



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1409-01**      DATE: **September 17, 2014**

Product Affected:    P9038-0NDGI , P9038-0NDGI8

Date Effective:      **October 17, 2014**

**MEANS OF DISTINGUISHING CHANGED DEVICES:**

- |                                               |                                                            |
|-----------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Product Mark         | Lot # will have a suffix "Y" to denote Copper bonding wire |
| <input checked="" type="checkbox"/> Back Mark |                                                            |
| <input type="checkbox"/> Date Code            |                                                            |
| <input type="checkbox"/> Other                |                                                            |

Contact:            IDT PCN DESK

Attachment:         Yes                     No

E-mail:             [pcndesk@idt.com](mailto:pcndesk@idt.com)

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 will change from Gold bond wire to Copper bond wire for the above part#. IDT has successfully completed the qualification.

There is no change in the moisture sensitivity performance.

Attachment 1 outlines the qualification results.

**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:**

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**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: \_\_\_\_\_

DATE: \_\_\_\_\_



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### ATTACHMENT 1 - PCN # : A1409-01

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

**Data Sheet Change:** None

**Details Of Change:**

This notification is to advise our customers that IDT will change from Gold bond wire to Copper bond wire.

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

Customers may expect to receive shipments with Copper wire process no sooner than 30 days from the date of this notification. Product assembled with Gold wire and 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 Copper wire will not be mixed in one tray stack, or tape and reel.

We request you to acknowledge receipt of this PCN notification. If you require samples to conduct an evaluation, please make your sample request through your local IDT sales representative.

**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 available now. Please contact your local IDT sales representative for your sample request.



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 1 - PCN # : A1409-01

#### 1. Qualification Test Result :

Qual Vehicle: 6mm x 6mm VFQFPN-48

Test Description	Test Method	Test Results (SS / Rej)		
		Lot1	Lot2	Lot3
High Temperature Operating Life Test (125 °C, 1000 Hrs)	JESD22-A108	77/0	-	-
* Highly Accelerated Stress Test (130 °C/85% RH, 96 Hrs)	JESD22-A110	30/0	30/0	30/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	30/0	30/0	30/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	30/0	30/0	30/0
Bond Shear Test	JESD22-B116	5/0	5/0	5/0
Bond Pull Test	IDT Spec MAC-3010	5/0	5/0	5/0
X-ray Examination	IDT Spec. MAC-3012 (Package voids, Die attach voids and Wire sweep)	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 and copper wire performance was comparable to gold wire performance.