

Product/process change notification

PCN N° 2020-017-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 EC4_650V and implementation of IGBT MPT in 300 mm Dresden for discrete Products in Advanced Isolation.

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 **2022-02-28**
- 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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Registered Office: Neubiberg
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Product/process change notification

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► **Products affected** Please refer to attached affected product list 1_cip20017_a

► **Detailed change information**

Subject Introduction of an additional FE wafer site production and implementation of 300mm wafer diameter

Reason Capacity extension and implementation of a 2nd source

Description	<u>Old</u>	<u>New</u>
Wafer production and test site EC4_650V	<ul style="list-style-type: none"> Infineon Technologies Austria AG, Villach 	<ul style="list-style-type: none"> Infineon Technologies (Kulim) Sdn. Bhd., Kulim or Infineon Technologies Austria AG, Villach
Wafer diameter and production, test site IGBT MPT	<ul style="list-style-type: none"> 200 mm in Infineon Technologies Austria AG, Villach 	<ul style="list-style-type: none"> 300 mm in Infineon Technologies Austria AG, Dresden

► **Product identification** Internal traceability assured via lot code and development code. External traceability assured via Product Bar Code Label / Lot Code

► **Impact of change** No Impact on parameters and reliability as proven via product qualification. Processes are optimized to meet identical product performance according to already applied Infineon specifications. Updated datasheet are available either on www.infineon.com or at your local sales office.

► **Attachments** Affected product list: 1_cip20017_a
Qualification report: 2_cip20017_a

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► Time schedule

- | | |
|------------------------------|--|
| ■ Final qualification report | Available (refer to attachment 2_cip20017_a) |
| ■ First samples available | on request |
| ■ Intended start of delivery | 2022-04-30 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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Date: 2022-01-13

Introduction of an additional wafer production site at Infineon Technologies (Kulim) Sdn. Bhd., Kulim, Malaysia for EC4_650V and implementation of IGBT MPT in 300 mm Dresden for discrete Products in Advanced Isolation.

Reason for choosing following test vehicle: Representatives for EC4 650V discrete Diodes and IGBT MPT in Advanced Isolation package.

Extension of qualification: All EC4 650V Diodes from 200mm Kulim and IGBT MPT from 300mm Dresden in Advanced Isolation.

Assessment of Q-Results Pass

Reference Products				IKD06N65ET6 TO252-3	IDW15E65D2 TO247-3	IDP30C65D2 TO220-3	IKB40N65ES5 TO263-3	IKF90N65ES5 HSIP247-3
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 / 77 0 / 77 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77	0 / 77 0 / 77 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77
unbiased HAST JESD22-A118	UHAST*	Ta = 130°C RH = 85%	0 h precon 96 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 Reverse Bias JESD22-A108	HTRB*	Tj = Tj max Vstress = 560 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 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 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77
Intermitted Operational Life Test MIL-STD 750/Meth.1037	IOL*	Delta T = 100 K	0 cyc precon 7500 cyc 15000 cyc	0 / 77 0 / 77 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77	0 / 77 0 / 77 0 / 77 0 / 77	0 / 77 - 0 / 77 0 / 77
ESD Characterization HBM: JEDEC JS-001 CDM: JEDEC JS-002	ESD*	HBM CDM		HBM / 1B CDM / C3	HBM / 2 CDM / C3	HBM / 2 CDM / C3	HBM / 2 CDM / C3	HBM / 3A CDM / C3

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

Abbreviations: - not performed

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Introduction of an additional wafer production site at Infineon Technologies (Kulim) Sdn. Bhd., Kulim, Malaysia for EC4_650V and Implementation of 300 mm wafer in Dresden for IGBT MPT in advanced isolation

