



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1409-02**                                      DATE: **7-Jan-2015**  
Product Affected:    8.0mm x 13.5mm FCCSP-253  
                                  Refer to Attachment II for the affected part numbers  
  
Date Effective:        **7-Apr-2015**

MEANS OF DISTINGUISHING CHANGED DEVICES:  
 Product Mark  
 Back Mark                      Assembly lot with suffix "R" denotes assembly facility, ASEK Taiwan.  
 Date Code  
 Other

Contact:            IDT PCN DESK                                      Attachment:             Yes                       No  
  
E-mail:             [pcndesk@idt.com](mailto:pcndesk@idt.com)                                      Samples: Please contact your local sales representative for sample request & availability.

### DESCRIPTION AND PURPOSE OF CHANGE:

- |  |  |
|--|--|
| <input type="checkbox"/> Die Technology                |  |
| <input type="checkbox"/> Wafer Fabrication Process     | This notification is to advise our customers that IDT is adding ASEK, Taiwan as an alternate Bump and Assembly facility. |
| <input type="checkbox"/> Assembly Process              |  |
| <input type="checkbox"/> Equipment                     | There is no change to the moisture performance.  |
| <input type="checkbox"/> Material                      |  |
| <input type="checkbox"/> Testing                       | Attachment I details the qualification data for this change and Attachment II shows the affected list of part numbers.   |
| <input checked="" type="checkbox"/> Manufacturing Site |  |
| <input type="checkbox"/> Data Sheet                    |  |
| <input type="checkbox"/> Other                         |  |

### 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><i>Approval for shipments prior to effective date.</i></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 # : A1409-02

**PCN Type:** Alternate Bump and 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 ASEK, Taiwan as an alternate Bump and Assembly facility.

The assembly material sets used at ASEK, Taiwan are qualified IDT materials.

There is no change to the moisture performance of this package using the assembly material sets as listed in Table 2.

Table 1: Summary of Changes

Description of Changes	From	To
Bump Location	Amkor, Taiwan	Amkor, Taiwan and ASEK, Taiwan
Assembly Location	Amkor, Philippines	Amkor, Philippines and ASEK, Taiwan

Table 2: Assembly Material Sets for the Existing Assembly & Alternate Assembly

Material Set / Assembly	Existing	Alternate
	Amkor, Philippines	ASEK, Taiwan
Die bump	Sn1.8Ag	Sn1.8Ag
Mold compound	MUF-1	KE-G1250FC-20B
Solder balls	Sn96.5/Ag3.0/Cu0.5	Sn96.5/Ag3.0/Cu0.5
Package substrate	UMTC Taiwan	UMTC Taiwan and Kinsus Taiwan



## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A1409-02

#### Qualification Test Plans and Results :

**Qual Plan & Results:** The qualification was performed in accordance with JEDEC47 recommended tests

**Qual Vehicle:** 8.0mm x 13.5mm FCCSP-253

(I) ASEK with UMTC Taiwan substrate		Test Results (SS / Rej)		
Test Description	Test Method	Lot 1	Lot 2	Lot 3
* Highly Accelerated Stress Test (Vcc Max Static, 130°C/85% RH, 96Hrs)	JESD22-A110	30/0	30/0	30/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	30/0	30/0	30/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	30/0	30/0	30/0
Ball Shear Test (1000 Hrs)	JESD22-B117	5/0	5/0	5/0

Note:

\* Test requires moisture pre-conditioning sequence per JESD22-A113 prior to stress test

(II) ASEK with KINSUS Taiwan substrate		Test Results (SS / Rej)		
Test Description	Test Method	Lot 1	Lot 2	Lot 3
* Highly Accelerated Stress Test (Vcc Max Static, 130°C/85% RH, 96Hrs)	JESD22-A110	30/0	30/0	30/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	30/0	30/0	30/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	30/0	30/0	30/0
Ball Shear Test (1000 Hrs)	JESD22-B117	5/0	5/0	5/0

Note:

\* Test requires moisture pre-conditioning sequence per JESD22-A113 prior to stress test



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

### **ATTACHMENT II - PCN # : A1409-02**

#### **Affected Part Numbers**

<b>Part Number</b>	<b>Part Number</b>
4RCD0124KC0ATG	4RCD0124KC0ATG8