



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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

<p>PCN #: F0001-01 DATE: January 21, 2000 Product Affected: 72v2114Z Product Family: FIFO 72v2101, 72v2111, 72v295, 72v2105, 72v263, 72v273, 72v283, 72v293, 72v2103, 72v2113, 72v3640, 72v3650 72v3660, 72v3670, 72v3680, 72v3690, 72v36100, 72v36110 Manufacturing Location Affected: Hillsboro, OR (Fab 4) Date Effective: April 21, 2000</p>	<p>MEANS OF DISTINGUISHING CHANGED DEVICES:</p> <p><input checked="" type="checkbox"/> Product Mark <input type="checkbox"/> Back Mark <input type="checkbox"/> Date Code <input type="checkbox"/> Other</p>
<p>Contact: Dash Patel Title: Product Assurance Manager Additional Data: Electrical parameters are unchanged Phone # 408-330-1488 Fax #: 408-330-1450 Samples: Available upon request E-mail: dasharath.patel@idt.com</p>	
<p>DESCRIPTION AND PURPOSE OF CHANGE:</p> <p><input checked="" type="checkbox"/> Die Technology <input checked="" type="checkbox"/> Wafer Fabrication Process <input type="checkbox"/> Assembly Process <input type="checkbox"/> Equipment Minor mask change to improve manufacturing efficiency. <input type="checkbox"/> Material Change in stepping from 72v2114Z to 72v2114Y <input type="checkbox"/> Testing <input type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet</p>	
<p>RELIABILITY/QUALIFICATION SUMMARY: Qualification and reliability data will be available upon request.</p>	
<p>CUSTOMER ACKNOWLEDGMENT OF RECEIPT: IDT records indicate that you require written notification of this change. Please use the acknowledgement below or e-mail to 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.</p>	
<p>Customer: _____ <input type="checkbox"/> Approval for shipments prior to effective date. Name/Date: _____ E-Mail Address: _____ Title: _____ Phone# /Fax# : _____</p>	
<p>CUSTOMER COMMENTS: _____ _____</p>	
<p>RECD. BY: _____ DATE: _____</p>	

ATTACHMENT - I

PCN Summary Upgrade from stepping Z to stepping Y

PCN Type: Mask Change

Commodity FIFO

Due Date 5/1/00

Forecast or Execute Execute

Planned or Unplanned Planned

Data Sheet Change No Change

Detail of Change Change stepping from 72v2114Z to 72v2114Y

Stepping	Z	Y
Technology	CEMOS - 8	CEMOS - 8
# Meta Layers	2	
# Poly Layers	4	
Wafer Type	pprime	
Epitaxial Layer	none	S A M E
Crystal orientation	100 +/- 1 degree per SEMI STD	
Contact size	0.5 um	
Metal Via Size	0.6 um	A S
Passivation	8000A Nitride	
Metal 1 Composition	300A Ti; 1200A PVD TiN 100A CVD TiN; 4200A Al; 500A TiN	"Z"
Metal 1 thickness/space	6300 A	
Minimum Metal 1 width/space	0.6/0.6 um	
Metal 2 Composition	300A Ti; 1000A PVD TiN 9500A Al; 340A TiN	S T E P P I N G
Metal 2 thickness	11140 A	
Minimum Metal 2 width/space	0.7/0.9 um	
Gate Material	140 A gate oxide 2500 A poly	
Minimum Gate Length	0.55 um	

Conversion Schedule (Estimated)

	<u>Sample Availability</u>	<u>Production Shipments</u>
72v2114Y	5/1/00	5/1/00

ATTACHMENT - II

Qualification Plan QFI-99-06

Test Vehicle: 72v2114Y

Expected Completion Date: 5/1/00

	Qualification requirements	Expected Completion
	Samples / # fails	Date
Operating Dynamic Life test	77/0	5/1/00
1000 hours @ 135C. Vcc = 4.0 Volts		
ESD Human Body Model	12 / 0	5/1/00
ESD Charge device Model	12 / 0	5/1/00
Latch-UP	10 / 0	5/1/00
(tested to 1.5 X Vcc)		
Temperature Cycling	45 / 0	5/1/00
Electrical Characterization	10	5/1/00

Characterization Data:

The Y die step meets the current data sheet