

Product/process change notification

PCN N° 2022-009-A

Dear customer,

Please find attached our Infineon Technologies AG PCN:

Capacity extension for dedicated OptiMOS™5 100V and 150V products by introduction of 300mm wafer diameter at Infineon Technologies Austria AG, Austria and Infineon Technologies Dresden GmbH & Co. KG, Germany for TO263 packages

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 **2022-12-15**
- 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.”**

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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Product/process change notification

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► **Products affected**

Please refer to attached affected product list 1_cip22009_a

► **Detailed change information**

Subject Introduction of 300mm wafer diameter at Infineon Technologies Austria AG and Infineon Technologies Dresden GmbH & Co. KG.

Reason Next phase of Front End capacity expansion by introduction of 300mm wafer diameter to support continuous increasing customer demand.

Description	<u>Old</u>	<u>New</u>
Wafer Production Site and Wafer Test for OptiMOS™5 100V	<ul style="list-style-type: none"> ■ Infineon Technologies Austria AG, Villach, Austria (200mm) 	<ul style="list-style-type: none"> ■ Infineon Technologies Austria AG, Villach, Austria (200mm & 300mm)
Wafer Production Site and Wafer Test for OptiMOS™5 150V	<ul style="list-style-type: none"> ■ Infineon Technologies Austria AG, Villach, Austria (200mm) 	<ul style="list-style-type: none"> ■ Infineon Technologies Austria AG, Villach, Austria (200mm) <i>and</i> ■ Infineon Technologies Dresden GmbH, Germany (300mm)
Wafer lot number	<ul style="list-style-type: none"> ■ VExxxxxx (Villach,200mm) 	<ul style="list-style-type: none"> ■ VExxxxxx (Villach,200mm) <i>and</i> ■ VFxxxxxx (Villach,300mm) <i>and</i> ■ ZFxxxxxx (Dresden,300mm)

► **Product identification**

External traceability is assured via wafer lot number on the product barcode label.

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► Impact of change

NO change on electrical, thermal parameters and reliability as proven via product qualification and characterization

NO change in existing datasheet parameters

NO change in quality and reliability. Processes are optimized to meet product performance according to already applied Infineon specification

► Attachments

1_cip22009_a	affected product list
2_cip22009_a	qualification report

► Time schedule

- | | |
|------------------------------|--|
| ■ Final qualification report | available |
| ■ First samples available | on request |
| ■ Intended start of delivery | 2022-12-31 or earlier based on customer approval |

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

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Affected products sold to DIGI-KEY (4002348)

Sales name	SP number	OPN	Package	Customer part number
IPB017N10N5LF	SP001503850	IPB017N10N5LFATMA 1	PG-TO263-7	IPB017N10N5LFATMA1
IPB020N10N5LF	SP001503854	IPB020N10N5LFATMA 1	PG-TO263-3	IPB020N10N5LFATMA1
IPB033N10N5LF	SP001503858	IPB033N10N5LFATMA 1	PG-TO263-3	IPB033N10N5LFATMA1
IPB048N15N5LF	SP001503860	IPB048N15N5LFATMA 1	PG-TO263-3	IPB048N15N5LFATMA1
IPB083N15N5LF	SP001503862	IPB083N15N5LFATMA 1	PG-TO263-3	IPB083N15N5LFATMA1

RESTRICTED

Qualification Test Report



PCN N° 2022-009-A

Date: 2022-10-31

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Reason for choosing the following test vehicles:

- IPB017N10N5LF Biggest chip in 100V OptiMOS™5 technology from Infineon Technologies Austria AG, Austria in PG-TO263-7 package assembled at Infineon Melaka, Malaysia
- IPB033N10N5LF Smallest chip in 100V OptiMOS™5 technology from Infineon Technologies Austria AG, Austria in PG-TO263-3 package assembled at Infineon Melaka, Malaysia
- IPB048N15N5LF Biggest chip in 150V OptiMOS™5 technology from Infineon Technologies Dresden GmbH & Co. KG, Germany in PG-TO263-3 package assembled at Infineon Melaka, Malaysia

Scope of qualification:

Qualification of dedicated OptiMOS™5 100V & 150V products by introduction of 300mm wafer diameter at Infineon Technologies Austria AG, Austria & Infineon Technologies Dresden GmbH & Co. KG, Germany

Assessment of Q-Results:

pass

Stress test	Abbreviation	Test conditions	Readout	IPB017N10N5LF	IPB033N10N5LF	IPB048N15N5LF
				fails / stressed	fails / stressed	fails / stressed
MSL Preconditioning JESD22-A113	PC	MSL 1	0h	0 / 484	0 / 484	0 / 484
Temperature Cycling JESD22-A104	TC	with preconditioning -40/ 125°C	1000 x	0/77	0/77	0/77
Unbiased Temperature/Humidity JESD22-A118	UHAST	with preconditioning Ta = 130°C, RH = 85%	96 h	0/77	0/77	0/77
High Humidity High Temp. Reverse Bias JESD22-A101	H3TRB	with preconditioning T = 85 °C RH = 85% VDS = 80% of VDSmx but max 100V	1000 h	0/77	0/77	0/77
High Temperature Reverse Bias JESD22-A108	HTRB	with preconditioning Tj = 150°C VDS =100%VDSmax	1000 h	0/77	0/77	0/77
High Temperature Gate stress JESD22-A108	HTGS	with preconditioning Ta = 150 °C VGE = ±20 V	1000 h	0/77	0/77	0/77
Intermittent Operational Life Test MIL-STD 750/Meth.1037	IOL	Delta T = 100 K n = 15000 cyc	15000 x	0/77	0/77	0/77