# Product/process change notification

## PCN N° 2022-016-A

**Dear customer**,

Please find attached our Infineon Technologies AG PCN:

## Capacity Extension by Introduction of 300mm wafer diameter for dedicated OptiMOS™5 30V products at Infineon Technologies Austria AG, Austria and assembly and test location at Infineon Technologies Wuxi Co., Ltd., China for PG-TDSON-8 packages

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 **2023-02-09**
- 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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# Product/process change notification

## PCN N° 2022-016-A

### ▶ Products affected

Please refer to attached affected product list
“pcn_2022-016-A_[*customer-no*].pdf”

### ▶ Detailed change information

**Subject**

- Introduction of 300mm wafer diameter at Infeneon Technologies Austria AG, Austria
- Capacity extension at Infineon Technologies Wuxi Co., Ltd., China for PG-TDSON-8 packages

**Reason**

- Next phase of Front-End capacity expansion by introduction of 300mm wafer diameter to support continuous increasing customer demand
- Implementation of additional assembly site for improved delivery security

| **Description** | **Old** | **New** |
|---|---|---|
| **Wafer Production Site and Wafer Test** | ■ Infineon Technologies Austria AG, Villach, Austria (200mm) | ■ Infineon Technologies Austria AG, Villach, Austria (200mm)<br>*and*<br>■ Infineon Technologies Austria AG, Villach, Austria (300mm) |
| **Wafer Lot Number** | ■ VExxxxxx (Villach, 200mm) | ■ VExxxxxx (Villach,200mm)<br>*and*<br>■ VFxxxxxx (Villach,300mm) |
| **Assembly & Final Test location for PG-TDSON-8 packages** | ■ Infineon Technologies Malaysia Sdn. Bhd., Melaka | ■ Infineon Technologies Malaysia Sdn. Bhd., Melaka<br>*and*<br>■ Infineon Technologies Wuxi Co., Ltd., Wuxi |
| **Mould Compound for PG-TDSON-8 packages** | ■ CEL 1772 | ■ CEL 9240 |

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### ▶ Product identification

External traceability is assured via wafer lot number and country of assembly on the product barcode 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

### ▶ Attachments

"pcn_2022-016-A_[*customer-no*].pdf" affected product list
2_cip22016_a qualification report

### ▶ Time schedule

| | |
|---|---|
| ■ Final qualification report | available |
| ■ First samples available | on request |
| ■ Intended start of delivery | 2023-03-01 |

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

## PCN 2022-016-A

Capacity Extension by Introduction of 300mm wafer diameter for dedicated OptiMOS™5 30V products at Infineon Technologies Austria AG, Austria and assembly and test location at Infineon Technologies Wuxi Co., Ltd., China for PG-TDSON-8 packages

Affected products sold to FUTURE ELECTRONICS INC. (4000624)

| Sales name | SP number | OPN | Package | Customer part number |
|---|---|---|---|---|
| BSC0501NSI | SP001288140 | BSC0501NSIATMA1 | PG-TDSON-8 | BSC0501NSIATMA1 |
| BSC0502NSI | SP001288142 | BSC0502NSIATMA1 | PG-TDSON-8 | BSC0502NSIATMA1 |
| BSZ0501NSI | SP001281638 | BSZ0501NSIATMA1 | PG-TSDSON-8 | BSZ0501NSIATMA1 |

## PCN 2022-016-A

Capacity Extension by Introduction of 300mm wafer diameter for dedicated OptiMOS™5 30V products at Infineon Technologies Austria AG, Austria and assembly and test location at Infineon Technologies Wuxi Co., Ltd., China for PG-TDSON-8 packages

Affected products sold to FUTURE ELECTRONICS INC. (4048203)

| Sales name | SP number | OPN | Package | Customer part number |
|---|---|---|---|---|
| BSZ0500NSI | SP001288150 | BSZ0500NSIATMA1 | PG-TSDSON-8 | BSZ0500NSIATMA1 |
| BSZ0506NS | SP001281636 | BSZ0506NSATMA1 | PG-TSDSON-8 | BSZ0506NSATMA1 |
| BSZ0589NS | SP001586396 | BSZ0589NSATMA1 | PG-TSDSON-8 | BSZ0589NSATMA1 |

RESTRICTED

# Qualification Test Report

**PCN N° 2022-016-A** **Date: 2022-11-30**

## Capacity Extension by Introduction of 300mm wafer diameter for dedicated OptiMOS™5 30V products at Infineon Technologies Austria AG, Austria and assembly and test location at Infineon Technologies Wuxi Co., Ltd., China for PG-TDSON-8 packages

**Reason for choosing the following test vehicles:**

| | |
|---|---|
| BSC0500NSI | Biggest chip of OptiMOS™5 30V products in 300mm wafer diameter at Infineon Technologies Austria AG, Austria in PG-TDSON-8 package assembled at Infineon Technologies Wuxi, China |
| BSC0588NSI | Smallest chip of OptiMOS™5 30V products in 300mm wafer diameter at Infineon Technologies Austria AG, Austria in PG-TDSON-8 package assembled at Infineon Technologies Wuxi, China |
| BSZ0589NS | Smallest chip of OptiMOS™5 30V products in 300mm wafer diameter at Infineon Technologies Austria AG, Austria in PG-TSDSON-8 package assembled at Infineon Technologies Melaka, Malaysia |
| BSZ0501NSI | Medium chip of OptiMOS™5 30V products in 300mm wafer diameter at Infineon Technologies Austria AG, Austria in PG-TSDSON-8 package assembled at Tongfu Microelectronics Co., Ltd, China |

**Scope of qualification:**

**Qualifcation of the capacity extension for Introduction of 300mm wafer diameter for dedicated OptiMOS™5 30V products at Infineon Technologies Austria AG, Austria and assembly and test location at Infineon Technologies Wuxi Co., Ltd., China for PG-TDSON-8 packages**

**Assessment of Q-Results:**

**pass**

| Stress test | Abbreviation | Test conditions | Readout | BSC0500NSI | BSC0588NSI | BSZ0589NS | BSZ0501NSI |
|---|---|---|---|---|---|---|---|
| | | | | fails / stressed | fails / stressed | fails / stressed | fails / stressed |
| **MSL Preconditioning** JESD22-A113 | **PC** | MSL 1 | 0h | 0 / 330 | 0 / 330 | 0 / 484 | 0 / 484 |
| **Temperature Cycling** JESD22-A104 | **TC** | with preconditioning -40/ 125°C | 1000 x | 0 / 77 | 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 | 0 / 77 |
| **High Humidity High Temp. Reverse Bias** JESD22-A101 | **H3TRB** | with preconditioning T = 85 °C RH = 85% VDS = 80% of VDSmx but max 100V | 1000 h | refer to BSZ0501NSI | refer to BSZ0501NSI | 0 / 77 | 0 / 77 |
| **High Temperature Reverse Bias** JESD22-A108 | **HTRB** | with preconditioning Tj = 150°C VDS =100%VDSmax | 1000 h | refer to BSZ0501NSI | refer to BSZ0501NSI | 0 / 77 | 0 / 77 |
| **High Temperature Gate stress** JESD22-A108 | **HTGS** | with preconditioning Ta = 150 °C VGE = ±20 V | 1000 h | 0 / 77 | 0 / 77 | 0 / 77 | 0 / 77 |
| **Intermitted Operational Life Test** MIL-STD 750/Meth.1037 | **IOL** | Delta T = 100 K n = 15000 cyc | 15000 x | 0 / 77 | 0 / 77 | 0 / 77 | 0 / 77 |