



Supplement
CUSTOMER PRODUCT-/ PROCESS CHANGE NOTIFICATION

Reactions to this notifications are to be addressed to your local Philips sales representative or quality contact.

CPCN Number: 200305025S5	CPCN Issue Date: Nov 17 2004
Author: Maas Geesteranus, Michiel in Nijmegen	Issued by: Maas Geesteranus, Michiel in Nijmegen
Previous Notifications: May 28, 2003: 200305025 Advance Nov 05, 2003: 200305025F Final Nov 16, 2004: 200305025C Correction	And following Supplements: Dec 16, 2003: 200305025S1 Feb 20, 2004: 200305025S2 Jun 18, 2004: 200305025S3 Sep 28, 2004: 200305025S4

IC Application Area: In Multiple IC Areas

Change Affects a Whole Prod/Proc/Pkg Family?

No

Product Types/12ncs Affected:

12NC	12NC (New)	Type Number	Type Number (New)	Philips Package Code	Package Name
999999999999		FOR THE TYPelist	SEE THE WEBPAGE A	INDICATED BELOW	UNDER REMARKS

Change Category: ASSEMBLY/SITE/PACKAGE/MATERIAL

Change Description:

Lead (Pb) containing leadfinish material will be replaced by a lead(Pb)-free leadfinish material. The 1st till 5th phases were communicated via the Final and 1st-4th Supplement CPCN's of Nov5, Dec16, 2003 and Feb20, June18 and Sept28, 2004 resp..

Through this 5th Supplement to the Final CPCN the conversion of the 6th phase products to Pb-free is communicated:

Products in following packages with NiPdAu:

- SSOP24/28 assembled at PST, Bangkok Thailand.
- SSOP24/28 assembled at PSC, Calamba Philippines.
- TSSOP8 assembled at subcon NS Electronics Bangkok Thailand.
- SO8 assembled at subcon NS Electronics Bangkok Thailand.

Products in following packages with matte Sn:

- HSOP20 packages with glue die-attach, assembled at PSK, Kaohsiung Taiwan.

Reason for Change:

Increased environmental friendliness, required by world-wide programs and legislation (RoHS) to remove lead (Pb) from semiconductor package terminals.

Remarks:

The Final CPCN is split-up in several phases (1 Final CPCN followed by supplements for each next phase). This 5th Supplement is intended as the 6th "Final CPCN" through which the 6th phase introduction is communicated.

PROPERTIES OF OLD VS CHANGED PRODUCT:

The form/fit/function properties of the products are not influenced by the change.

As the leadtin(SnPb)plating is replaced by NiPdAu preplating or matte Sn, the visual appearance of the leads may change.

The mounting of products on PCB are not influenced by this change. Pb-free and Pb-containing product are compatible for SnPb and Pb-free boardmounting processes. For both processes the MSL precautions, as indicated on packing label, must be respected.

With Pb-free introduction all mentioned products comply to RoHS.

DISPOSITION OF OLD PRODUCTS:

Pb-free products delivery starts once Pb-containing products are depleted.

IDENTIFICATION OF CHANGED PRODUCT:

The Pb-free products can be identified:

1. By a Pb-free logo on the label, e.g. on reel and inner packing box.
2. If space permits : By marking the symbol "G" on the product.
3. By backward traceability through date codes.

ESTIMATED DATE FOR DELIVERY OF CHANGED PRODUCT:

From January 2005 onwards.

The ZIP file attached at "Attachement" below contains following information:

1. Qualification results report of the packages with NiPdAu.
2. Qualification results report of the packages with matte Sn.
3. Product type list 6th phase.



Supplement
CUSTOMER PRODUCT-/ PROCESS CHANGE NOTIFICATION

Reactions to this notifications are to be adressed to your local Philips sales representative or quality contact.

CPCN Number: 200305025S5	CPCN Issue Date: Nov 17 2004
Author: Maas Geesteranus, Michiel in Nijmegen	Issued by: Maas Geesteranus, Michiel in Nijmegen
Previous Notifications: May 28, 2003: 200305025 Advance Nov 05, 2003: 200305025F Final Dec 16, 2003: 200305025S Supplement	And following Supplements: Dec 16, 2003: 200305025S1 Feb 20, 2004: 200305025S2 Jun 18, 2004: 200305025S3 Sep 28, 2004: 200305025S4

4. Updated Conversion Roadmap.
The above information and more is also available on the leadfree webpage:
http://www.semiconductors.com/green_roadmap/cpcn/.

Supplemented As Follows:

See remarks above

Attachment: See text under "Remarks"

Approved by:	Name:	Job Title:	Date:
	Eef Bagerman	Sr. Director ATO Innovation	Nov 16 2004
	Rob de Heus	Leadfree Program Manager	Nov 17 2004
	Michiel Maas Geesteranus	Assembly Technical Change Coordinator ATO I	Nov 17 2004

An approved electronic or hardcopy version of this Change Notification has been filed by the publishing Business Unit or Business Line/Organization mentioned at the top of this document.



Supplement
CUSTOMER PRODUCT-/ PROCESS CHANGE NOTIFICATION

Reactions to this notifications are to be addressed to your local Philips sales representative or quality contact.

CPCN Number: 200305025S5	CPCN Issue Date: Nov 17 2004
Author: Maas Geesteranus, Michiel in Nijmegen	Issued by: Maas Geesteranus, Michiel in Nijmegen
Previous Notifications: May 28, 2003: 200305025 Advance Nov 05, 2003: 200305025F Final Dec 16, 2003: 200305025S Supplement	And following Supplements: Dec 16, 2003: 200305025S1 Feb 20, 2004: 200305025S2 Jun 18, 2004: 200305025S3 Sep 28, 2004: 200305025S4