

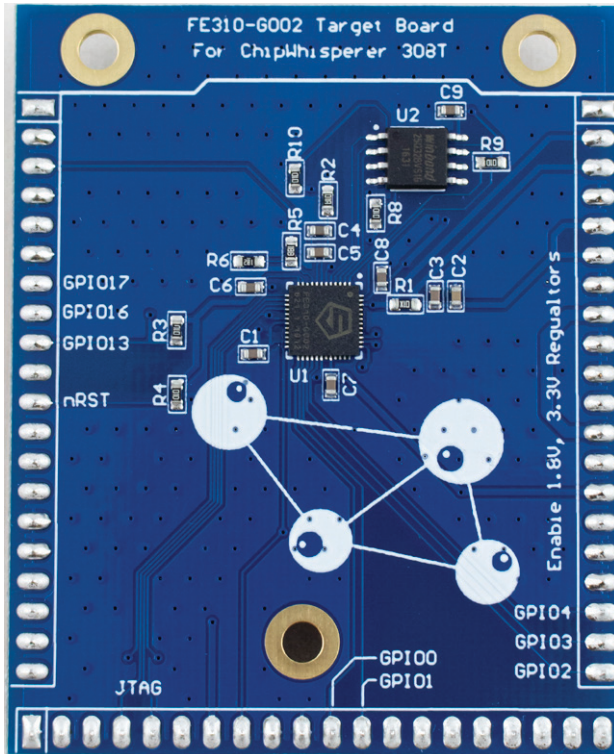


NewAE Technology Inc.
newae.com

ChipWhisperer® Embedded Security Analysis Tools CW308 UFO Targets

FE310-G002 UFO Target

Product Datasheet



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.

