



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **A-0504-02R1**      DATE: 7/27/2005  
 Product Affected: Please see attachment  
  
 Date Effective: 8/27/2005

MEANS OF DISTINGUISHING CHANGED DEVICES:  
 Product Mark  
 Back Mark      Lot # will have "C" prefix  
 Date Code  
 Other

Contact: Geoffrey Cortes  
 Title: Manager, Corporate Quality & Reliability  
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Attachment:       Yes       No  
  
 Samples: Please contact your local sales representative for sample request & availability.

**DESCRIPTION AND PURPOSE OF CHANGE:**

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

This notification is a follow-up letter advising our customers that IDT has completed the Group 3 qualification of PCN # A-0504-02, qualification of OSE Philippines Tin Plating line for green packages..  
 Attachment 1 outlines the qualification plan and actual qual data  
 Attachment 2 shows the affected device list  
  
 Please see attachment for additional details.

**RELIABILITY/QUALIFICATION SUMMARY:**

There is no expected change to the product quality or reliability performance.

**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 1 - PCN # : A-0504-02R1**

**PCN Type:** Assembly Transfer

**Data Sheet Change:** None.  
No change in MSL level.

#### **Detail Of Change:**

This notification is a follow-up letter advising our customers that IDT has completed the Group 3 qualification of PCN # A-0504-02, qualification of OSE Philippines Tin Plating line for green packages..

Attachment 1 outlines the qualification plan  
Attachment 2 shows the affected device list

There are no datasheet or Moisture Sensitive Level (MSL) changes due to this change. We do not expect customers to be adversely impacted by this change.

Customer may expect to receive shipments no sooner than 30 days from the date of this notification.



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

**ATTACHMENT 1 - PCN # : A-0504-02R1**

**Qualification Test Plan:**

**GROUP 3:**

This group consists of green packages that are assembled and plated at IDT Manila facility. IDT will qualify the OSE Tin Plating line for green packages. The qualification plan and data are detailed below.

**Affected Packages:** SOIC - PSG20  
SOJ - PJG28, PJG32, PBG28, PBG32, PBG36, PBG44  
SSOP - DJG48, DMG40, DMG80, PCG16, PCG20, PCG24,  
PGG24, PVG48, PVG56  
PLCC - PLG32  
TSSOP - PAG48, PAG56

**Sample Availability:** Samples are already available for customer evaluation, but may not be available for all affected device types. Please contact your local IDT sales representative for your sample request and availability.

**Qualification Test Plan and Data:**

**Tin Whisker Evaluation Test Data:**

| Test Description       | Test Condition                         | Test Duration       | Spec Limits | Test Results<br>SS/Rej |
|------------------------|--|---------------------|-------------|------------------------|
| Storage Test           | 25°C/30% - 80%RH                       | 0, 1000, 2000 Hours | 40µm max.   | 3/0 (pass)             |
| Aging                  | 60°C/90%RH                             | 0, 1000, 2000 Hours | 40µm max.   | 3/0 (pass)             |
| Temperature<br>Cycling | -55°C to +85°C,<br>15 min. per chamber | 0, 500 Cycles       | 40µm max.   | 3/0 (pass)             |

**Notes:**

Visual inspection is performed at 100 X.  
Leads are preselected and 3 leads per units are inspected.



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## PRODUCT/PROCESS CHANGE NOTICE (PCN)

