

**Dear Customer,**

With this INFINEON Technologies Information Note we would like to inform you about the following

**Early Problem Notification: DMA\_TC.045\_EPN\_v1\_0**

N° 112/16

## Early Problem Notification: DMA\_TC.045\_EPN\_v1\_0

<b>► Products affected:</b>	<b>Sales Name</b>	<b>SP N°</b>	<b>OPN</b>	<b>Package</b>
	Please refer to 1_cip16112 attached			

### ► Detailed Change Information:

**Subject:** Early Problem Notification DMA\_TC.045\_EPN\_v1\_0: DMA Reconfigures DMA Channels Lockup

**Reason:** Functional Problem

<b>Description:</b>	<b><u>Old</u></b>	<b><u>New</u></b>
	■ Not applicable (no previous release)	■ Early Problem Notification DMA_TC.045_EPN_v1_0 (first release)

**► Product Identification:** Not applicable (no change of product)

**► Impact of Change:** Not applicable (no change of product)

**► Attachments:**  
Affected product list: 1\_cip16112  
Errata Sheet V1.0: 4\_cip16112

**► Intended start of delivery:** Not applicable

If you have any questions, please do not hesitate to contact your local Sales office.



<b>Device</b>	<b>TC2xx</b>
<b>Marking/Step</b>	<b>TC29xB, TC27xB/C/D, TC26xB, TC23xA, TC22xA, TC21xA</b>
<b>Package</b>	<b>independent</b>

## No. 112/16

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Infineon is providing you with product information not previously addressed in the product data sheets or other documentation for the devices listed above. The enclosed information describes device behavior which may affect your current or prior use of the product. As our customers use these products in a number of different applications, Infineon is not in a position to assess the consequences of this device behavior in your specific application(s). Therefore, you should review the enclosed information and evaluate its effect, if any, on your current or prior use of the product in your application(s), including whether there are any safety concerns requiring further action and/or regulatory reporting.

### **DMA TC.045 EPN DMA Reconfigures DMA Channels Lockup**

If two or more DMA channels are used to re-configure other DMA channels (i.e. perform a DMA write move to DMA address space) the DMA may lock up if the re-configuration DMA channels are assigned to different DMA hardware resource partitions.

The effect of the DMA lock up is to lock up other SPB master interfaces which attempt a write access to DMA address space.

### **Workaround**

All DMA channels used to re-configure other DMA channels shall be assigned to the same hardware resource partition in their corresponding DMA Channel Hardware Resource Registers HRRz.