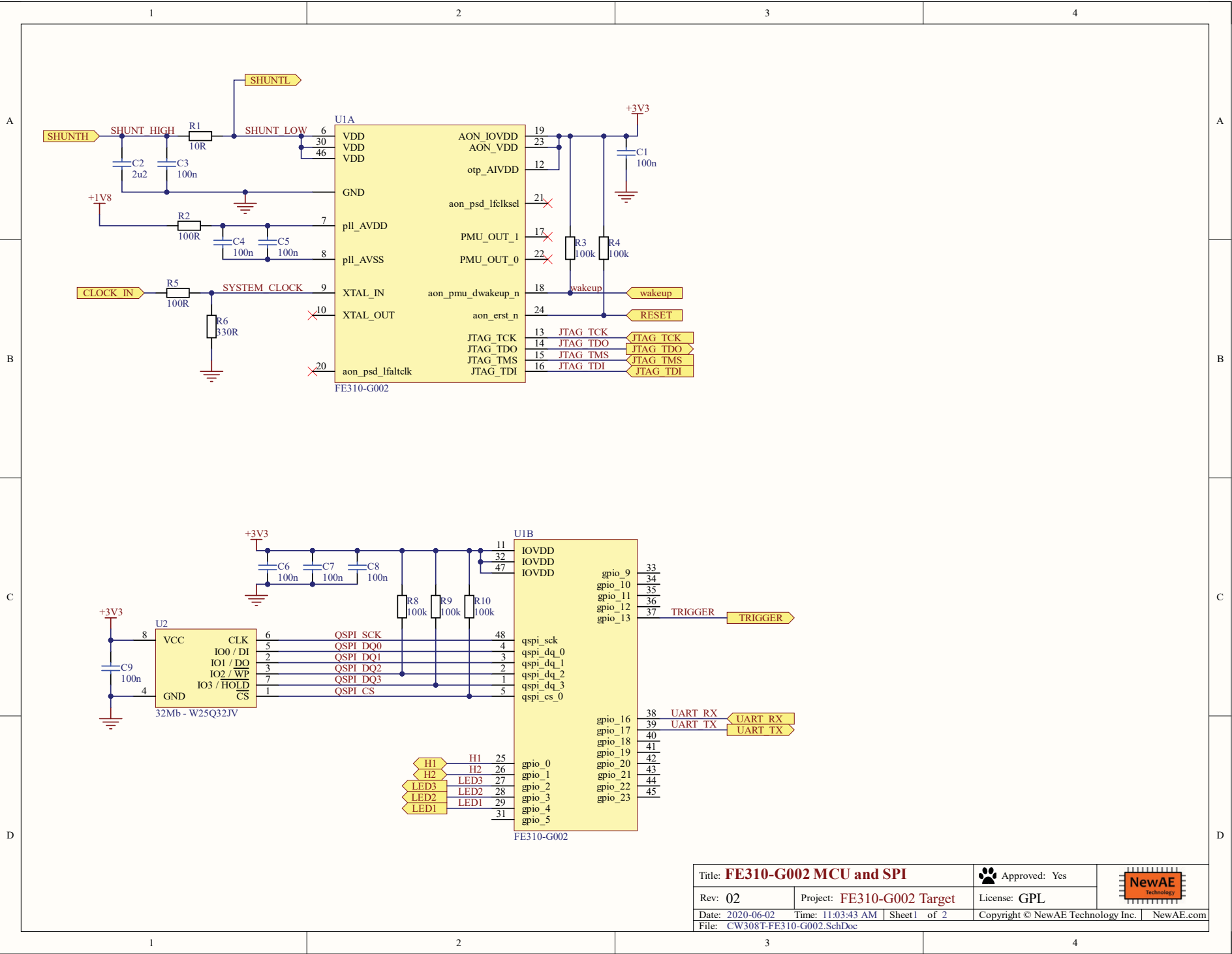
Ordering Summary

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

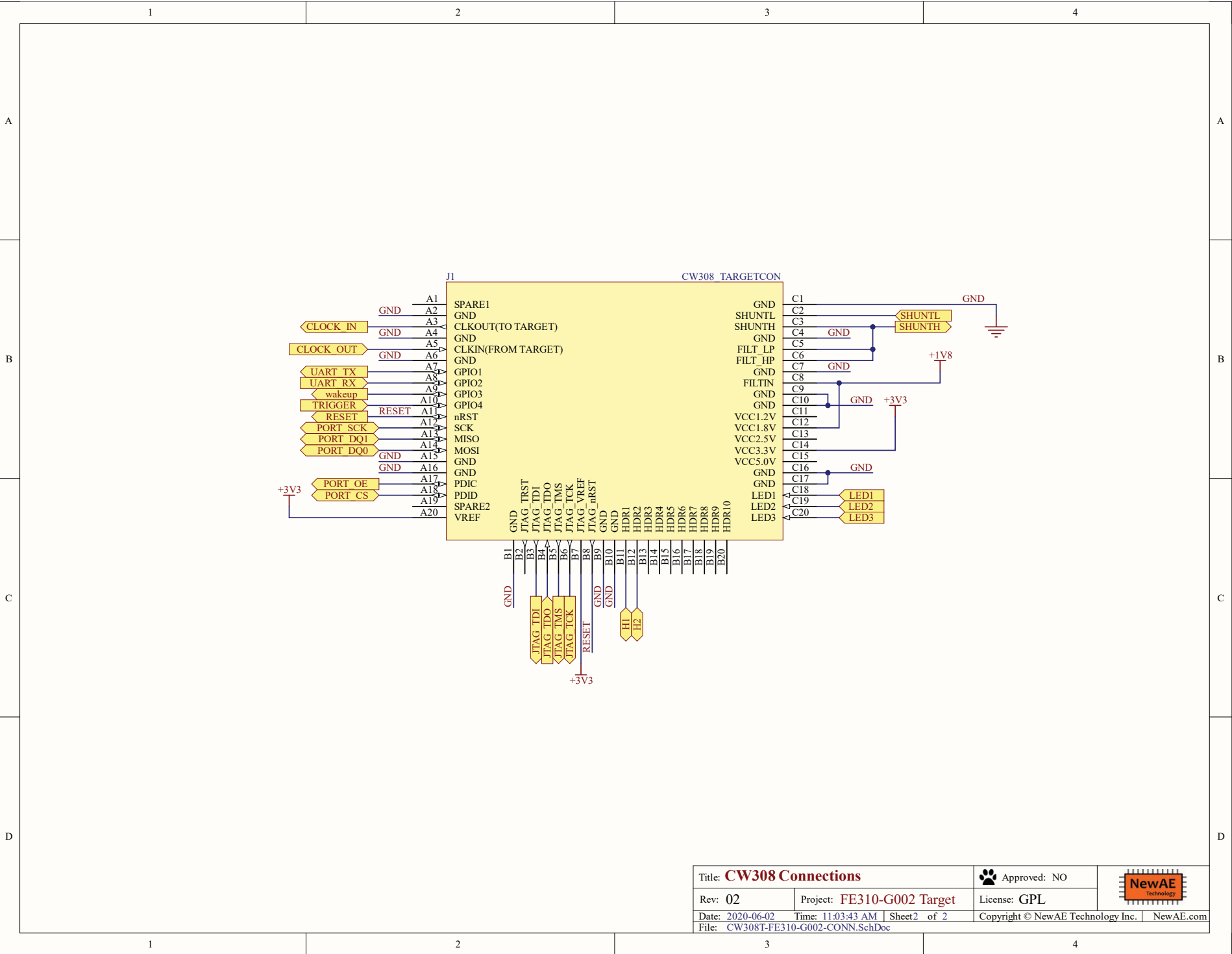
Product Links

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



Schematic



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