



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

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: SR-0402-02 Product Affected: IDT71V424S/L  Date Effective: 6/2/04	DATE: 3/3/04	<b>MEANS OF DISTINGUISHING CHANGED DEVICES:</b> <input type="checkbox"/> Product Mark <input type="checkbox"/> Back Mark <input checked="" type="checkbox"/> Date Code "Y" die revision in date code <input type="checkbox"/> Other
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Contact: Dennis Lantz Title: Quality / Reliability Engineer Phone #: 831-754-4597 Fax #: 831-754-4672 E-mail: dennis.lantz@idt.com	Attachment: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Samples: Refer to page 2 for sample availability
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**DESCRIPTION AND PURPOSE OF CHANGE:**

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

This is an update to PCN SR0008-03 which documented the die revision change from Z to Y. The Z step was from IDT's Cmos 10 .28um technology, the Y step is Cmos 11.5 .18um technology. The Y-step die revision is now ready for production release.

Customers may continue to order the current IDT p/n or may specify "Y" in the p/n (see attachment).

This die revision will also incorporate a data sheet change for the Isb limit. Refer to page 2 for details

**RELIABILITY/QUALIFICATION SUMMARY:**

Device qualification details shown on attachment verifies that there is no change to the device reliability

**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: _____	<input type="checkbox"/> <b><i>Approval for shipments prior to effective date.</i></b>
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____

**CUSTOMER COMMENTS:** \_\_\_\_\_

**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: \_\_\_\_\_ DATE: \_\_\_\_\_



# ATTACHMENT - PCN #: SR-0402-02

**PCN Summary**

**PCN Type:** Mask/Design Change for Die Shrink and Data Sheet change

**Commodity:** Memory

**Forecast or Execute:** Execute

**Planned or Unplanned:** Planned

**Data Sheet Change:** Isb limit

**Detail of Change**

Die Step Details

Die Revision (step)	Z	Y
Wafer Fab Technology	Cmos 10	Cmos 11.5
# Poly Layers	3	1
# Metal Layers	2	3
Minimum Feature Size	0.28 um	0.18 um
Die Dimensions (sq mils)	85k	57k

Data Sheet limit for Isb for all part#'s listed in this PCN will change as shown below  
IDT71V424YS/L and IDT71V424S/L will change to 55mA (from 40mA)

**Sample Availability:** IDT71V424Y Now

**Production Shipments:** Customer shipments for this die revision will start June 02, 2004 unless specifically requested.



## Product Details

### Current IDT Part No.

IDT71V424L10PH  
IDT71V424L10PH8  
IDT71V424L10PHI  
IDT71V424L10PHI8  
IDT71V424L10Y  
IDT71V424L10Y8  
IDT71V424L12PH  
IDT71V424L12PH8  
IDT71V424L12PHI  
IDT71V424L12PHI8  
IDT71V424L12Y  
IDT71V424L12Y8  
IDT71V424L12YI  
IDT71V424L12YI8  
IDT71V424L15PH  
IDT71V424L15PH8  
IDT71V424L15PHI  
IDT71V424L15PHI8  
IDT71V424L15Y  
IDT71V424L15Y8  
IDT71V424L15YI  
IDT71V424L15YI8  
IDT71V424S10PH  
IDT71V424S10PH8  
IDT71V424S10Y  
IDT71V424S10Y8  
IDT71V424S12PH

### Optional IDT Part No.

IDT71V424YL10PH  
IDT71V424YL10PH8  
IDT71V424YL10PHI  
IDT71V424YL10PHI8  
IDT71V424YL10Y  
IDT71V424YL10Y8  
IDT71V424YL12PH  
IDT71V424YL12PH8  
IDT71V424YL12PHI  
IDT71V424YL12PHI8  
IDT71V424YL12Y  
IDT71V424YL12Y8  
IDT71V424YL12YI  
IDT71V424YL12YI8  
IDT71V424YL15PH  
IDT71V424YL15PH8  
IDT71V424YL15PHI  
IDT71V424YL15PHI8  
IDT71V424YL15Y  
IDT71V424YL15Y8  
IDT71V424YL15YI  
IDT71V424YL15YI8  
IDT71V424YS10PH  
IDT71V424YS10PH8  
IDT71V424YS10Y  
IDT71V424YS10Y8  
IDT71V424YS12PH

### Current IDT Part No.

IDT71V424S12PH8  
IDT71V424S12PHI  
IDT71V424S12PHI8  
IDT71V424S12Y  
IDT71V424S12Y8  
IDT71V424S12YI  
IDT71V424S12YI8  
IDT71V424S15PH  
IDT71V424S15PH8  
IDT71V424S15PHI  
IDT71V424S15PHI8  
IDT71V424S15Y  
IDT71V424S15Y8  
IDT71V424S15YI  
IDT71V424S15YI8  
IDT71V424S12PHGI8  
IDT71V424S15PHG  
IDT71V424S15PHG8  
IDT71V424S15PHGI  
IDT71V424S15PHGI8  
IDT71V424S12PHG  
IDT71V424S12PHG8  
IDT71V424S12PHGI  
IDT71V424S10PHG  
IDT71V424S10PHG8  
IDT71V424S10PHGI  
IDT71V424S10PHGI8

### Optional IDT Part No.

IDT71V424YS12PH8  
IDT71V424YS12PHI  
IDT71V424YS12PHI8  
IDT71V424YS12Y  
IDT71V424YS12Y8  
IDT71V424YS12YI  
IDT71V424YS12YI8  
IDT71V424YS15PH  
IDT71V424YS15PH8  
IDT71V424YS15PHI  
IDT71V424YS15PHI8  
IDT71V424YS15Y  
IDT71V424YS15Y8  
IDT71V424YS15YI  
IDT71V424YS15YI8  
IDT71V424YS12PHGI8  
IDT71V424YS15PHG  
IDT71V424YS15PHG8  
IDT71V424YS15PHGI  
IDT71V424YS15PHGI8  
IDT71V424YS12PHG  
IDT71V424YS12PHG8  
IDT71V424YS12PHGI  
IDT71V424YS10PHG  
IDT71V424YS10PHG8  
IDT71V424YS10PHGI  
IDT71V424YS10PHGI8



## ATTACHMENT - PCN #: SR-0402-02

**Qualification Plan #:** QS-0008-10R3  
**Test Vehicle:** 71V416Y (Base device for 71V424Y)

### Qualification Results

Package Type: TSOP-44

TEST DESCRIPTION	Sample Size / # Fails	Comments
High Temperature Operating Life (Dynamic) JESD22-A108, +125°C @ 1000 hours or equivalent	347/0	
Highly Accelerated Stress Test: JEDEC STD 22, Method A110, Biased, @+130°C, +85%RH, 3 Atm, 100 hours*	90/0	
Autoclave: EIA/JESD22-A102 @ 2 ATM, Saturated Steam @ 121°C, 168 hours*	90/0	
Temperature Cycling: JESD22-A104, Condition C, -65°C to +150°C, 500 cycles*	45/0	
High Temp Storage: JESD22-A103 +150°C, 1000 hours	77/0	
ESD: Human Body Model Mil-Std-883, method 3015	6/0	Rating: 3000V
ESD: Charged device Model JEDEC 22-101	6/0	Rating: 1000V
Latch-up EIA/JESD STD-78	30/0	

\* Preconditioning per JESD22-A113B Level 3

Characterization of the IDT71V424S/L confirms that there is no change to the datasheet except as noted for the change to the Isb limits.