Product/process change notification

PCN N° 2020-028-A

Dear customer,

Please find attached our Infineon Technologies AG PCN:

Change of wafer production from Infineon Technologies Americas Corp., Temecula CA., USA to Silicon Foundry EPISIL Technologies Inc., Hsinchu, Taiwan for PVG Gen 2 and Gen 3, MOSFET G5 and IGBT G4 wafers, and MOSFET G7.5 wafers to Silicon Foundry Sichuan Gen Microelectronics co.Ltd, Suining, China

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 **2021-08-16**
- 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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Management Board: Dr. Reinhard Ploss (CEO), Dr. Helmut Gassel, Jochen Hanebeck, Constanze Hufenbecher, Dr. Sven Schneider
Registered Office: Neubiberg
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▶ Products affected

Please refer to attached affected product list 1_cip20028_a

▶ Detailed change information

Subject

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Reason

The wafer production of the affected products will be transferred to Silicon Foundry EPISIL Technologies Inc., Hsinchu, Taiwan, according to the global Infineon production strategy.

Description

Old	**New**
Wafer of PVG Gen2 /Gen3, MOSFET G5 / G7.5 and IGBT G4 at : ■ Wafer fab: Infineon Technologies Americas Corp., Temecula CA., USA ■ Wafer sort: Infineon Technologies Americas Corp., Temecula CA., USA	Wafer of PVG Gen2 /Gen3, MOSFET G5 and IGBT G4 at : ■ Wafer fab: Silicon Foundry EPISIL Technologies Inc., Hsinchu, Taiwan ■ Wafer sort: ETREND Hightech Corp., Taiwan Wafer production and probing MOSFET G7.5 at : ■ Sichuan Gen Microelectronics co.Ltd, Suining, China.

▶ Product identification

Ensured by internal traceability in manufacturing execution systems.

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Impact of change

Based on the qualification performed, Infineon does not expect any negative impact on quality, function and reliability.

Attachments

1_cip20028_a	affected product list
2_cip20028_a	Qualification report

Time schedule

Final qualification report	2021-04-22
First samples available	on request
Intended start of delivery	Start of delivery of changed products beginning from October 15th, 2021 or earlier on customer request. Further delivery of unchanged products is possible until stock will be depleted

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

Purpose : To qualify FE PVG-IC process transfer from Temecula FAB2 to EPISIL 6 inch FAB in Taiwan

MER Matrix: Passed reliability requirements for transfer to EPISIL

Final Qualification report for PCN 2020-028-A

Extension of qualification:

Product Name (Sales Code)

Chip Development Code

Wafer Process

Package Name

Chip Die Size (X by Y)

Wafer Fab Location

Assembly Location

Test description	Abbreviation	Condition	Lot ID/ Readout
High Temperature Intermittent Bias	HTIB	Temp: 70 °C	1000h
Temperature Humidity Bias	THB	Temp: 85 °C Humidity rel.: 85 %	1000h
High Temperature Reverse Bias	HTRB	Tj max: 110 °C	1000h
Unbiased HAST	UHST	Temp: 130 °C Humidity rel.: 85 %	16 h
Temperature Cycling	TC	Cycle time: 30 min Temp min: -40 °C Temp max: 125 °C	1000 x
ESD- CDM	EXT ESD CDM	NA	
ESD - HBM	EXT ESD HBM	NA	
Solder Heat Resistance	SHR (MSL4)	Repetition: 3 x Temp peak: 260 °C	

