

Company	Trenz Electronic GmbH
PCN Number	PCN-20240616
Title	TE0808-05 PLL, DCDC and DDR update
Subject	BOM Change
Issue Date	2024-08-14

1 Products Affected

This change affects all Trenz Electronic TE0808 SoMs: TE0808-05*.

Affected Product	Changes	Intermediate Product ¹⁾	Changes	Replacement
TE0808-05-6BE21-A	#1, #3	-	-	TE0808-05-6BE81-E
TE0808-05-6BE21-AK	#1, #3	-	-	TE0808-05-6BE81-EK
TE0808-05-6BE21-AZ	#1, #2, #3	-	-	TE0808-05-6BE81-E
TE0808-05-6BE21-L	#1	TE0808-05-6BE21-F	#3	TE0808-05-6BE81-F
TE0808-05-6BE21-LK	#1, #3	-	-	TE0808-05-6BE81-FK
TE0808-05-6BE81-A	#1	-	-	TE0808-05-6BE81-E
TE0808-05-6BE81-AK	#1	-	-	TE0808-05-6BE81-EK
TE0808-05-6BE81-L	#1	-	-	TE0808-05-6BE81-F

Affected Product	Changes	Intermediate Product ¹⁾	Changes	Replacement
TE0808-05-6BI21-X	#1	-	-	S-Variant ²⁾
TE0808-05-6BI41-X	#1	-	-	S-Variant ²⁾
TE0808-05-9BE21-A	#1	TE0808-05-9BE21-E	#3	TE0808-05-9BE81-E
TE0808-05-9BE21-AK	#1, #3	-	-	TE0808-05-9BE81-EK
TE0808-05-9BE21-AS	#1, #3	-	-	TE0808-05-9BE81-ES
TE0808-05-9BE21-AZ	#1, #2, #3	-	-	TE0808-05-9BE81-E
TE0808-05-9BE21-KZ	#1, #2, #3	-	-	TE0808-05-9BE81-EK
TE0808-05-9BE21-L	#1	TE0808-05-9BE21-F	#3	TE0808-05-9BE81-F
TE0808-05-9BE21-LK	#1, #3	-	-	TE0808-05-9BE81-FK
TE0808-05-9BE21-LZ	#1, #2, #3	-	-	TE0808-05-9BE81-F
TE0808-05-9BE81-A	#1	-	-	TE0808-05-9BE81-E
TE0808-05-9BE81-AK	#1	-	-	TE0808-05-9BE81-EK
TE0808-05-9BE81-AS	#1	-	-	TE0808-05-9BE81-ES

Affected Product	Changes	Intermediate Product ¹⁾	Changes	Replacement
TE0808-05-9BI41-X	#1	-	-	S-Variant ²⁾
TE0808-05-9GI21-A	#1	TE0808-05-9GI21-E	#3	TE0808-05-9GI81-E
TE0808-05-9GI21-AK	#1	TE0808-05-9GI21-EK	#3	TE0808-05-9GI81-EK
TE0808-05-9GI21-AS	#1, #3	-	-	TE0808-05-9GI81-ES
TE0808-05-9GI21-AZ	#1, #2, #3	-	-	TE0808-05-9GI81-E
TE0808-05-9GI21-C	#1, #3	-	-	TE0808-05-9GI81-C
TE0808-05-9GI21-KZ	#1, #2, #3	-	-	TE0808-05-9GI81-E
TE0808-05-9GI81-A	#1	-	-	TE0808-05-9GI81-E
TE0808-05-9GI81-AK	#1	-	-	TE0808-05-9GI81-EK
TE0808-05-BBE21-A	#1	TE0808-05-BBE21-E	#3	TE0808-05-BBE81-E
TE0808-05-BBE21-AK	#1	TE0808-05-BBE21-EK	#3	TE0808-05-BBE81-EK
TE0808-05-BBE21-AS	#1, #3	-	-	TE0808-05-BBE81-ES
TE0808-05-BBE21-AZ	#1, #2, #3	-	-	TE0808-05-BBE81-E

Affected Product	Changes	Intermediate Product ¹⁾	Changes	Replacement
TE0808-05-BBE81-A	#1	-	-	TE0808-05-BBE81-E
TE0808-05-BBE81-AK	#1	-	-	TE0808-05-BBE81-EK

¹⁾ Intermediate products are delivered on demand for customers who are not able to switch to replacements on the short term.

