

# Design Note 20210519 TE0710-02 CPLD Firmware

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

## Products Affected

This Design Note affects all SoMs TE0710 revision 02:

<b>Product</b>
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](https://forum.trenz-electronic.de)
- [wiki.trenz-electronic.de](https://wiki.trenz-electronic.de)
- [support@trenz-electronic.de](mailto:support@trenz-electronic.de) (subject = DN-20210519)
- phone
  - national calls: 05741 3200-0
  - international calls: 0049 5741 3200-0

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