Sales name	SP number	OPN	Package
IDFW80C65D1	SP005423480	IDFW80C65D1XKSA1	PG-HSIP247-3
IDP08E65D1	SP001015376	IDP08E65D1XKSA1	PG-TO220-2
IDP08E65D2	SP000994154	IDP08E65D2XKSA1	PG-TO220-2
IDP15E65D1	SP001015380	IDP15E65D1XKSA1	PG-TO220-2
IDP15E65D2	SP001005456	IDP15E65D2XKSA1	PG-TO220-2
IDP20C65D2	SP001170096	IDP20C65D2XKSA1	PG-TO220-3
IDP20E65D2	SP001170100	IDP20E65D2XKSA1	PG-TO220-2
IDP30C65D2	SP001170098	IDP30C65D2XKSA1	PG-TO220-3
IDP30E65D1	SP001170108	IDP30E65D1XKSA1	PG-TO220-2
IDP30E65D2	SP001170104	IDP30E65D2XKSA1	PG-TO220-2
IDP40E65D2	SP001008324	IDP40E65D2XKSA1	PG-TO220-2
IDV08E65D2	SP000994148	IDV08E65D2XKSA1	PG-TO220-2
IDV15E65D2	SP001005460	IDV15E65D2XKSA1	PG-TO220-2
IDV20E65D1	SP001170102	IDV20E65D1XKSA1	PG-TO220-2
IDV30E65D2	SP001170106	IDV30E65D2XKSA1	PG-TO220-2
IDW15E65D2	SP001005464	IDW15E65D2FKSA1	PG-TO247-3
IDW20C65D2	SP001174446	IDW20C65D2XKSA1	PG-TO247-3
IDW30C65D1	SP001174450	IDW30C65D1XKSA1	PG-TO247-3
IDW30C65D2	SP001174452	IDW30C65D2XKSA1	PG-TO247-3
IDW30E65D1	SP001015412	IDW30E65D1FKSA1	PG-TO247-3
IDW40E65D1	SP001015382	IDW40E65D1FKSA1	PG-TO247-3
IDW40E65D2	SP001005474	IDW40E65D2FKSA1	PG-TO247-3
IDW60C65D1	SP001174454	IDW60C65D1XKSA1	PG-TO247-3
IDW75D65D1	SP001130576	IDW75D65D1XKSA1	PG-TO247-3
IDW80C65D1	SP001130578	IDW80C65D1XKSA1	PG-TO247-3
IDW80C65D2	SP001130580	IDW80C65D2XKSA1	PG-TO247-3
IHFW40N65R5S	SP001878204	IHFW40N65R5SXKSA1	PG-HSIP247-3
IKA08N65ET6	SP001701332	IKA08N65ET6XKSA1	PG-TO220-3
IKA08N65F5	SP000973414	IKA08N65F5XKSA1	PG-TO220-3
IKA08N65H5	SP001001722	IKA08N65H5XKSA1	PG-TO220-3
IKA10N65ET6	SP001701334	IKA10N65ET6XKSA2	PG-TO220-3
IKA15N65ET6	SP001701336	IKA15N65ET6XKSA2	PG-TO220-3
IKA15N65F5	SP000973416	IKA15N65F5XKSA1	PG-TO220-3
IKA15N65H5	SP001001724	IKA15N65H5XKSA1	PG-TO220-3
IKB15N65EH5	SP001502570	IKB15N65EH5ATMA1	PG-TO263-3
IKB20N65EH5	SP001502642	IKB20N65EH5ATMA1	PG-TO263-3
IKB30N65EH5	SP001502648	IKB30N65EH5ATMA1	PG-TO263-3
IKB30N65ES5	SP001502572	IKB30N65ES5ATMA1	PG-TO263-3
IKB40N65EF5	SP001509612	IKB40N65EF5ATMA1	PG-TO263-3
IKB40N65EH5	SP001502650	IKB40N65EH5ATMA1	PG-TO263-3

