

Company	Trenz Electronic GmbH
PCN Number	PCN-20231007
Title	TE0820-05 DDR4 SDRAM and DCDC Change
Subject	BOM change
Issue Date	2023-10-23

1 Products Affected

This change affects all Trenz Electronic TE0820 SoMs: TE0820-05*.

Affected Product	Changes	Replacement
TE0820-05-2AE21MA	#2	TE0820-05-2AE81MA
TE0820-05-2AE21MAZ	#1, #2	TE0820-05-2AE81MA
TE0820-05-2AI21MA	#2	TE0820-05-2AI81MA
TE0820-05-2AI21MAZ	#1, #2	TE0820-05-2AI81MA
TE0820-05-2AI21MC	#2	TE0820-05-2AI81MC
TE0820-05-2AI21MCZ	#1, #2	TE0820-05-2AI81MC
TE0820-05-2BE21MA	#2	TE0820-05-2BE81MA
TE0820-05-2BE21MAJ	#2	TE0820-05-2BE81MAJ
TE0820-05-2BE21MAZ	#1, #2	TE0820-05-2BE81MA
TE0820-05-2BE21ML	#2	TE0820-05-2BE81ML
TE0820-05-2BE21MLZ	#1, #2	TE0820-05-2BE81ML
TE0820-05-2BI21MA	#2	TE0820-05-2BI81MA

Affected Product	Changes	Replacement
TE0820-05-2BI21MAZ	#1, #2	TE0820-05-2BI81MA
TE0820-05-2BI21ML	#2	TE0820-05-2BI81ML
TE0820-05-2BI21MLZ	#1, #2	TE0820-05-2BI81ML
TE0820-05-3AE21MA	#2	TE0820-05-3AE81MA
TE0820-05-3AE21MAZ	#1, #2	TE0820-05-3AE81MA
TE0820-05-3BE21MA	#2	TE0820-05-3BE81MA
TE0820-05-3BE21MAZ	#1, #2	TE0820-05-3BE81MA
TE0820-05-3BE21ML	#2	TE0820-05-3BE81ML
TE0820-05-3BE21MLZ	#1, #2	TE0820-05-3BE81ML
TE0820-05-3BI21ML	#2	TE0820-05-3BI81ML
TE0820-05-3BI21MLZ	#1, #2	TE0820-05-3BI81ML
TE0820-05-4AE21MA	#2	TE0820-05-4AE81MA
TE0820-05-4AE21MAZ	#1, #2	TE0820-05-4AE81MA
TE0820-05-4AI21MC	#2	TE0820-05-4AI81MC
TE0820-05-4AI21MCZ	#1, #2	TE0820-05-4AI81MC
TE0820-05-4AI21MI	#2	TE0820-05-4AI81MI
TE0820-05-4BI21KL	#2	TE0820-05-4BI81KL
TE0820-05-4BI21PL	#2	TE0820-05-4BI81PL
TE0820-05-4BI21PLZ	#1, #2	TE0820-05-4BI81PL

Affected Product	Changes	Replacement
TE0820-05-4DE21MA	#2	TE0820-05-4DE81MA
TE0820-05-4DE21MAZ	#1, #2	TE0820-05-4DE81MA
TE0820-05-4DI21MA	#2	TE0820-05-4DI81MA
TE0820-05-4DI21MAZ	#1, #2	TE0820-05-4DI81MA
TE0820-05-5DI21MA	#2	TE0820-05-5DI81MA
TE0820-05-5DI21MAZ	#1, #2	TE0820-05-5DI81MA
TE0820-05-5DR21MA	#2	TE0820-05-5DQ81MA
TE0820-05-5DR21MAZ	#1, #2	TE0820-05-5DQ81MA

2 Changes

2.1 #1 Changed DCDC (U4, U9, U12, U13, U15, U20, U24, U26, U27) from MUN3CAD03-SE to TPS82085SIL and adapted voltage divider resistors.

Type: BOM Change

Reason: TPS82085SIL availability.

Impact: Minor changes in electrical characteristics.

2.2 #2 Changed DDR4 SDRAM (U2, U3) from K4A8G165WB-BIRC to K4A8G165WC-BITDTCV.

Type: BOM change

Reason: BOM Optimization.

Impact: New DDR timings may be considered in designs. DDR4 setup used in reference design is known to work still.

3 Method of Identification

Locate DDR4 SDRAM (U2) on top side of TE0820-05 PCB:



old	new
K4A8G165WB-BIRC	K4A8G165WC-BITDTCV
	

4 Production Shipment Schedule

This change takes place with immediate effect. If the new revision is not suitable for your application and still the former revision of the board is needed, please contact us.

5 Contact Information

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

- forum.trenz-electronic.de¹
- wiki.trenz-electronic.de²
- support@trenz-electronic.de³ (subject = PCN-20231007)
- 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.

¹ <http://forum.trenz-electronic.de/>

² <http://wiki.trenz-electronic.de/>

³ <mailto:support@trenz-electronic.de?subject=PCN-20231007>