

PCN-20240124 TE0600-03 to TE0600-04 Hardware Revision Change

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Company	Trenz Electronic GmbH
PCN Number	PCN-20240124
Title	TE0600-03 to TE0600-04 Hardware Revision Change
Subject	Hardware Revision Change
Issue Date	2024-02-06

Products Affected

This change affects all Trenz Electronic TE0600 SoMs: TE0600-03*.

Affected Product	Replacement
TE0600-03-72C11-A	TE0600-04-72C11-A
TE0600-03-72C21-A	TE0600-04-72C21-A
TE0600-03-52I11-A	TE0600-04-52I11-A
TE0600-03-83I21-A	TE0600-04-83I21-A
TE0600-03-52I11-M	TE0600-04-52I11-M
TE0600-03-83I11-A	TE0600-04-83I11-A
TE0600-03-83C21-A	TE0600-04-83C21-A
TE0600-03-52I11-W	EOL
TE0600-03-52I11-C	EOL

Changes

#1 Changed DCDC EN6347QI (U2) to MPM3860GQW-Z and adapted power circuit.

Type: Schematic Change

Reason: EOL of Component.

Impact: None. Increased current output capability. Minor changes in electrical characteristics.

#2 Changed DCDC EP53F8QI (U3) to MPM3834CGPA and adapted power circuit.

Type: Schematic Change

Reason: EOL of Component.

Impact: None. Minor changes in electrical characteristics.

#3 Changed LDO LP3878SD-ADJ (U4, U14) to TPS74601PBDRV and adapted power circuit.

Type: Schematic Change

Reason: EOL of Component.

Impact: None. Increased current output capability. Minor changes in electrical characteristics.

#4 Assembled clock SiT8008BI-73-XXS-100.000000E (U12).

Type: BOM Change

Reason: System clock improvement.

Impact: Add additional system clock.

#5 Inserted internal pull-up IO resistor option for FPGA via external resistor (R83).

Type: Schematic Change

Reason: Increase flexibility.

Impact: None.

#6 Improved led (D1) driving circuit via adding MOSFET (T1) and resistor (R84) and changed 120 Ohm resistor (R36) to 240 Ohm.

Type: Schematic Change

Reason: Improve led circuit.

Impact: None.

#7 Changed 2.2 kOhm resistor (R29) to 100 Ohm.

Type: BOM Change

Reason: Follow AMD recommendation.

Impact: None.

#8 Changed diode (D3) from BAT54VV,115 to two separated diodes (D2, D3) BAT54A,215.

Type: Schematic Change

Reason: BOM optimization.

Impact: None.

#9 Changed 2.2 kOhm resistors (R56, R57, R58) to 2.4 kOhm.

Type: BOM Change

Reason: Follow AMD recommendation.

Impact: None.

#10 Pulled-down board revision signal "BR0" (FPGA U5, pin P17) and updated board revision documentation.

Type: Schematic Change

Reason: Update revision information.

Impact: None. Custom design needs to be updated by customer in cases where board revision signals are used.

#11 Added testpoints (TP11...TP14, TP23...TP28).

Type: PCB Change

Reason: Improve voltage and system monitoring.

Impact: None.

#12 Changed fiducials to standard fiducial type.

Type: Schematic Change

Reason: Use standard fiducials.

Impact: None.

#13 Changed stacked vias to staggered vias.

Type: PCB Change

Reason: Reliability improvement.

Impact: Reliability improvement.

#14 Signal trace lengths changed.

Type: PCB change

Reason: Result of changes above.

Impact: Changed trace length have to be taken into account in existing designs.

#15 Updated B2B documentation.

Type: Documentation Update

Reason: Documentation Improvement.

Impact: None.

#16 Renamed document sheets.

Type: Documentation Update

Reason: Documentation Improvement.

Impact: None.

#17 Updated legal notices, revision history, block and power diagram. Updated page count and order.

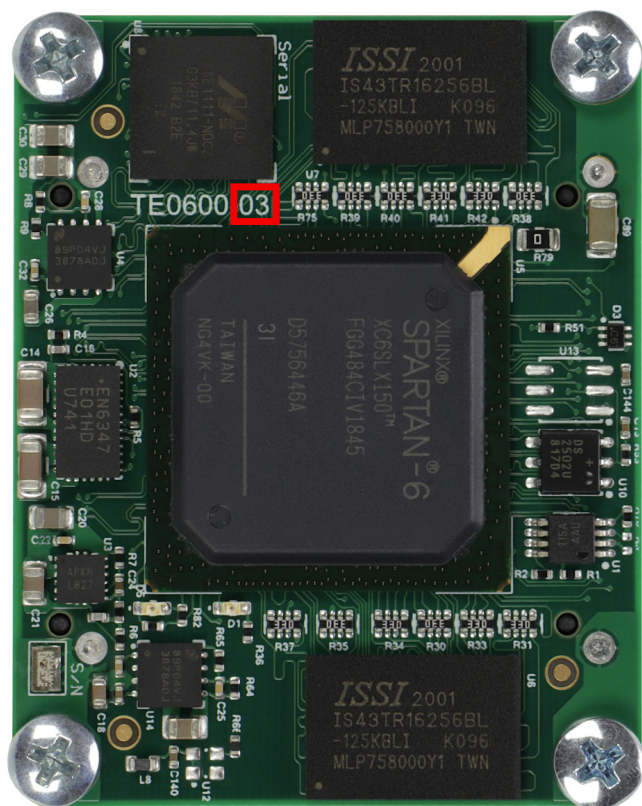
Type: Documentation Update

Reason: Documentation Improvement.

Impact: None.

Method of Identification

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



Production Shipment Schedule

From September 2024, after old stock is gone. If the new revision is not suitable for your application and still the former revision of the board is needed, please contact us.

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-20240124)
- 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.