

## PCN-20230705 TE0703-06 to TE0703-07 Hardware Revision Change

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

### Products Affected

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

Affected Product	Replacement
TE0703-06	TE0703-07

### Changes

#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 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.

#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.

#4 Named enable signal for load switch (Q1) to "EN\_3.3V\_SD".

**Type:** Schematic Change

**Reason:** Improve signal identification.

**Impact:** None.

#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.

#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.

#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.

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

**Type:** Schematic Change

**Reason:** Improve manufacturing process.

**Impact:** None.

#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.

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

**Type:** Schematic Change

**Reason:** Improve decoupling.

**Impact:** None.

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

**Type:** PCB Change

**Reason:** Improve voltage monitoring.

**Impact:** None.

#12 Changed 1  $\mu$ F capacitor (C38, C39) from 6.3 V to 16 V.

**Type:** Schematic Change

**Reason:** BOM Optimization.

**Impact:** None.

#13 Changed 47  $\mu$ F capacitor (C48) from 6.3 V, 1206 to 10 V, 0805.

**Type:** Schematic Change

**Reason:** BOM Optimization.

**Impact:** None.

#14 Changed 22  $\mu$ F capacitor (C31) from 10 %, 1206 to 20 %, 0805.

**Type:** Schematic Change

**Reason:** BOM Optimization.

**Impact:** None.

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

**Type:** Schematic Change

**Reason:** BOM Optimization.

**Impact:** None.

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

**Type:** Schematic Change

**Reason:** BOM Optimization.

**Impact:** None.

#17 Changed fiducials to standard fiducial type.

**Type:** Schematic Change

**Reason:** Use standard fiducials.

**Impact:** None.

#18 Removed serial number S/N.

**Type:** Schematic Change

**Reason:** EOL of Component.

**Impact:** None.

#19 Added UKCA logo.

**Type:** PCB Change

**Reason:** Required for export to UK.

**Impact:** None.

#20 Changed address on silkscreen.

**Type:** PCB Change

**Reason:** Updated contact information.

**Impact:** None.

#21 Updated components from library.

**Type:** Schematic Change

**Reason:** Use latest component data.

**Impact:** None.

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

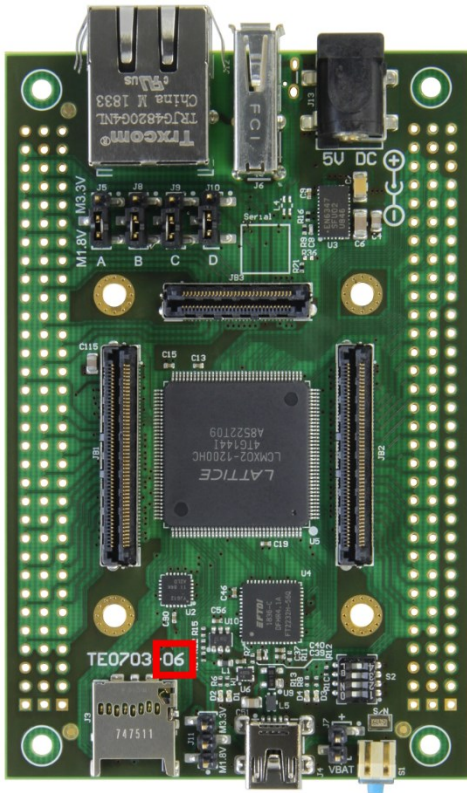
**Type:** Documentation Update

**Reason:** Documentation improvement.

**Impact:** None.

## Method of Identification

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



## 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.

## 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.





