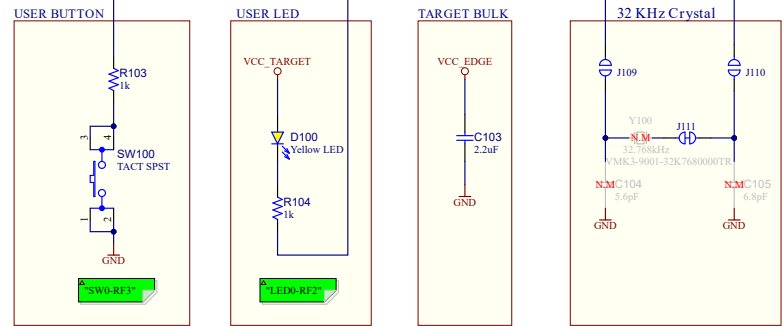
PIC18F56Q24		
Debugger	Name	Pin
CDC TX	UART2 RX	RB4
CDC RX	UART2 TX	RB5
DBG0	ICSPDAT	RB6
DBG1	ICSPCLK	RB7
DBG2	GPIO0	RF3
DBG3	MCLR	RE3
VTG	1.8V - 5.5V	

J112 can be used to apply external power to VDDIO2. Make sure to remove R105 to disconnect on-board power before applying power to J112.



NOTE on UART/CDC:
RX/TX on the header denotes the input/output direction of the signal respective to it's source.
CDC TX is output from the DEBUGGER.
CDC RX is input to the DEBUGGER.
TX is output from the TARGET device.
RX is input to the TARGET device.

NOTE on I2C:
No pull-ups on board. Pull-ups must be mounted close to client device(s).



Crystal datasheet:
Crystal = 9pF
max ESR = 70kOhm
Accuracy ±20ppm
PIC18F56Q24 datasheet:
C_{xin} = 5.0pF
C_{xout} = 5.0pF
Maximum Cl = 18pF
Maximum ESR = 100k
Cl = 1 / ((1/5.0pF) + (1/5.0pF)) ≈ 2.5pF
Estimated Cpcb = 0.5pF
Estimated load
C = 2(Ccrystal - Cpara - Cpcb)
C = 2(9pF - 2.5pF - 0.5pF)
C = 12.9pF
Selected in design after verification
C = 6.8/5.6pF

Project Owner: S. Tanbergmoen		CSANO Template Revision: 22			
PCB Layout Contact: S. Tanbergmoen		Part Number: EV01E36A	Project Title: PIC18F56Q24 Curiosity Nano		
Sheet Title: Target MCU	Variant: Default Assembly	Designed with: 			
Size: A3	SCH #: 02-00868	Rev: 1	Date: 2023-11-13	Rev: 1	Sheet 2 of 4
File: PIC18F56Q24_Curiosity Nano_Target MCU_SchDoc					