



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **F0305-05**      DATE: 5/31/2003  
 Product Affected:  
                                  IDT82V3001PV, IDT82V3002PV  
 Date Effective: 8/31/2003

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

Contact: Dasharath Patel  
 Title: Quality Assurance Manager      Attachment::  Yes       No  
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**DESCRIPTION AND PURPOSE OF CHANGE:**

- Die Technology
  - Wafer Fabrication Process
  - Assembly Process
  - Equipment
  - Material
  - Testing
  - Manufacturing Site
  - Data Sheet
  - Other
- Product enhancement to address the current errata for "Lock" pin as described in the attachment.
- IDT82V3001PV mark will change to IDT82V3001APV  
 IDT82V3002PV mark will change to IDT82V3002APV

**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 # F0305-05

**Qualification Plan:** QFI-01-16

**Test Vehicle:** 82V3002

Test Description/Condition	Test Methods	SS /# Fails	Lot # 1 Test Results
Temperature Cycling (-65°C to +150°C, 500 cyc)	MIL-STD-883, Method 1010	45/0	45/0
Highly Accelerated Stress Test (HAST) (100 Hrs, @130°C/85%RH,Static Bias)	EIA/JESD22-A110	45/0	45/0
Auto Clave (SPP) (168Hrs, @ 2ATM, 121°C)	EIA/JESD22-A102	45/0	45/0
Life Test (+125°C, 1000 hrs)	MIL-STD-883, Method 1005	77/0	77/0
ESD Human Body Model (2000V)	MIL-STD-883, Method 3015	9/0	9/0
ESD Charge Device Model (500V)	JESD22-C101	6/0	6/0
Latch-Up Immunity (+I and Vstress, +- 100mA Trigger)	EIA/JESD 78	10/0	10/0

**Characterization Data:** Characterization Data is available upon request.



## ATTACHMENT - PCN # F0305-05

### Conversion note for 82V3001/82V3002 to new "A" version

#### 1.) Top Mark

The top mark will change as follows

82V3001PV	will change to	82V3001APV
82V3002PV	will change to	82V3002APV

#### 2.) The new "A" version offers a fully pin compatible upgrade path

The 82V3001A is fully pin compatible with the 82V3001

The 82V3002A is fully pin compatible with the 82V3002

#### 3.) The current errata dated August 2002 has been fixed in the 3001A/3002A

**Current Errata:** Under certain conditions, the LOCK pin could give a false indication of being locked (logic high pulse) of variable duration less than 1 second.

The above described errata has been fixed in the "A" version.

For further description of the Lock Indication refer to the data sheet.

#### 4.) Improvement of TIE Enable

In the current product 82V3001/82V3002, TIE Enable is automatically enabled when the mode is changed from Auto Holdover mode to Normal mode.

The new 82V3001A/82V3002A permits the user to manually enable or disable the TIE control block with the TIE\_en pin. When TIE\_en is high, the A part acts like the non-A part.

#### 5.) BSDL Files

New BSDL files are available for the 82V3001A/82V3002A and can be downloaded from IDT's Web Page

#### 6.) JTAG IDs

The JTAG IDs have been changed with the conversion to the "A" version as shown below:

<b>82V3001A:</b>	<b>0x4BC</b>	from	82V3001:	0x41E
<b>82V3002A:</b>	<b>0x4BD</b>	from	82V3002:	0x41F