

Company	Trenz Electronic GmbH
PCN Number	PCN-20250325
Title	TEB0729-03 to TEB0729-04 Hardware Revision Change
Subject	Hardware Revision Change
Issue Date	2025-11-06

Products Affected

This change affects all Trenz Electronic TEB0729 baseboards: TEB0729-03*.

Affected Product	Changes	Replacement
TEB0729-03A	#1 ... #13, #16 ... #18	TEB0729-04-A
TEB0729-03B	#1 ... #18	TEB0729-04-B

Changes

#1 Changed DCDC EN6347QI (U4) to MPM3860GQW-Z and adapted power circuit.

Type: Schematic Change

Reason: EOL of Component.

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

#2 Improved input protection circuit.

- Added input protection fuse (F1), diode (D2), capacitor (C32) and common mode choke (L2).
- Changed input protection MP5010BDQ-LF-Z (U5) to LTC4365ITS8#TRMPBF.

Type: Schematic Change

Reason: Input protection improvement.

Impact: None. Minor changes in electrical characteristics.

#3 Added ESD protection (U6) for USB.

Type: Schematic Change

Reason: USB protection improvement.

Impact: None. Minor changes in electrical characteristics.

#4 Added additional decoupling capacitor (C27, C28, C29).

Type: Schematic Change

Reason: Improve power rail.

Impact: None.

#5 Added zero Ohm resistor (R32, R33) for USB settings.

Type: Schematic Change

Reason: Improve USB connection.

Impact: None.

#6 Added pull-up resistor (R34) for signal "USB_OC".

Type: Schematic Change

Reason: Use external pull-up resistor.

Impact: Signal "USB_OC" needs to be a system-wide 3.3 V signal. Otherwise, this resistor needs not to be assembled.

#7 Added pull-up resistor (R36) for signal "MIO0".

Type: Schematic Change

Reason: Use external pull-up resistor.

Impact: Signal "MIO0" needs to be a system-wide 3.3 V signal. Otherwise, this resistor needs not to be assembled.

#8 Added ferrite bead (L3) assembly option to connect RJ45 ETH connector (J3, J4, J5) signal Frame to GND (default: not assembled).

Type: Schematic Change

Reason: Improve ETH connection.

Impact: None.

#9 Combined pin header (J2, J6, J7) in one three times five pin header (J2).

Type: Schematic Change

Reason: Manufacturing Process Optimization.

Impact: None.

#10 Changed 100 μ F, 6.3 V capacitor (C1, C10) to 2 x 47 μ F, 16 V (C1, C10, C30, C31).

Type: Schematic Change

Reason: Increase capacitor voltage rating.

Impact: None. Minor changes in electrical characteristics.

#11 Changed 47 μ F capacitor (C12, C13, C16) from 6.3 V to 16 V.

Type: BOM Change

Reason: Increase capacitor voltage rating.

Impact: None. Minor changes in electrical characteristics.

#12 Changed resistor (R16) from 0402 to 0603.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None. Minor changes in electrical characteristics.

#13 Added jumper (JP3).

Type: BOM Change

Reason: Improve VBAT handling.

Impact: None.

#14 Changed USB 2.0 Micro-B receptable (J11) to USB 2.0 Micro-AB receptable.

Type: Schematic Change

Reason: Improve USB OTG connection.

Impact: None. Minor changes in electrical characteristics.

#15 Changed capacitor (C12, C13) from 47 μ F to 4.7 μ F.

Type: BOM Change

Reason: Follow USB recommendation.

Impact: None. Minor changes in electrical characteristics.

#16 Added test point (TP1 ... TP20).

Type: Schematic Change

Reason: Improve voltage measurement possibilities.

Impact: None.

#17 Removed track-it traceability pad completely from PCB.

Type: Schematic Change

Reason: EOL of Component.

Impact: None.

#18 Added UKCA-logo.

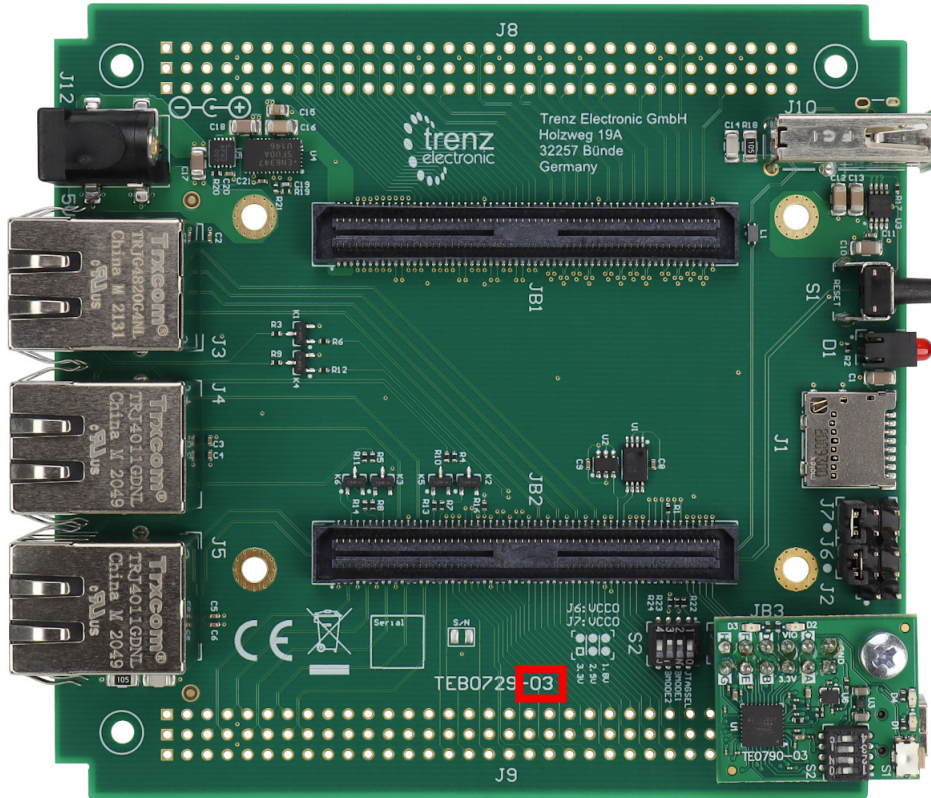
Type: PCB Change

Reason: Improve product classification.

Impact: None.

Method of Identification

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



Production Shipment Schedule

From June 2026, 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-20250325)
- 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.