

Company	Trenz Electronic GmbH
PCN Number	PCN-20230705
Title	TE0703-06 to TE0703-07 Hardware Revision Change
Subject	Hardware Revision Change
Issue Date	2023-10-13

1 Products Affected

This change affects all Trenz Electronic TE0703 SoMs: TE0703-07*.

Affected Product	Replacement
TE0703-06	TE0703-07

2 Changes

2.1 #1 Removed VG96 connector (MECH1, MECH2, J1, J2) from BOM.

Type: BOM Change

Reason: Improve manufacturing process.

Impact: Connector no longer available within product. If needed, connector needs to be ordered separately (Trenz article number 21545).

2.2 #2 Changed DCDC (U3) from EN6347QI 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.

2.3 #3 Changed load switch (Q1) from TPS27081ADDCR to load switch MP5077GG-Z and adapted circuit.

Type: Schematic Change

Reason: BOM Optimization.

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

2.4 #4 Named enable signal for load switch (Q1) to "EN_3.3V_SD".

Type: Schematic Change

Reason: Improve signal identification.

Impact: None.

2.5 #5 Changed clock (U6) from SiT8008AI-73-XXS-12.000000E to SiT8008BI-73-XXS-12.000000E.

Type: Schematic Change

Reason: Use new clock revision.

Impact: None.

2.6 #6 Changed USB connector (J12) from 629105150521 to 629105150921.

Type: Schematic Change

Reason: Follow USB specification.

Impact: Changed micro USB type B receptable to micro USB type AB receptable and mechanical component size. Reduced current capability.

2.7 #7 Changed SD Card connector (J3) from 504077-1891 to MEM2052-00-195-00-A.

Type: Schematic Change

Reason: EOL of Component.

Impact: Mechanical component size increased and push/pull changed to push/push.

2.8 #8 Changed pin header (J7) from two pins to three pins and added jumper (J20).

Type: Schematic Change

Reason: Improve manufacturing process.

Impact: None.

2.9 #9 Added pull-up resistor (R43) for signal "USB_OC".

Type: Schematic Change

Reason: Enable external pull-up option.

Impact: Firmware reflects it but custom firmware needs to be updated by customer.

2.10 #10 Added additional decoupling capacitors C55, C57...C65.

Type: Schematic Change

Reason: Improve decoupling.

Impact: None.

2.11 #11 Added testpoints (TP1...TP30).

Type: PCB Change

Reason: Improve voltage monitoring.

Impact: None.

2.12 #12 Changed 1 μ F capacitor (C38, C39) from 6.3 V to 16 V.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.13 #13 Changed 47 μ F capacitor (C48) from 6.3 V, 1206 to 10 V, 0805.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.14 #14 Changed 22 μ F capacitor (C31) from 10 %, 1206 to 20 %, 0805.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.15 #15 Changed resistor (R10, R14, R24, R27, R37, R38) from 10 kOhm to 12 kOhm.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.16 #16 Changed resistor (R17...R20) from 4.7 kOhm to 5.1 kOhm.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.17 #17 Changed fiducials to standard fiducial type.

Type: Schematic Change

Reason: Use standard fiducials.

Impact: None.

2.18 #18 Removed serial number S/N.

Type: Schematic Change

Reason: EOL of Component.

Impact: None.

2.19 #19 Added UKCA logo.

Type: PCB Change

Reason: Required for export to UK.

Impact: None.

2.20 #20 Changed address on silkscreen.

Type: PCB Change

Reason: Updated contact information.

Impact: None.

2.21 #21 Updated components from library.

Type: Schematic Change

Reason: Use latest component data.

Impact: None.

2.22 #22 Updated legal notices, revision history, block and power diagram. Updated page count and order.

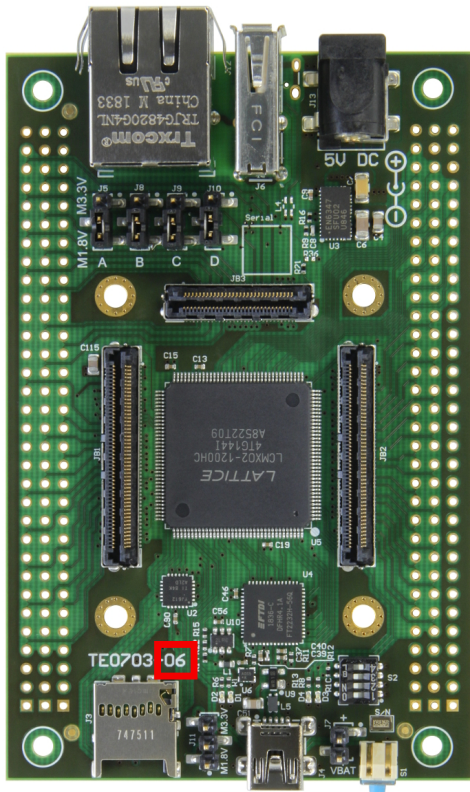
Type: Documentation Update

Reason: Documentation improvement.

Impact: None.

3 Method of Identification

The revision number is shown on the top side of the PCB. Revision number position changes between REV06 and REV07 on top side of the PCB.



4 Production Shipment Schedule

This change takes place with immediate effect. 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

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

- forum.trenz-electronic.de¹
- wiki.trenz-electronic.de²
- support@trenz-electronic.de³ (subject = PCN-20230705)

¹ <http://forum.trenz-electronic.de/>

² <http://wiki.trenz-electronic.de/>

³ <mailto:support@trenz-electronic.de?subject=PCN-20230705>

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

6 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.