Product/process change notification

PCN N° 2021-142-A

Dear customer,

Please find attached our Infineon Technologies AG PCN:

Capacity expansion by introduction of an additional assembly and final test location for BGA 524N6

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 **2021-12-23**
- 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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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

Products affected

Please refer to attached affected product list 1_cip21142_A

Detailed change information

Subject

Capacity expansion by introduction of an additional assembly and final test location at JCET Group Co., Ltd, Jiangyin, China for BGA 524N6

Reason

Expansion of assembly and test location to assure continuity and increase supply flexibility.

Description

<u>**Old**</u>	<u>**New**</u>
■ **Infineon Melaka**, Infineon Technologies (Malaysia) Sdn. Bhd., Melaka, Malaysia	■ **Infineon Melaka**, Infineon Technologies (Malaysia) Sdn. Bhd., Melaka, Malaysia *or* ■ **Subcon JCET**, JCET Group Co., Ltd, Jiangyin, China
■ **Infineon Melaka** packing = Tape & Reel 15,000pcs	■ **Infineon Melaka** packing = Tape & Reel 15,000pcs or ■ **Subcon JCET** packing = Tape & Reel 12,000pcs

Product identification

1. Internal traceability: Baunumber, lot number, date code
2. External traceability: Marking and SP number (Please refer to attached 3_cip21142_A)

Impact of change

NO change on electrical and thermal performance
NO impact on the device reliability as proven via product qualification
NO change in quality and device processability at customer end.
Assembly processes are optimized to meet product performance according to already applied Infineon specification.

- The package outer dimension remains unchanged
- Product datasheet remain unchanged

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▸ Attachments

1_cip21142_A	affected product list
2_cip21142_A	qualification report
3_cip21142_A	additional information

▸ Time schedule

Final qualification report	available
First samples available	available
Intended start of delivery	2022-02-15

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

RESTRICTED

Qualification Test Report

JCAP/JCET Assembly platform qualification

Final Assessment of Qualification Results: PASS

Date: 2018-05-16

Stress test	**Abbreviation**	**Test conditions**	**Readout**	**BGA 729N6**	**BGA 824N6**	**BGA 824N6**	**BGA 5L1BN6**	**BGA 5M1BN6**	**BGSA14GN10**
				fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed	fails / stressed
MSL Preconditioning JESD22-A113	**PC**	MSL-1: Ta = 85 °C, 85% RH, t = 168 h 3 x reflow at 260 °C	after preconditioning	0 / 90	0 / 74	0 / 74	0 / 70	0 / 90	0 / 74
High Temperature Storage Life JESD22-A103	**HTSL**	Ta = 150 °C	1000 h	0 / 25	0 / 25	0 / 25	0 / 25	0 / 25	0 / 25
Humidity Bias (Highly Accelerated Temperature and Humidity Stress) JESD22-A110	**HAST**	with preconditioning Ta = 130 °C, 85% RH, V = Vcc max	96 h	0 / 30	0 / 24	0 / 25	0 / 20	0 / 40	0 / 24
Temperature Humidity Bias JESD22-A118	**THB**	with preconditioning	1000 h	covered by HAST					
Temperature Cycling JESD22-A104	**TC**	with preconditioning Ta = -55 °C to 150 °C, 30' per cycle	1000 x	0 / 30	0 / 25	0 / 25	0 / 25	0 / 25	0 / 25
Unbiased Temperature/Humidity JESD22-A118	**UHAST**	with preconditioning Ta=130 °C, 85% RH	96 h	0 / 30	0 / 25	0 / 25	0 / 25	0 / 25	0 / 25
Solder Ball Shear JESD22-B117	**SBS**	> 2,5 g/mil²		10 bumps PASS	10 bumps PASS	10 bumps PASS	10 bumps PASS	10 bumps PASS	10 bumps PASS
Solderability JESD22-B102	**SD**	solder pot		0 / 22	0 / 22	0 / 22	0 / 22	0 / 22	0 / 22
Physical dimensions	**PD**	acc. datasheet		0 / 30			0 / 30		0 / 30

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Capacity expansion by introduction of an additional assembly and final test location for BGA 524N6

Sales name	SP number	OPN	Package
BGA 524N6 E6327	SP001088394	BGA524N6E6327XTSA1	TSNP-6-2