PCN-20210227 TE0783-02 DDR3, EMMC Change and Product Update

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| Company | Trenz Electronic GmbH |
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| PCN Number | PCN-20210227 |
| Title | TE0783-02 DDR3, EMMC Change and Product Update |
| Subject | BOM change |
| Issue Date | 2021-03-26 |

Products Affected

This change affects all Trenz Electronic TE0783 SoMs of revision 02: TE0783-02-*

| Affected Product | Changes | Replacement |
|-------------------|----------------|-------------------|
| TE0783-02-045-2I | #1, #2, #3, #4 | TE0783-02-92I33FA |
| TE0783-02-100-2I | #1, #2, #3, #4 | TE0783-02-A2I33FA |
| TE0783-02-92I35HA | #3, #4, #5 | TE0783-02-92I33HA |

Changes

#1 Change DDR3 RAM (U8, U9, U10, U12, U14, U19) from IM4G16D3FABG-125I to IS43TR16256BL-125KBLI

Type: BOM change Reason: Component is end of life. Impact: New DDR timings may be considered in designs. DDR3 setup used in reference design is known to work still.

#2 Change eMMC (U28) from MTFC4GACAJCN-4M IT to IS21ES08G-JCLI

Type: BOM change Reason: Improve availability. Impact: The eMMC capacity changed from 4 GByte to 8 GByte.

#3 Clock Revision Change (U7, U28, U61) SiT8008AI-... to SiT8008BI-...

Type: BOM change Reason: Switch to actual revision. Revision A devices may be discontinued. Impact: None.

#4 Change Ferrite Beads (L1 .. L7, L9, L10, L15, L51, L53) BKP0603HS121-T to MPZ0603S121HT000

Type: BOM change

Reason: Part is NRND and EOL announced.

Impact: None. DC resistance decreased from 150mOhm to 130mOhm, rated current increased from 0.85A to 1A.

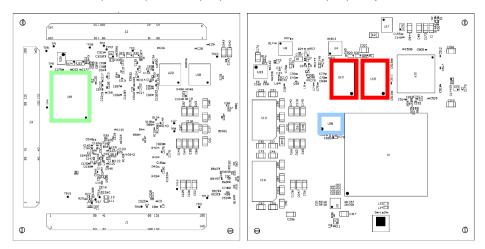
#5 TE0783-02-92I35HA only: Replaced Flash (U38)

Type: BOM change

Reason: Althrough IS25LP256D-JHLE is listed as 'Supported Flash Memory Devices for Zynq-7000 Device Configuration' in Xilinx UG908 (since version 2019.1), there are unsolved problems with reboot after petalinux was started. Therfore we change to a device which i known to work as expected. **Impact:** Jedec Manufacturer ID is 01h, the device ID 0219h. Size does not change, 256 Mbit flash are available. All variants use now S25FL256SAGBHI20

Method of Identification

Locate DDR3 RAM (U10, U19) and Flash (U38) on bottom and eMMC (U28) on top side of PCB:



| old | new | |
|---|---|--|
| IM4G16D3FABG-125I | IS43TR16256BL-125KBLI | |
| IM4 G16D3F ABG-1251 TW KP9006 1927 • 1901X772104 | ISASTR16256BL -125KBLI K096 MLP758000Y1 TWN | |

| MTFC4GACAJCN-4M IT | IS21ES08G-JCLI | |
|------------------------|---|--|
| 9XA17 JYOOI | ISSI 1945 IS21ES086 -JCLI DP1231478Y1 | |
| IS25LP256D-JHLE | S25FL256SAGBHI20 | |
| TE0783-02-92I35HA only | FL256SAIH20 B128B122 A THAILAND 010 SPANSION | |

Production Shipment Schedule

From end of Juli 2021, 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-20210227)
- phone
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 - international calls: +49 5741 3200-0

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.