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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1807-01** DATE: **September 26, 2018**

Product Affected: SOIC, TSSOP, VFQFPN, TQFP
(Refer to affected part list in Attachment 2)

Date Effective: **December 26, 2018**

MEANS OF DISTINGUISHING CHANGED DEVICES:

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

Contact: IDT PCN DESK
E-mail: pcndesk@idt.com

Attachment: ■ Yes ☐ No
Samples: Samples available upon request

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 is converting to Copper bond wire for the selective products at the existing qualified assembly sub-contractors.

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:

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: ______________________

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

Name/Date: ______________________

E-Mail Address: ______________________

Title: ______________________

Phone# /Fax# : ______________________

CUSTOMER COMMENTS: ______________________

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: ______________________ DATE: ______________________

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT 1 - PCN # : A1807-01

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 is converting to Copper bond wire for the selective products at the existing qualified assembly sub-contractors.

There is no change to the moisture performance of these packages.

Customers may expect to receive shipments with Copper wire process no sooner than 90 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 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.

	Affected Assembly Location		
Package	GEI - Greatek, Taiwan	CRSS - Carsem, Malaysia	ASEK - ASE, Taiwan
SOIC-8	X		
TQFP-48 TQFP-100	X		
TSSOP-16 TSSOP-48	X		
VFQFPN-16 VFQFPN-32 VFQFPN-40 VFQFPN-56		X	
VFQFPN-72			X

Note: X denote affected products converting from Gold to Copper wire at the existing assembly location

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.

ATTACHMENT 1 - PCN # : A1807-01

Qualification Test Result :

Qual Vehicle: SOIC-8 (3 lots @ GEI)
Packages Covered: SOIC-8

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-100 (3 lots @ GEI)
Packages Covered: TQFP-48, 100

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.

ATTACHMENT 1 - PCN # : A1807-01

Qualification Test Result :

Qual Vehicle: TSSOP-64 (3 lots @ GEI)
Packages Covered: TSSOP-16, 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, 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: VFQFPN-64 (3 lots @ CRSS) & VFQFPN-72 (3 lots @ ASEK)
Packages Covered: VFQFPN-16, 32, 40, 56 & 72

Test Description	Test Method	Test Results VFQFPN-64 (SS / Rej)	Test Results VFQFPN-72 (SS / Rej)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 96 Hrs)	JESD22-A110	25/0, 25/0, 25/0	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	25/0, 25/0, 25/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	25/0, 25/0, 25/0	25/0, 25/0, 25/0
Bond Shear	JESD22-B116	5/0, 5/0, 5/0	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.

ATTACHMENT 2 - PCN # : A1807-01

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
8S89831AKILF	NV021AMLFT	82V3380EQG-ECI	841N4830BKILFT
87016AYILF	9ZX21902AKLFT	82V3380EQG	841N4830BKILF/W
854S712AKILFT	9ZX21902AKLF	82V3380AEQG8	841N4830BKILF-09
854S712AKILF	9LPRS436CGLFT-INT	82V3380AEQG	841N4830BKILF
854S54AKILFT	9LPRS436CGLFT	82V3285EQG8	841N4830BKI-09LFT
854S54AKILF	9LPRS436CGLF-INT	82V3285EQG	841N4830BKI-09LF
854S01AKILFT	9LPRS436CGLF	82V3285AEQG8	8413S12BKILFT
854S01AKILF	9LPRS436CGILFT	82V3285AEQG	8413S12BKILF
853S9252BKILFT	9LPRS436CGILF	82V3380EQG8	841N4830BKILFT-09
87016AYILFT	9ZX21907BKLF	82V3380EQG8-ECI	841S012DKILF
87016AYLF	9ZX21907BKLFT	82V3390BEQG8	844S42BKILF
8S58021AKILFT-09	NV021AMLF	82V3390BEQG	844S2416CKILFT
8S58021AKILFT	MPC941AER2	82V3389BEQG8	844S2416CKILF/W
8S58021AKILF-09	MPC941AE	82V3389BEQG	844S2416CKILF/C
8S58021AKILF	CLK503J45KLFT-TRQ1	82V3385EQG8	844S2416CKILF
87021AMILFT	CLK503J45KLFT-TRQ	82V3385EQG	844N234AKILFT
87021AMILF	CLK503J45KLFT	82V3385AEQG8	844N234AKILF
87016AYLFT	CLK503J45KLF-TRQ	82V3385AEQG	841S012DKILFT
87016AYLF/W	CLK503J45KLF	82V3280EQG8	8413S08BKILFT
853S9252BKILF/W	9FG1903AK-1LFT	82V3280EQG	8413S08BKILF
853S9252BKILF	9FG1903AK-1LF	82V3280AEQG8	840022AKI-02LFT-99
853S01AKILFT	9FG1902AKLFT	5V41235PGG	8302AMLF
8530DYLFT	9DB833AGLF	23S09E-1HPGGI8	8302AMILFT
8530DYLF/W	9DB833AGILFT	23S09E-1HPGGI	8302AMILF
8530DYLF	9DB833AGILF	23S09E-1HPGG8	83021AMILFT
851S201CKILFT	8V89704ANLGI8	23S09E-1HPGG	83021AMILF
851S201CKILF	8V89704ANLGI	2308B-1HPGGI8	83021AMI-09LFT
8516FYLFT	8V89308ANLGI8	2308B-1HPGGI	83021AMI-09LF
8516FYLF	8V89308ANLGI	2308B-1HPGG8	830154AMI-08LFT
8516FYILFT	8V89308AKILFT	5V41235PGG8	8302AMLF-ST
8530FY-01LF	9DB833AGLF-INT	5V41235PGGI	8302AMLFT
8530FY-01LFT	9DB833AGLF-MOT	82V3280AEQG	840022AKI-02LFT
853S01AKILF5	9FG1902AKLF	810252DKI-02LFT	840022AKI-02LF-99
853S01AKILF	9DB834AGLFT	810252DKI-02LF	840022AKI-02LF
853S011BMILFT	9DB834AGLF	6V49126NLGI8	8400110EKILFT
853S011BMILF	9DB834AGILFT	6V49126NLGI	8400110EKILF
85322AMLFT	9DB834AGILF	6V49122PAG8	830S21AMI-01LFT
85322AMLF	9DB833AGLFT-MOT	6V49122PAG	830S21AMI-01LF
85322AMILFT	9DB833AGLFT-INT	5V41235PGGI8	8302AMLFT-ST
85322AMILF	9DB833AGLFT	2308B-1HPGG	830154AMI-08LF
8516FYILF	8V89308AKILF	82V3391BEQG8	
8S89831AKILFT	82V3391BEQG	844S42BKILFT	