**INF N°112/16**

Early Problem Notification:  
DMA\_TC.045\_EPN\_v1\_0



Sales Name	SP number	Package
SAK-TC298TF-128F300L BB	SP001207662	PG-BGA-416-26
SAK-TC298TF-128F300N BC	SP001366132	PG-BGA-416-26
SAL-TC298TP-128F300L BB	SP001207660	PG-BGA-416-26
SAL-TC298TP-128F300L BC	SP001366092	PG-BGA-416-26
SAL-TC298TP-128F300N BC	SP001397604	PG-BGA-416-26
SAK-TC237L-32F200S AB	SP001268354	PG-LFBGA-292-6
SAK-TC237LF-32F200S AB	SP001367650	PG-LFBGA-292-6
SAK-TC237LP-32F200N AC	SP001397698	PG-LFBGA-292-6
SAK-TC237LP-32F200S AB	SP001268356	PG-LFBGA-292-6
SAK-TC267D-40F200N BC	SP001592934	PG-LFBGA-292-6
SAK-TC267D-40F200S BB	SP001270092	PG-LFBGA-292-6
SAK-TC277T-64F200S CA	SP001146094	PG-LFBGA-292-6
SAK-TC277T-64F200S DB	SP001217632	PG-LFBGA-292-6
SAK-TC277TC-64F200S CA	SP001217636	PG-LFBGA-292-6
SAK-TC277TC-64F200S DB	SP001217638	PG-LFBGA-292-6
SAK-TC277TC-64F200S DC	SP001611468	PG-LFBGA-292-6
SAK-TC277TE-64F200S BC	SP001103434	PG-LFBGA-292-6
SAK-TC277TF-64F200N DC	SP001366170	PG-LFBGA-292-6
SAK-TC277TF-64F200S BC	SP001103432	PG-LFBGA-292-6
SAK-TC277TF-64F200S CA	SP001146096	PG-LFBGA-292-6
SAK-TC277TF-64F200S DB	SP001241308	PG-LFBGA-292-6
SAK-TC277TP-64F200N DC	SP001397616	PG-LFBGA-292-6
SAK-TC277TP-64F200S BC	SP001103396	PG-LFBGA-292-6
SAK-TC277TP-64F200S CA	SP001146098	PG-LFBGA-292-6
SAK-TC277TP-64F200S DB	SP001217634	PG-LFBGA-292-6
SAK-TC277TP-64F200S DC	SP001366136	PG-LFBGA-292-6
SAK-TC277TU-64F200S BC	SP001103400	PG-LFBGA-292-6
SAK-TC297T-128F300S BB	SP001265596	PG-LFBGA-292-6
SAK-TC297T-96F300S BB	SP001265616	PG-LFBGA-292-6
SAK-TC297TA-128F300N BC	SP001397668	PG-LFBGA-292-6
SAK-TC297TA-128F300S BB	SP001130460	PG-LFBGA-292-6
SAK-TC297TA-64F300S BB	SP001265584	PG-LFBGA-292-6
SAK-TC297TB-128F300S BB	SP001265582	PG-LFBGA-292-6
SAK-TC297TC-96F300S BB	SP001265598	PG-LFBGA-292-6
SAK-TC297TF-128F300N BC	SP001366130	PG-LFBGA-292-6
SAK-TC297TF-128F300S BB	SP001241310	PG-LFBGA-292-6
SAK-TC297TP-128F300N BC	SP001396392	PG-LFBGA-292-6
SAK-TC297TP-128F300S BB	SP001207656	PG-LFBGA-292-6
SAK-TC297TP-128F300S BC	SP001366094	PG-LFBGA-292-6
SAK-TC297TP-96F300S BB	SP001001102	PG-LFBGA-292-6
SAK-TC297TX-128F300N BC	SP001397674	PG-LFBGA-292-6
SAK-TC297TX-128F300S BB	SP001265592	PG-LFBGA-292-6
SAK-TC297TY-128F300S BB	SP001265594	PG-LFBGA-292-6
SAL-TC237L-32F200S AB	SP001281206	PG-LFBGA-292-6
SAL-TC237LP-32F200S AB	SP001281212	PG-LFBGA-292-6
SAL-TC267D-40F200S BB	SP001386934	PG-LFBGA-292-6
SAL-TC277T-64F200S CA	SP001256016	PG-LFBGA-292-6
SAL-TC277T-64F200S DB	SP001270154	PG-LFBGA-292-6
SAL-TC277TP-64F200S DB	SP001217642	PG-LFBGA-292-6
SAK-TC299TC-96F300S BB	SP001265604	PG-LFBGA-516-5

