

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

## 1 Products Affected

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

<b>Affected Product</b>	<b>Replacement</b>
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

## 2 Changes

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### 2.1 #1 Changed DCDC EN6347QI (U2) to MPM3860GQW-Z and adapted power circuit.

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**Type:** Schematic Change

**Reason:** EOL of Component.

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

### 2.2 #2 Changed DCDC EP53F8QI (U3) to MPM3834CGPA and adapted power circuit.

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**Type:** Schematic Change

**Reason:** EOL of Component.

**Impact:** None. Minor changes in electrical characteristics.

### 2.3 #3 Changed LDO LP3878SD-ADJ (U4, U14) to TPS74601PBDRVT and adapted power circuit.

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**Type:** Schematic Change

**Reason:** EOL of Component.

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

### 2.4 #4 Assembled clock SiT8008BI-73-XXS-100.000000E (U12).

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**Type:** BOM Change

**Reason:** System clock improvement.

**Impact:** Add additional system clock.

### 2.5 #5 Inserted internal pull-up IO resistor option for FPGA via external resistor (R83).

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**Type:** Schematic Change

**Reason:** Increase flexibility.

**Impact:** None.

## 2.6 #6 Improved led (D1) driving circuit via adding MOSFET (T1) and resistor (R84) and changed 120 Ohm resistor (R36) to 240 Ohm.

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**Type:** Schematic Change

**Reason:** Improve led circuit.

**Impact:** None.

## 2.7 #7 Changed 2.2 kOhm resistor (R29) to 100 Ohm.

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**Type:** BOM Change

**Reason:** Follow AMD recommendation.

**Impact:** None.

## 2.8 #8 Changed diode (D3) from BAT54VV,115 to two separated diodes (D2, D3) BAT54A,215.

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**Type:** Schematic Change

**Reason:** BOM optimization.

**Impact:** None.

## 2.9 #9 Changed 2.2 kOhm resistors (R56, R57, R58) to 2.4 kOhm.

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**Type:** BOM Change

**Reason:** Follow AMD recommendation.

**Impact:** None.

## 2.10 #10 Pulled-down board revision signal "BR0" (FPGA U5, pin P17) and updated board revision documentation.

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**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.

## 2.11 #11 Added testpoints (TP11...TP14, TP23...TP28).

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**Type:** PCB Change

**Reason:** Improve voltage and system monitoring.

**Impact:** None.

## 2.12 #12 Changed fiducials to standard fiducial type.

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**Type:** Schematic Change

**Reason:** Use standard fiducials.

**Impact:** None.

## 2.13 #13 Changed stacked vias to staggered vias.

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**Type:** PCB Change

**Reason:** Reliability improvement.

**Impact:** Reliability improvement.

## 2.14 #14 Signal trace lengths changed.

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**Type:** PCB change

**Reason:** Result of changes above.

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

## 2.15 #15 Updated B2B documentation.

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**Type:** Documentation Update

**Reason:** Documentation Improvement.

**Impact:** None.

## 2.16 #16 Renamed document sheets.

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**Type:** Documentation Update

**Reason:** Documentation Improvement.

**Impact:** None.

## 2.17 #17 Updated legal notices, revision history, block and power diagram. Updated page count and order.

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**Type:** Documentation Update

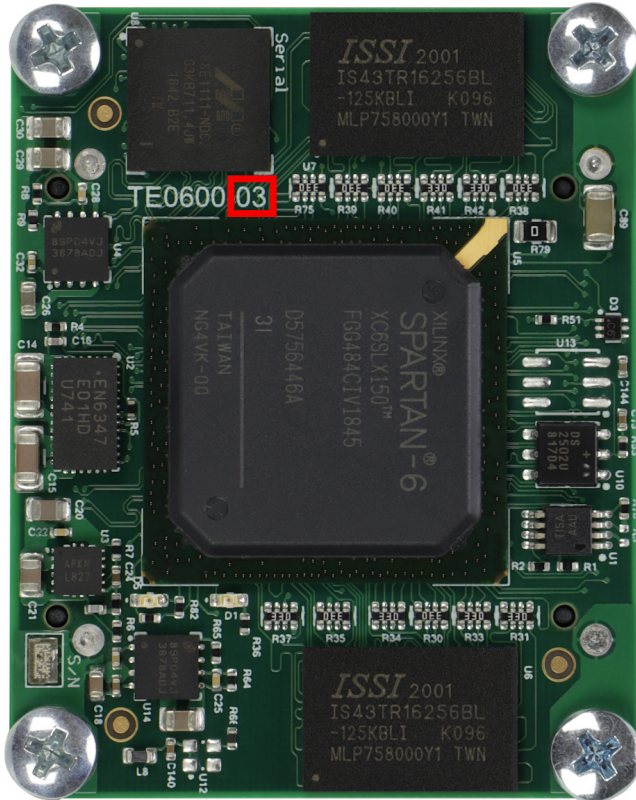
**Reason:** Documentation Improvement.

**Impact:** None.

## 3 Method of Identification

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



## 4 Production Shipment Schedule

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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.

## 5 Contact Information

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

- [forum.trenz-electronic.de](http://forum.trenz-electronic.de)<sup>1</sup>
- [wiki.trenz-electronic.de](http://wiki.trenz-electronic.de)<sup>2</sup>
- [support@trenz-electronic.de](mailto:support@trenz-electronic.de)<sup>3</sup> (subject = PCN-20240124)
- phone

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<sup>1</sup> <http://forum.trenz-electronic.de/>

<sup>2</sup> <http://wiki.trenz-electronic.de/>

<sup>3</sup> <mailto:support@trenz-electronic.de?subject=PCN-20240124>

- national calls: 05741 3200-0
- international calls: 0049 5741 3200-0

## 6 Disclaimer

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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.