PCN-20201007 TE0803-03 to TE0803-04 Hardware Revision Change

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Company	Trenz Electronic GmbH
PCN Number	PCN-20201007
Title	TE0803-03 to TE0803-04 Hardware Revision Change
Subject	Hardware Revision Change
Issue Date	2021-02-15

Products Affected

This change affects all Trenz Electronic TE0803 SoMs of revision 03:

Affected Product	Replacement
TE0803-03-*	TE0803-04-*

Changes

#1 PL_VCCINT power supply U4 replaced by TPS548A28RWWR

Type: Schematic change
Reason: Minimize solution footprint and cost optimization.
Impact: Up to 15A VCCINT possible. Height profile of the module is changed.

#2 Added support of wide DDR4 SDRAM packages

Type: PCB change
Reason: Support of new packages of DDP DDR4 ICs.
Impact: DDP DDR4 now supported.

#3 Add resistors R12 and R93

Type: Schematic change
Reason: Add option to select POR_OVERRIDE level.
Impact: For all standard variants R93 is fitted and R12 is not fitted. With this setting the behavior is the same as in previous revision. Custom variants 4BI21-X and 4BI41-X have R12 fitted and R93 not fitted.

#4 Unused VCCO pins connected together within Bank 24 and Bank44

Type: Schematic change
Reason: Xilinx recomendation UG583.
Impact: None.

#5 Signal trace lengths changed

Type: PCB change
Reason: Result of changes above.
Impact: Changed tracelength have to be taken into account in existing designs. The tracelength for new revision are added to the TE080x series pinout generator.

#6 Updated company address

Type: Silkscreen change
Reason: Trenz Electronic moved to new location in 2019.
Impact: None.

#7 Added module orientation pointer

Type: PCB change
Reason: Correct orientation of SoM on baseboard not obvious.
Impact: Implementing a similar pointer on a carrier PCB will lower the risk of mounting the module wrongly oriented.

#8 Changed resistors value of R29, R31, R35, R39, R44-R47

Type: PCB change
Reason: BOM optimization
Impact: None.

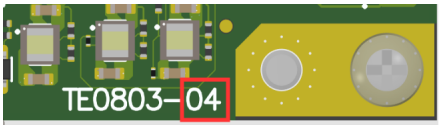
#9 Removed traceability S/N part

Type: BOM change
Reason: Part is end of life.
Impact: Track it pad no more available.

Note: Due to the changes above the height profile of the module is changed. Using TE0803-04 board as a replacement or in system designed for TE0803-03, review and adaption of mechanics e.g. cooling solutions have to be done. KK0803-03 is not compatible with TE0803-04. A new revision of the heat spreader for revision 04 of TE0803 will be released.

Method of Identification

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



Production Shipment Schedule

The new revison 04 is available from October 2021. Revision 03 is still continued. For new designs revison 04 should be used. It is recommended to switch to the new revision when possible.

Contact Information

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

- forum.trenz-electronic.de
- wiki.trenz-electronic.de
- support%trenz-electronic.de (subject = PCN-20201007)
- phone
    - national calls: 05741 3200-0
    - international calls: +49 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.