Company	Trenz Electronic GmbH
PCN Number	PCN-20180511
Title	PCN-20180511 TE0841-01 to TE0841-02 Hardware Revision Upgrade
Subject	Hardware revision 01 to 02
Issue Date	20180511

Products Affected

This change affects all Trenz Electronic TE0841 SoMs: TE0841-01*.

Affected Product	Replacement
TE0841-01*	TE0841-02*

Changes

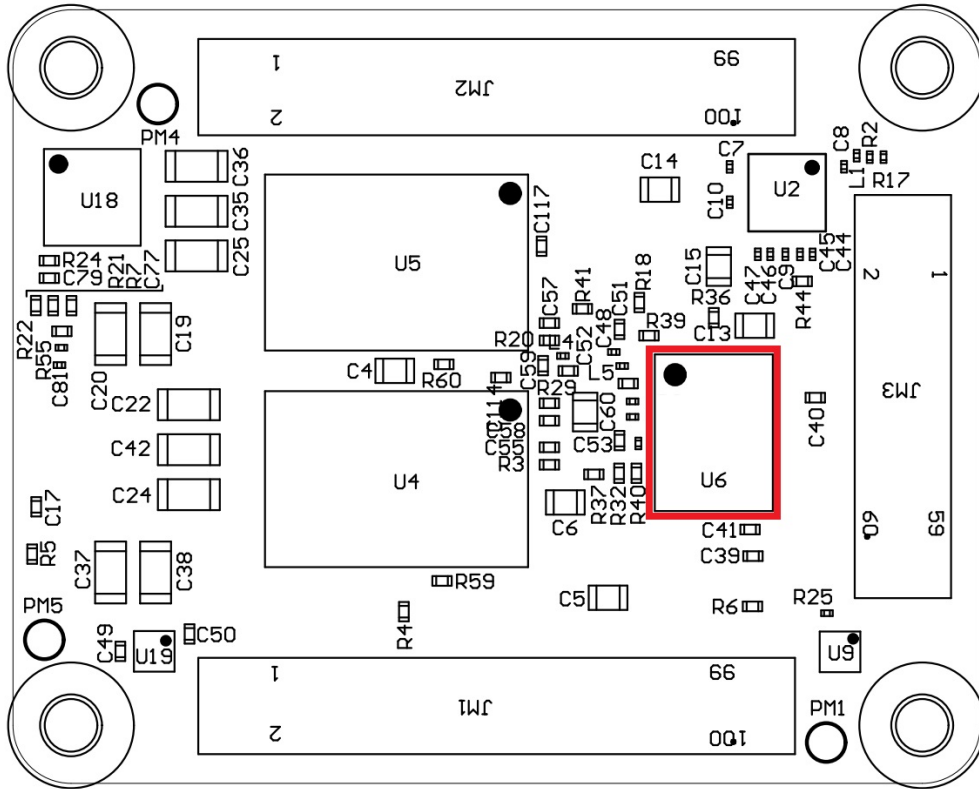## #1 Change SPI Flash from N25Q256A11E1240E to N25Q512A11G1240E

Type: BOM change

Reason: N25Q256A11E1240E became obsolete, replacement part not available for purchase. This is only interim solution because N25Q512A11G1240E is also obsolete already. It will be changed after the replacement parts get available.

Impact: Size changed from 256 MBit to 512 MBit per chip. JEDEC ID changed from BB19h to BB20h both with manufacturer ID: 20h.
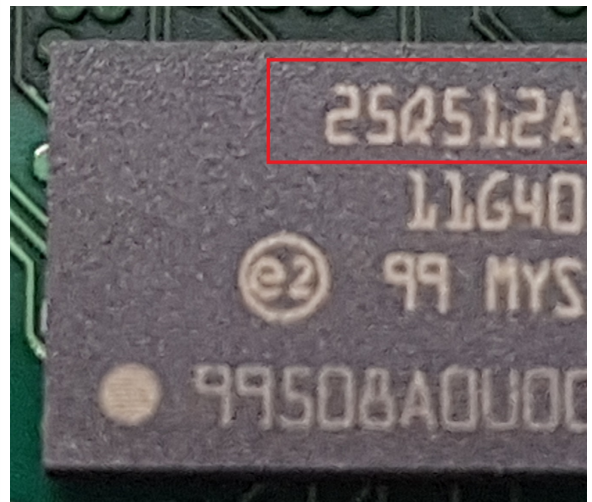
Method of Identification

Locate Flash on backside of PCB:

N25Q256A11E1240E	N25Q512A11G1240E

#2 Change of DDR4 from NT5AD256M16B2-GN to K4A8G165WB-BIRC

Type: BOM change

Reason: NT5AD256M16B2-GN going obsolete, double the DDR size, industrial temp grade of DDR.

Impact: New DDR timing and size need to be considered in customer design.

#3 Fixed sense connection on DCDC

Type: Layout change

Reason: Sense connection was not optimal, voltage drop under high load was too high.

Impact: None

#4 Added support for 16 GBIT DDR4 chips

Type: Layout change

Reason: Add support for higher memory capacity.

Impact: None

#5 Added strong pull-down to EN_PL

Type: Layout change

Reason: Improved reliability.

Impact: None

#6 Added additional testpoints for I2C bus

Type: Layout change

Reason: Improved testing capability.

Impact: None

#7 Added additional MEMS oscillator (25MHz)

Type: Layout change

Reason: Improved usabilty**.**

Impact: None

#8 Changed pull-up on PG_DDR from VIN to 3.3VIN

Type: Layout change

Reason: Error correction.

Impact: None

#9 Added pull-down to EN_DDR

Type: Layout change

Reason: Error correction.

Impact: None

Production Shipment Schedule

From May 2018, after old stock is gone.

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-20180511)
- phone
    - national calls: 05223 65301-0
    - international calls: 0049 5223 65301-0

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.