



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **TB1507-01**                      DATE: **August 18, 2015**  
Product Affected: **Selective part# of VFQFPN-16**  
(Refer to Attachment II for affected part#)  
Date Effective: **August 18, 2015**

MEANS OF DISTINGUISHING CHANGED DEVICES:  
 Product Mark  
 Back Mark  
 Date Code  
 Other  
Lot shipments will have Level 1  
Moisture Sensitive Label

Contact: **IDT PCN DESK**  
E-mail: [pcndesk@idt.com](mailto:pcndesk@idt.com)

Attachment:  Yes                       No  
Samples: N/A

### DESCRIPTION AND PURPOSE OF CHANGE:

- Die Technology
- Wafer Fabrication Process
- Assembly Process
- Equipment
- Material
- Testing
- Manufacturing Site
- Data Sheet
- Other

This notification is to advise our customers that IDT is converting moisture sensitivity classification to MSL 1. The affected products will be shipped without dry pack and labeled as MSL 1 according to JEDEC J-STD-020. There is no change to the assembly material sets and the peak reflow temperature.

Attachment I details the qual data and the examples of moisture sensitive labels. Attachment II shows the list of the affected part numbers.

### RELIABILITY/QUALIFICATION SUMMARY:

Moisture sensitive classification qual report is 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: \_\_\_\_\_

*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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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT I - PCN #: TB1507-01

**PCN Type:** Change in Moisture Sensitivity Level

**Data Sheet Change:** There is change in Moisture Sensitive Level (MSL) from 3 to 1.

**Detail of Change:** This notification is to advise our customers that IDT is converting moisture sensitivity classification to MSL 1.

The affected products will be shipped without dry pack and labeled as MSL 1 according to JEDEC J-STD-020. There is no change to the assembly material sets and the peak reflow temperature. Peak reflow temperature remains 260°C.

Refer to examples of moisture sensitive labels as shown below.

#### Qualification Information and Qualification Data:

**Qual Plan & Results:** Tests are in accordance with JEDEC47 recommended tests.

**Qualification Vehicle:** VFQFPN-16

Test Description	Test Method	Test Results (SS / Rej)		
		Lot 1	Lot 2	Lot 3
* HAST - biased (130 °C/85% RH, 100 Hrs)	JESD22-A110	45/0	45/0	45/0
* Temperature Cycle / Condition B (-55 °C to +125 °C, 700 Cyc)	JESD22-A104	45/0	45/0	45/0
High Temp. Storage Test (150 °C, 1000 Hrs)	JESD22-A103	77/0	77/0	77/0
Moisture Sensitivity Level (MSL 1, 260°C)	J-STD-20	45/0	45/0	45/0

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

#### From: MSL 3 Moisture Sensitive Label



**CAUTION**  
This Bag Contains  
**MOISTURE-SENSITIVE DEVICES**

LEVEL  
**3**

1. Calculated shelf life in sealed bag:  
12 months at < 40°C and < 90% relative humidity (RH)
2. Peak package body temperature: 260°C
3. After bag is opened, devices that will be subjected to reflow solder or other high temperature process must
  - a) Mounted within 168 hours of factory conditions <= 30°C/60% RH
  - b) Stored per J-STD-033
4. Devices required bake, before mounting if:
  - a) Humidity indicator card reads >10% for level 2a-5a devices or >60% for level 2 devices when read at 23 +/-5 deg C
  - b) 3a or 3b are not met
5. If baking is required, refer to IPC/JEDEC J-STD-033 for bake procedure **Bag Seal Date: 07/31/15**

Note: Level and body temperature defined by IPC/JEDEC J-STD-020.



#### To: MSL 1 Non-Moisture Sensitive Label


**NOT MOISTURE SENSITIVE**

LEVEL  
**1**

These Devices do not require special storage conditions provided:

1. They are maintained at conditions equal to or less than 30°C/85 % RH, and
2. They are solder reflowed at a peak body temperature which does not exceed 260°C

Note: Level and body temperature defined by IPC/JEDEC J-STD-020.



**Note: There is no change to the peak reflow temperature of the affected products.**



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT II - PCN #: TB1507-01

#### Affected Part Numbers

Part Number	Part Number	Part Number	Part Number
F2250NLGI	F2258NLGI	F2255NLGI8	F2250NLGK
F2258NLGK	F2255NLGK8	F2255NLGI	F2250NLGI8
F2258NLGI8	F2255NLGK	F2250NLGK8	F2258NLGK8