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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1602-02** DATE: **18-May-2016**

Product Affected: FCBGA-1156
Refer to Attachment II for the affected part numbers

Date Effective: **18-Aug-2016**

MEANS OF DISTINGUISHING CHANGED DEVICES:

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

Lot # will have:
"R" prefix for ASEK, Taiwan

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 adding ASEK, Taiwan as an alternate assembly facility for parts that are currently assembled at Amkor Philippines and Amkor Taiwan.

There is no change to the moisture performance.

Attachment I details the qualification results and
Attachment II shows the affected list of part numbers.

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 # : A1602-02

PCN Type: Manufacturing Site - 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 adding ASEK, Taiwan as an alternate assembly facility for parts that are currently assembled at Amkor Philippines and Amkor Taiwan.

The material set details of the current and alternate assembly location is as shown in Table 1.

There is no change to the moisture performance.

Table 1: Assembly Material Sets for The Existing and Alternate Assembly Location

	Existing: Amkor Philippines	**Existing: Amkor Taiwan**	**Alternate: ASEK Taiwan**
Heat spreader thermo grease	DCL-5	SHA-1	SE4450
Adhesive	DCL-5	DCL-4	SE4450
Die bump	Sn1.8Ag	Sn1.8Ag	Sn1.8Ag
Underfill	NAU-27	NAU27	UA32
Substrate	ABF-GX13/ E679 Core	ABF-GX13/ E679 Core	ABF-GX13/ E679 Core
Solder balls	Sn96.5/Ag3.0/Cu0.5 (Green)	Sn96.5/Ag3.0/Cu0.5 (Green)	Sn96.5/Ag3.0/Cu0.5 (Green)

ATTACHMENT I - PCN # : A1602-02

Qualification Information and Qualification Data:

Affected Packages: FCBGA-1156

Assembly Material: Shown on page 2 of this attachment.

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

Qualification Vehicle: FCBGA-1156

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

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

ATTACHMENT II - PCN # : A1602-02

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
89H22H16G2ZCBLG	89H64H16AG2ZCBLG	89H48H12AG2ZCBLG	89H22H16G2ZCBLGI
89H64H16G2ZCBLG	89H48H12BG2ZCBLG	89H34H16G2ZCBLGI	89H64H16G2ZCBLGI
89H64H16AG2ZCBLGI	89H48H12AG2ZCBLGI	89H34H16G2ZCBLG	