

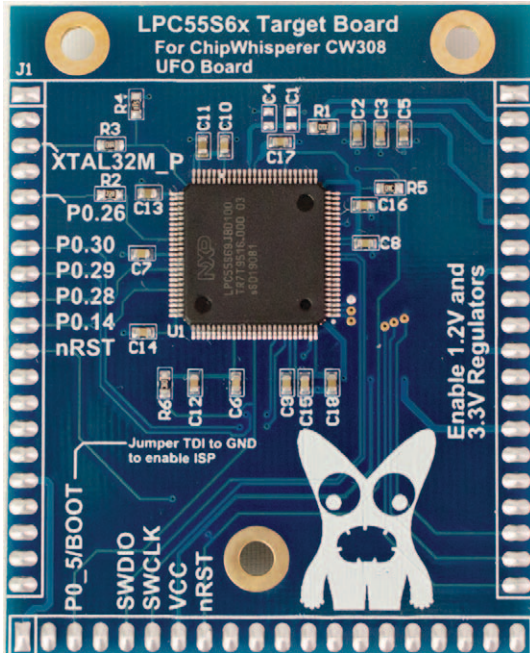


NewAE Technology Inc.
newae.com

ChipWhisperer® Embedded Security Analysis Tools CW308 UFO Targets

LPC55S69 UFO Target

Product Datasheet



The LPC55S69 board features the LPC55S69 from NXP. This device has a dual-core Cortex-M33 core, which features many advanced security features including a PUF and TrustZone-M.

This board requires an external programmer (such as Atmel ICE or OpenOCD) to be used. The example firmware will bring up the AES peripheral (which does not have DPA countermeasures) along with running other normal demos.

The design files are available as part of the open-source ChipWhisperer example targets.

CW308 UFO Baseboard REQUIRED for use!

JTAG/SWD Programmer REQUIRED for use!

Product Highlights

NXP LPC55S6x in TQFP-100 package.

JTAG port on CW308 UFO baseboard breaks out SWD pins to standard 20-pin JTAG header.

Many security features including TrustZone-M, and silent access modes for FLASH and RAM can be investigated.

Full design files are available under an open-source license.

Default 10-ohm shunt resistor for high-SNR measurements, can be shorted with lower-value resistor when running higher frequencies or full dual-core mode.

Errata

Rev -02 PCBs have a solder jumper shorting Pin 44-45 on TQFP package, with reduces noise by disabling the DC-DC SMPS in the device. Do not remove this solder jumper as it is not a defect but added on purpose.

