

Product/process change notification

PCN N° 2023-135-A

Dear customer,

Please find attached our Infineon Technologies AG PCN:

Introduction of an additional wafer production site at Infineon Technologies (Kulim) Sdn. Bhd., Kulim, Malaysia for TRENCHSTOP™ Performance IGBT3.1 in 600V discrete products

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 2023-06-27
- 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

Infineon Technologies AG

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Management Board Jochen Hanebeck (CEO), Constanze Hufenbecher, Dr. Sven Schneider, Andreas Urschitz, Dr. Rutger Wijburg

Registered office Neubiberg Commercial register Amtsgericht München HRB 126492



Product/process change notification

PCN N° 2023-135-A

Products affected

Please refer to attached affected product list "PCN 2023-135-A_[customer-no].pdf"

Detailed change information

Subject Introduction of an additional FE wafer site production.

Reason Capacity extension and implementation of a 2nd source

Description

<u>Old</u>

New

Wafer production and test site for IGBT3.1 products

 Infineon Technologies Austria AG, Villach Infineon Technologies
 Austria AG, Villach
 or
 Infineon Technologies
 (Kulim) Sdn. Bhd., Kulim

Product identification

Internal traceability assured via lot code and development code. External traceability assured via Sales Description, Product Bar Code Label / Lot Code

Impact of change

No impact on electrical performance. Quality and reliability verified by qualification. There is no change in form, fit and function. Datasheet are available either on www.infineon.com or at your local sales office.

Attachments

"PCN_2023-135-A_[customer-no].pdf" 2_cip23135A

affected product list Qualification report

▶ Time schedule

Final qualification report

available

First samples available

on request

Intended start of delivery

2023-08-30 or earlier on specific customer request

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

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Introduction of an additional wafer production site at Infineon Technologies (Kulim) Sdn. Bhd., Kulim, Malaysia for TRENCHSTOP™ Performance IGBT3.1 in 600V discrete products



Affected products sold to FUTURE ELECTRONICS INC. (4000624)

Sales name	SP number	OPN	Package	Customer part number
IGW50N60TP	SP001379668	IGW50N60TPXKSA1	PG-TO247-3	IGW50N60TPXKSA1
IKW30N60DTP	SP001379684	IKW30N60DTPXKSA1	PG-TO247-3	IKW30N60DTPXKSA1
IKW50N60DTP	SP001379678	IKW50N60DTPXKSA1	PG-TO247-3	IKW50N60DTPXKSA1

RESTRICTED

Qualification Test Report



PCN nr. PCN 2023-135-A 2023-05-08

PCN Title: Introduction of an additional wafer production site at Infineon Technologies (Kulim) Sdn. Bhd., Kulim, Malaysia for TRENCHSTOP™ Performance IGBT3.1 in 600V discrete products

Reason for choosing IGC06T60TE Smallest chip in product portfolio, bare die following test vehicle: IGC08T60TE Medium size chip in product portfolio, bare die

IKW50N60DTP Largest chip in product portfolio, discrete

Extension of qualification: All IGBT3.1 bare die & discrete products from 200mm Kulim including BE site ATX

Assessment of Q-Results Pass

	cts	IGC06T60TE	IGC08T60TE	IKW50N60DTP		
Stress test	Abbreviation	Test conditions	Readout			
Temperature Cycling JESD22-A104	TC*	Ta min = -55 °C Ta max = 150 °C	0 cyc precon 500 cyc 1000 cyc	-		0 /231 - 0 / 231 0 / 231
unbiased HAST JESD22-A118	UHAST*	Ta = 130°C RH = 85%	0 h precon 96 h			0/231 - 0/231 0/231
High Temperature Reverse Bias JESD22-A108	HTRB*	Tj = Tj max Vstress = 80% VCE_max	0 h precon 500 h 1000 h	0/77 - 0/77 0/77	0/77 - 0/77 0/77	0/77 - 0/77 0/77
High Humidity, High Temperature Reverse Bias JESD22-A101	H3TRB*	T = 85°C RH = 85% Vstress = 80 V	0 h precon 500 h 1000 h	0/77 0/77 0/77 0/77	0/77 0/77 0/77 0/77	0/77 0/77 0/77 0/77
High Temperature Gate stress JESD22-A108	нтся	Tj = Tj_max VGE= ±20V	0 h precon 500 h 1000 h	0/77 - 0/77 0/77	0/77 - 0/77 0/77	0/77 - 0/77 0/77
Intermitted Operational Life Test MIL-STD 750/Meth.1037	IOL*	Delta T = 125K	0 cyc precon 7500 cyc	-	-	0/231 - 0/231 0/231
ESD Characterization HBM: JEDEC JS-001 CDM: JEDEC JS-002	E\$D*	HBM CDM		-		HBM / 3B CDM / C3

^{*)} Standards are taken as a reference; slight variations from the standards according to Infineon regulations may occur