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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1406-01 (R1)** DATE: **15-Oct-2015**

Product Affected: VFQFPN-28, VFQFPN-32, VFQFPN-36
Refer to Attachment II for the affected part numbers

Date Effective: **7-Jul-2015**

MEANS OF DISTINGUISHING CHANGED DEVICES:

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

Lot # will have:
"P" prefix for Amkor, Philippines
"RC" prefix for ASECL, 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

Revision 1: This revised notice is to detail the wire type by device. Selective devices will have changes on the wire from Au to PdCu due to typo on the orignal PCN. Refer to Table 2.
PCN effective date remains unchanged.

This notification is to advise our customers that IDT is adding Amkor, Philippines (ATP) and ASE Chungli, Taiwan (ASECL) as alternate Assembly facilities.

There is no change to the moisture performance.

Attachment I details the qualification data for this change 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 # : A1406-01 (R1)

PCN Type: Manufacturing Site - Alternate Assembly Locations

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 Amkor, Philippines (ATP) and ASE Chungli (ASECL) as alternate Assembly facilities. Presently, ATP and ASECL are qualified IDT Subcontractor.

The material set details of the current and alternate assembly locations is as shown in Table 2. The die attach, wire type and mold compound used at the alternate assembly are qualified IDT materials. There is no change from the existing qualified lead frame material and lead finish for the alternate assembly locations.

There is no change to the moisture performance.

Table 1: The Existing and Alternate Assembly Locations

	Existing Assembly	**Alternate Assembly**	
Package	ATK - Amkor, Korea	ATP - Amkor, Philippines	ASECL - ASECL, Taiwan
VFQFPN-28 VFQFPN-32 VFQFPN-36	X	X	X

Note: X denote qualified assembly location

Table 2: Assembly Material Sets for The Existing and Alternate Assembly Locations

	Existing Assembly	**Alternate Assembly**	
Material Set / Assembly	ATK - Amkor, Korea	ATP - Amkor, Philippines	ASECL - ASECL, Taiwan
Die Attach	CRM1085A	CRM1085A	EN4900G
Wire[1]	Au wire	PdCu wire	PdCu wire
Wire[2]	PdCu wire	PdCu wire	PdCu wire
Mold Compound	G700, G631BQF	G700, G631BQF	G700LA

Note:

1. For VFQFPN-36 devices F1100NBGI, F1102NBGI, F1150NBGI, F1152NBGI, F1162NBGI, F1350NBGI, F1370NBGI and VFQFPN-28 device F1200NBGI.
2. For VFQFPN-32 devices F1240NBGI, F1241NBGI.

ATTACHMENT I - PCN # : A1406-01 (R1)

Qualification Information and Qualification Data:

Affected Packages: VFQFPN-28, VFQFPN-32, VFQFPN-36

Assembly Material: The affected package type is using ATP and ASECL standard materials shown on page 2 of this attachment.

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

Qualification Vehicle: Device F1350NBGI, VFQFPN-36 (4 lots)

Test Description	Test Method	Test Results (Rej / SS)
* HAST - biased (130 °C/85% RH, 96 Hrs)	JESD22-A110	0/30, 0/30, 0/30, 0/30
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/30, 0/30, 0/30, 0/30
High Temperature Storage Test (150°C, 1000 hours)	JESD22-A103	0/30, 0/30, 0/30, 0/30

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

ATTACHMENT II - PCN # : A1406-01 (R1)

Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
F1100NBGI	F1150NBGI8	F1200NBGI	F1241NBGI8
F1100NBGI8	F1152NBGI	F1200NBGI8	F1350NBGI
F1102NBGI	F1152NBGI8	F1240NBGI	F1350NBGI8
F1102NBGI8	F1162NBGI	F1240NBGI8	F1370NBGI
F1150NBGI	F1162NBGI8	F1241NBGI	F1370NBGI8