

<b>Company</b>	Trenz Electronic GmbH
<b>PCN Number</b>	PCN-20201007
<b>Title</b>	TE0803-03 to TE0803-04 Hardware Revision Change
<b>Subject</b>	Hardware Revision Change
<b>Issue Date</b>	2021-02-15

## 1 Products Affected

---

This change affects all Trenz Electronic TE0803 SoMs of revision 03:

<b>Affected Product</b>	<b>Replacement</b>
TE0803-03-*	TE0803-04-*

## 2 Changes

---

### 2.1 #1 PL\_VCCINT power supply U4 replaced by TPS548A28RWWR

---

**Type:** Schematic change

**Reason:** Minimize solution footprint and cost optimization.

**Impact:** Up to 15A VCCINT possible. Height profile of the module is changed.

### 2.2 #2 Added support of wide DDR4 SDRAM packages

---

**Type:** PCB change

**Reason:** Support of new packages of DDP DDR4 ICs.

**Impact:** DDP DDR4 now supported.

### 2.3 #3 Add resistors R12 and R93

---

**Type:** Schematic change

**Reason:** Add option to select POR\_OVERRIDE level.

**Impact:** For all standard variants R93 is fitted and R12 is not fitted. With this setting the behavior is the same as in previous revision. Custom variants 4BI21-X and 4BI41-X have R12 fitted and R93 not fitted.

## 2.4 #4 Unused VCCO pins connected together within Bank 24 and Bank44

---

**Type:** Schematic change

**Reason:** Xilinx recommendation UG583.

**Impact:** None.

## 2.5 #5 Signal trace lengths changed

---

**Type:** PCB change

**Reason:** Result of changes above.

**Impact:** Changed tracelength have to be taken into account in existing designs. The tracelength for new revision are added to the [TE080x series pinout generator](#)<sup>1</sup>.

## 2.6 #6 Updated company address

---

**Type:** Silkscreen change

**Reason:** Trenz Electronic moved to new location in 2019.

**Impact:** None.

## 2.7 #7 Added module orientation pointer

---

**Type:** PCB change

**Reason:** Correct orientation of SoM on baseboard not obvious.

**Impact:** Implementing a similar pointer on a carrier PCB will lower the risk of mounting the module wrongly oriented.

## 2.8 #8 Changed resistors value of R29, R31, R35, R39, R44-R47

---

**Type:** PCB change

**Reason:** BOM optimization

**Impact:** None.

## 2.9 #9 Removed traceability S/N part

---

**Type:** BOM change

**Reason:** Part is end of life.

**Impact:** Track it pad no more available.

Note: Due to the changes above the height profile of the module is changed. Using TE0803-04 board as a replacement or in system designed for TE0803-03, review and adaption of mechanics e.g. cooling solutions have to be done. KK0803-03 is not compatible with TE0803-04. A new revision of the heat spreader for revision 04 of TE0803 will be released.

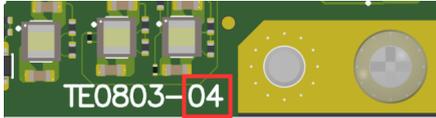
---

<sup>1</sup> [https://shop.trenz-electronic.de/Download/?path=Trenz\\_Electronic/Pinout](https://shop.trenz-electronic.de/Download/?path=Trenz_Electronic/Pinout)

## 3 Method of Identification

---

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



## 4 Production Shipment Schedule

---

The new revision 04 is available from October 2021. Revision 03 is still continued. For new designs revision 04 should be used. It is recommended to switch to the new revision when possible.

## 5 Contact Information

---

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>2</sup>
- [wiki.trenz-electronic.de](http://wiki.trenz-electronic.de)<sup>3</sup>
- [support@trenz-electronic.de](mailto:support@trenz-electronic.de)<sup>4</sup> (subject = PCN-20201007)
- 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.

---

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

<sup>3</sup> <http://wiki.trenz-electronic.de/>

<sup>4</sup> <mailto:support@trenz-electronic.de?subject=PCN-20201007>