



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A1008-06**                      DATE: **August 27, 2010**  
 Product Affected:    **82P20516DBFG & 82P20516DBFG8**  
    **built in 19mm x 19mm FPBGA-484**  
 Date Effective:    **November 27, 2010**

MEANS OF DISTINGUISHING CHANGED DEVICES:  
 Product Mark  
 Back Mark  
 Date Code              Date code 1050 onwards  
 Other

Contact:        Mary Vesey  
 Title:            Director, Product Assurance                      Attachment:         Yes                       No  
 Phone #:        (408) 284-4565  
 Fax #:            (408) 284-1450                                      Samples:    Availability shown on request  
 E-mail:          [Mary.Vesey@com](mailto:Mary.Vesey@com)

**DESCRIPTION AND PURPOSE OF CHANGE:**

- |  |  |
|--|--|
| <input type="checkbox"/> Die Technology<br><input type="checkbox"/> Wafer Fabrication Process<br><input type="checkbox"/> Assembly Process<br><input type="checkbox"/> Equipment<br><input type="checkbox"/> Material<br><input type="checkbox"/> Testing<br><input checked="" type="checkbox"/> Manufacturing Site<br><input type="checkbox"/> Data Sheet<br><input type="checkbox"/> Other | <p>This notification is to advise our customers that IDT is adding ASEK, Taiwan as an alternate assembly facility for 19mm x 19mm FPBGA-484 green version.</p> <p>There is no change to the moisture performance of the package as a result of this change.</p> <p>Attachment I details the qualification data for this change<br/>         Attachment II details the affected part number list.</p> |
|--|--|

**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.

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: \_\_\_\_\_



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### ATTACHMENT I - PCN # : A1008-06

**PCN Type:** Manufacturing Site

**Data Sheet Change:** No change  
No change in moisture sensitivity level (MSL)

#### Details Of Change:

This notification is to advise our customers that IDT is adding ASEK, Taiwan as an alternate assembly facility for 19mm x 19mm FPBGA-484 green version. There is no change to the moisture performance of these packages using the assembly material sets as listed in the below table.

#### Qualification Information and Qualification Data:

**Affected Packages:** 19mm x 19mm FPBGA-484 (BFG484)

**Assembly Material:** See Table below

| Description        | Existing                                 | Add                                      |
|--------------------|--|--|
| Assembly Location  | SPII, Taiwan                             | ASEK, Taiwan                             |
| Assembly Materials | Die Attach: Ablestik 2000                | 2100                                     |
|                    | Wire: Au wire                            | Au wire                                  |
|                    | Mold Compound: GE100LFCS                 | KE-G1250LKDS                             |
|                    | Substrate: HL832NX/ AUS303               | HL832NX/ AUS303                          |
|                    | Solder Balls: Sn96.5/Ag3.0/Cu0.5 (Green) | Solder Balls: Sn96.5/Ag3.0/Cu0.5 (Green) |



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN # : A1008-06

#### Qualification Test Plans and Results :

**Qual Vehicle:** 19mm x 19mm FPBGA ( 1 lot ) & 15mm x 15mm FPBGA ( 1 lot )

| Test Description   | Test Method | Test Results (SS / Rej) |             |
|--|-------------|-------------------------|-------------|
|  |             | 19mm x 19mm             | 15mm x 15mm |
| * High Accelerated Stress Test<br>(Biased, 110 °C/85% RH, 100 Hours) | JESD22-A110 | 45/0                    | 25/0        |
| * Temperature Cycle<br>(-55 °C to +125 °C, 700 Cycles)               | JESD22-A104 | 77/0                    | 25/0        |
| High Temp. Storage Test<br>(150 °C, 1000 Hours)                      | JESD22-A103 | 77/0                    | 25/0        |

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.



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

### **ATTACHMENT II - PCN # : A1008-06**

#### **Affected Part Number**

| <b>Part Number</b> | <b>Part Number</b> | <b>Part Number</b> |
|--------------------|--------------------|--------------------|
| 82P20416DBFG       | 82P20516DBFG       | 82P2916BFG         |
| 82P20416DBFG8      | 82P20516DBFG8      | 82P2916BFG8        |
| 82P20416EBFG       |                    |                    |