

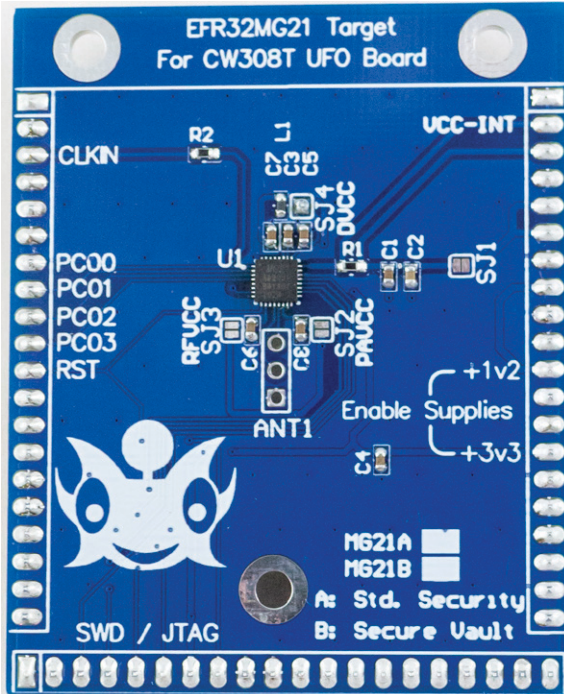


NewAE Technology Inc.
newae.com

ChipWhisperer® Embedded Security Analysis Tools CW308 UFO Targets

EFR32MG21A UFO Target

Product Datasheet



The EFR32MG21A board features the EFR32MG21A010F1024 from Silicon Labs. This device features a number of security features, including a dedicated “Secure Element” core that performs a secure boot operation, and DPA countermeasures on cryptographic primitives.

This board requires an external JTAG/SWD programmer (such as OpenOCD or J-Link) for use, as does not include a bootloader.

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

The RF section is not broken out to a 50-ohm matched header, but instead a simple 3-pin header which allows potential usage in laboratory environments.

See the -SOCKET board for an optional socket version.
See the -MG21B board for the version with ‘Secure Vault’.

CW308 UFO Baseboard REQUIRED for use!

JTAG Programmer REQUIRED for use!

Product Highlights

EFR32MG21A (“Mighty Gecko Multiprotocol Wireless SoC”) has a high-performance Cortex M33 (TrustZone-M) with a separate “secure element” core that handles the secure boot operation, along with multiple cryptographic accelerators (both AES and ECC) that include advertised DPA countermeasures.

Total of 1024KB of FLASH Memory and 96 KB SRAM.

Break-out for various voltage rails, allowing over-driving of internal regulator to reduce noise for DPA measurements, or for testing fault injection detection capability.