### ATTACHMENT 2 - PCN #: A-0504-02R1

#### Group - 3

|                      |                      |                  |                  |
|----------------------|----------------------|------------------|------------------|
| IDTQS32X861Q1G       | IDT74FST1632861PAG   | IDTCV128PAG      | IDT71V016SA10YG  |
| IDTQS32XL384Q1G      | IDT74FST32XL2384PAG  | IDTCV133PAG      | IDT71V016SA10YGI |
| IDTQS4A215Q1G        | IDT74LVC162244APAG   | IDTCV136PAG      | IDT71V016SA12YG  |
| IDTQS32X2245Q2G      | IDT74LVC162245APAG   | IDTCV137PAG      | IDT71V016SA12YGI |
| IDTQS32X244Q2G       | IDT74LVC16244APAG    | IDTCV139PAG      | IDT71V016SA15YG  |
| IDTQS32X245Q2G       | IDT74LVC16245APAG    | IDTCV140PAG      | IDT71V016SA15YGI |
| IDTQS32XR245Q2G      | IDT74LVCH162244APAG  | IDTCV142PAG      | IDT71V016SA20YG  |
| IDTQS32XVH245Q2G     | IDT74LVCH162245APAG  | IDTCV144PAG      | IDT71V016SA20YGI |
| IDTQS34X2245Q3G      | IDT74LVCH16245APAG   | IDTCV147PAG      | IDT71V416S10YG   |
| IDTQS34X245Q3G       | IDT74LVCHR162245APAG | IDTCV149PAG      | IDT71V416S10YGI  |
| IDTQS34XVH245Q3G     | IDT74LVCR162245APAG  | IDTQS3VH16211PAG | IDT71V416S12YG   |
| IDT5T915PAGI         | IDT74SSTV16857PAG    | IDTQS3VH16212PAG | IDT71V416S12YGI  |
| IDT74ALVC162245PAG   | IDT74SSTVF16857PAG   | IDTQS3VH16233PAG | IDT71V416S15YG   |
| IDT74ALVC16245PAG    | IDTCSPT857CPAG       | IDT71028S15YG    | IDT71V416S15YGI  |
| IDT74ALVC164245PAG   | IDTCSPT857DPAG       | IDT71024S12YG    | IDT5V925QGI      |
| IDT74ALVCH162244PAG  | IDTCV141PAG          | IDT71024S12YGI   | IDT74CBTLV3251QG |
| IDT74ALVCH162245PAG  | IDTQS3VH16210PAG     | IDT71024S15YG    | IDTQS3125QG      |
| IDT74ALVCHR162245PAG | IDTQS3VH16244PAG     | IDT71024S15YGI   | IDTQS3126QG      |
| IDT74FCT162244ATPAG  | IDTQS3VH16861PAG     | IDT71024S20YG    | IDTQS3251QG      |
| IDT74FCT162244CTPAG  | IDT72V81L20PAG       | IDT71024S20YGI   | IDTQS3253QG      |
| IDT74FCT162244ETPAG  | IDT74ALVCF162835APAG | IDT71024S25YG    | IDTQS3257QG      |
| IDT74FCT162245ATPAG  | IDT74ALVCHR16601PAG  | IDT71124S12YG    | IDTQS3VH125QG    |
| IDT74FCT162245CTPAG  | IDT74CBTLV16211PAG   | IDT71124S12YGI   | IDTQS3VH126QG    |
| IDT74FCT16244ATPAG   | IDT74CBTLV16212PAG   | IDT71124S15YG    | IDTQS3VH251QG    |
| IDT74FCT16244CTPAG   | IDT74CBTLV16292PAG   | IDT71124S15YGI   | IDTQS3VH253QG    |
| IDT74FCT16245ATPAG   | IDT74FCT162543ATPAG  | IDT71124S20YG    | IDTQS3VH257QG    |
| IDT74FCT16245CTPAG   | IDT74FCT162543CTPAG  | IDT71124S20YGI   | IDTQS4A205QG     |
| IDT74FCT16245ETPAG   | IDT74FCT162827ATPAG  | IDT71V124SA10YG  | IDT49FCT3805AQQ  |
| IDT74FCT163244APAG   | IDT74FCT162827CTPAG  | IDT71V124SA10YGI | IDT49FCT3805AQQI |
| IDT74FCT163244CPAG   | IDT74FCT16501ATPAG   | IDT71V124SA12YG  | IDT49FCT3805QG   |
| IDT74FCT163373APAG   | IDT74FCT16501CTPAG   | IDT71V124SA12YGI | IDT49FCT3805QGI  |
| IDT74FCT163373CPAG   | IDT74FST163211PAG    | IDT71V124SA15YG  | IDT74FCT3245AQQ  |
| IDT74FCT163374APAG   | IDT74FST163233PAG    | IDT71V124SA15YGI | IDT74FCT3807AQQ  |
| IDT74FCT163374CPAG   | IDT74LVC16827APAG    | IDT71016S12YG    | IDT74FCT3807AQQI |
| IDT74FCT16374ATPAG   | IDT74LVCH16543APAG   | IDT71016S12YGI   | IDT74FCT3807QG   |
| IDT74FCT16374CTPAG   | IDTCV110NPAG         | IDT71016S15YG    | IDT74FCT3807QGI  |
| IDT74FCT16374ETPAG   | IDTCV111IPAG         | IDT71016S15YGI   | IDT74FCT540ATQG  |
| IDT74FCT164245TPAG   | IDTCV125PAG          | IDT71016S20YG    | IDT74FCT540CTQG  |
| IDT74FST163245PAG    | IDTCV126PAG          | IDT71016S20YGI   | IDT74FCT573ATQG  |