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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1004-04** DATE: **26-Jul-2010**

Product Affected: 15.0mm x 15.0mm x 1.7mm FPBGA-324 (Green)
VPP1552BFG
VPP1552BFG8

Date Effective: **26-Oct-2010**

MEANS OF DISTINGUISHING CHANGED DEVICES:

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

Lot# will have the following prefix:
"P" prefix for ATP
"R" prefix for ASEK

Contact: PS Tow
Title: Director, Product Assurance
Phone #: (408) 284-8206
Fax #: (408) 284-1450
E-mail: pstow@idt.com

Attachment: ■ Yes ☐ No

Samples: Please contact your local sales representative for sample request & availability.

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 ATP, Philippines and ASEK, Taiwan as the alternate assembly facilities for 15.0mm x 15.0mm x 1.7mm FPBGA-324 green version. There is no change to the moisture performance of this package.

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 # : A1004-04

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 ATP, Philippines and ASEK, Taiwan as the alternate assembly facilities for 15.0mm x 15.0mm x 1.7mm FPBGA-324 green version. There is no change to the moisture performance of this package using the assembly material sets as listed in the below table.

Qualification Information and Qualification Data:

Affected Packages: 15.0mm x 15.0mm x 1.7mm FPBGA-324 (BFG324)

Assembly Material: See Table below

Description	Existing	Add	
Assembly Location	SPIL, Taiwan	ATP, Philippines	ASEK, Taiwan
Assembly Materials	Die Attach: Ablestik 2000	2000B	2100A
	Wire: Au wire 0.9 mil	0.8 mil	0.9 mil
	Mold Compound: GE100LFCS	GE100LFCS	KE1250LKDS
	Substrate: HL832-NX/AUS 308	HL832NXA (EX)	HL832NXA (EX)
	Solder Balls: Sn96.5/Ag3.0/Cu0.5	Sn96.5/Ag3.0/Cu0.5	Sn96.5/Ag3.0/Cu0.5

ATTACHMENT I - PCN # : A1004-04

Qualification Test Plans and Results :

(I) Qual data for ATP, Philippines

Qual Vehicle: 15.0mm x 15.0mm x 1.7mm FPBGA-324 (1 lot)

Test Description	Test Method	Test Results (SS / Rej)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 100 Hrs)	JESD22-A110	25/0
* Temperature Cycle (-55 °C to +125 °C, 1000 Cyc)	JESD22-A104	25/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	24/0

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.

(II) Qual data for ASEK, Taiwan

Qual Vehicle: 13mm x 13mm LBGA-167 (1 lot)

Test Description	Test Method	Test Results (SS / Rej)
* High Accelerated Stress Test (Unbiased, 130 °C/85% RH, 100 Hrs)	JESD22-A118	77/0
* Temperature Cycle (-65 °C to +150 °C, 500 Cyc)	JESD22-A104	77/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	77/0

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.