



**Supplement**  
**CUSTOMER PRODUCT-/ PROCESS CHANGE NOTIFICATION**

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

<b>CPCN Number:</b> 200305025S10	<b>CPCN Issue Date:</b> Aug 24 2005
<b>Author:</b> Maas Geesteranus, Michiel in Nijmegen	<b>Issued by:</b> Maas Geesteranus, Michiel in Nijmegen
<b>Previous Notifications:</b> May 28, 2003: 200305025 Advance Nov 05, 2003: 200305025F Final Correction CPCNs: Nov 16, 2004: ...C June 02, 2005: ...C1	<b>And following Supplements:</b> 200305025S1, ...S2, ...S3, etc.: Dec 16, 2003: ...S1 Feb 20, 2004: ...S2 Jun 18, 2004: ...S3 Sep 28, 2004: ...S4 Nov 17, 2004: ...S5 Dec 29, 2004: ...S6 Mar 14, 2005: ...S7 April 18, 2005: ...S8 May 04, 2005: ...S9

**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 10th phases were communicated via the Final and several Supplement CPCN's in 2003/2004/2005. Two correction CPCNs were issued in 2004 resp 2005, the last one (200305025C1, issued on June 2nd, 2005) relates to the conversion announced by this CPCN: Through this 10th Supplement to the Final CPCN the conversion of the 11th phase products to Pb-free is communicated: TSSOP56 conversion to leadfree.

The original plan was to release the TSSOP56 (SOT364-1 at PST and PSC) in NiPdAu + MP8000/8390P BOM. However this has repeatedly showed MSL4 which is unacceptable. Due to this Philips was not able to convert TSSOP56 to leadfree. Philips has now released Nitto GE-7470 plastic and Hysol QMI519 die-attach as material-set which resulted in MSL1/260. This material-set complies to the so-called "dark-green" (halogene- and antimoni-oxide free) definition.

**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 10th Supplement is intended as the 11th "Final CPCN" through which the 11th 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, 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.

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 October 2005 onwards.

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

1. The Qualification results reports.
2. Product type list 11th phase.

The above information is also available on the leadfree webpage:

[http://www.semiconductors.com/green\\_roadmap/](http://www.semiconductors.com/green_roadmap/).



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**Supplemented As Follows:**

See under chapter "Remarks" above.

**Attachment:** Qualification report and type list

<b>Approved by:</b>	<b>Name:</b>	<b>Job Title:</b>	<b>Date:</b>
	Eef Bagerman	Sr. Director IMO-BE Innovation	Aug 24 2005
	Rob de Heus	Leadfree Program Manager IMO-BE Innov.	Aug 24 2005
	Michiel Maas Geesteranus	Technical Change Coordinator IMO-BE Innov.	Aug 24 2005

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.



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