



Integrated Device Technology, Inc.  
2975 Stender Way, Santa Clara, CA - 95054

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **T0404-03**      DATE: 4/28/2004  
 Product Affected: IDT82V2082  
 Date Effective: 7/28/2004

MEANS OF DISTINGUISHING CHANGED DEVICES:  
 Product Mark  
 Back Mark      "ZB" prefix  
 Date Code  
 Other

Contact: Bimla Paul  
 Title: Quality Assurance Manager      Attachment:  Yes       No  
 Phone #: (408) 654-6419  
 Fax #: (408) 492-8362      Samples: Available on request.  
 E-mail: [bimla.paul@idt.com](mailto:bimla.paul@idt.com)

**DESCRIPTION AND PURPOSE OF CHANGE:**

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

Please see attachment for detail of change.

**RELIABILITY/QUALIFICATION SUMMARY:**

Please see attachment for qualification summary.

**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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### ATTACHMENT - PCN #: T0404-03

**PCN Type:** Die Revision and datasheet change

**Datasheet Change:** Yes

**Detail of Change:** The new die revision is "ZB", and the definition of pins TERM1 and TERM2 has been changed. This change may affect current customers using the device in Hardware mode, requiring board level changes to use the new "ZB" revision. TERM1/TERM2 pins determine internal/external termination for Rx and Tx. The change will improve the device performance in regards to HPS applications. For a detailed summary of changes including updates to product datasheets, please see URL below:

IDT82V2082 <http://www1.idt.com/pcms/getDoc.taf?docID=9660>

Devices with the new TERM1/TERM2 pin definition can be identified by the top mark **date code**:

Revision	Date Code Mark
Z (current)	Zyyww
ZB (new)	ZByyww

**Note:** yy = last two digits of the year  
ww = workweek

Prior to the PCN effective date of 07/28/04, IDT will ship the current revision (Z) only, unless otherwise requested.

After the PCN effective date of 07/28/04, IDT will ship the new revision (ZB) only, unless otherwise requested. Current customers using the device in hardware mode should evaluate their board design for potential changes that may be required to use the "ZB" revision.

### Qualification Data

**Qualification Plan:** QFI-03-09

**Test Vehicle:** IDT82V2082

Test Description/Condition	Test Methods	Required SS / # Fails	Qual Test Results	
			Lot # 1	Lot # 2
Life Test (+125°C, 1000 hrs)	MIL-STD-883, Method 1005	77 / 0	77 / 0	77 / 0 <sup>[1]</sup>
Latch-Up Immunity (+ - I and V stress, + - 100 mA Trigger)	EIA/JESD 78	10 / 0	10 / 0	N/A
ESD Human Body Model (2000V)	MIL-STD-883, Method 3015	3 / 0	3 / 0	N/A
ESD Charge Device Model (500V)	JESD22-C101	3 / 0	3 / 0	N/A

**Note:**

[1] 168 hour Early Life readpoint data. 1000 hour readpoint data expected by May 31, 2004.