

Company	Trenz Electronic GmbH
PCN Number	PCN-20240803
Title	TE0890-01 to TE0890-02 Hardware Revision Change
Subject	Hardware Revision Change
Issue Date	2024-08-26

1 Products Affected

This change affects all Trenz Electronic TE0890 SoMs: TE0890-01*.

Affected Product	Replacement
TE0890-01-P1C-5-A	TE0890-02-P1C-5-A

2 Changes

2.1 #1 Changed DCDC EP53A7HQI (U10) / EP53A7LQI (U4) to MPM3834CGPA-Z and adapted power circuit.

Type: Schematic Change

Reason: EOL of Component.

Impact: None. Minor changes in electrical characteristics.

2.2 #2 Changed power-up sequencing.

Type: Schematic Change

Reason: Follow AMD recommendation.

Impact: None.

2.3 #3 Added jumper (J5) option (default: not fitted) and resistor (R24) to enable JTAG only boot mode.

Type: Schematic Change

Reason: QSPI programming problems with newer Vivado versions.

Impact: None. JTAG boot mode directly accessible. Fix QSPI programming problems with newer Vivado versions according to [AR#00002 - QSPI Programming issues](#)¹.

2.4 #4 Added pull-up resistor (R3) for HyperRAM (U2) signal "CS0" to power rail "3.3V".

Type: Schematic Change

Reason: Follow ISSI recommendation.

Impact: None. Improved power-up handling.

2.5 #5 Added pull-up resistor (R25, R26) for Flash (U6).

Type: Schematic Change

Reason: Improve connectivity.

Impact: None.

2.6 #6 Added series termination resistor (R27) for MEMS oscillator (U3).

Type: Schematic Change

Reason: Improve impedance matching.

Impact: None. Improved signal quality.

2.7 #7 Changed "DNP"-resistor (R5) to 1 kOhm (default: not fitted).

Type: BOM Change

Reason: Improve internal process.

Impact: None.

2.8 #8 Changed ferrid bead (L1) from BKP0603HS121-T to MPZ0603S121HT000.

Type: BOM Change

Reason: EOL of component.

Impact: None.

2.9 #9 Added testpoints (TP14 ... TP18).

Type: Schematic Change

¹ <https://wiki.trenz-electronic.de/pages/viewpage.action?pageId=105689937>

Reason: Voltage monitoring improvement.

Impact: None.

2.10 #10 Added UKCA logo.

Type: PCB Change

Reason: Required for export to UK.

Impact: None.

2.11 #11 Added system and power diagram, legal notices and revision history. Updated page count and order.

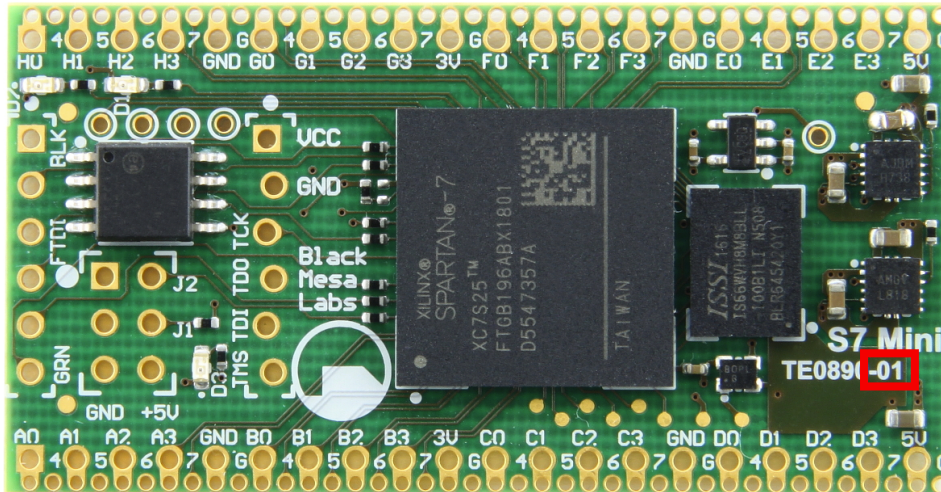
Type: Documentation Update

Reason: Documentation improvement.

Impact: None.

3 Method of Identification

The revision number is printed on the 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.de²
- wiki.trenz-electronic.de³
- support@trenz-electronic.de⁴ (subject = PCN-20240803)
- 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.

² <http://forum.trenz-electronic.de/>

³ <http://wiki.trenz-electronic.de/>

⁴ <mailto:support@trenz-electronic.de?subject=PCN-20240803>



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Document Rev: v.6

This PCN follows JEDEC Standard J-STD-046.