



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: <b>A-0605-07</b>	DATE: <b>6/19/2006</b>	<b>MEANS OF DISTINGUISHING CHANGED DEVICES:</b> <input type="checkbox"/> Product Mark <input checked="" type="checkbox"/> Back Mark      Lot # will have "P" prefix <input type="checkbox"/> Date Code <input type="checkbox"/> Other
Product Affected: 144, 240, 260 and 324-ball PBGA (See attached affected part # list)		
Date Effective: <b>9/17/2006</b>		

Contact: Geoffrey Cortes Title: Product Quality Assurance Phone #: (408) 284-8321 Fax #: (408) 284-1450 E-mail: <a href="mailto:Geoffrey.Cortes@idt.com">Geoffrey.Cortes@idt.com</a>	Attachment: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Samples: Please contact your local sales representative for sample request & availability.
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**DESCRIPTION AND PURPOSE OF CHANGE:**

<input type="checkbox"/> Die Technology <input type="checkbox"/> Wafer Fabrication Process <input type="checkbox"/> Assembly Process <input type="checkbox"/> Equipment <input type="checkbox"/> Material <input type="checkbox"/> Testing <input checked="" type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet <input type="checkbox"/> Other	<p>This notification is to advise our customers that Amkor Technology, Korea (ATK) is transferring the above-mentioned PBGA packages assembly to Amkor Technology, Philippines (ATP). ATK assembly of these packages will no longer be available for production. There is no change to the moisture performance of these packages.</p> <p>Attachment I details the qualification results for this change and Attachment II shows the affected list of devices.</p>
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**RELIABILITY/QUALIFICATION SUMMARY:**

Refer to qualification results 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: _____	<input type="checkbox"/> <i>Approval for shipments prior to effective date.</i>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____

**CUSTOMER COMMENTS:** \_\_\_\_\_

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**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: \_\_\_\_\_      DATE: \_\_\_\_\_



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

### **ATTACHMENT I - PCN # : A-0605-07**

**PCN Type:** Manufacturing Site - Assembly Transfer

**Data Sheet Change:** None  
No change in moisture sensitivity level (MSL)

#### **Detail Of Change:**

This notification is to advise our customers that IDT has qualified the above-mentioned PBGA packages transferred from Amkor Technology, Korea (ATK) to Amkor Technology, Philippines (ATP). ATP will use the same qualified assembly material (mold compound, die attach, bond wire, substrate and solder ball), assembly equipment and assembly process as ATK.

There is no change in the moisture sensitivity level (MSL).

Attachment I details the qualification results for this change and Attachment II shows the affected list of devices.

#### **Sample Availability:**

Samples for each package type are available for customer evaluation, but may not be available for all devices.

Please contact your local IDT sales representative for your sample request and availability.



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A-0605-07

#### Qualification Information and Qualification Data:

**Affected Packages:** PBGA  
144-ball 13 x 13 mm PBGA (BB/BBG144)  
240-ball 19 x 19 mm PBGA (BB/BBG240)  
260-ball 19 x 19 mm PBGA (BB/BBG260)  
324-ball 19 x 19 mm PBGA (BB/BBG324)

**Assembly Material:** See Table below

Description	From	To
Assembly Location	Amkor Technology, Korea	Amkor Technology, Philippines
Assembly Material	Die Attach: Ablestik 2300	Same
	Wire: 1.0mil Au	Same
	Mold Compound: EME-G770	Same
	Substrate: BT	Same
	Solder Ball: Sn/Pb (standard) and Sn/Ag/Cu (green)	Same

#### Qualification Test Results:

**Test Vehicle:** 388-ball 35 x 35 mm PBGA, 3 lots

Test Description	Test Method	Test Results (SS/Rej) 3 lots
Moisture Sensitivity Classification, L3	J-STD-020B	22/0, 22/0, 22/0
* Temperature Cycling (Cond B, 1000 cycles)	JESD22-A104-B	76/0, 76/0, 76/0
* Autoclave (121°C, Saturated Steam, 96 hours)	JESD22-A102-C	45/0, 45/0, 45/0
High Temperature Stabilization Bake (150 °C, 1000 hours)	JESD22-A103-C	76/0, 76/0, 76/0

