

Design Note 20210519 TE0710-02 CPLD Firmware

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Company	Trenz Electronic GmbH
DN Number	DN-20210519
Title	Design Note TE0710-02 CPLD Firmware
Subject	CPLD Firmware
Issue Date	2021-05-20

Products Affected

This Design Note affects all SoMs TE0710 revision 02:

Product
TE0710-02-*

Description

TE0710-02 does not have any hardware pullup on the reset signal. In combination with baseboards (e.g. TE0706-03 or other custom baseboards) without pullup on this signal, reset will never be released. This can be overcome by changing the CPLD Firmware on TE0710-02. Therefore a CPLD software is available at the [Download Area](#) of the module (SC-PGM-TE0710-02_SC0710-02_preliminary_20210520.zip).

Following changes compared to the standard firmware are included:

- added pullup on RESET
- PGOOD tristate is now with high impedance and pullup
- pullup/downs on JTAG (some pulldown instead of pullup because CPLD JTAG to FPGA JTAG has different 3.3V power domain, pulldown is used to archive correct power sequencing)

A description of how to update the firmware is available in the [wiki documentation](#). The checksum for the new firmware is 0x0141, visible in Diamond Programmer. The standard firmware has the checksum 0xEC44.

Contact Information

If you have any questions related to this Design Note, please contact Trenz Electronics Technical Support at

- forum.trenz-electronic.de
- wiki.trenz-electronic.de
- support@trenz-electronic.de (subject = DN-20210519)
- phone
 - national calls: 05741 3200-0
 - international calls: 0049 5741 3200-0

Disclaimer

Any statement in this DN is based on the most current product information at the time this DN is being issued. For any further information, please contact your local Trenz Electronic sales office, technical support.