

Company	Trenz Electronic GmbH
PCN Number	PCN-20210126a
Title	TE0720-03 DDR3, Flash, EMMC Change and Product Update
Subject	BOM change
Issue Date	(2021-01-29), Revised 2021-03-09

1 Products Affected

This change affects all Trenz Electronic TE0720 SoMs of revision 03: TE0720-03-*

Affected Product	Changes	Replacement
TE0720-03-14S-1C	#1, #3, #4	TE0720-03-31C33FA
TE0720-03-1CFA	#1, #3, #4	TE0720-03-61C33FA
TE0720-03-1QF	#1, #3, #4	TE0720-03-61Q33FA
TE0720-03-1QFA	#1, #2, #3, #4	TE0720-03-61Q33FA
TE0720-03-1QFA-V1	#1, #3, #4	TE0720-03-61Q33FAD
TE0720-03-1QC11	#1, #3, #4	TE0720-03-61Q33FAE
TE0720-03-1QC12	#1, #3, #4	TE0720-03-61Q33FAF
TE0720-03-1QFL	#1, #3, #4	TE0720-03-61Q33FL
TE0720-03-2IF	#1, #3, #4	TE0720-03-62I33FA
TE0720-03-2IFA	#1, #2, #3, #4	TE0720-03-62I33FA
TE0720-03-2IFC1	#1, #3, #4	TE0720-03-62I33FAN
TE0720-03-2IFC3	#1, #3, #4	TE0720-03-62I33FL
TE0720-03-62I12GA	#1, #4	TE0720-03-62I33GA

Affected Product	Changes	Replacement
TE0720-03-L1IF	#1 ⁽¹⁾ , #3, #4	TE0720-03-64I63FA
TE0720-03-62I320M	#4 ⁽²⁾	TE0720-03-62I330M
TE0720-03-1CR	#1, #4	TE0720-03-61C530A
TE0720-03-1QFD	#3, #4	TE0720-03-61Q43FA
TE0720-03-61Q42GA	#4	TE0720-03-61Q43GA
TE0720-03-1CFA-S	#1, #3, #4	TE0720-03-61C33FAS

⁽¹⁾ Only U12 assembled, U13 not fitted.

⁽²⁾ Only U6 assembled, U14 not fitted.

2 Changes

2.1 #1 Change DDR3 RAM (U12, U13) 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.

2.2 #2 Replaced Flash (U7) to IS25LP512M-RHLE All SoMs use S25FL256SAGBHI20 Flash (U7)

Type: BOM change

Reason: Ensure long time availability.

Impact: Jedec Manufacturer ID changed from 01h to 9Dh, the device ID from 18h to 19h. 512Mbit flash are now available.

Type: BOM change

Reason: The planned IS25LP512M-RHLE is listed as 'Supported Flash Memory Devices for Zynq-7000 Device Configuration' in Xilinx UG908 (since version 2019.1), but there are unsolved problems with reboot after petalinux was started. Therefore this change is canceled. Only modules where other than S25FL256SAGBHI20 was used are changed to S25FL256SAGBHI20.

Impact: Jedec Manufacturer ID is 01h, the device ID 18h. Size does not change, 256 Mbit flash are available.

2.3 #3 Change eMMC (U15) to IS21ES08G-JCLI

Type: BOM change

Reason: Improve availability.

Impact: Most of the variants had installed 4GB. For this variants the eMMC capacity is increased to 8 GByte.

2.4 #4 Clock Revision Change (U6, U14) SiT8008AI-... to SiT8008BI-...

Type: BOM change

Reason: Switch to actual revision. Revision A devices may be discontinued.

