

Company	Trenz Electronic GmbH
PCN Number	PCN-20260916
Title	TEM0007-01 to TEM0007-02 Hardware Revision Change
Subject	Hardware Revision Change
Issue Date	2026-09-22

Products Affected

This change affects all Trenz Electronic TEM0007 SoMs: TEM0007-01*.

Affected Product	Replacement
TEM0007-01-CAA11-A	TEM0007-02-CAA33-A
TEM0007-01-CBD11-A	TEM0007-02-CBD33-A
TEM0007-01-CHE11-A	TEM0007-02-CHE33-A

Changes

#1 Changed LPDDR4 (U6) from IS43LQ32256A-062BLI to IS43LQ32256B-062BLI.

Type: BOM Change

Reason: Component not recommended for new designs.

Impact: None, die revision changed. Trenz reference design reflects the changes.

#2 Changed signal trace lengths.

Type: PCB Change

Reason: Updated PolarFire SoC internal trace length and improved LPDDR4 length matching.

Impact: Improved LPDDR4 behaviour. Changed trace length have to be taken into account in existing designs. The trace length for new revision will be available in [TEM0007 series pinout generator](#). Please check if change in trace length still matches your requirements. Adaption of carrier may be necessary.

#3 Changed flash (U3) from MT25QU512ABB8E12-0SIT to MX25U51245GXDI00.

Type: BOM Change

Reason: EOL of Component.

Impact: None, no changes in our reference design expected to be necessary.

#4 Changed DCDC (U18) from MIC33153YHJ-TR to MPM3834CGPA and adapted power circuit.

Type: Schematic Change

Reason: Increase output current capability.

Impact: None. Increased output current capability from 1.2 A to 3 A. Minor changes in electrical characteristics.

#5 Changed inductor (L8) from SRP0320-R47K to XGL4030-471MEC.

Type: Schematic Change

Reason: EOL of Component.

Impact: None. Minor changes in electrical characteristics.

#6 Added capacitors (C83, C85, C94).

Type: Schematic Change

Reason: Improve power supply rail.

Impact: Improved power supply rail.

#7 Changed all 220 nF, 0201, 6.3 V capacitors from X5R to X6S.

Type: BOM Change

Reason: Improve temperature range.

Impact: None, capacitors have slightly larger capacitance variation.

#8 Changed all 4.7 μ F, 0402, 6.3 V capacitors from X5R to X6S.

Type: BOM Change

Reason: Improve temperature range.

Impact: None, capacitors have slightly larger capacitance variation.

#9 Changed all 10 μ F, 0603, 16 V capacitors from X5R to X6S.

Type: BOM Change

Reason: Improve temperature range.

Impact: None, capacitors have slightly larger capacitance variation.

#10 Changed all 22 μ F, 0603, 10 V capacitors from X5R to X6S.

Type: BOM Change

Reason: Improve temperature range.

Impact: None, capacitors have slightly larger capacitance variation.

#11 Added test points (TP16 ... TP32).

Type: Schematic Change

Reason: Improve measuring process.

Impact: None. Improved measuring process.

#12 Moved test points (TP3, TP6, TP8, TP9, TP11, ... , TP15) on bottom layer.

Type: PCB Change

Reason: Result from other changes above.

Impact: Test points have different location on board.

#13 Added RoHS and WEEE logo.

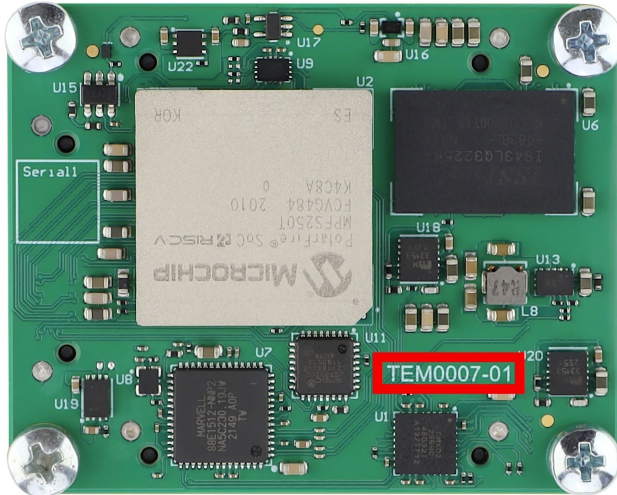
Type: PCB Change

Reason: Improve product classification identification.

Impact: None.

Method of Identification

The revision number is shown on the 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.

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-20260916)
- 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.