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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1709-02** DATE: **27-Sep-2017**

Product Affected: TQFP-32, TQFP-48

Date Effective: **27-Dec-2017**

MEANS OF DISTINGUISHING CHANGED DEVICES:

- ☐ Product Mark
- ■ Back Mark
- ☐ Date Code
- ☐ Other

Lot # will have:
"Y" suffix for Copper wire
"A" prefix for OSET

Contact: IDT PCN DESK

E-mail: pcndesk@idt.com

Attachment: ■ Yes ☐ No

Samples: Please contact your local sales representative for sample 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 wire for parts currently assembled at Amkor Philippines (ATP) and adding OSET Taiwan as an alternate assembly location. Parts that are assembled at OSET will be built in Copper wire as well.

There is no change to the moisture performance.

Attachment I details the qualification results.

RELIABILITY/QUALIFICATION SUMMARY:

Refer to qualification data shown in Attachment I.

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 30 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 I - PCN # : A1709-02

PCN Type: Change Bond Wire Material and Add Alternate Assembly Location

Data Sheet Change: None

No change in moisture sensitivity level (MSL)

Detail Of Change:

This notification is to advise our customers that IDT is converting to Copper wire for parts currently assembled at Amkor Philippines (ATP) and adding OSET Taiwan as an alternate assembly location. Parts that assembled at OSET will be built in Copper wire as well.

Refer to Table 1 for changes.

There is no change to the moisture performance.

Table 1: Changes in material sets at Existing Location and Add Assembly Location.

	From	To	
Assembly Location	ATP, Philippines	ATP, Philippines	OSET, Taiwan
Die Attach	Ablestik 3230	Ablestik 3230	CRM-1076WA
Bond Wire	Gold Wire	Copper Wire	Copper Wire
Mold Compound	EME-G700L	EME-G700L	EME-G700L

ATTACHMENT I - PCN # : A1709-02

Qualification Information and Qualification Data:

Affected Packages: TQFP-32, TQFP-48

Assembly Material: Shown on page 2 of this attachment.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests.

Qualification Vehicle: TQFP-48

Assembly Location: **ATP, Philippines**

Test Description	Test Method	Test Results (Rej / SS)		
		Lot 1	Lot 2	Lot 3
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/25	0/25	0/25
* HAST - unbiased (130 °C/85% RH, 96 Hrs)	JESD22-A118	0/25	0/25	0/25
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Ball Shear Test	JESD22-B116	0/5	0/5	0/5
Bond Pull Test	IDT Spec MAC-3010	0/5	0/5	0/5
X Ray	IDT Spec. MAC-3012	0/45	0/45	0/45
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 3, 260 °C	0/25	0/25	0/25

* Tests were subjected to Preconditioning per JESD22-A113 prior to stress test

ATTACHMENT I - PCN # : A1709-02

Qualification Information and Qualification Data:

Affected Packages: TQFP-32, TQFP-48

Assembly Material: Shown on page 2 of this attachment.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests.

Qualification Vehicle: TQFP-48

Assembly Location: **OSET, Taiwan**

Test Description	Test Method	Test Results (Rej / SS)		
		Lot 1	Lot 2	Lot 3
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/25	0/25	0/25
* HAST - biased (110 °C/85% RH, 264 Hrs)	JESD22-A110	0/25	0/25	0/25
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Ball Shear Test	JESD22-B116	0/5	0/5	0/5
Bond Pull Test	IDT Spec MAC-3010	0/5	0/5	0/5
X Ray	IDT Spec. MAC-3012	0/45	0/45	0/45
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 3, 260 °C	0/25	0/25	0/25

* Tests were subjected to Preconditioning per JESD22-A113 prior to stress test

ATTACHMENT II - PCN # : A1709-02

Part Number	Part Number	Part Number	Part Number
840S05AYILF	853S111BYILF	843S06FYLFT-ECI	8430S803BYILF
844008AYI-01LFT	853S111BYILFT	840S05AYILFT	8430S803BYILFT
849S625BYILF	853S1208AYILF	840S07BYILF	843S050AYI-02LF
849S625BYILFT	853S1208AYILFT	840S07BYILFT	843S050AYI-02LFT
851010AYILF	854S1208AYILF	8430S10BYI-02LF	843S06FYLF
851010AYILFT	854S1208AYILFT	8430S10BYI-02LFT	843S06FYLF-ECI
85352AYILF	8T33FS6111DXGI	8430S10BYI-03LF	843S06FYLFT
85352AYILFT	844008AYI-01LF	8430S10BYI-03LFT	8T33FS6111DXGI8