

# PCN-20200615 TE0835-01 to TE0835-02 Hardware Revision Change

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|                   |                                                 |
|-------------------|-------------------------------------------------|
| <b>Company</b>    | Trenz Electronic GmbH                           |
| <b>PCN Number</b> | PCN-20200615                                    |
| <b>Title</b>      | TE0835-01 to TE0835-02 Hardware Revision Change |
| <b>Subject</b>    | Hardware Revision Change                        |
| <b>Issue Date</b> | 2020-07-02                                      |

## Products Affected

This change affects all Trenz Electronic TE0835 SoMs of revision 01: TE0835-01-.\*.

| Affected Product | Replacement  |
|------------------|--------------|
| TE0835-01-.*     | TE0835-02-.* |

## Changes

### #1 Added VRP resistor on bank 65

**Type:** Schematic change

**Reason:** Some I/O standards with DCI need external VRP.

**Impact:** DCI I/O standards with external VRP usable on this bank.

### #2 LDO U33 is changed on ADP7102ACPZ

**Type:** Schematic change

**Reason:** Primilary installed LDO had disadvantegous output discharge function, which prevents external sourcing of 3.3V\_CPLD rail.

**Impact:** External sourcing of 3.3V\_CPLD rail possible.

### #3 Changed assignment of Signal DBG\_LED3 at SoC

**Type:** Schematic change

**Reason:** Improve routing/signal integrity.

**Impact:** Signal DBG\_LED3 is connected on AD18 pin of FPGA, was AE18.

### #4 Changed assignment of Signal FPGA IO0 at SoC

**Type:** Schematic change

**Reason:** Improve routing/signal integrity.

**Impact:** Signal FPGA\_IO0 to CPLD now available at Pin AE18, was AF17.

## #5 Signal MIO13\_25 connected to J1 pin 33 instead of MIO25

**Type:** Schematic change

**Reason:** PS peripheral controller with fixed IO assignments may need MIO13 (e.g. for eMMC).

**Impact:** MIO13 now available at B2B J1, if still MIO25 is needed a jumper resistor has to be moved from R76 to R84.

## #6 Resistor R84 is removed

**Type:** Schematic change

**Reason:** MIO13 is now user IO.

**Impact:** No pullup on MIO13.

## #7 LED D1 moved on edge of PCB and controlled via CPLD Signal PWR\_STATUS

**Type:** PCB change

**Reason:** MIO13 is now user IO.

**Impact:** It is no more possible to control LED D1 via MIO13.

## #8 Added THT testpoints on CPLD\_JTAGEN, R76 was removed

**Type:** Schematic change

**Reason:** Improve solution for enabling CPLD JTAG.

**Impact:** CPLD update possible when JTAG enabled via shortcut of THT testpoints, also installation of pinheader with jumper possible.

## #9 Signals B49\_XX\_X are renamed in B88\_XX\_X

**Type:** Schematic change

**Reason:** Inconsistent net naming.

**Impact:** Nets named according to resident Bank.

## #10 C241 is changed to 1nF

**Type:** BOM change

**Reason:** Compensation of U7 did not work.

**Impact:** U7 stable working.

## #11 Improved length matching of CLK signals on RFADC and RFDAC

**Type:** PCB change

**Reason:** Length matching required.

**Impact:** Clks correctly length matched.

## #12 Connection of U8 fixed (PCB)

**Type:** PCB change

**Reason:** BIAS routed to wrong Powerrail.

**Impact:** U8 working correctly.

## #13 PGOOD of U7 connected exclusively to pin E7

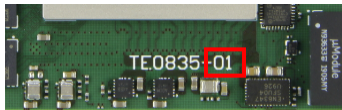
**Type:** Schematic change

**Reason:** PGOOD did not work.

**Impact:** PGOOD of U7 works correct.

## Method of Identification

The revision number is printed on the top side of the PCB.



## Production Shipment Schedule

The new revision 02 is available from August 2020.

## Contact Information

If you have any questions related to this PCN, 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 = PCN-20200615)
- phone
  - national calls: 05741 3200-0
  - international calls: 0049 5741 3200-0

## Disclaimer

Any projected dates in this PCN are based on the most current product information at the time this PCN is being issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information, please contact your local Trenz Electronic sales office, technical support or local distributor.

This PCN follows JEDEC Standard J-STD-046.