



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

<b>PCN #:</b> <b>A-0607-02</b> <b>DATE:</b> <b>26-Jul-2006</b> <b>Product Affected:</b> 52L, 56L CVBGA and 96L FPBGA Package of ICS Products  <b>Date Effective:</b> <b>24-Oct-2006</b>	<b>MEANS OF DISTINGUISHING CHANGED DEVICES:</b> <input type="checkbox"/> Product Mark <input checked="" type="checkbox"/> Back Mark      Lot # will have "H" prefix <input type="checkbox"/> Date Code <input type="checkbox"/> Other
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<b>Contact:</b> Geoffrey Cortes <b>Title:</b> Product Quality Assurance <b>Phone #:</b> (408) 284-8321 <b>Fax #:</b> (408) 284-1450 <b>E-mail:</b> <a href="mailto:Geoffrey.Cortes@idt.com">Geoffrey.Cortes@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 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 IDT is adding IDT-Penang as an alternate assembly facility for 52L, 56L CVBGA and 96L FPBGA packages of ICS products. There is no change to the moisture performance of these packages.</p> <p>Attachment I details the qualification data for this change and Attachment II shows the affected list of part numbers.</p>
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**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: _____	<input type="checkbox"/> <b>Approval for shipments prior to effective date.</b>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____

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

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**IDT ACKNOWLEDGMENT OF RECEIPT:**

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



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A-0607-02

**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 IDT-Penang as an alternate assembly facility for 52L, 56L CVBGA and 96L FPBGA packages of ICS products using the assembly material set as listed in Table 1.

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

Table 1

Description	Existing	Add
Assembly Location	AIT, ASE, OSET	IDT-Penang
Assembly Material	Die Attach: Ablestik 2000/2100A	Die Attach: Ablestik 2200
	Wire: 1.0mil Au	Same
	Mold Compound: EME-G760/Toshiba G1270	Mold Compound: EME-G770
	Substrate: BT	Same
	Solder Balls: Sn/Pb (standard) and Sn/Ag/Cu (green)	Same

**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.



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A-0607-02

#### Qualification Information and Qualification Data:

#### Qualification Test Results:

**Test Vehicle:** 52L 4.5x7.0mm CVBGA (Green), 2 lots  
96L 5.5x13.5mm FPBGA (Green), 2 lots

Test Description	Test Method	Test Results (SS/Rej)			
* Temperature Cycling (Cond B, 1000 cycles)	JESD22-A104	45/0	45/0	45/0	45/0
* HAST (130°C, 85% RH, 100 hours)	JESD22-A110	45/0	45/0	45/0	45/0
Moisture Sensitivity Classification, L3	J-STD-020	90/0	90/0	90/0	90/0
Physical Dimensions	JESD22-B100	5/0	5/0	5/0	5/0
Resistance to Solvents	JESD22-B107	3/0	3/0	3/0	3/0
Bake and Ball Shear Test	JESD22-B116	5/0	5/0	5/0	5/0
Bond Pull Test	MIL-STD-883, M2011	5/0	5/0	5/0	5/0
X-ray Examination	MIL-STD-883, M2015	45/0	45/0	45/0	45/0
External Visual Inspection	MIL-STD-883, M2009	25/0	25/0	25/0	25/0
Internal Visual Inspection	MIL-STD-883, M2010	5/0	5/0	5/0	5/0
Die Shear Test	MIL-STD-883, M2019	5/0	5/0	N/A	N/A
Solder Ball Shear	JESD22-B117	5/0	5/0	5/0	5/0

**Notes:** \* Test requires moisture pre-conditioning sequence per JESD22-A113.



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT II - PCN # : A-0607-02

#### Affected Part Number

IDT Part Number	IDT Part Number	IDT Part Number	IDT Part Number
ICS95V2F857AH	ICS97ULP877AH	ICSSSTUA32864BHFLF	ICSSSTUF32864AHLF
ICS95V2F857AHLF	ICS97ULP877AHLF	ICSSSTUA32864BHFLF_	ICSSSTUF32864AHLF-SEC
ICS95V857AH	ICS97ULP877BH	ICSSSTUA32864CH	ICSSSTUF32864BH
ICS95V857AHLF	ICS97ULP877BHFLF	ICSSSTUA32864CHFLF	ICSSSTUF32864BHFLF
ICS95VLP857AH	ICS97ULP878AH	ICSSSTUA32866ASHLF	ICSSSTUF32864CH
ICS95VLP857AHLF	ICS97ULP878AHLF	ICSSSTUA32866BHFLF	ICSSSTUF32864CHFLF
ICS97U2A877AHLF	ICS97ULP878BH	ICSSSTUA32866BHFLF_	ICSSSTUF32864EH
ICS97U870AH	ICS97ULP878BHFLF	ICSSSTUA32866CH	ICSSSTUF32864EHLF
ICS97U870AHI	ICS97ULPA877AH	ICSSSTUA32866DHFLF	ICSSSTUF32866AH
ICS97U877AH	ICS97ULPA877AHLF	ICSSSTUB32864AH	ICSSSTUF32866AHLF
ICS97U877AHLF	ICS98ULPA877AHLF	ICSSSTUB32864AHLF	ICSSSTUF32866EH
ICS97U877AH_	ICSSSTU32864AH	ICSSSTUB32864BHFLF	ICSSSTUF32866EHLF
ICS97U877BH	ICSSSTU32864AHLF	ICSSSTUB32866BHFLF	
ICS97UA877AH	ICSSSTU32864AH_	ICSSSTUB32866CHFLF	
ICS97UA877AHLF	ICSSSTUA32864BH	ICSSSTUF32864AH	

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