

| | |
|-------------------|---|
| Company | Trenz Electronic GmbH |
| PCN Number | PCN-20231006 |
| Title | TE0630-02 to TE0630-03 Hardware Revision Change |
| Subject | Hardware Revision Change |
| Issue Date | 2023-11-06 |

1 Products Affected

This change affects all Trenz Electronic TE0630 SoMs: TE0630-02*.

| Affected Product | Replacement |
|-------------------|-------------------|
| TE0630-02I | TE0630-03-52I12-A |
| TE0630-02IBF | TE0630-03-63I12-A |
| TE0630-02IV | TE0630-03-82I12-A |
| TE0630-02IV-DWS | TE0630-03-S001 |
| TE0630-02B-DWS | - |
| TE0630-02IBFC1 | - |
| TE0630-02-52C12-A | - |

2 Changes

2.1 #1 Changed DCDC EN6347QI (U7) 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.

2.2 #2 Changed DCDC EN6338QI (U5, U8) to MPM3834CGPA and adapted power circuit.

Type: Schematic Change

Reason: EOL of Component.

Impact: None. Minor changes in electrical characteristics.

2.3 #3 Added optional pull-down resistor (R70) to add pull-down option for function "HSWAPEN".

Type: Schematic Change

Reason: Added "HSWAPEN" pull-down option.

Impact: None.

2.4 #4 Board revision coding updated to REV03 via pulling-up FPGA (U6) pin R19 "BR0".

Type: Schematic Change

Reason: New revision.

Impact: If hardware coding of board revision is used in design, update is needed.

2.5 #5 Board variant coding updated to REV03 variants via pull-down resistor options (R74, R76, R77, R78).

Type: Schematic Change

Reason: New revision.

Impact: If hardware coding of board variant is used in design, update is needed. Variant coding only valid in combination with revision coding.

2.6 #6 Added pull-up resistor (R84) for clock U10 enable signal.

Type: Schematic Change

Reason: Follow clock enable recommendation.

Impact: None.

2.7 #7 Added pull-up resistor (R85) for clock U11 enable signal.

Type: Schematic Change

Reason: Follow clock enable recommendation.

Impact: None.

2.8 #8 Changed resistor (R46) from 2.2 kOhm to 330 Ohm.

Type: Schematic Change

Reason: Follow AMD recommendation.

Impact: None.

2.9 #9 Changed 22 μ F capacitor (C77, C80) from 6.3 V to 10 V.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.10 #9 Changed 4.7 μ F capacitor (C108) from 10 %, 0603 to 20 %, 0402.

Type: Schematic Change

Reason: BOM Optimization.

Impact: None.

2.11 #10 Removed serial number S/N1.

Type: Schematic Change

Reason: EOL of Component.

Impact: None.

2.12 #11 Changed fiducials to standard fiducial type.

Type: Schematic Change

Reason: Use standard fiducials.

Impact: None.

2.13 #12 Removed not needed testpoints (TP2, TP3, TP7, TP10, TP13, TP14, TP15, TP30, TP31, TP32).

Type: Schematic Change

Reason: Testpoints not needed.

Impact: None.

2.14 #13 Removed testpoints (TP17, TP19, TP20, TP21).

Type: Schematic Change

Reason: Improve signal integrity.

Impact: None.

2.15 #14 Changed net connection for testpoints (TP27, TP28).

Type: Schematic Change

Reason: Optimize signal monitoring.

Impact: None.

2.16 #15 Added UKCA logo.

Type: PCB Change

Reason: Required for export to UK.

Impact: None.

2.17 #16 Removed TE logo.

Type: Schematic Change

Reason: Result of changes above.

Impact: None.

2.18 #17 Updated components from library.

Type: Schematic Change

Reason: Use latest component data.

Impact: None.

2.19 #18 Updated group tables and colours on "B2B_Connector" page.

Type: Documentation Update

Reason: Documentation improvement.

Impact: None.

2.20 #19 Updated legal notices, revision history, block and power diagram. Updated page count and order.

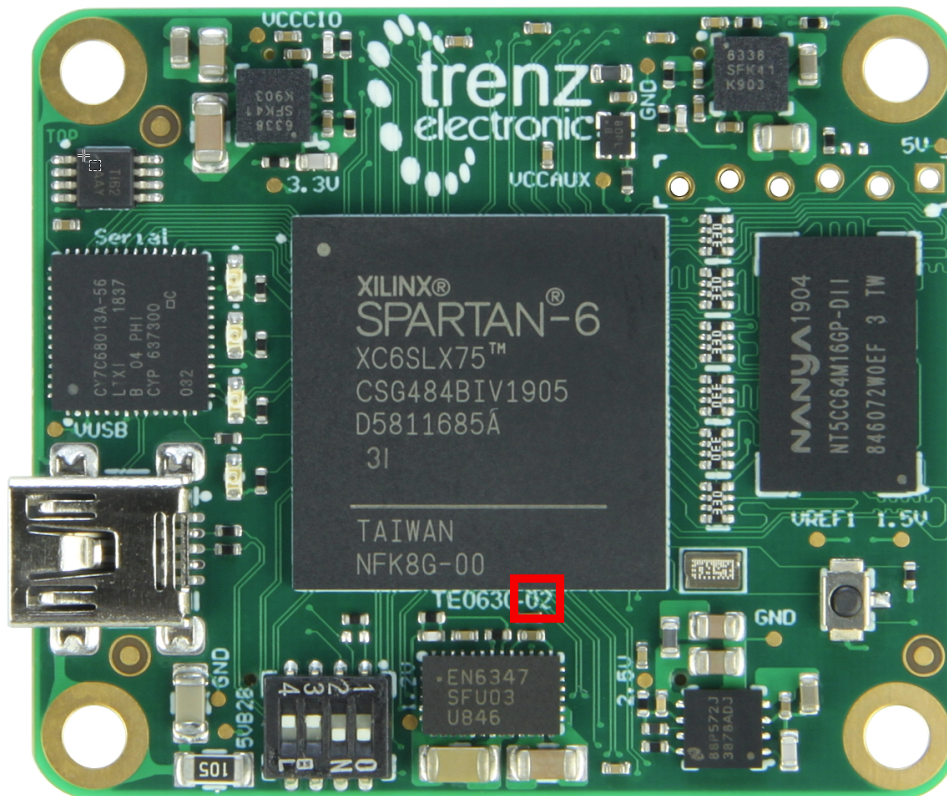
Type: Documentation Update

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 REV02 and REV03 on top side of the PCB.



4 Production Shipment Schedule

From June 2024, 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.

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-20231006)

¹ <http://forum.trenz-electronic.de/>

² <http://wiki.trenz-electronic.de/>

³ <mailto:support@trenz-electronic.de?subject=PCN-20231006>

- 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.