4/22/2021

PVX6012PBF	PVT412PBF	PVG612PBF	PVU414PBF	PVN012SPBF	PVN012SPBF	PVI1050NSPBF	PVI1050NSPBF
V9477X-000-00-2	V9460X-000-00-2	V9401X-000-00-2	V9471X-000-00-2	V9415X-000-00-2	V9415X-000-00-2	V9245X-000-00-2	V9245X-000-00-2
HVIC_PVG / IG_PLN4 / DI_HXFRED2	HVIC_PVG / FPLN_3	HVIC_PVG / FPLN_3	HVIC_PVG / FPLN_3	HVIC_PVG / FPLN_5	HVIC_PVG / FPLN_5	HVIC_PVG	HVIC_PVG
PG-DIP-4-902	PG-DIP-6-901	PG-DIP-6-901	PG-DIP-6-901	PG-DIP-6-903	PG-DIP-6-903	PG-DIP-4-901	PG-DIP-4-901
1.27 x 0.9140 mm / 2.7180 x 3.4040 mm / 1.6760 x 1.6760 mm	1.27 x 0.9140 mm / 0.9650 x 1.3720 mm	1.1170 x 1.7270 mm / 1.93 x 2.1840 mm	1.1170 x 1.7270 mm / 0.9650 x 1.3720 mm	1.1170 x 1.7270 mm / 2.1590 x 1.5240	1.1170 x 1.7270 mm / 2.1590 x 1.5240	1.2820 x 1.7020 mm	1.2820 x 1.7020 mm
PVG & IGBT-EPISIL / Diode-VISHAY	PVG-EPISIL / FET-VISHAY_IT	PVG-EPISIL / FET-VISHAY_IT	PVG-EPISIL / FET-VISHAY_IT	PVG-EPISIL / FET-EPISIL	PVG-EPISIL / FET-EPISIL	EPISIL	EPISIL
CIRTEK_PH	CIRTEK_PH	CIRTEK_PH	CIRTEK_PH	CIRTEK_PH	CIRTEK_PH	CIRTEK_PH	CIRTEK_PH
Lot P21-02097-C1 ID:211556	**Lot P21-01859-C1 ID:211554**	**Lot P21-02090-C1 ID:211551**	**Lot P21-02092-C1 ID:211555**	**Lot P21-02095-C1 ID:211553**	**Lot P21-02094-C1 ID:239507**	**Lot 9 P20-35818-C1 ID:211552**	**Lot 10 P21-02093-C1 ID:211748**
pass 1/77 1-scratch on IGBT die (see CR tab)	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77
NA	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77
pass 0/77	NA	NA	NA	pass 0/77	pass 0/77	pass 0/77	pass 0/77
pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77
pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77	pass 0/77
Class - C3 (±1KV)	NA	**Class - C3 (±1KV)**	NA	NA	NA	**Class - C3 (±1KV)**	NA
Class - 3A (±4KV)	NA	**Class - 3A (±4KV)**	NA	NA	NA	**Class - 1C (±1KV)**	NA
NA	NA	NA	NA	0/22	0/22	0/22	0/22

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Sales name	SP number	OPN	Package
75-0052	SP001535224	75-0052	bare die
75-0052_E	SP005433784	750052EX6SA1	bare die
PVA1352NPBF	SP001543774	PVA1352NPBF	DIP8
PVA1352NSPBF	SP001543324	PVA1352NSPBF	SMT8
PVA1354NPBF	SP001550044	PVA1354NPBF	DIP8
PVA1354NSPBF	SP001541210	PVA1354NSPBF	SMT8
PVA1354NS-TPBF	SP001543766	PVA1354NS-TPBF	SMT8
PVA2352NPBF	SP001543314	PVA2352NPBF	DIP8
PVA3054NPBF	SP001546836	PVA3054NPBF	DIP8
PVA3054NSPBF	SP001539584	PVA3054NSPBF	SMT8
PVA3054NS-TPBF	SP001547160	PVA3054NS-TPBF	SMT8
PVA3055NPBF	SP001546766	PVA3055NPBF	DIP8
PVA3055NSPBF	SP001546826	PVA3055NSPBF	SMT8
PVA3324NPBF	SP001543304	PVA3324NPBF	DIP8
PVA3324NSPBF	SP001550034	PVA3324NSPBF	SMT8
PVA3354NPBF	SP001549226	PVA3354NPBF	DIP8
PVA3354NSPBF	SP001543746	PVA3354NSPBF	SMT8
PVAZ172NPBF	SP001541190	PVAZ172NPBF	DIP8
PVAZ172NSPBF	SP001543756	PVAZ172NSPBF	SMT8
PVAZ172NS-TPBF	SP001549246	PVAZ172NS-TPBF	SMT8
PVD1352NPBF	SP001544278	PVD1352NPBF	DIP8
PVD1352NSPBF	SP001546816	PVD1352NSPBF	SMT8
PVD1354NPBF	SP001549206	PVD1354NPBF	DIP8
PVD1354NSPBF	SP001543706	PVD1354NSPBF	SMT8
PVDZ172NPBF	SP001546748	PVDZ172NPBF	DIP8
PVDZ172NSPBF	SP001549254	PVDZ172NSPBF	SMT8
PVDZ172NS-TPBF	SP001550016	PVDZ172NS-TPBF	SMT8
PVG612APBF	SP001547270	PVG612APBF	DIP6
PVG612ASPBF	SP001544270	PVG612ASPBF	SMT6
PVG612AS-TPBF	SP001543736	PVG612AS-TPBF	SMT6
PVG612PBF	SP001549188	PVG612PBF	DIP6
PVG612SPBF	SP001547280	PVG612SPBF	SMT6
PVG612S-TPBF	SP001546758	PVG612S-TPBF	SMT6
PVI1050NPBF	SP001543294	PVI1050NPBF	DIP8
PVI1050NSPBF	SP001544250	PVI1050NSPBF	SMT8
PVI1050NS-TPBF	SP001550008	PVI1050NS-TPBF	SMT8
PVI5033RPBF	SP001541162	PVI5033RPBF	DIP8

