

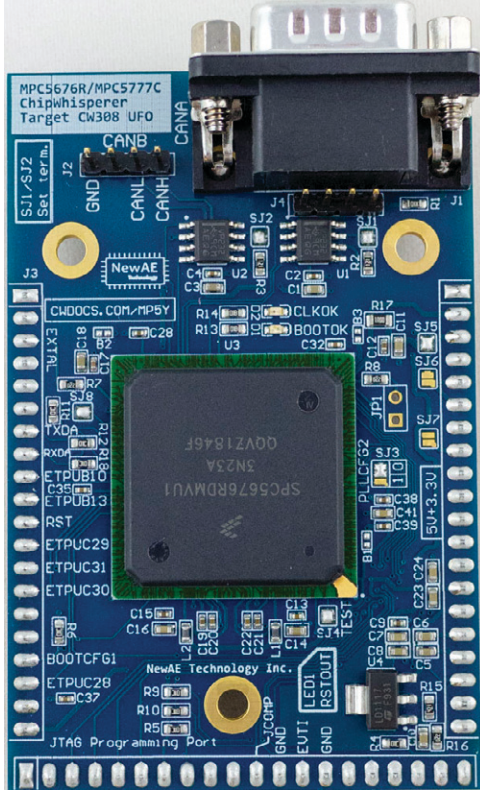


NewAE Technology Inc.
newae.com

ChipWhisperer® Embedded Security Analysis Tools CW308 UFO Targets

MPC5676R UFO Target

Product Datasheet



The CW308T-MPC5676R target series allows experiments on the dual-core e200z7 (PowerPC) device. This microcontroller is found in automotive and industrial applications. The connected pin headers allow usage of two CAN controllers, along with various other peripherals.

The built-in bootloader can be activated to download and execute code from SRAM, examples for doing so are also provided. The booter control is routed to a ChipWhisperer-controlled GPIO, allowing entry via the ChipWhisperer scripting.

ENGCLK header pins allow synchronizing to the internal oscillator during the boot process.

An external JTAG programmer is required for this target. A suggested programmer is the PE Micro Multilink or Multilink FX, which are directly compatible with the S32 Studio Environment (NXP Provided Environment).

CW308 UFO Baseboard Required for use!

JTAG Programmer Required for use!

Product Highlights

Total of 6MB flash, 384 KB SRAM.

On-board internal core voltage regulator for low-noise core supply voltage (does not use on-chip regulator).

Two CAN ports broken out, one to DB9 header, one to a pin header.

Identical board available with MPC5777C device mounted for comparisons across device families.

Ordering Summary

NAE-CW308T-MPC5676R NXP MPC5676 (SPC5676RDK3MVU1R) UFO Target Board.

Product Links

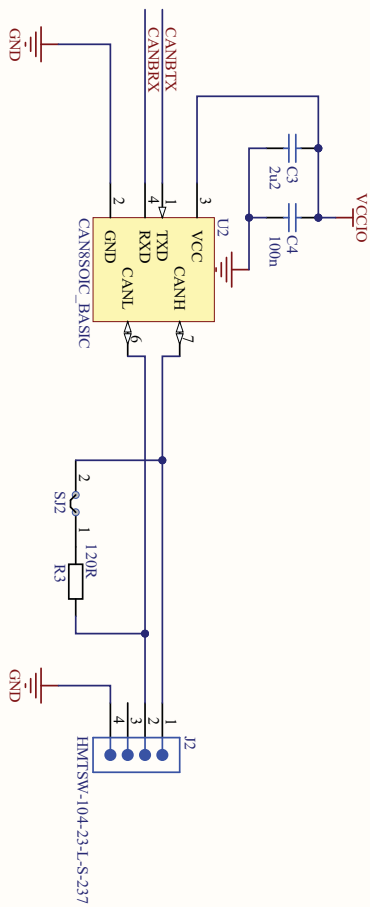
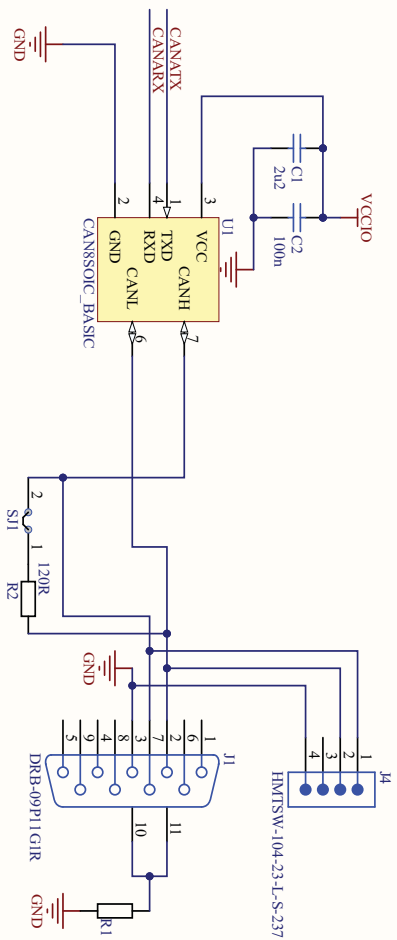
Full Documentation	https://wiki.newae.com/CW308T-MP5Y
Firmware Examples	https://github.com/newaetech/chipwhisperer/tree/master/hardware/victims/firmware
Design Files	https://github.com/newaetech/chipwhisperer-target-cw308t