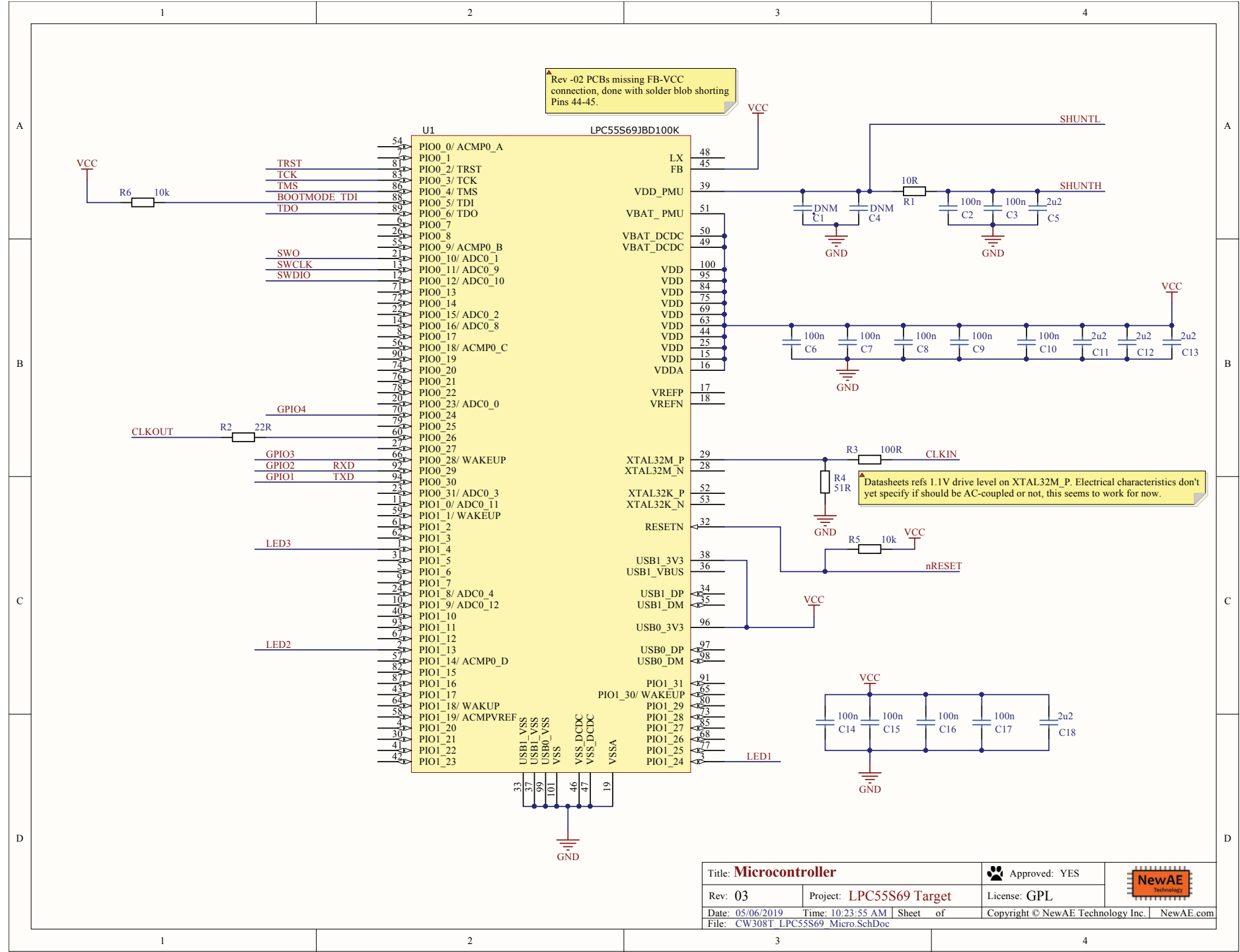
Ordering Summary

NAE-CW308T-LPC55S69 NXP LPC55S69 UFO Target Board.

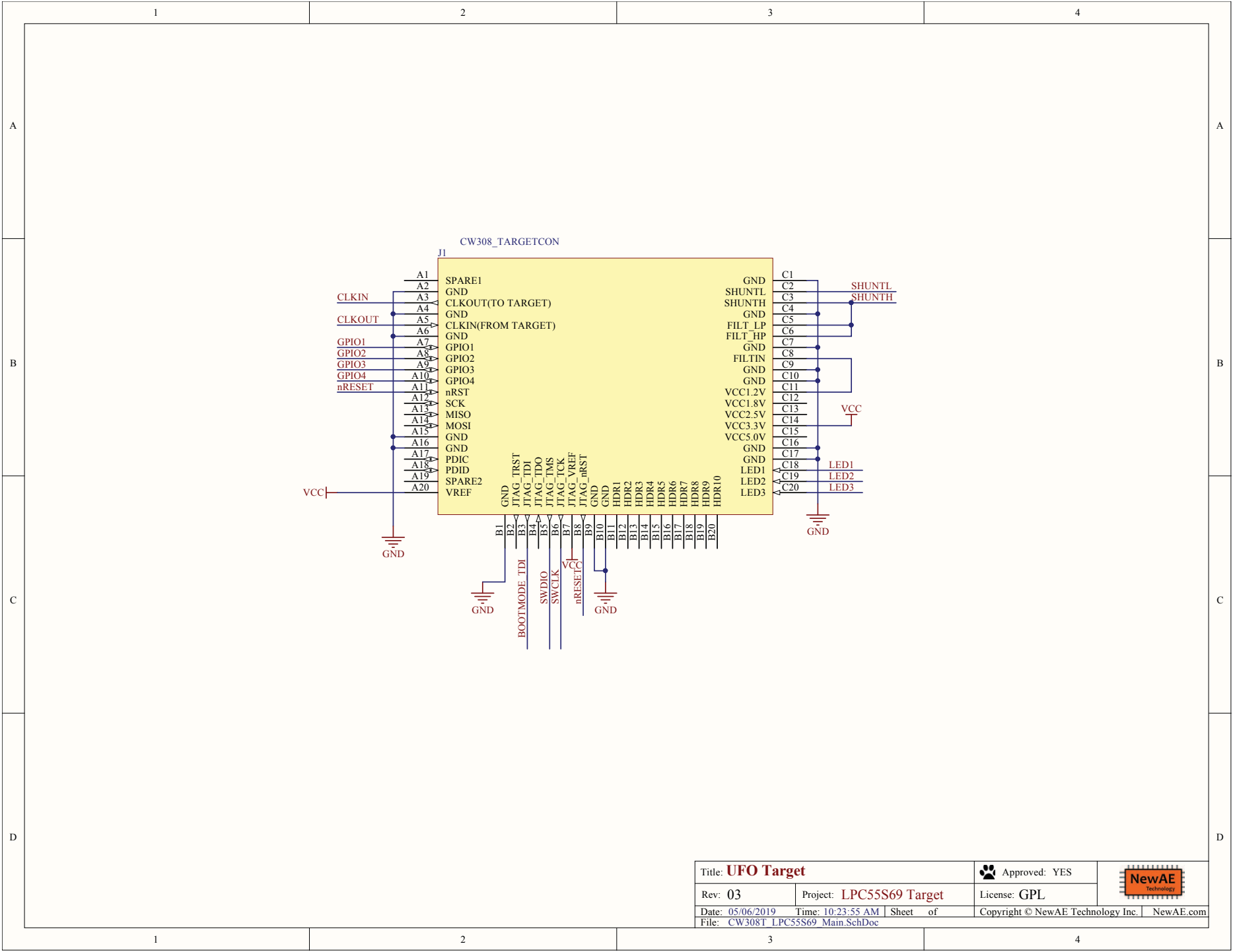
Product Links

Full Documentation <https://wiki.newae.com/CW308T-LPC55S69>
Hardware Design <https://github.com/newaetech/chipwhisperer-target-cw308t>
Firmware Example <https://github.com/newaetech/chipwhisperer/tree/develop/hardware/victims/firmware/>

Schematic



Schematic



Title: UFO Target		Approved: YES	
Rev: 03	Project: LPC55S69 Target	License: GPL	
Date: 05/06/2019	Time: 10:23:55 AM	Sheet of	Copyright © NewAE Technology Inc. NewAE.com
File: CW308T-LPC55S69_Main.SchDoc			



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