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Sales name	SP number	OPN	Package
IKB40N65ES5	SP001502574	IKB40N65ES5ATMA1	PG-TO263-3
IKD06N65ET6	SP004210258	IKD06N65ET6ARMA1	PG-TO252-3
IKD08N65ET6	SP004275470	IKD08N65ET6ARMA1	PG-TO252-3
IKFW40N65ES5	SP005401489	IKFW40N65ES5XKSA1	PG-HSIP247-3
IKFW50N65DH5	SP002510444	IKFW50N65DH5XKSA1	PG-HSIP247-3
IKFW50N65EH5	SP001728804	IKFW50N65EH5XKSA1	PG-HSIP247-3
IKFW50N65ES5	SP001728802	IKFW50N65ES5XKSA1	PG-HSIP247-3
IKFW60N65ES5	SP001878206	IKFW60N65ES5XKSA1	PG-HSIP247-3
IKFW75N65EH5	SP001728808	IKFW75N65EH5XKSA1	PG-HSIP247-3
IKFW75N65ES5	SP001728806	IKFW75N65ES5XKSA1	PG-HSIP247-3
IKP08N65F5	SP000973408	IKP08N65F5XKSA1	PG-TO220-3
IKP08N65H5	SP001001716	IKP08N65H5XKSA1	PG-TO220-3
IKP15N65F5	SP000973410	IKP15N65F5XKSA1	PG-TO220-3
IKP15N65H5	SP001001718	IKP15N65H5XKSA1	PG-TO220-3
IKP20N65F5	SP001133076	IKP20N65F5XKSA1	PG-TO220-3
IKP20N65H5	SP001133078	IKP20N65H5XKSA1	PG-TO220-3
IKP28N65ES5	SP002655502	IKP28N65ES5XKSA1	PG-TO220-3
IKP30N65F5	SP001133082	IKP30N65F5XKSA1	PG-TO220-3
IKP30N65H5	SP001133084	IKP30N65H5XKSA1	PG-TO220-3
IKP39N65ES5	SP002882512	IKP39N65ES5XKSA1	PG-TO220-3
IKP40N65F5	SP000973412	IKP40N65F5XKSA1	PG-TO220-3
IKP40N65H5	SP001001720	IKP40N65H5XKSA1	PG-TO220-3
IKW30N60DTP	SP001379684	IKW30N60DTPXKSA1	PG-TO247-3
IKW30N65EL5	SP001178080	IKW30N65EL5XKSA1	PG-TO247-3
IKW30N65EL5	SP001178080	IKW30N65EL5XKSA1	PG-TO247-3
IKW30N65ES5	SP001319678	IKW30N65ES5XKSA1	PG-TO247-3
IKW30N65H5	SP001204194	IKW30N65H5XKSA1	PG-TO247-3
IKW40N60DTP	SP001379680	IKW40N60DTPXKSA1	PG-TO247-3
IKW40N65ES5	SP001319680	IKW40N65ES5XKSA1	PG-TO247-3
IKW40N65F5	SP000973418	IKW40N65F5FKSA1	PG-TO247-3
IKW40N65F5	SP000973418	IKW40N65F5FKSA1	PG-TO247-3
IKW40N65H5	SP001001730	IKW40N65H5FKSA1	PG-TO247-3
IKW40N65H5	SP001001730	IKW40N65H5FKSA1	PG-TO247-3
IKW50N60DTP	SP001379678	IKW50N60DTPXKSA1	PG-TO247-3
IKW50N65EH5	SP001257944	IKW50N65EH5XKSA1	PG-TO247-3
IKW50N65ES5	SP001319682	IKW50N65ES5XKSA1	PG-TO247-3
IKW50N65F5	SP000973420	IKW50N65F5FKSA1	PG-TO247-3
IKW50N65F5	SP000973420	IKW50N65F5FKSA1	PG-TO247-3
IKW50N65H5	SP001001734	IKW50N65H5FKSA1	PG-TO247-3
IKW75N65EH5	SP001257948	IKW75N65EH5XKSA1	PG-TO247-3