SAK-TC299TF-128F300N BC	SP001366134	PG-LFBGA-516-5
SAK-TC299TF-128F300S BB	SP001241312	PG-LFBGA-516-5
SAK-TC299TP-128F300N BC	SP001604770	PG-LFBGA-516-5
SAK-TC299TP-128F300S BB	SP001207664	PG-LFBGA-516-5
SAK-TC299TP-128F300S BC	SP001366090	PG-LFBGA-516-5
SAK-TC299TP-96F300S BB	SP001001112	PG-LFBGA-516-5
SAK-TC299TX-128F300N BC	SP001397678	PG-LFBGA-516-5
SAK-TC299TX-128F300S BB	SP001265588	PG-LFBGA-516-5
SAK-TC299TY-128F300S BB	SP001265590	PG-LFBGA-516-5
SAL-TC299TP-128F300N BC	SP001397596	PG-LFBGA-516-5
SAL-TC299TP-128F300S BB	SP001260190	PG-LFBGA-516-5
SAK-TC264D-40F200N BC	SP001397656	PG-LQFP-144-22
SAK-TC264D-40F200W BB	SP001257822	PG-LQFP-144-22
SAK-TC264DA-40F200N BC	SP001397646	PG-LQFP-144-22
SAK-TC264DA-40F200W BB	SP001257824	PG-LQFP-144-22
SAK-TC264DC-40F200W BB	SP001399740	PG-LQFP-144-22
SAK-TC264DE-40F200N BC	SP001397640	PG-LQFP-144-22
SAK-TC264DE-40F200W BB	SP001257826	PG-LQFP-144-22
SAL-TC264D-40F200W BB	SP001260256	PG-LQFP-144-22
SAK-TC265D-40F200W BB	SP001257830	PG-LQFP-176-18
SAK-TC275T-64F200W CA	SP001106358	PG-LQFP-176-18
SAK-TC275T-64F200W DB	SP001217592	PG-LQFP-176-18
SAK-TC275TF-64F200W BC	SP001103390	PG-LQFP-176-18
SAK-TC275TF-64F200W CA	SP001146100	PG-LQFP-176-18
SAK-TC275TF-64F200W DB	SP001217582	PG-LQFP-176-18
SAK-TC275TP-64F200W BC	SP001103370	PG-LQFP-176-18
SAK-TC275TP-64F200W CA	SP001105592	PG-LQFP-176-18
SAK-TC275TP-64F200W DB	SP001217586	PG-LQFP-176-18
SAK-TC275TU-64F200W BC	SP001103368	PG-LQFP-176-18
SAL-TC275T-64F200W CA	SP001242868	PG-LQFP-176-18
SAL-TC275TP-64F200W DB	SP001217598	PG-LQFP-176-18
SAK-TC265D-40F200W BB	SP001257830	PG-LQFP-176-19
SAK-TC265DE-40F200W BB	SP001257844	PG-LQFP-176-19
SAK-TC275T-64F200W CA	SP001106358	PG-LQFP-176-19
SAK-TC275TE-64F200W BC	SP001103386	PG-LQFP-176-19
SAK-TC275TF-64F200W BC	SP001103390	PG-LQFP-176-19
SAK-TC275TF-64F200W CA	SP001146100	PG-LQFP-176-19
SAK-TC275TP-64F200W BC	SP001103370	PG-LQFP-176-19
SAK-TC275TP-64F200W CA	SP001332056	PG-LQFP-176-19
SAK-TC275TU-64F200W BC	SP001103368	PG-LQFP-176-19
SAL-TC275TP-64F200W CA	SP001256012	PG-LQFP-176-19
SAL-TC275TP-64F200W DB	SP001217598	PG-LQFP-176-19
SAK-TC275TP-64F200W CA	SP001105592	PG-LQFP-176-21
SAL-TC275T-64F200W CA	SP001242868	PG-LQFP-176-21
SAL-TC275TP-64F200W CA	SP001256012	PG-LQFP-176-21
SAK-TC265D-40F200N BC	SP001397662	PG-LQFP-176-22
SAK-TC265D-40F200W BB	SP001257830	PG-LQFP-176-22
SAK-TC265DC-40F200W BB	SP001363114	PG-LQFP-176-22
SAK-TC265DE-40F200N BC	SP001397634	PG-LQFP-176-22
SAK-TC265DE-40F200W BB	SP001257844	PG-LQFP-176-22
SAK-TC275T-64F200N DC	SP001651570	PG-LQFP-176-22
SAK-TC275T-64F200W CA	SP001106358	PG-LQFP-176-22
SAK-TC275T-64F200W DB	SP001217592	PG-LQFP-176-22
SAK-TC275TC-64F200W CA	SP001217626	PG-LQFP-176-22
SAK-TC275TC-64F200W DB	SP001217602	PG-LQFP-176-22

