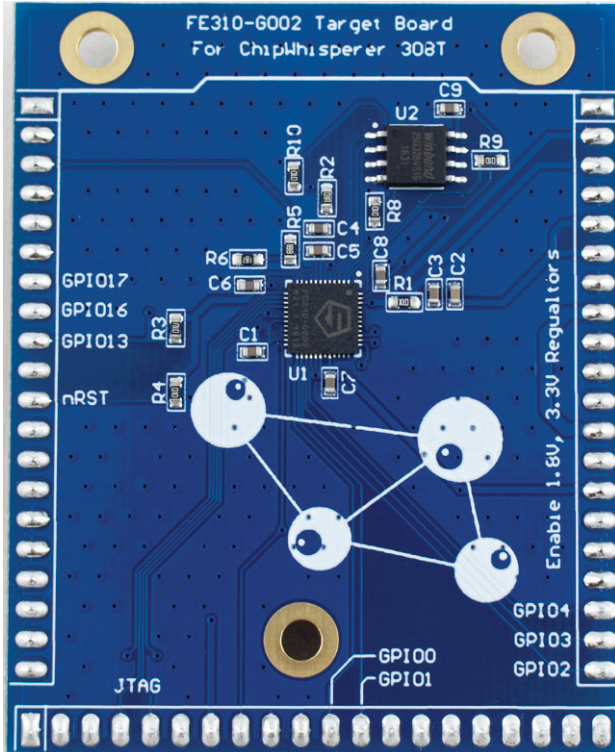




# FE310-G002 UFO Target



The FE310-G002 UFO Target board features the SiFive FE310-G002, a small RISC-V based microcontroller. This board lets you experiment with a RISC-V device from SiFive.

This board features a SPI flash to run your code from, and is most easily programmed using a JTAG programmer (such as J-Link) that supports the FE310-G002.

A shunt resistor allows you to perform DPA measurements, or perform voltage or clock fault injection, similar to other experiments on the ChipWhisperer system.

A subset of peripherals can be exercised with the wired out GPIO pins.

**CW308 UFO Baseboard REQUIRED for use!**  
**JTAG Programmer REQUIRED for use!**

## Product Highlights

SiFive F310-G002 with SiFive E31 Core and 16KB SRAM.

Uses RISC-V core for testing DPA & fault injection attacks on a hardware RISC-V implementation.

SPI 32M-bit flash for program storage.

## Errata

Devices may require use of adjustable regulator on CW308 board to ensure 1.8V core after shunt. If device does not start-up properly see full documentation for start-up procedure sequence.

Power cycle either CORE or 3.3V supply regulator if start-up still not occurring.