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Sales name	SP number	OPN	Package
PVI5033RSPBF	SP001543274	PVI5033RSPBF	SMT8
PVI5033RS-TPBF	SP001541182	PVI5033RS-TPBF	SMT8
PVI5050NSPBF	SP001541288	PVI5050NSPBF	SMT8
PVI5080NPBF	SP001549990	PVI5080NPBF	DIP8
PVI5080NSPBF	SP001544240	PVI5080NSPBF	SMT8
PVN012PBF	SP001546728	PVN012PBF	DIP6
PVN012SPBF	SP001543696	PVN012SPBF	SMT6
PVN012S-TPBF	SP001547262	PVN012S-TPBF	SMT6
PVT212PBF	SP001541414	PVT212PBF	DIP6
PVT212SPBF	SP001546796	PVT212SPBF	SMT6
PVT212S-TPBF	SP001549952	PVT212S-TPBF	SMT6
PVT312LPBF	SP001547244	PVT312LPBF	DIP6
PVT312LSPBF	SP001547254	PVT312LSPBF	SMT6
PVT312LS-TPBF	SP001544230	PVT312LS-TPBF	SMT6
PVT312PBF	SP001539534	PVT312PBF	DIP6
PVT312SPBF	SP001549374	PVT312SPBF	SMT6
PVT312S-TPBF	SP001543792	PVT312S-TPBF	SMT6
PVT322APBF	SP001541394	PVT322APBF	DIP8
PVT322ASPBF	SP001544210	PVT322ASPBF	SMT8
PVT322AS-TPBF	SP001546710	PVT322AS-TPBF	SMT8
PVT322PBF	SP001549364	PVT322PBF	DIP8
PVT322SPBF	SP001549264	PVT322SPBF	SMT8
PVT322S-TPBF	SP001541384	PVT322S-TPBF	SMT8
PVT412APBF	SP001547224	PVT412APBF	DIP6
PVT412ASPBF	SP001550068	PVT412ASPBF	SMT6
PVT412AS-TPBF	SP001543666	PVT412AS-TPBF	SMT6
PVT412LPBF	SP001543914	PVT412LPBF	DIP6
PVT412LSPBF	SP001549382	PVT412LSPBF	SMT6
PVT412LS-TPBF	SP001541374	PVT412LS-TPBF	SMT6
PVT412PBF	SP001549980	PVT412PBF	DIP6
PVT412SPBF	SP001549390	PVT412SPBF	SMT6
PVT412S-TPBF	SP001539544	PVT412S-TPBF	SMT6
PVT422PBF	SP001547234	PVT422PBF	DIP8
PVT422SPBF	SP001547036	PVT422SPBF	SMT8
PVT422S-TPBF	SP001546718	PVT422S-TPBF	SMT8
PVU414PBF	SP001543254	PVU414PBF	DIP6

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Sales name	SP number	OPN	Package
PVU414SPBF	SP001550076	PVU414SPBF	SMT6
PVU414S-TPBF	SP001546922	PVU414S-TPBF	SMT6
PVX6012PBF	SP001543656	PVX6012PBF	DIP14