SAK-TC275TC-64F200W DC	SP001611466	PG-LQFP-176-22
SAK-TC275TF-64F200N DC	SP001366176	PG-LQFP-176-22
SAK-TC275TF-64F200W CA	SP001146100	PG-LQFP-176-22
SAK-TC275TF-64F200W DB	SP001217582	PG-LQFP-176-22
SAK-TC275TP-64F200N DC	SP001397622	PG-LQFP-176-22
SAK-TC275TP-64F200N DC	SP001630432	PG-LQFP-176-22
SAK-TC275TP-64F200W BC	SP001103370	PG-LQFP-176-22
SAK-TC275TP-64F200W CA	SP001105592	PG-LQFP-176-22
SAK-TC275TP-64F200W CA	SP001332056	PG-LQFP-176-22
SAK-TC275TP-64F200W DB	SP001217586	PG-LQFP-176-22
SAK-TC275TP-64F200W DC	SP001366138	PG-LQFP-176-22
SAL-TC265D-40F200W BB	SP001260192	PG-LQFP-176-22
SAL-TC275T-64F200W CA	SP001242868	PG-LQFP-176-22
SAL-TC275T-64F200W DB	SP001270152	PG-LQFP-176-22
SAL-TC275TP-64F200W CA	SP001256012	PG-LQFP-176-22
SAL-TC275TP-64F200W DB	SP001217598	PG-LQFP-176-22
SAK-TC213L-8F133F AB	SP001268338	PG-TQFP-100-23
SAK-TC213S-8F133F AB	SP001240244	PG-TQFP-100-23
SAK-TC223L-12F133F AB	SP001335944	PG-TQFP-100-23
SAK-TC223L-16F133F AB	SP001268340	PG-TQFP-100-23
SAK-TC223L-16F133N AC	SP001592698	PG-TQFP-100-23
SAK-TC223S-12F133F AB	SP001335940	PG-TQFP-100-23
SAK-TC223S-16F133F AB	SP001288594	PG-TQFP-100-23
SAK-TC233L-32F200F AB	SP001268346	PG-TQFP-100-23
SAK-TC233LC-24F133F AB	SP001270740	PG-TQFP-100-23
SAK-TC233LP-16F200F AB	SP001270730	PG-TQFP-100-23
SAK-TC233LP-32F200F AB	SP001268348	PG-TQFP-100-23
SAK-TC233LP-32F200N AC	SP001397720	PG-TQFP-100-23
SAK-TC233LP-32F200N AC	SP001641894	PG-TQFP-100-23
SAL-TC223L-16F133F AB	SP001281284	PG-TQFP-100-23
SAL-TC233L-32F200F AB	SP001281240	PG-TQFP-100-23
SAL-TC233LP-32F200F AB	SP001281194	PG-TQFP-100-23
SAK-TC233L-32F200F AB	SP001268346	PG-TQFP-100-3
SAK-TC214L-8F133F AB	SP001268342	PG-TQFP-144-27
SAK-TC224L-16F133F AB	SP001268344	PG-TQFP-144-27
SAK-TC224L-16F133N AC	SP001641938	PG-TQFP-144-27
SAK-TC234L-24F200F AB	SP001596338	PG-TQFP-144-27
SAK-TC234L-24F200N AC	SP001624402	PG-TQFP-144-27
SAK-TC234L-32F200F AB	SP001268350	PG-TQFP-144-27
SAK-TC234LA-32F200F AB	SP001276932	PG-TQFP-144-27
SAK-TC234LC-24F133F AB	SP001270742	PG-TQFP-144-27
SAK-TC234LF-32F200F AB	SP001271404	PG-TQFP-144-27
SAK-TC234LP-16F200F AB	SP001270728	PG-TQFP-144-27
SAK-TC234LP-32F200F AB	SP001268352	PG-TQFP-144-27
SAK-TC234LP-32F200N AC	SP001397714	PG-TQFP-144-27
SAK-TC234LX-32F200F AB	SP001350934	PG-TQFP-144-27
SAK-TC234L-32F200F AB	SP001268350	PG-TQFP-144-3
SAK-TC234LF-32F200F AB	SP001271404	PG-TQFP-144-3
SAK-TC234LP-32F200N AC	SP001642890	PG-TQFP-144-3
SAK-TC264DE-40F200Q BB	SP001257828	PG-TQFP-172-1
SAK-TC264DE-40F200Q BC	SP001592944	PG-TQFP-172-2
SAK-TC265DE-40F200Q BB	SP001257814	PG-TQFP-216-1
SAK-TC275TF-64F200Q BC	SP001103392	PG-TQFP-216-1
SAK-TC275TF-64F200Q CA	SP001146102	PG-TQFP-216-1
SAK-TC275TF-64F200Q DB	SP001217580	PG-TQFP-216-1

SAK-TC275TF-64F200Q DC	SP001366178	PG-TQFP-216-1
SAK-TC265DE-40F200Q BC	SP001592942	PG-TQFP-216-2
SAK-TC275TF-64F200Q DB	SP001217580	PG-TQFP-216-2
SAK-TC275TF-64F200Q DC	SP001366178	PG-TQFP-216-2
SAK-TC212L-8F133F AB	SP001268334	PG-TQFP-80-7
SAK-TC212L-8F133N AC	SP001592690	PG-TQFP-80-7
SAK-TC212S-8F133F AB	SP001287988	PG-TQFP-80-7
SAK-TC222L-12F133F AB	SP001335936	PG-TQFP-80-7
SAK-TC222L-16F133F AB	SP001268336	PG-TQFP-80-7
SAK-TC222L-16F133N AC	SP001584424	PG-TQFP-80-7
SAK-TC222S-12F133F AB	SP001329964	PG-TQFP-80-7
SAK-TC222S-12F133F AB	SP001641678	PG-TQFP-80-7
SAK-TC222S-16F133F AB	SP001288596	PG-TQFP-80-7
SAL-TC230LP-32F200 AB	SP001397536	S-BDWBT-1
SAL-TC260D-40F200 BB	SP001257818	S-BDWBT-1
SAL-TC260D-40F200N BC	SP001397652	S-BDWBT-1
SAL-TC270TC-64F200 DB	SP001217578	S-BDWBT-1
SAL-TC270TF-64F200 DB	SP001388458	S-BDWBT-1
SAL-TC270TF-64F200N DC	SP001388460	S-BDWBT-1
SAL-TC270TP-64F200 BC	SP001103436	S-BDWBT-1
SAL-TC270TP-64F200 CA	SP001146110	S-BDWBT-1
SAL-TC270TP-64F200 DB	SP001217576	S-BDWBT-1
SAL-TC270TP-64F200 DC	SP001366140	S-BDWBT-1
SAL-TC270TP-64F200N DC	SP001397628	S-BDWBT-1
SAL-TC290TP-128F300 BB	SP001001126	S-BDWBT-1
SAL-TC290TP-128F300N BC	SP001397610	S-BDWBT-1