

Product / Process Change Notification



N° 2011-088-A1

!! Update!!

PL=21

Implementation of halogen-free mould compound for products assembled in lead-free packages PG-DIP-7/8/16 and dual source wafer production for depletion CoolMOS™ technology products

Original (Master): PCN-N° 2011-088-A dated 21. AUGUST. 2011

Update : **PCN-N° 2011-088-A1**
(Additional and removed products)

Attached you find the process change notification PCN-N° 2011-088-A1.
Please forward this information to all affected customers as soon as possible.

If we receive no response to the contrary until 15. SEPTEMBER 2012 at the latest we assume, that your customers have been informed and are in agreement with our outlined intentions.

JEDEC STANDARD "JESD46" stipulates: "Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change."

For PCN sample ordering, please use the Infineon Sample Request (ISaR) tool, and include the PCN number as reference. Please note that the sample availability date indicated in the PCN is only valid for lead products.

Complete customer information, e.g.: product list, Customer Info Package is available on the Infineon intranet at:

http://goto.infineon.com/ci_docs/

Please address any questions on this issue to PCN author:

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Product / Process Change Notification



N° 2011-088-A1 !! Update!!

- update (Additional and removed products) Information in **BLUE TYPE**
- Master (Original PCN) N° 2012-088-A dated 21. August 2011

Dear Customer,

Attached please find an updated PCN 2011-088-A1 for your attention.

Implementation of halogen-free mould compound for products assembled in lead-free packages PG-DIP-7/8/16 and dual source wafer production for depletion CoolMOS™ technology 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 **15. September 2012**.
- 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 Technologies 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.

Disclaimer:

If we do not receive any response by the date in the PCN above we consider this as the acceptance of the PCN. After the last order date as stated herein, purchase orders related to the unchanged product(s) cannot be accepted.

In case the customer rejects this PCN this PCN shall be considered a product discontinuation notice (PD).

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N° 2011-088-A1 !! Update!!

■ update (Additional and removed products) Information in **BLUE TYPE**

■ Master (Original PCN) N° 2012-088-A dated 21. August 2011

SUBJECT OF CHANGE:

- 1) Implementation of halogen-free¹⁾ mold compound.
- 2) Multisource assembly production by using additionally subcontractor ASE (Shanghai) Inc., China and Nantong Fujitsu, China
- 3) Dual source chip production by using additionally wafer fabrication site Infineon Technologies Kulim

1) Note

Infineon products defined as halogen-free according to IEC 61249-2-21 meet the following requirements:

- 900 ppm maximum Chlorine
- 900 ppm maximum Bromine
- 1500 ppm maximum sum of Chlorine and Bromine

All homogeneous materials in the final product defined as halogen-free according to IEC 61249-2-21 meet these voluntary substance thresholds defined by the International Electrotechnical Commission (IEC).

PRODUCTS AFFECTED:

Products assembled in lead-free packages PG-DSO-12, PG-TO220-6, PG-DIP-7, PG-DIP-8 and PG-DIP-16 as listed per sales code in attachment [1_cip11088_a1](#). (updated)

Removed product TCA785 due to product going to be discontinued FY12/13

Added in products ICE3A2065P, ICE3B2065P, ICE3B2065P-2, ICE3A3065P, ICE3B3065P, ICE3A3565P, ICE3B3565P, ICE3A5065P, ICE3B5065P, ICE3A5565P, and ICE3B5565P

REASON OF CHANGE:

Increase halogen-free¹⁾ production capacity by implementing a multi source strategy

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■ Master (Original PCN) N° 2012-088-A dated 21. August 2011

DESCRIPTION OF CHANGE:	<u>OLD</u>	<u>NEW</u>
■ PG-DIP-7		
□ Wafer fabrication site	Depends on product, no generic aggregation possible Details see affected product list, attachment 1_cip11088_a	Depends on product, no generic aggregation possible Details see affected product list, attachment 1_cip11088_a
□ Assembly site	Depends on product, no generic aggregation possible Details see affected product list, attachment 1_cip11088_a	Subcontractor Unisem Batam, Indonesia and Subcontractor Nantong Fujitsu Microelectronics Co., Ltd. (NFME), Nantong, China and Subcontractor ASE (Shanghai) Ltd., China
□ Lead frame, die pad size	Details see attachment 3_cip11088_a	Details see attachment 3_cip11088_a
□ Die attach	Unisem: TS 333 Nantong: Ablebond 2815	Unisem: TS 333 Nantong: Ablebond 2815 ASE: Ablebond 2815
□ Wire diameter	Unisem: 30 µm Nantong: 25 µm	Unisem: 30 µm Nantong: 25 µm Ase: 25 µm
□ Mold compound	Unisem: EME 6600 / EME G600 Nantong: SG 8300	Unisem: EME 6600/ EME G600 Nantong: SG 8300 ASE: CEL 9240
□ Package outline dimensions Note: Product data sheets will be updated respectively by revised package drawing	Details see attachment 3_cip11088_a	Details see attachment 3_cip11088_a

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■ update (Additional and removed products) Information in **BLUE TYPE**