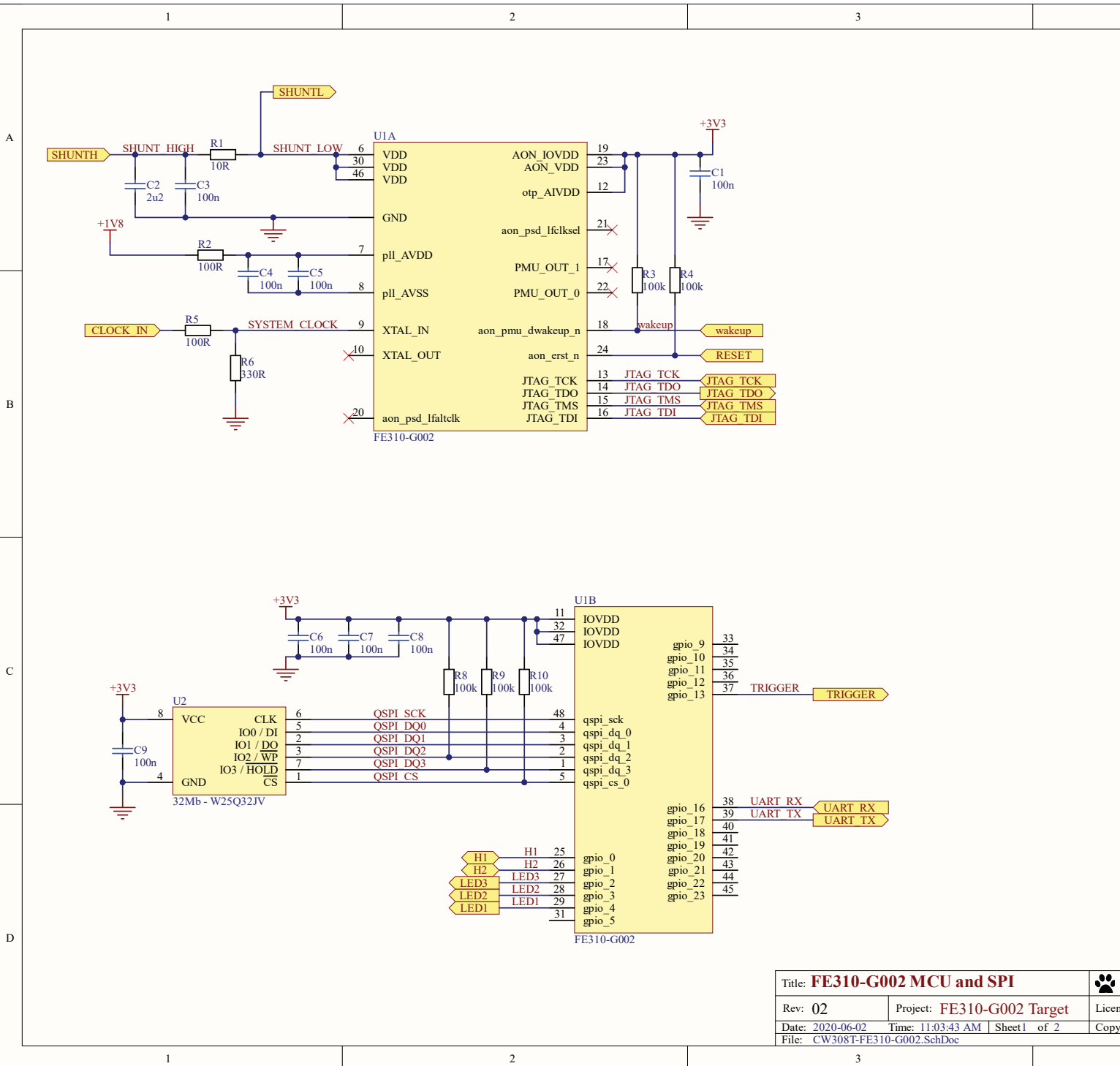
## Ordering Summary

NAE-CW308T-FE310 SiFive FE310-G002 UFO Target Board.

## Product Links

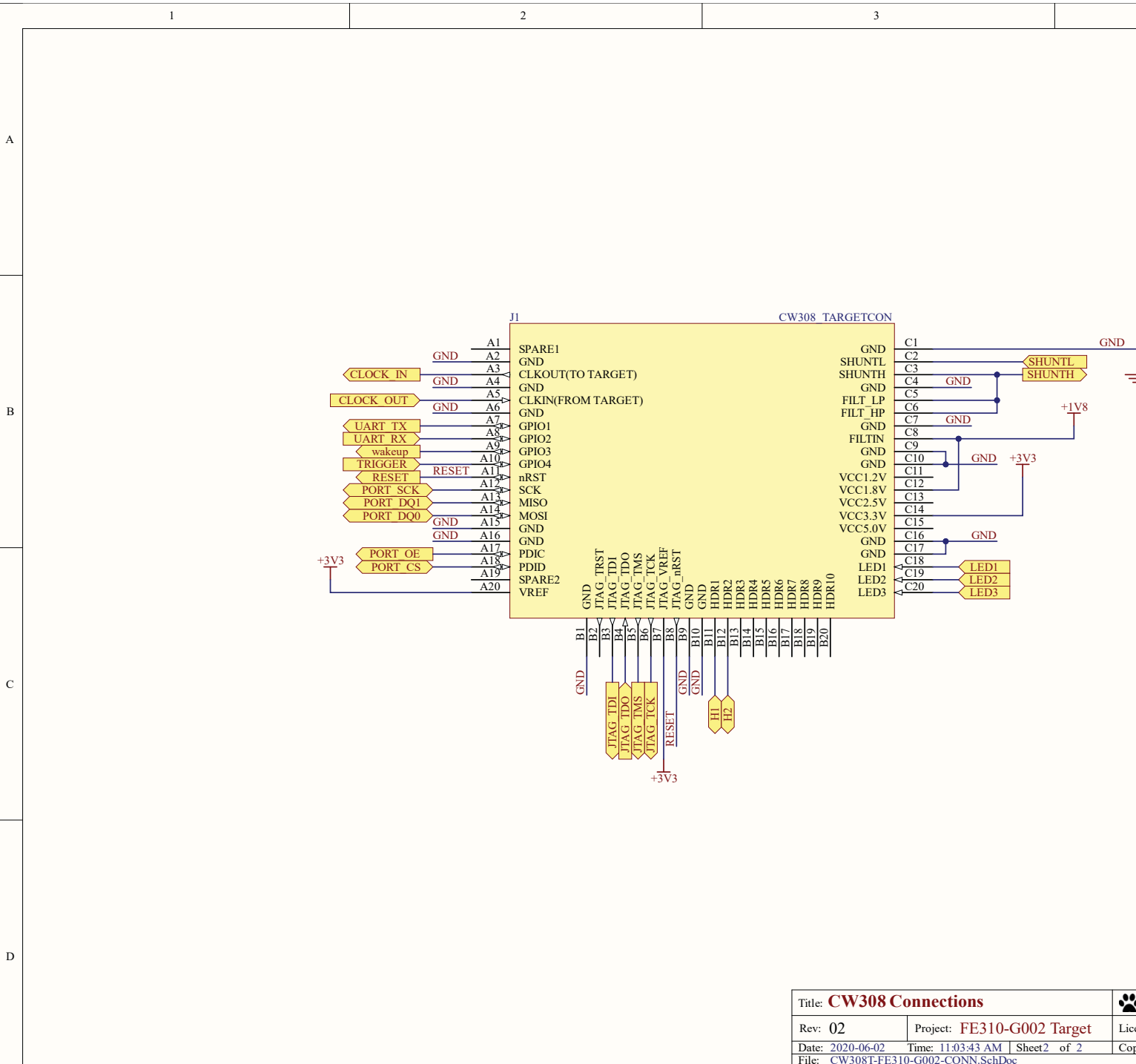
- Full Documentation <https://wiki.newae.com/CW308T-FE310-G002>
- Hardware Design <https://github.com/newaetech/chipwhisperer-target-cw308t>
- Firmware Example <https://github.com/newaetech/chipwhisperer/tree/develop/hardware/victims/firmware/>

# Schematic



Title: <b>FE310-G002 MCU and SPI</b>		
Rev: <b>02</b>	Project: <b>FE310-G002 Target</b>	Licen
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File: CW3081-FE310-G002.SchDoc		Copy

# Schematic



Title: <b>CW308 Connections</b>		Project: <b>FE310-G002 Target</b>		Lic	
Rev: <b>02</b>	Date: <b>2020-06-02</b>	Time: <b>11:03:43 AM</b>	Sheet <b>2</b> of <b>2</b>	Cop	
File: CW308T-FE310-G002-CONN.SchDoc					

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