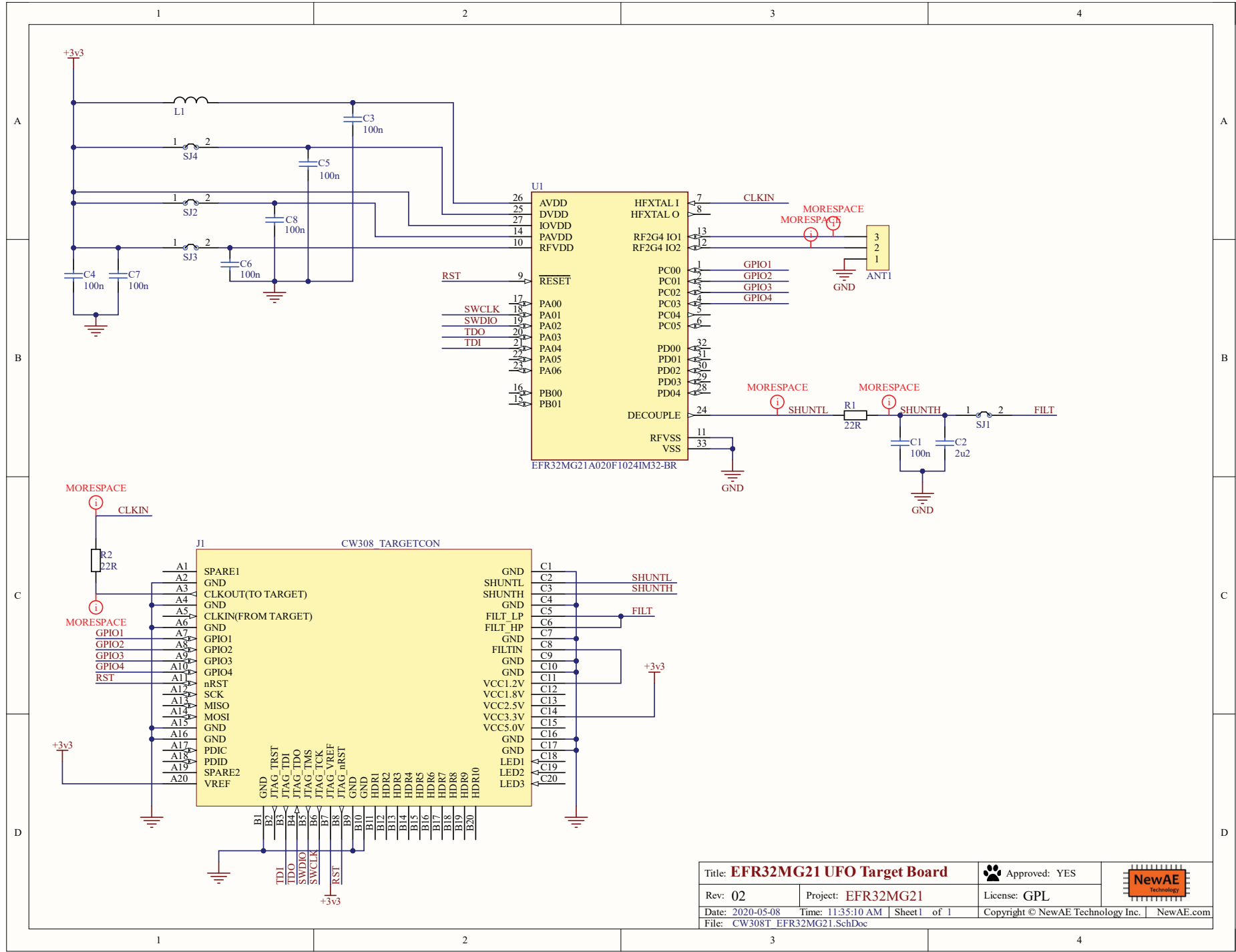
Ordering Summary

NAE-CW308T-EFR32MG21A Silicon Labs EFR32MG21A (EFR32MG21A010F1024) UFO Target Board.

Product Links

Full Documentation	https://wiki.newae.com/CW308T-EFR32MG21
Hardware Design	https://github.com/newaetech/chipwhisperer-target-cw308t
Firmware Example	https://github.com/newaetech/chipwhisperer/tree/develop/hardware/victims/firmware/

Schematic



Title: EFR32MG21 UFO Target Board		
Rev: 02	Project: EFR32MG21	
Date: 2020-05-08	Time: 11:35:10 AM	License: GPL
File: CW308T_EFR32MG21.SchDoc	Sheet 1 of 1	Copyright © NewAE Technology Inc. NewAE.com

Disclaimers

All content is Copyright NewAE Technology Inc., 2019-2020. ChipWhisperer is a trademark of NewAE Technology Inc., registered in the United States of America, Europe, and Peoples Republic of China. ChipSHOUTER is a trademark of NewAE Technology Inc., registered in Europe. Trademarks are claimed in all jurisdictions and may be registered in other states than specified here.

NewAE Technology makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. NewAE Technology does not make any commitment to update the information contained herein. NewAE Technology products are not intended, authorized, or warranted for use as components in applications intended to support or sustain life. NewAE Technology products are designed solely for teaching purposes.

All other product names and trademarks are the property of their respective owners, which are in no way associated or affiliated with NewAE Technology Inc. Use of these names does not imply any co-operation or endorsement.