■ Master (Original PCN) N° 2012-088-A dated 21. August 2011

DESCRIPTION OF CHANGE:	<u>OLD</u>	<u>NEW</u>
<p>■ PG-DIP-8 Dual chip products</p>		
<p>□ Wafer fabrication site</p>	<p>Depends on product, no generic aggregation possible</p> <p>Details see affected product list, attachment 1_cip11088_a</p>	<p>Depends on product, no generic aggregation possible</p> <p>Details see affected product list, attachment 1_cip11088_a</p>
<p>□ Assembly site</p>	<p>Subcontractor Unisem Batam, Indonesia</p> <p>and</p> <p>Subcontractor Nantong Fujitsu Microelectronics Co., Ltd. (NFME), Nantong, China</p>	<p>Subcontractor Unisem Batam, Indonesia</p> <p>and</p> <p>Subcontractor Nantong Fujitsu Microelectronics Co., Ltd. (NFME), Nantong, China</p> <p>and</p> <p>Subcontractor ASE (Shanghai) Ltd., China</p>
<p>□ Lead frame, die pad size</p>	<p>Details see attachment 3_cip11088_a</p>	<p>Details see attachment 3_cip11088_a</p>
<p>□ Die attach</p>	<p>Unisem: TS 333 Nantong: Ablebond 2815</p>	<p>Unisem: TS 333 Nantong: Ablebond 2815 ASE: Ablebond 2815</p>
<p>□ Wire diameter</p>	<p>Unisem: 30 µm Nantong: 30 µm</p>	<p>Unisem: 30 µm Nantong: 30 µm ASE: 25 µm</p>
<p>□ Mold compound</p>	<p>Unisem: EME 6600/ EME G600 Nantong: SG 8300</p>	<p>Unisem: EME 6600/ EME G600 Nantong: SG 8300 ASE: CEL 9240</p>
<p>□ Package outline dimensions</p> <p>Note: Product data sheets will be updated respectively by revised package drawing</p>	<p>Details see attachment 3_cip11088_a</p>	<p>Details see attachment 3_cip11088_a</p>

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■ update (Additional and removed products) Information in **BLUE TYPE**

■ Master (Original PCN) N° 2012-088-A dated 21. August 2011

DESCRIPTION OF CHANGE:	<u>OLD</u>	<u>NEW</u>
<p>■ PG-DIP-8 Single chip products</p>		
<p>□ Assembly site</p>	<p>Subcontractor Unisem Batam, Indonesia and subcontractor AMKOR Phillipines</p>	<p>Subcontractor Unisem Batam, Indonesia and subcontractor AMKOR Phillipines and Subcontractor ASE (Shanghai) Ltd., China</p>
<p>□ Lead frame, die pad size</p>	<p>Details see attachment 3_cip11088_a</p>	<p>Details see attachment 3_cip11088_a</p>
<p>□ Die attach</p>	<p>Unisem: Ablebond 84 Amkor: Ablebond 8390</p>	<p>Unisem: Ablebond 84 Amkor: Ablebond 8390 ASE: EN-4900</p>
<p>□ Wire diameter</p>	<p>Unisem: 30 µm Amkor: 30 µm</p>	<p>Unisem: 30 µm Amkor: 30 µm ASE: 25 µm</p>
<p>□ Mold compound</p>	<p>Unisem: EME 6300 Amkor: EME G600</p>	<p>Unisem: EME 6300 Amkor: EME G600 ASE: CEL 9240</p>
<p>□ Package outline dimensions</p> <p>Note: Product data sheets will be updated respectively by revised package drawing</p>	<p>Details see attachment 3_cip11088_a</p>	<p>Details see attachment 3_cip11088_a</p>

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■ update (Additional and removed products) Information in **BLUE TYPE**

■ Master (Original PCN) N° 2012-088-A dated 21. August 2011

DESCRIPTION OF CHANGE:	<u>OLD</u>	<u>NEW</u>
■ <u>PG-DIP-16</u>		
□ Assembly site	Subcontractor Unisem Batam, Indonesia	Subcontractor Unisem Batam, Indonesia and Subcontractor Nantong Fujitsu Microelectronics Co., Ltd. (NFME), Nantong, China
□ Lead frame, die pad size	Details see attachment 3_cip11088_a	Details see attachment 3_cip11088_a
□ Die attach	Unisem: Ablebond 84	Unisem: Ablebond 84 Nantong: Yiz-tech 9144
□ Wire diameter	Unisem: 30 µm	Unisem: 30 m Nantong: 25 µm
□ Mold compound	Unisem: EME 6300	Unisem: EME 6300 Nantong: CEL 1620
□ Package outline dimensions Note: Product data sheets will be updated respectively by revised package drawing	Details see attachment 3_cip11088_a	Details see attachment 3_cip11088_a
■ <u>PG-DSO-12 and PG-TO220-6</u>		
□ Wafer fabrication site	Infineon Technologies Austria AG, Villach	Infineon Technologies Austria AG, Villach and Infineon Technologies (Kulim) Sdn Bhd, Malaysia

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PRODUCT IDENTIFICATION:

External traceability

- 1) Package Body Marking "H" in front of date code
- 2) Barcode Product Label (BPL):



Halogen free logo added “ ”

For country of assembly at Subcontractor ASE (Shanghai) Inc., China the information will change to “Assembled in China”

► **Note:**

For a detailed illustration refer to attachment 3_cip11088_a, page 5

Internal traceability

Ensured via baunumber, lotnumber and date code.

TIME SCHEDULE:

- Final qualification report:
- First samples available:

	<u>2011-088-A</u>	<u>2011-088-A1</u>
	31-December-2011	31-December-2011
	Lead types available All other types on request with a lead time of 6 weeks from customer sample order till PCN sample delivery.	Lead types available All other types on request with a lead time of 6 weeks from customer sample order till PCN sample delivery.
■ Start of delivery:	From November 2011 onwards	From November 2011 onwards

ASSESSMENT:

- Halogen-free production at subcontractor ASE (Shanghai) Inc., China according to IEC 61249-2-21
- No change in electrical performance as defined in already applied datasheets
- No change in quality and reliability
- No change in processability

DOCUMENTATION:

1_cip11088_a1	List of affected products and details in changes per product
2_cip11088_a	Final qualification report
3_cip11088_a	Customer information package Package outline dimensions Die pad size dimensions