



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

<b>PCN #:</b> <b>A0605-01R1</b> <b>Product Affected:</b> 655L, 24.5x19.5mm FCBGA (See attached affected part # list)  <b>Date Effective:</b> <b>8/11/2006</b>	<b>DATE:</b> <b>7/17/2006</b>	<b>MEANS OF DISTINGUISHING CHANGED DEVICES:</b> <input type="checkbox"/> Product Mark    Lot # will have "AT" prefix and "Y" mark <input type="checkbox"/> Back Mark        code for ATT assembly location <input type="checkbox"/> Date Code         Test Location traceable by lot #. <input checked="" type="checkbox"/> Other
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<b>Contact:</b> Bimla Paul <b>Title:</b> Product Quality Assurance <b>Phone #:</b> (408) 574-6419 <b>Fax #:</b> (408) 284-8362 <b>E-mail:</b> <a href="mailto:Bimla.Paul@idt.com">Bimla.Paul@idt.com</a>	<b>Attachment:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Samples:</b> 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 checked="" type="checkbox"/> Testing - Test Location <input checked="" type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet <input type="checkbox"/> Other	<p><b>Revision 1: This PCN is being revised to notify our customers that IDT has qualified an alternate test location KYEC (Taiwan) for AMB products.</b></p> <p>This notification is to advise our customers that IDT has qualified AMKOR Taiwan as an alternate assembly facility for 655L, 24.5x19.5mm FCBGA packages. There is no change to the moisture performance of the package as a result of this change.</p> <p>Please see attached for the qualification data and affected part number list.</p>
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**RELIABILITY/QUALIFICATION SUMMARY:**

Please refer to the attached Qualification & Reliability data.

**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"/> <b>Approval for shipments prior to effective date.</b>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____

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

**IDT ACKNOWLEDGMENT OF RECEIPT:**

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



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A0605-01R1

**PCN Type:** Manufacturing Site - Alternate Assembly and Test Location

**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 AMKOR Taiwan (ATT) as an alternate assembly facility and test location - KYEC, Taiwan for 655L, 24.5x19.5mm FCBGA package. The assembly material set for ATT assembly location is listed in Table 1.

KYEC-Taiwan test facility will test the product using same test platform (HP tester/model), loadboard, and software (test program) as IDT Penang facility. Therefore, the test coverage will be identical for both test facilities. Backend processing (Coplanarity, final visual inspection and packing) will be done at IDT Penang facility only.

There is no change in the moisture sensitivity level (MSL) as a result of this change.

Attachment I outlines the qualification data and affected part#s.

Table 1

Description	Existing	Add
Assembly Location	AMKOR Philippines and Korea, STATSChipPAC, Korea	AMKOR, Taiwan (ATT)
Assembly Material	95Pb/5Sn (High Pb Bump), NAU6 or CRP-4152RA (Underfill), TTG3 (Thermal Grease), 96.5Sn/3Ag/0.5Cu (Solder Ball)	95Pb/5Sn (High Pb Bump), NAU6 (Underfill), TTG3 (Thermal Grease), 96.5Sn/3Ag/0.5Cu (Solder Ball)
Test Location	IDT Penang Facility ( HP Tester, IDT Loadboard and Test Program)	KYEC - Taiwan ( HP Tester - same model as IDT Penang, IDT Loadboard and Test Program)

**Sample Availability:**

Samples are already available for customer evaluation.

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 # : A0605-01R1

#### Assembly Location

#### Qualification Information and Qualification Tests Result:

**Test Vehicles:** 31 x31 mm FCBGA (3 assembly lots)

Test Description	Test Method	Test Results (SS/ Rej)		
* Temperature Cycling (Cond B, 1000 cycles)	JESD22-A104-B	45/0	45/0	45/0
* Unbiased HAST (130°C/85% RH, 100 hours)	JESD22-A102-C	45/0	45/0	45/0
* High Temperature Stabilization Bake (150 °C, 1000 hours)	JESD22-A103-C	77/0	77/0	77/0

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

#### Test Location

#### Qualification Information and Qualification Tests Result:

Description	IDT Penang (Existing Facility)	KYEC - Taiwan (Alternate Facility)
Test Hardware/Software	HP Tester, IDT Loadboard and Test Program	HP Tester - same model as IDT Penang, IDT Loadboard and Test Program
Test Correlation Results	100%	100%
Good Units (2 Lots)	2000/0 (Per Lot)	2000/0 (Per Lot)
Rejects	100/0	100/0

#### Affected Part #s

IDTAMB0480A5RH  
IDTAMB0480A5RJ