PCN-20210216a TE0712-02 DDR3, Flash Change and Product Update (Revised)

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Company	Trenz Electronic GmbH
PCN Number	PCN-20210216a
Title	TE0712-02 DDR3, Flash Change and Product Update
Subject	BOM change
Issue Date	(2021-02-17), Revised 2021-03-09

Products Affected

This change affects all Trenz Electronic TE0712 SoMs of revision 02: TE0712-02-*

Affected Product	Changes	Replacement
TE0712-02-100-1I	#1, #3	TE0712-02-71I36-A
TE0712-02-100-2C	#1, #3	TE0712-02-72C36-A
TE0712-02-100-2C2	#1, #3	TE0712-02-72C36-C
TE0712-02-100-2C3	#1, #3	TE0712-02-72C36-L
TE0712-02-100-2CA	#1, #2, #3	TE0712-02-72C36-A
TE0712-02-200-1I	#1, #3	TE0712-02-81I36-A
TE0712-02-200-1I3	#1, #3	TE0712-02-81I36-L
TE0712-02-200-1I39	#1, #3	TE0712-02-81I36-X
TE0712-02-200-2C	#1, #3	TE0712-02-82C36-A
TE0712-02-200-2C10	#1, #3	TE0712-02-82C36-AW
TE0712-02-200-2C3	#1, #3	TE0712-02-82C36-L
TE0712-02-200-2I	#1, #3	TE0712-02-82I36-A
TE0712-02-35-2I	#1, #3	TE0712-02-42I36-A
TE0712-02-82C11-P	#1, #3	TE0712-02-82C36-P
TE0712-02-72C03-M	#2, #3	TE0712-02-72C06-M
TE0712-02-71I01-M	#3	TE0712-02-71I06-M
TE0712-02-200-1IC1	#1, #3	TE0712-02-81I36-AC

Changes

#1 Change DDR3 RAM (U15, 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 ~~Replaced Flash (U4) to IS25LP512M-RHLE~~ All SoMs use S25FL256SAGBHI20 Flash (U4)

~~**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.~~

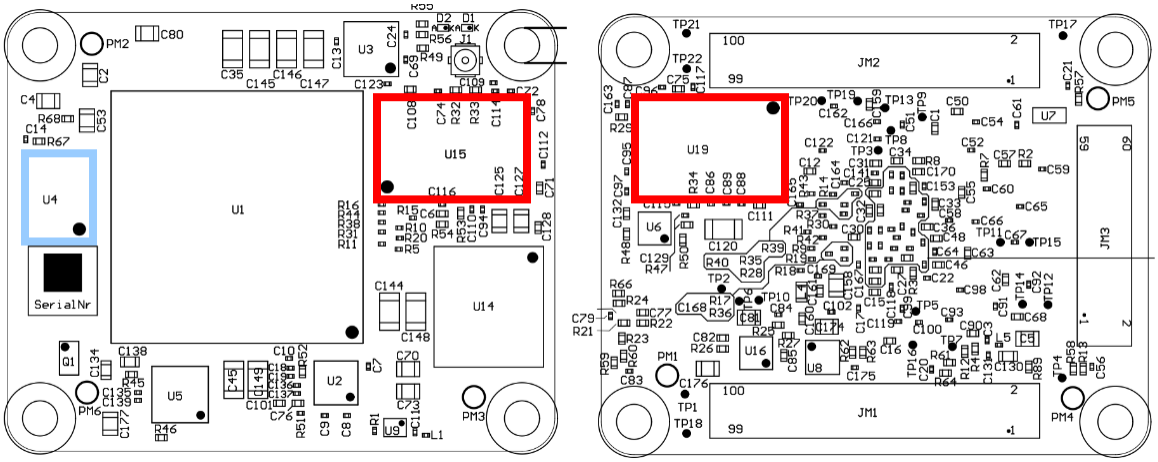
Type: BOM change
Reason: The planned IS25LP512M-RHLE is listed as 'Supported Flash Memory Devices for Artix-7 Device Configuration' in Xilinx UG908 (since version 2019.1), but there are unsolved problems with reboot after petalinux was started. Therefore this change is canceled. Only modules where other than S25FL256SAGBHI20 was used are changed to S25FL256SAGBHI20.
Impact: Jedec Manufacturer ID is 01h, the device ID 0219h. Size does not change, 256 Mbit flash are available.

#3 Clock Revision Change (U9) SiT8008AI-73-XXS-25.000000E to SiT8008BI-73-XXS-25.000000E

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

Method of Identification

Locate DDR3 RAM (U15 top, U19 bottom) and Flash (U4 top) on PCB:



old	new

IM4G16D3FABG-125I	IS43TR16256BL-125KBLI
	
S25FL256SAGBHI20 or **MT25QL256ABA8E12-1SIT**	**IS25LP512M-RHLE**
 TE0712-02-2CA and TE0712-02-72C03-M only: 	 

Production Shipment Schedule

TE0712-02-81I36-A variant will be available from mid of April in parallel to the precursor. From end of Juni 2021, after old stock is gone, all variants above are replaced by the corresponding variants.

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-20210216a)
- phone
    - national calls: 05741 3200-0
    - 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.