Product/process change notification

PCN N° 2022-002-A

Dear customer,

Please find attached our Infineon Technologies AG PCN:

Capacity extension by introduction of 300mm wafer diameter for dedicated OptiMOS™5 150V products at Infineon Technologies Dresden, Germany

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 **2022-04-18**
- 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
Postal Address Headquarters: Am Campeon 1-15, D-85579 Neubiberg, Phone +49 (0)89 234-0
Chairman of the Supervisory Board: Dr. Wolfgang Eder
Management Board: Dr. Reinhard Ploss (CEO), Dr. Helmut Gassel, Jochen Hanebeck, Constanze Hufenbecher, Dr. Sven Schneider
Registered Office: Neubiberg
Commercial Register: München HRB 126492

Product/process change notification

PCN N° 2022-002-A

▸ Products affected

Please refer to attached affected product list 1_cip22002_a

▸ Detailed change information

Subject

Introduction of 300mm wafer diameter at Infineon Technologies Dresden GmbH

Reason

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

Description

	Old	New
Wafer Production Site & Wafer Test	■ Infineon Technologies Austria AG, Villach, Austria (200mm)	■ Infineon Technologies Austria AG, Villach, Austria (200mm) *and* ■ Infineon Technologies Dresden GmbH, Germany (300mm)
Wafer lot number	■ VExxxxxx (Villach, 200mm)	■ VExxxxxx (Villach,200mm) *and* ■ ZFxxxxxx (Dresden,300mm)

▸ Product identification

External traceability is assured via waferlot number & country of diffusion on the product label

▸ 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

Product/process change notification

PCN N° 2022-002-A

▶ Attachments

1_cip22002_a	affected product list
2_cip22002_a	qualification report

▶ Time schedule

■ Final qualification report	available
■ First samples available	on request
■ Intended start of delivery	2022-05-01

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

PCN N° 2022-002-A

Capacity extension by introduction of 300mm wafer diameter for dedicated OptiMOS™5 150V products at Infineon Technologies Dresden, Germany

Sales name	SP number	OPN	Package
IPB044N15N5	SP001326442	IPB044N15N5ATMA1	PG-TO263-7
IPB044N15N5 E8187	SP004531436	IPB044N15N5E8187ATMA1	PG-TO263-7
IPB048N15N5	SP001279596	IPB048N15N5ATMA1	PG-TO263-3
IPB060N15N5	SP001607814	IPB060N15N5ATMA1	PG-TO263-7
IPB060N15N5 E8187	SP001863630	IPB060N15N5E8187ATMA1	PG-TO263-7
IPB060N15N5 E8197	SP005569714	IPB060N15N5E8197ATMA1	PG-TO263-7
IPB073N15N5	SP001180660	IPB073N15N5ATMA1	PG-TO263-3
IPI051N15N5	SP001326440	IPI051N15N5AKSA1	PG-TO262-3
IPI076N15N5	SP001326438	IPI076N15N5AKSA1	PG-TO262-3
IPP051N15N5	SP001279600	IPP051N15N5AKSA1	PG-TO262-3
IPP076N15N5	SP001180658	IPP076N15N5AKSA1	PG-TO262-3

PCN 2022-002-A

Capacity extension by introduction of 300mm wafer diameter for dedicated OptiMOS™5 150V products at Infineon Technologies Dresden, Germany

Affected products sold to FUTURE ELECTRONICS INC. (4000624)

Sales name	SP number	OPN	Package	Customer part number
IPB044N15N5	SP001326442	IPB044N15N5ATMA1	PG-TO263-7	IPB044N15N5ATMA1
IPB048N15N5	SP001279596	IPB048N15N5ATMA1	PG-TO263-3	IPB048N15N5ATMA1
IPP076N15N5	SP001180658	IPP076N15N5AKSA1	PG-TO220-3	IPP076N15N5AKSA1

RESTRICTED

Qualification Test Report

PCN N° 2022-002-A **Date: 2022-02-17**

Capacity extension by introduction of 300mm wafer diameter for dedicated OptiMOS™5 150V products at Infineon Technologies Dresden, Germany

Reason for choosing the following test vehicles:

IPB048N15N5 Biggest chip in PG-TO262-3 package
IPB044N15N5 Biggest chip in PG-TO262-7 package
IPP051N15N5 Biggest chip in PG-TO220-3 package

Scope of qualification: Qualify 300mm wafer diameter for dedicated OptiMOS™5 150V products at Infineon Technologies Dresden, Germany

Assessment of Q-Results: pass

Stress test	Abbreviation	Test conditions	Readout	IPB048N15N5	IPB044N15N5	IPP051N15N5
				fails / stressed	fails / stressed	fails / stressed
MSL Preconditioning JESD22-A113	**PC**	MSL 1	0h	0 / 484	0 / 407	N.A
Temperature Cycling JESD22-A104	**TC**	with preconditioning	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 V	1000 h	0 / 77	0 / 77	0 / 77
High Temperature Reverse Bias JESD22-A108	**HTRB**	with preconditioning Tj = 175 VDS= 150V	1000 h	0 / 77	0 / 77	0 / 77
High Temperature Gate stress JESD22-A108	**HTGS**	with preconditioning Ta = 175 °C VGE = ±20 V	1000 h	0 / 77	refer to IPB048N15N5	0 / 77
Intermitted Operational Life Test MIL-STD 750/Meth.1037	**IOL**	'with preconditioning Delta T = 100 K n = 15000 cyc	15000 x	0 / 77	0 / 77	0 / 77