PCN-20180816 TE0820-02 to TE0820-03 Hardware Revision Change

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Company	Trenz Electronic GmbH
PCN Number	PCN-20180816
Title	TE0820-02 to TE0820-03 Hardware Revision Change
Subject	Trenz Electronic TE0820 Hardware Change
Issue Date	20180816

Products Affected

This change affects all variations of TE0820 SoMs of revision: TE0820-02-*

affected product	suggested upgrade
TE0820-02-*	TE0820-03-*

Changes

#1 Fixed VCU connection: add additional DCDC (0.9V)

Type: Fix

Reason: Follow Xilinx product integration advice.

Impact: None

#2 LIB components update

Type: PCB change

Reason: Improve production yield.

Impact: None

#3 Change package 1K resistors (0402 -> 0201)

Type: BOM Change

Reason: Improve board layout

Impact: None

#4 Added LEDs (1x user LED, 1x LED for ERR_STATUS, 1xLED for ERR_OUT)

Type: Enhancement

Reason: Function feedback desired.

Impact: LEDs available for visual feedback.

#5 Replaced obsolete 2xSPI Flash (256MBit) -> 2xSPI Flash (512MBit)

Type: BOM change

Reason: N25Q256A11E1240E became obsolete, replacement part not available for purchase. This is only interim solution because N25Q512A11G1240E is also obsolete already. It will be changed after the replacement parts get available.

Impact: Size changed from 256 MBit to 512 MBit per chip. JEDEC ID changed from BB19h to BB20h both with manufacturer ID: 20h.

#6 Added additional DCDCs (PL_VCCINT_IO, PS_FP0V85)

Type: Improvement

Reason: Allow for higher loads.

Impact: None

#7 Changed DCDC (U5) 6A (optional 4A)

Type: Improvement

Reason: Allow for higher loads.

Impact: None

#8 Routed POR signal to A4 pin of SPI Flash chips with not fitted resistors R80, R81

Type: Schematic change

Reason: Depending on the Flash type, this pin is used as RESET.

Impact: More Flash types are compatible with the PCB.

#9 Replaced obsolet DDR4 NT5AD256M16B2-GN by K4A8G165WB-BIRC

Type: BOM change

Reason: NT5AD256M16B2-GN became obsolete.

Impact: Size changed from 4Gbit to 8Gbit.

Method of Identification

The model code and revision number (e.g. TE0820-02 or TE0820-03) are printed on the top side of the PCB.

Production Shipment Schedule

After August 2018.

Contact Information

If you have any questions related to this PCN, please contact Trenz Electronic's Technical Support at

- forum.trenz-electronic.de
- wiki.trenz-electronic.de
- support%trenz-electronic.de (subject = PCN-20180816)
- phone
    - national calls: 05223 65301-0
    - international calls: 0049 5223 65301-0

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.