**Notes:** \* Test requires moisture pre-conditioning sequence per JESD22-A113C.



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT II - PCN #: A-0605-07

#### Affected Part Number

IDT Part Number	IDT Part Number	IDT Part Number	IDT Part Number
IDT5T2010BBGI	IDT72T1895L4-4BB	IDT72T55258L6-7BBI	IDT72V36110L6BBG
IDT5T2010BBI	IDT72T1895L5BB	IDT72T55268L5BB	IDT72V36110L7-5BB
IDT5T2110BBGI	IDT72T1895L5BBI	IDT72T55268L6-7BB	IDT72V36110L7-5BBG
IDT5T2110BBI	IDT72T1895L6-7BB	IDT72T55268L6-7BBI	IDT72V36110L7-5BBGI
IDT5T9010BBGI	IDT72T36105L10BB	IDT72T6360L6BB	IDT72V36110L7-5BBI
IDT5T9010BBI	IDT72T36105L4-4BB	IDT72T6360L6BBG	IDT72V3640L6BB
IDT5T9110BBGI	IDT72T36105L5BB	IDT72T6360L7-5BB	IDT72V3640L7-5BB
IDT5T9110BBI	IDT72T36105L5BBI	IDT72T6360L7-5BBG	IDT72V3640L7-5BBI
IDT5V996BBI	IDT72T36105L6-7BB	IDT72T6360L7-5BBI	IDT72V3650L6BB
IDT72T18105L10BB	IDT72T36115L10BB	IDT72T6480L10BB	IDT72V3650L7-5BB
IDT72T18105L4-4BB	IDT72T36115L4-4BB	IDT72T6480L10BBI	IDT72V3650L7-5BBI
IDT72T18105L5BB	IDT72T36115L5BB	IDT72T6480L7-5BB	IDT72V3660L6BB
IDT72T18105L5BBI	IDT72T36115L5BBI	IDT72T6480L7-5BBG	IDT72V3660L7-5BB
IDT72T18105L6-7BB	IDT72T36115L6-7BB	IDT72T72105L10BB	IDT72V3660L7-5BBG
IDT72T18115L10BB	IDT72T36125L10BB	IDT72T72105L4-4BB	IDT72V3660L7-5BBI
IDT72T18115L4-4BB	IDT72T36125L4-4BB	IDT72T72105L5BB	IDT72V3670L6BB
IDT72T18115L5BB	IDT72T36125L5BB	IDT72T72105L6-7BB	IDT72V3670L7-5BB
IDT72T18115L5BBI	IDT72T36125L5BBI	IDT72T72115L10BB	IDT72V3670L7-5BBI
IDT72T18115L6-7BB	IDT72T36125L6-7BB	IDT72T72115L4-4BB	IDT72V3680L6BB
IDT72T18125L10BB	IDT72T36135ML5BB	IDT72T72115L4-4BBG	IDT72V3680L6BBG
IDT72T18125L4-4BB	IDT72T36135ML6BB	IDT72T72115L5BB	IDT72V3680L7-5BB
IDT72T18125L5BB	IDT72T51248L5BB	IDT72T72115L5BBGI	IDT72V3680L7-5BBI
IDT72T18125L5BBI	IDT72T51248L6-7BB	IDT72T72115L5BBI	IDT72V3690L6BB
IDT72T18125L6-7BB	IDT72T51248L6-7BBI	IDT72T72115L6-7BB	IDT72V3690L7-5BB
IDT72T1845L4-4BB	IDT72T51258L5BB	IDT72T7285L10BB	IDT72V3690L7-5BBI
IDT72T1845L5BB	IDT72T51258L6-7BB	IDT72T7285L4-4BB	IDT72V71650BB
IDT72T1845L5BBI	IDT72T51258L6-7BBI	IDT72T7285L5BB	IDT72V71650BBG
IDT72T1845L6-7BB	IDT72T51268L5BB	IDT72T7285L6-7BB	IDT72V73250BB
IDT72T1855L4-4BB	IDT72T51268L6-7BB	IDT72T7295L10BB	IDT72V73250BBG
IDT72T1855L5BB	IDT72T51268L6-7BBI	IDT72T7295L4-4BB	IDT72V73260BB
IDT72T1855L5BBI	IDT72T54242L5BB	IDT72T7295L4-4BBG	IDT72V73260BBG
IDT72T1855L6-7BB	IDT72T54242L6-7BB	IDT72T7295L5BB	IDT82V2108BB
IDT72T1865L4-4BB	IDT72T54242L6-7BBI	IDT72T7295L6-7BB	IDT82V2108BBG
IDT72T1865L5BB	IDT72T54252L5BB	IDT72V14320L10BBI	IDT82V2616BB
IDT72T1865L5BBI	IDT72T54252L6-7BB	IDT72V15320L10BBI	IDT82V2616BBG
IDT72T1865L6-7BB	IDT72T54252L6-7BBI	IDT72V16320L10BBI	IDT72T54242L5BBG
IDT72T1875L4-4BB	IDT72T54262L5BB	IDT72V17320L10BBI	IDT72T54262L5BBG
IDT72T1875L5BB	IDT72T54262L6-7BB	IDT72V18320L10BBI	
IDT72T1875L5BBI	IDT72T54262L6-7BBI	IDT72V19320L10BBI	
IDT72T1875L6-7BB	IDT72T55248L5BB	IDT72V36100L6BB	
IDT72T1885L4-4BB	IDT72T55248L6-7BB	IDT72V36100L7-5BB	
IDT72T1885L5BB	IDT72T55248L6-7BBI	IDT72V36100L7-5BBGI	
IDT72T1885L5BBI	IDT72T55258L5BB	IDT72V36100L7-5BBI	
IDT72T1885L6-7BB	IDT72T55258L6-7BB	IDT72V36110L6BB	

Notes: For T & R (shipping method) "8" is added to the p/n.