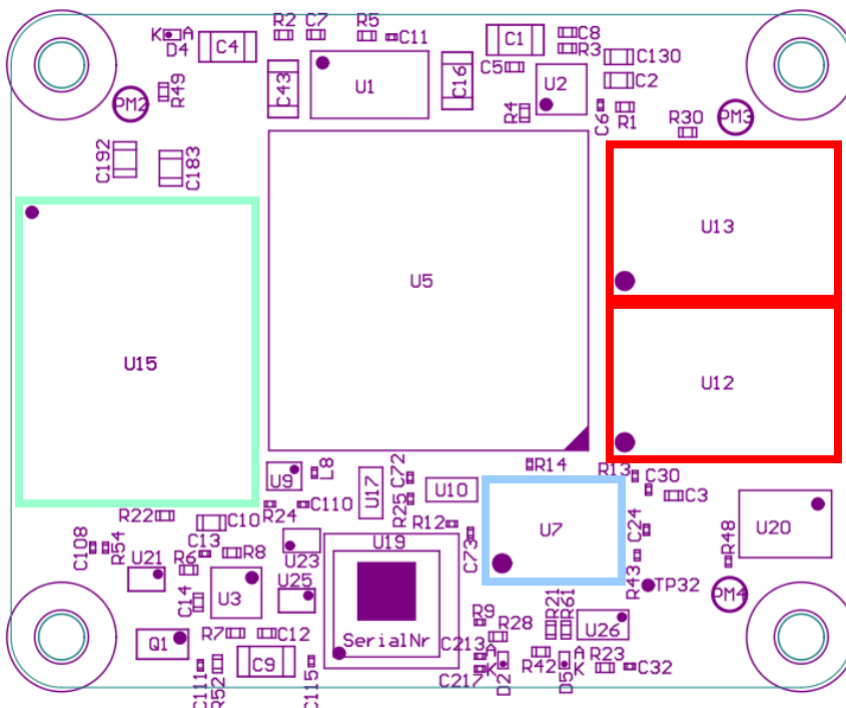
Impact: None.

2.5 Please Note:

Additionally to the changes above a CPLD update for TE0720-03 is prepared. The PCN with title '[PCN-20210127 TE0720 CPLD Firmware Revision Upgrade from REV05 to REV06](https://wiki.trenz-electronic.de/display/PD/PCN-20210127+TE0720+CPLD+Firmware+Revision+Upgrade+from+REV05+to+REV06)¹' will be published mid of February 2021. New variants in the column replacement (see table above) with the only exception 61Q33FAD will have the updated CPLD Firmware. Both, new and old CPLD Firmware are compatible to all mentioned revision 03 SoM variants. The CPLD Firmware will be online available. Further detailed description will be given in the upcoming PCN.

3 Method of Identification




Locate DDR3 RAM (U12, U13), Flash (U7) and EMMC (U15) on top side of PCB:



¹ <https://wiki.trenz-electronic.de/display/PD/PCN-20210127+TE0720+CPLD+Firmware+Revision+Upgrade+from+REV05+to+REV06>

old	new
IM4G16D3FABG-125I	IS43TR16256BL-125KBLI
 <p>IM IM4G16D3F ABG-125I TW KP9006 1927 ● 1901X772104</p>	 <p>ISSI 2001 IS43TR16256BL -125KBLI K096 MLP758000Y1 TWN</p>

old	new
<p>S25FL256SAGBH120 or MT25QL256ABA8E12-1SIT</p>	<p>IS25LP512M-RHLE</p>
 <p>TE0720-03-1QFA and TE0720-03-2IFA only:</p> 	 
<p>MTFC4GACAJCN-4M IT or KLM8G1GETF-B041</p>	<p>IS21ES08G-JCLI</p>

old	new
 <p data-bbox="233 819 523 853">TE0720-03-1CFA only:</p> 	

4 Production Shipment Schedule

TE0720-03-61C33FA variant will be available from mid of May in parallel to the precursor. From end of Juli 2021, after old stock is gone, all variants above are replaced by the corresponding variants.

5 Contact Information

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

- forum.trenz-electronic.de²
- wiki.trenz-electronic.de³
- support@trenz-electronic.de⁴ (subject = PCN-20210126a)

² <http://forum.trenz-electronic.de/>

³ <http://wiki.trenz-electronic.de/>

⁴ <mailto:support@trenz-electronic.de?subject=PCN-20210126a>

- phone
 - national calls: 05741 3200-0
 - international calls: +49 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.