



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

<b>PCN #:</b> <b>A1509-03</b> <b>DATE:</b> <b>October 16, 2015</b> <b>Product Affected:</b> QSOP-20, 28, SOIC-8, 20, SSOP-28, 56, TQFP-48, TSSOP-8, 14, 16, 20, 24, VFQFPN-16, 32 (Refer to affected part list in Attachment 2) <b>Date Effective:</b> <b>January 16, 2016</b>	<b>MEANS OF DISTINGUISHING CHANGED DEVICES:</b> <input type="checkbox"/> Product Mark <input checked="" type="checkbox"/> Back Mark      Lot# will have a "Y" suffix <input type="checkbox"/> Date Code <input type="checkbox"/> Other
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<b>Contact:</b> IDT PCN DESK <b>E-mail:</b> <a href="mailto:pcndesk@idt.com">pcndesk@idt.com</a>	<b>Attachment:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Samples:</b> Samples available upon request
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**DESCRIPTION AND PURPOSE OF CHANGE:**

<input type="checkbox"/> Die Technology <input type="checkbox"/> Wafer Fabrication Process <input type="checkbox"/> Assembly Process <input type="checkbox"/> Equipment <input checked="" type="checkbox"/> Material <input type="checkbox"/> Testing <input type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet <input type="checkbox"/> Other	<p>This notification is to advise our customers that IDT plans to change from Gold bond wire to Copper bond wire (Cu or PdCu) for the selective products. This change is applicable to the existing qualified assembly sub-contractors of the affected part numbers.</p> <p>Please refer to the following attachments for additional information.  Attachment 1 outlines the qualification results.  Attachment 2 shows the affected part numbers.</p>
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**RELIABILITY/QUALIFICATION SUMMARY:**

There is no expected change to the product quality or reliability performance.

**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: _____	<input type="checkbox"/> <i>Approval for shipments prior to effective date.</i>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____

**CUSTOMER COMMENTS:** \_\_\_\_\_

**IDT ACKNOWLEDGMENT OF RECEIPT:**

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



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 1 - PCN # : A1509-03

**PCN Type:** Assembly Material Change - Gold Wire to Copper Wire (Cu or PdCu)

**Data Sheet Change:** None

**Details Of Change:**

This notification is to advise our customers that IDT plans to change from Gold bond wire to Copper bond wire (Cu or PdCu) for the selective products. This change is applicable to the existing qualified assembly sub-contractors of the affected part numbers.

Customers may expect to receive shipments with Copper wire process no sooner than 90 days from the date of this notification, October 16, 2015. 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 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 5 (standard products) and RoHS 6 (green products) requirements.

**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.



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 1 - PCN # : A1509-03

#### Qualification Test Results :

Qual Vehicle: SSOP-56 (3 lots)  
Packages Covered: SSOP-28, 56

Test Description	Test Method	Test Results (SS / Rej)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 96 Hrs)	JESD22-A110	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	JESD22-B116	5/0, 5/0, 5/0

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.

Qual Vehicle: TSSOP-64 (3 lots)  
Packages Covered: TSSOP-8, 14, 16, 20, 24, SOIC-8, 20, QSOP-20, 28

Test Description	Test Method	Test Results (SS / Rej)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 96 Hrs)	JESD22-A110	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	JESD22-B116	5/0, 5/0, 5/0

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.



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 1 - PCN # : A1509-03

#### Qualification Test Results :

Qual Vehicle: VFQFPN-32 (3 lots)  
Packages Covered: VFQFPN-16, 32

Test Description	Test Method	Test Results (SS / Rej)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 96 Hrs)	JESD22-A110	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	JESD22-B116	5/0, 5/0, 5/0

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.

Qual Vehicle: TQFP-144 (3 lots)  
Packages Covered: TQFP-48

Test Description	Test Method	Test Results (SS / Rej)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 96 Hrs)	JESD22-A110	25/0, 25/0, 24/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	25/0, 25/0, 22/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	24/0, 25/0, 25/0
Bond Shear	JESD22-B116	5/0, 5/0, 5/0

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.



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 2 - PCN # : A1509-03

#### Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
843023AGLF	85322AMLFT	23S09E-1HPGGI	8308AGILFT
85211BMI-03LN	87008AGILFT	8302AMILF	843004AGI-01LFT
85211BMI-03LNT	87354AMILF	8302AMILFT	843011AGLF
85222AM-02LF	87354AMILFT	8302AMLFT	843011AGLFT
85222AM-02LFT	8735AM-21LF	8302AMLFT	843011CGLF
85304AGI-01LF	8735AM-21LFT	8304AMI	843011CGLFT
85304AGI-01LFT	9250BFI-27LF	8304AMILF	843021AG-57LF
85311AMILF	9250BFI-27LFT	8304AMILFT	843021AG-57LFT
85311AMILFT	9FG104CFLF	8304AMIT	843021AGILF
85311AMLFT	9FG104CFLFT	8304AMLFT	843021AGILFT
85311AMLFT	MK1491-06RILF	8304AMLFT	843021AGLF
85322AMILF	MK1491-06RILFTR	83052AGILF	843021AGLFT
85322AMILFT	QS3VH245QG	83052AGILFT	843023AGILF
85211AMI-01LFT	87008AGILF	83026BMI-01LFT	843004AGI-01LF
85211AMI-01LF	854S202AYILFT	83026BMI-01LF	843004AG-01LFT
844003AKI-04LFT	854S202AYILF	83026BGI-01LFT	843004AG-01LF
843023AGLFT	8535AG-21LF	23S09E-1HPGGI8	83115BRLF
843031AGI-01LF	8535AG-21LFT	548G-05ILF	83115BRLF
843031AGI-01LFT	8536AG-01LF	548G-05LFT	8316AKLF
843071AGILF	8536AG-01LFT	5V2305NRGI	8316AKLFT
843071AGILFT	85408BGILF	5V2305NRGI8	840011AGLN
843251AG-04LF	85408BGILFT	5V2310PGG	840011AGLNT
843251AG-04LFT	85408BGLF	5V2310PGG8	843001AGI-22LF
843251AGI-04LF	85408BGLFT	83021AMILF	843001AGI-22LFT
843251AGI-04LFT	85411AMILF	83021AMILFT	843003AGI-01LF
843251BGI-12LF	85411AMILFT	83026AMILF	843003AGI-01LFT
843251BGI-12LFT	85411AMLFT	83026AMILFT	843003AGLF
844003AKI-04LF	85411AMLFT	83026BGI-01LF	843003AGLFT
85322AMLFT	QS3VH245QG8	8308AGILF	843023AGILFT