Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1301-09** DATE: **March 14, 2013**

Product Affected: TEPBGA-399
(Refer to affected part list in Attachment 2)

Date Effective: **June 14, 2013**

MEANS OF DISTINGUISHING CHANGED DEVICES:

☐ Product Mark
■ Back Mark Lot# will have a "Y" suffix
☐ Date Code
☐ Other

Contact: Mary Vesey
Title: Director, Product Assurance
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E-mail: Mary.Vesey@idt.com

Attachment: ■ Yes ☐ No

Samples: Please contact your local sales representative for sample request & availability.

DESCRIPTION AND PURPOSE OF CHANGE:

☐ Die Technology
☐ Wafer Fabrication Process
☐ Assembly Process
☐ Equipment
■ Material
☐ Testing
☐ Manufacturing Site
☐ Data Sheet
☐ Other

This notification is to advise our customers that IDT plans to change from Gold bond wire to Palladium Copper bond wire on TEPBGA-399 products.

There is no change in the moisture sensitivity performance.

Please refer to the following attachments for additional information.
Attachment 1 outlines the qualification results.
Attachment 2 shows the affected part numbers.

RELIABILITY/QUALIFICATION SUMMARY:

Qualification has been successfully completed. There is no change in MSL rating.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 90 days of this notice it will be assumed that this change is acceptable.
IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: ____________________

☐ ***Approval for shipments prior to effective date.***

Name/Date: ____________________

E-Mail Address: ____________________

Title: ____________________

Phone# /Fax# : ____________________

CUSTOMER COMMENTS: ____________________

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: ____________________ DATE: ____________________

ATTACHMENT 1 - PCN # : A1301-09

PCN Type: Assembly Material Change - Gold Wire to Palladium Copper Wire

Data Sheet Change: None

Details Of Change:

This notification is to advise our customers that IDT plans to change from Gold bond wire to Palladium Copper bond wire on TEPBGA-399 products.

There is no change to the moisture performance of this package.

Customers may expect to receive shipments with Palladium Copper wire process no sooner than 90 days from the date of this notification, March 14, 2013. Product assembled with Gold wire and Palladium Copper wire will be shipped during the transition period or until the Gold wire inventory has been depleted. However please note that product assembled with Gold wire and Palladium Copper wire will not be mixed in one tray stack, or tape and reel.

We request you to acknowledge receipt of this notification within 30 days of the date of this PCN notification. If you require samples to conduct an evaluation, please make your sample request within 30 days as samples are not built ahead of the change for all device options. You may contact your local sales representative to acknowledge this PCN and request samples.

Assembly Material : There is no change in the mold compound and die attach materials. The material sets used in assembly is in compliance with RoHS 6 (green products) requirement. There is no change in the moisture sensitivity performance.

Sample Availability : Samples are not built ahead of the change for all device types and may not be available for all affected device types.
Please contact your local IDT sales representative for your sample request and availability.

ATTACHMENT 1 - PCN # : A1301-09

Qualification Test Result :

Qual Vehicle: TEPBGA-399 (3 lots)

		Test Results (SS / Rej)		
Test Description	**Test Method**	**Lot1**	**Lot2**	**Lot3**
* Temperature Humidity Bias Test (85 °C/85% RH, 1000 Hrs)	JESD22-A101	25/0	25/0	25/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	25/0	25/0	25/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	25/0	25/0	25/0
Bond Shear Test	JESD22-B116	6/0	6/0	6/0
Bond Pull Test	JESD47H	3/0	3/0	3/0
X-ray Examination	MIL-STD-883, M 2015	45/0	45/0	45/0

Note:
* Test requires moisture pre-conditioning sequence per JESD22-A113 and will use the existing moisture sensitivity level that has been qualified for this material set.

2. Product Electrical Characterization

Product electrical characterization has been successfully completed on representative product families and copper wire performance was comparable to gold wire performance.

ATTACHMENT 2 - PCN # : A1301-09

Affected Part Numbers

Part Number	Part Number	Part Number
TSI572-10GCLV	TSI574-10GCLV	TSI577-10GCLV
TSI572-10GILV	TSI574-10GILV	TSI577-10GILV