

N° 2021-161-A4

Dear customer,

please find attached our Infineon Technologies AG PCN:

Functional Safety related PCN:

Update of "Functional Safety documents" and several changes affecting products TLE9180Dx and TLE9183QK

Important information for your attention:

- Please respond to this PCN by indicating your decision on the approval form, sign it and return to your sales partner before 2022-05-25.
- Infineon aligns with the widely-recognized JEDEC STANDARD "JESD46", which stipulates:
 "Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change."

Notwithstanding the aforesaid individual agreements shall prevail.

Your prompt reply will help Infineon to assure a smooth and well-executed transition. If Infineon does not hear from your side by the due date, we will assume your full acceptance to this proposed change and its implementation.

Your attention and response to this matter is greatly appreciated.







On 16 April 2020, Infineon acquired Cypress.

We are now in the process of merging and consolidating our tools and processes for PCN, Information Notes, Errata and Product Discontinuance.

For further details, please visit our website:

https://www.infineon.com/cms/en/about-infineon/company/cypress-acquisition/

Infineon Technologies AG

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Management Board Jochen Hanebeck (CEO), Dr. Helmut Gassel, Constanze Hufenbecher, Dr. Sven Schneider, Dr. Rutger Wijburg Registered office Neubiberg Commercial register Amtsgericht München HRB 126492



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Products affected Please refer to attached affected product list PCN_2021-161-A4_[customer-no].pdf

Detailed change information

Subject: Functional Safety related PCN:

Update of "Functional Safety documents" and several changes affecting products

Reason/Motivation: Infineon is extending manufacturing capabilities and will enable product families

at external manufacturing partners.

Infineon has continuously extended its production capacity to meet strongly

Description	<u>Old</u>	New
ANY: Any change with impact on processability/manufacturability at customer, which is not covered in the matrix below	Valid Functional Safety documentation	New Functional Safety documentation (links see 5_cip21161_A4)
DATA SHEET: Change of datasheet parameters/electrical specification (min./max./typ. values) and/or AC/DC specification	Valid data sheets	New data sheets (links see 5_cip21161_A4)
DESIGN: Design changes in routing	S9180D (Infineon Dresden)	S9180D (Infineon Dresden) AND S9180U (UMC)
PROCESS - WAFER PRODUCTION: New wafer diameter	200 mm (Infineon Dresden)	200 mm (Infineon Dresden) AND 300 mm (UMC)
PROCESS - WAFER PRODUCTION: New final wafer thickness	600 μm (Infineon Dresden)	600 μm (Infineon Dresden) AND 500 μm (UMC)
PROCESS - WAFER PRODUCTION: New / change of metallization / vias / contacts	NiMoP	NiMoP AND Pro.Cu
PROCESS - WAFER PRODUCTION: Change in process technology not covered by any other type of change	Old process flow	Old process flow AND New process flow



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PROCESS - WAFER PRODUCTION: Move all or parts of production to a different wafer fab site.		Locations: Wafer Fab: Infineon Technologies Dresden GmbH, Dresden, Germany AND United Microelectronics Corporation, Tainan, Taiwan
	Power Copper: Infineon Technologies AG, Regensburg, Germany	Power Copper: Infineon Technologies AG, Regensburg, Germany
PROCESS - ASSEMBLY: Change in leadframe dimensions	Leadframe used at Infineon Melaka	Leadframe used at Infineon Melaka AND Leadframe used at ASE
PROCESS - ASSEMBLY: Die attach material	ABLEBOND 3230 (Infineon Melaka)	ABLEBOND 3230 (Infineon Melaka) AND CRM 1076WA (ASE)
PROCESS - ASSEMBLY: Change of wire bonding	Cu wire (Infineon Melaka)	Cu wire (Infineon Melaka) AND PCC wire (ASE)
PROCESS - ASSEMBLY: Change of mold compound / encapsulation material	EME G700 H (Infineon Melaka)	EME G700 H (Infineon Melaka) AND CEL-9240 (ASE)
PROCESS - ASSEMBLY: Change of product marking	Device marking from Infineon Melaka	Device marking from Infineon Melaka AND Device marking from ASE
PROCESS - ASSEMBLY: Move all or parts of production to a different assembly site	•	Infineon Technologies (Malaysia) Sdn. Bhd., Melaka, Malaysia AND Advanced Semiconductor Engineering, Inc., Kaohsiung, Taiwan
EQUIPMENT: Production from a new equipment/tool which uses a different basic technology or which due to its unique form or function can be expected to influence the integrity of the final product	Infineon tool park	Infineon tool park AND SiFo and OSAT tool park



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Product identification Traceability assured.

E.g. Wafer lot numbers from Dresden start with ZAxxxxxx; Wafer lot numbers

from UMC start with 6Hxxxxxx.

Anticipated impact of change

Based on the qualification performed, Infineon does not expect any negative impact on quality, function and reliability. No change in function expected. Regarding FuSa documentation update (see customer information package),

assessment in application required!

DeQuMa-ID(s): SEM-AN-02 / SEM-DS-01 / SEM-DE-02 / SEM-PW-02 / SEM-PW-03 / SEM-PW-07 / SEM-PW-09 / SEM-PW-13 / SEM-PA-03 / SEM-PA-07 / SEM-PA-05

08 / SEM-PA-11 / SEM-PA-13 / SEM-PA-18 / SEM-EQ-01

Attachments

PCN_2021-161-A4_[customer-no].pdf	affected product list
3_cip21161_A4	customer information package (on request)
5_cip21161_A4	myICP links (data sheets, safety package)

Time schedule

Final qualification report	available
First samples available	on request
Intended start of delivery [1]	2022-06-30
Last order date (LOD) [2]	2022-10-17
Last delivery date (LDD) [3]	2023-10-17

^[1] Provided date or earlier after customer approval.

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

^[2] Last date where orders for unchanged products will be accepted.

^[3] Last date for delivery of unchanged products. Delivery of changed products can be earlier (see Intended start of delivery) and depends on approval.

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Functional Safety related PCN: Update of "Functional Safety documents" and several changes affecting products TLE9180Dx and TLE9183QK



Affected products sold to DIGI-KEY (4002348)

Sales name	SP number	OPN	Package	Customer part number
TLE9180D-31QK	SP001417250	TLE9180D31QKXUM A1	PG-LQFP-64-27	TLE9180D31QKXUM A1