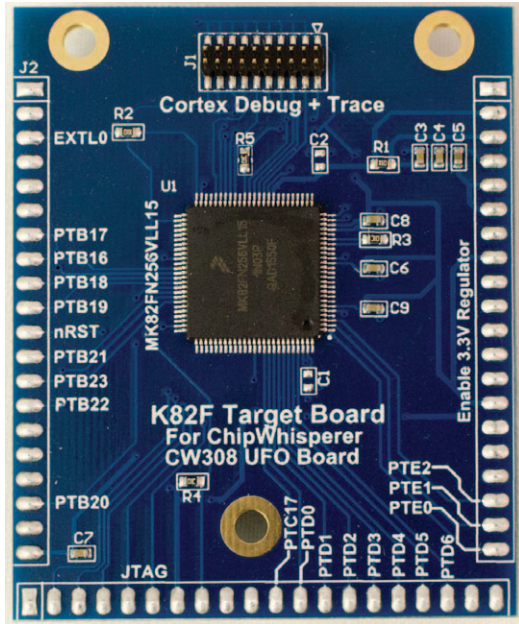




# Kinetis K82 UFO Target

NewAE Technology Inc.  
newae.com



The Kinetis K82 contains a Cortex M4F core with various cryptographic and security features. This includes three (3!) separate AES engines, one of which has hardware masking support for side-channel (or 'side band' in the datasheet) protection.

In addition there is an AES accelerator for loading from flash memory, and a general-purpose higher-speed AES accelerator.

This target also contains a 20-pin Cortex trace port, allowing you to use trace features in the core to better understand program flow during fault events.

The Kinetis K82 has both 256KB of FLASH and SRAM, making it an ideal target for very resource-heavy algorithms.

**CW308 UFO Baseboard REQUIRED for use!**

**JTAG Programmer REQUIRED for use!**

## Product Highlights

NXP Kinetis K82 target device in TQFP100 packaging (MK82FN256VLL15) with 256KB FLASH and 256KB SRAM (that is not a typo, this device has a huge amount of SRAM).

Multiple AES cryptographic hardware accelerators, including with hardware side-channel power analysis protection.

Trace port allowing use of hardware trace (such as Segger J-Trace) for following program flow in real-time during fault events. Uses standard 20-pin Cortex trace header (0.05" pin spacing).

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

JTAG header on CW308 UFO base-board allows use of standard Arm JTAG debug adapter (tested with Segger J-Link) to program the device.

## Ordering Summary

NAE-CW308T-K82F NXP Kinetis MK82FN256VLL15 UFO Target Board.