1

2

3

4



Title: **CAN Transceivers**

Approved: YES

Rev: 03

Project: CW308T-MPC5Y

License: GPL

Date: 2020-03-20

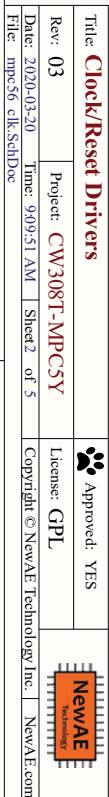
Time: 9:09:50 AM

Copyright © NewAE Technology Inc. NewAE.com

File: mp566_can.SchDoc



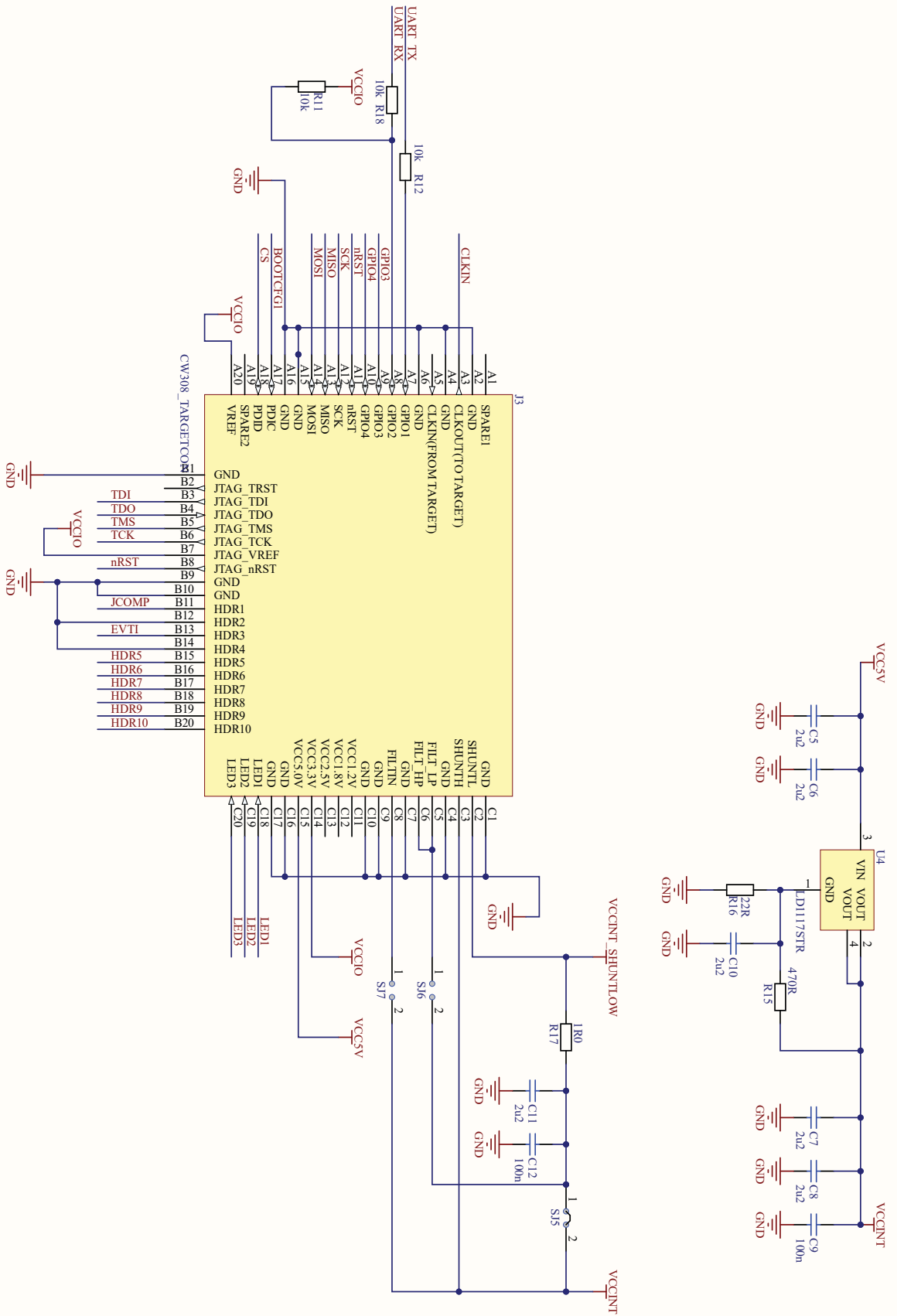
3



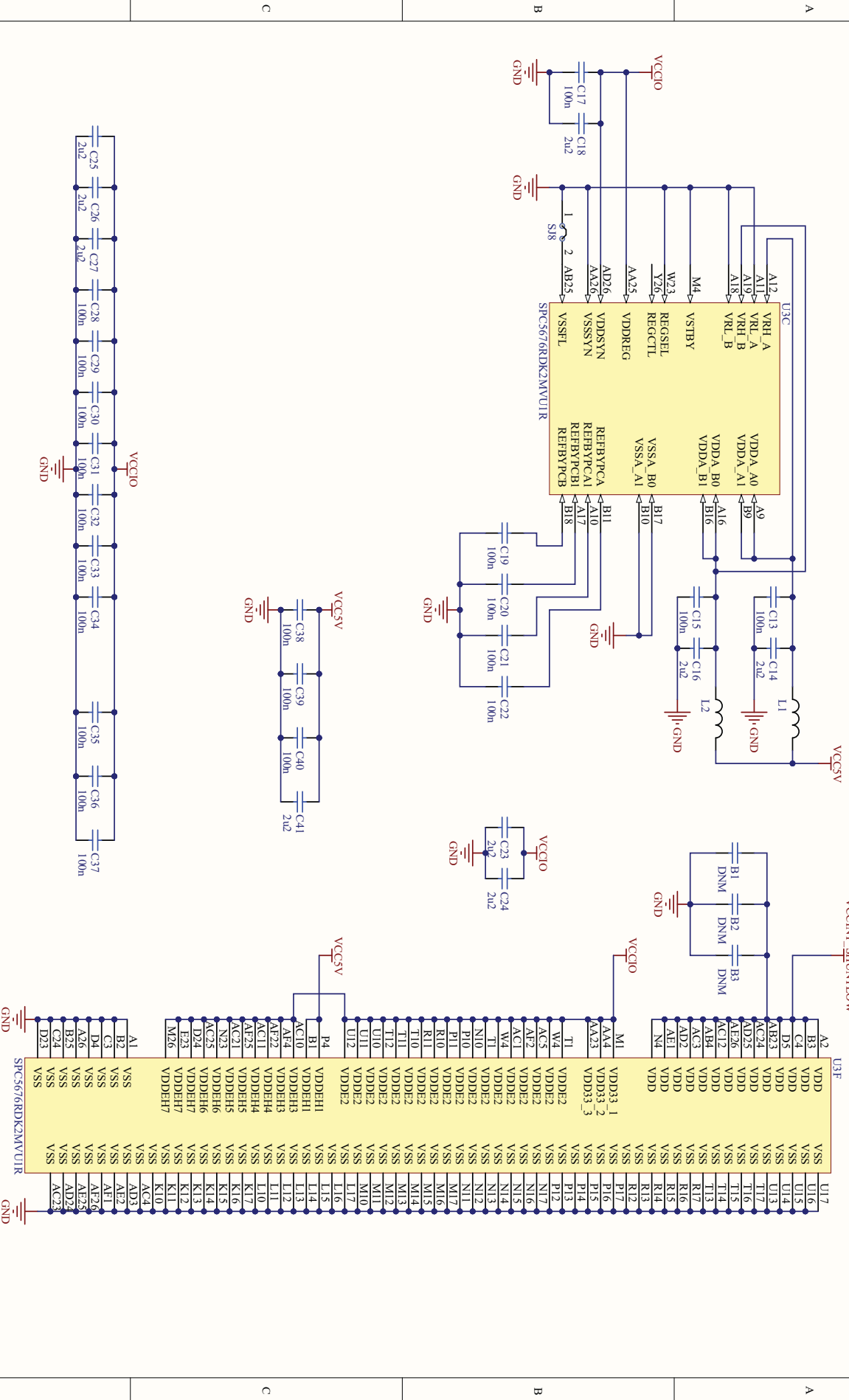
CW308T-MPC5676R Datasheet
Last Update: 2020-JULY-7



Schematic



Title: CW308 UFO Connectors		Approved: YES	
Rev: 03	Project: CW308T-MPC5Y		
Date: 2020-03-20	Time: 9:09:51 AM	Sheet 4 of 5	Copyright © NewAE Technology Inc. NewAE.com
File: mp566_cwcom_SchDoc			



Title: **MCU Power**

Rev: 03

Project: CW308T-MPC5676R

License: GPL



Date: 2020-03-20

Time: 9:09:51 AM

Sheet 5 of 5

Copyright © NewAE Technology Inc. NewAE.com

File: mpc5676r_mcu_power.schDoc

Disclaimers

All content is Copyright NewAE Technology Inc., 2018-2020. ChipWhisperer is a trademark of NewAE Technology Inc., registered in the United States of America, Europe, and Peoples Republic of China. 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.