

# **PRODUCT/PROCESS CHANGE NOTICE (PCN)**

CN #: A1709-02 DATE: 27-Sep-2017 MEANS OF DISTINGUISHING CHANGED DEVICES:				
Product Affected: TQFP-32, TQFP-48		<ul> <li>Product Mark</li> <li>Back Mark</li> <li>Date Code</li> <li>'Y" suffix for Copper wire</li> <li>'A" prefix for OSET</li> </ul>		
Date Effective: 27-Dec-2017				
Contact: IDT PCN DESK		Attachment: Yes No		
E-mail: pcndesk@idt.com		Samples: Please contact your local sales representative for sample request.		
DESCRIPTION AND PURPOSE OF CH	IANGE:			
<ul> <li>Die Technology</li> <li>Wafer Fabrication Process</li> <li>Assembly Process</li> <li>Equipment</li> <li>Material</li> <li>Testing</li> <li>Manufacturing Site</li> <li>Data Sheet</li> <li>Attachment I details the qualification results.</li> </ul>				
□ Other				
<b>RELIABILITY/QUALIFICATION SUN</b> Refer to qualification data shown in Attack				
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.			
IDT ACKNOWLEDGMENT OF RECE				
RECD. BY:		DATE:		



## **PRODUCT/PROCESS CHANGE NOTICE (PCN)**

### **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	То	
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



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### **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

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Assembly Location:	ATP, Philippines

Test Description	Test Method	Test Results (Rej / SS)		
Test Description	Test Method	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



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- 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)		
Test Description	Test Wiethou	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



## **PRODUCT/PROCESS CHANGE NOTICE (PCN)**

### 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