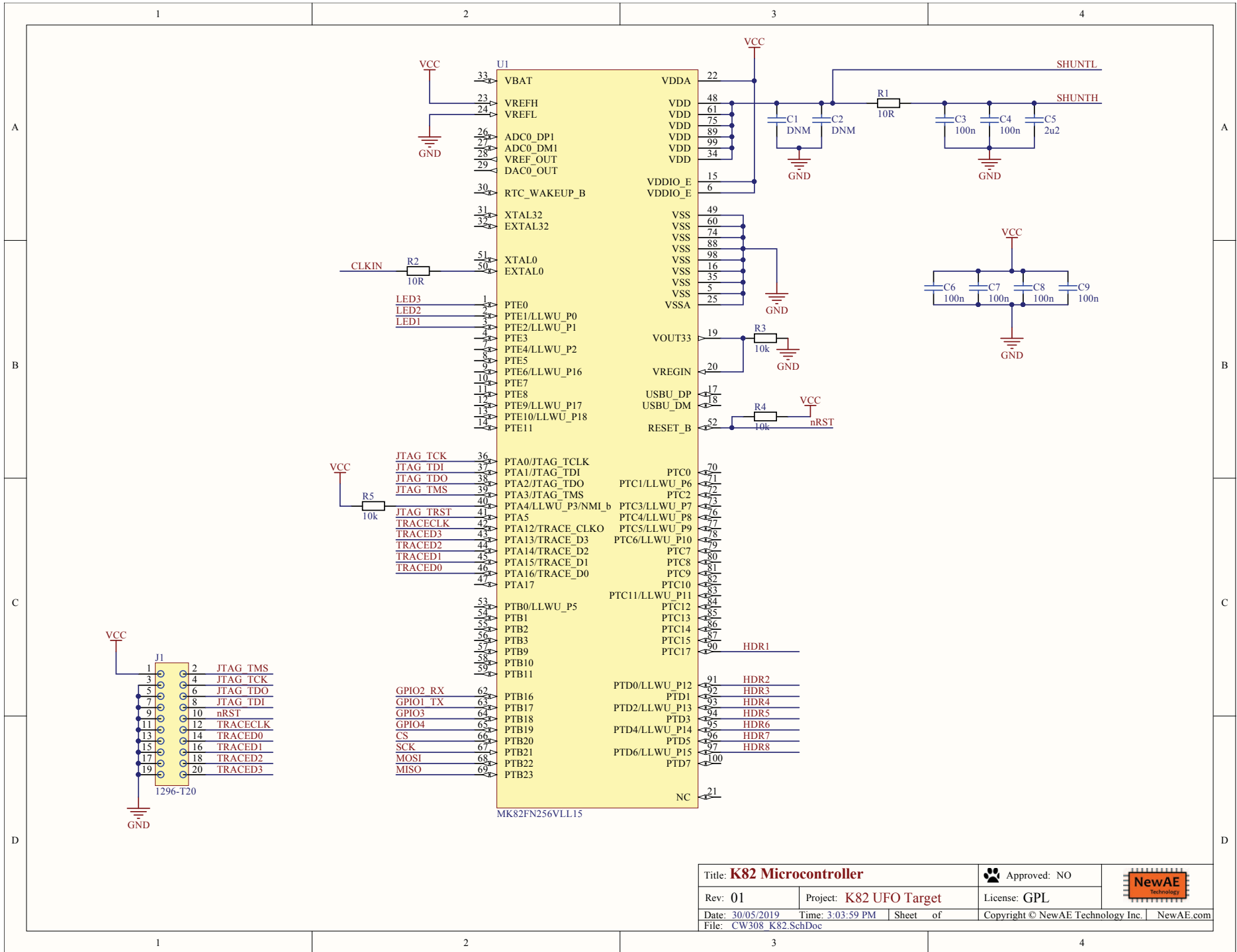
## Product Links

Full Documentation <https://wiki.newae.com/CW308T-K82F>

Hardware Design <https://github.com/newaetech/chipwhisperer-target-cw308t>

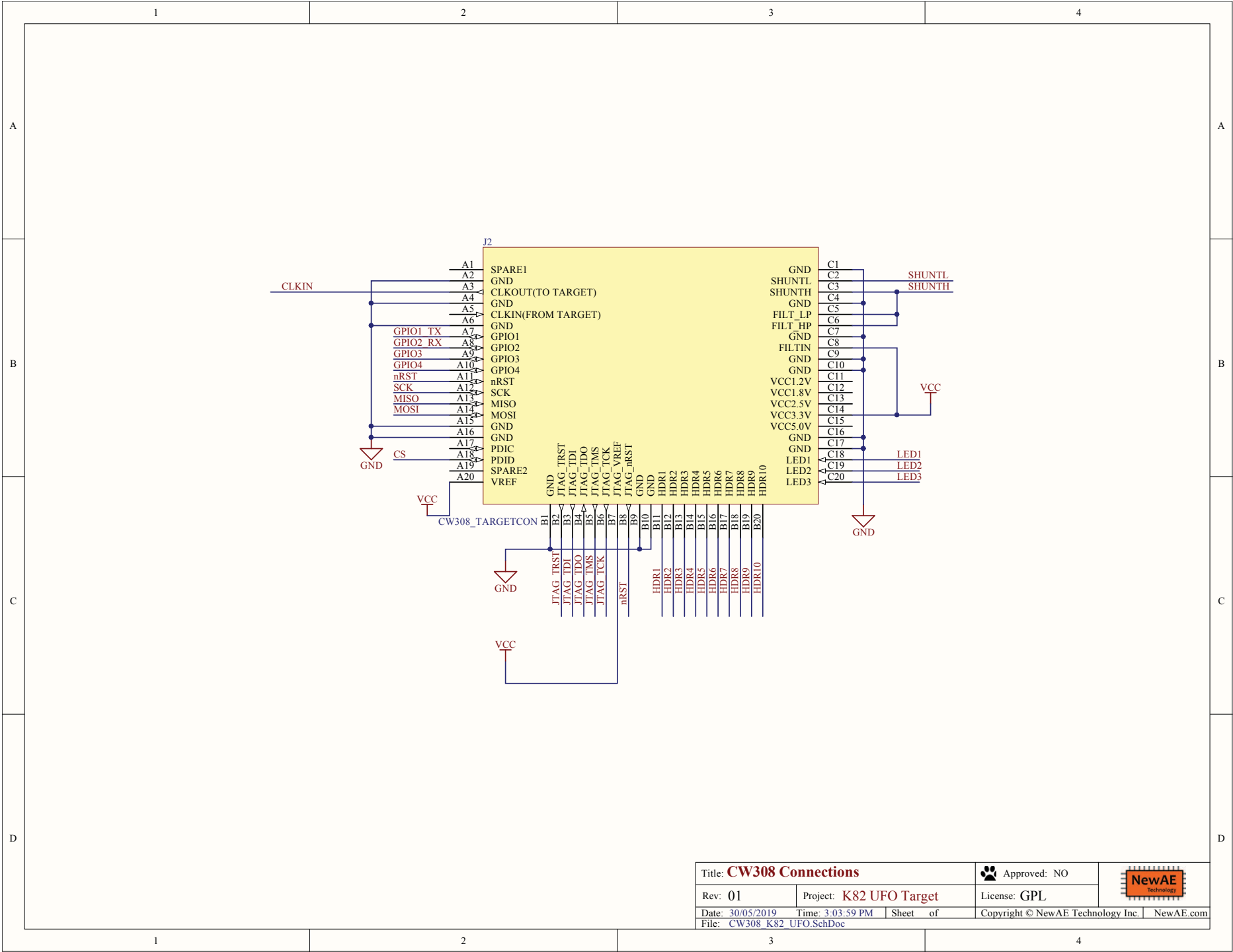
Firmware Example <https://github.com/newaetech/chipwhisperer/tree/develop/hardware/victims/firmware/>

# Schematic



Title: <b>K82 Microcontroller</b>		Approved: NO	
Rev: 01	Project: K82 UFO Target	License: GPL	
Date: 30/05/2019	Time: 3:03:59 PM	Sheet of	Copyright © NewAE Technology Inc.   NewAE.com
File: CW308_K82.SchDoc			

# Schematic



Title: <b>CW308 Connections</b>		Approved: NO	
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