²⁾ Variant changes to customer specific S-variant.

2 Changes

2.1 #1 Changed PLL (U5) from Si5345A-B-GM to Si5345A-D-GM.

Type: Schematic Change

Reason: Updated to new PLL revision.

Impact: New programming file is necessary. Trenz reference design considers new PLL programming information but custom programming files needs to be updated by customer. For more information take a look at [AN1006-Si534x-8x-RevB-RevD-Differences¹](https://www.skyworksinc.com/-/media/SkyWorks/SL/documents/public/application-notes/AN1006-Si534x-8x-RevB-RevD-Differences¹).

2.2 #2 Changed DCDC (U15, U20, U21, U22, U23, U24, U29, U30, U31, U35, U36, U38, U45) from MUN3CAD03-SE to TPS82085SIL and adapted voltage divider resistors.

Type: BOM Change

Reason: TPS82085SIL availability.

Impact: Minor changes in electrical characteristics.

2.3 #3 Changed DDR4 SDRAM (U2, U3, U9, U12) from K4A8G165WB-BIRC to K4A8G165WC-BITDTCV.

Type: BOM change

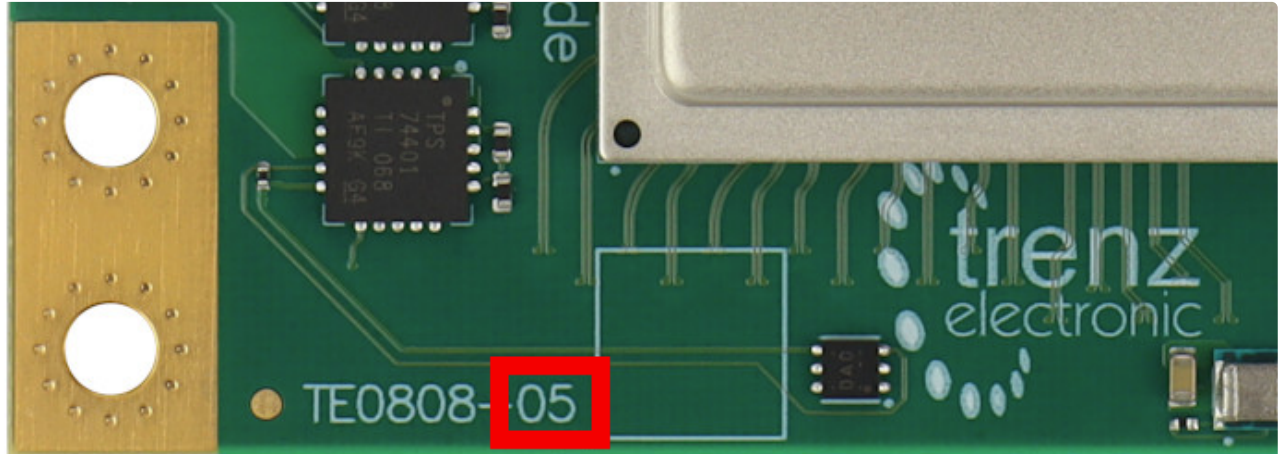
Reason: BOM Optimization.

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

¹ <https://www.skyworksinc.com/-/media/SkyWorks/SL/documents/public/application-notes/AN1006-Si534x-8x-RevB-RevD-Differences.pdf>

3 Method of Identification

The revision number is shown on the top side of the PCB.



4 Production Shipment Schedule

With immediate effect this change takes place. If the changed product is not suitable for your application and still the former version 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.de²
- wiki.trenz-electronic.de³
- support@trenz-electronic.de⁴ (subject = PCN-20240616)
- 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.

² <http://forum.trenz-electronic.de/>

³ <http://wiki.trenz-electronic.de/>

⁴ <mailto:support@trenz-electronic.de?subject=PCN-20240616>