

<b>Company</b>	Trenz Electronic GmbH
<b>PCN Number</b>	PCN-20200616
<b>Title</b>	TE0820-03 to TE0820-04 Hardware Revision Change
<b>Subject</b>	Hardware Revision Change
<b>Issue Date</b>	2020-08-13

## 1 Products Affected

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This change affects all Trenz Electronic TE0820 SoMs of revision 03: TE0820-03-\*.

Affected Product	Replacement
TE0820-03-*	TE0820-04-*

## 2 Changes

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### 2.1 #1 Added DDR4 connection BG1

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**Type:** Schematic change

**Reason:** Support different DDR4 chips.

**Impact:** Support of B-die DDR4 Industrial grade chips

### 2.2 #2 Changed U28 to TPS27081ADDCR, added R93, changed value of C62

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**Type:** Schematic change

**Reason:** Former chip not recommended for new designs.

**Impact:** None. With R93 and changed value of C62 the circuit behaves as before.

### 2.3 #3 Added R89

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**Type:** Schematic change

**Reason:** Datasheet recommendation.

**Impact:** None.

## 2.4 #4 Added capacitors 4.7uF to PS\_AVTT/PS\_AVCC

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**Type:** Schematic change

**Reason:** Recommended by Xilinx UG583.

**Impact:** None.

## 2.5 #5 Changed R51 to 10K Ohm

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**Type:** BOM change

**Reason:** Recommended by Xilinx DS925 v1.17

**Impact:** None.

## 2.6 #6 Fixed DDR4 connection (Alert)

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**Type:** Schematic change

**Reason:** Alert signal was connected to VTT.

**Impact:** None. Alert signal connected to DDR\_1V2.

## 2.7 #7 Added 3.3V signal to CPLD pin 5

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**Type:** Schematic change

**Reason:** Request for power good signal at CPLD.

**Impact:** State of 3.3V rail can be evaluated in CPLD Firmware.

## 2.8 #8 Added testpoints

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**Type:** Schematic change

**Reason:** Testpoints needed for improved automatic testing.

**Impact:** More testpoints available.

## 2.9 #9 LIB components update

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**Type:** Schematic change

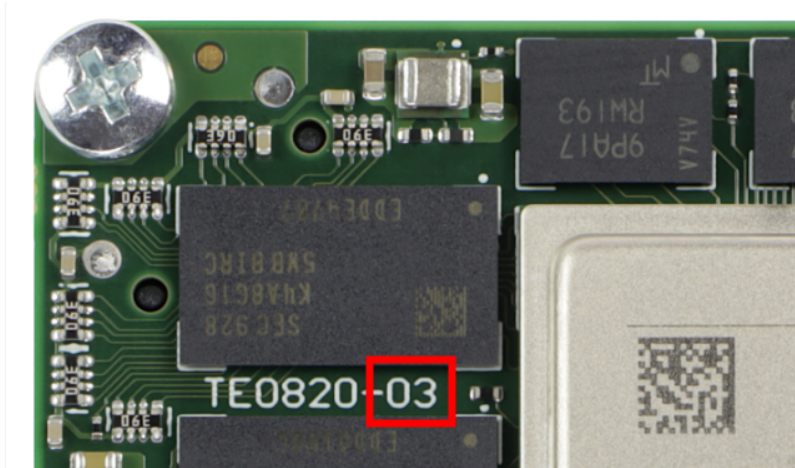
**Reason:** Improve production yield.

**Impact:** None.

## 3 Method of Identification

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



## 4 Production Shipment Schedule

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The new revision 04 is available from August 2020, after old Stock is gone. If you still need revision 03 please contact us.

## 5 Contact Information

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If you have any questions related to this PCN, please contact Trenz Electronics Technical Support at

- [forum.trenz-electronic.de](http://forum.trenz-electronic.de)<sup>1</sup>
- [wiki.trenz-electronic.de](http://wiki.trenz-electronic.de)<sup>2</sup>
- [support@trenz-electronic.de](mailto:support@trenz-electronic.de)<sup>3</sup> (subject = PCN-20200616)
- phone
  - national calls: 05741 3200-0
  - international calls: 0049 5741 3200-0

## 6 Disclaimer

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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.

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<sup>1</sup> <http://forum.trenz-electronic.de/>

<sup>2</sup> <http://wiki.trenz-electronic.de/>

<sup>3</sup> <mailto:support@trenz-electronic.de?subject=PCN-20200616>