



Integrated Device Technology, Inc.  
6024 Silver Creek Valley Road  
San Jose, CA 96138

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: <b>W1512-01</b>	DATE <b>December 18, 2015</b>	MEANS OF DISTINGUISHING CHANGED DEVICES:
Product Affected: Refer to affected parts list on attachment II		<input checked="" type="checkbox"/> Product Mark      New orderable part # <input type="checkbox"/> Back Mark                      or <input checked="" type="checkbox"/> Date Code              Y character in the date code on the top <input type="checkbox"/> Other                      mark
Date Effective: <b>March 18, 2016</b>		
Contact: IDT PCN DESK		Attachment: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E-mail: <a href="mailto:pcndesk@idt.com">pcndesk@idt.com</a>		Samples: Available upon request

**DESCRIPTION AND PURPOSE OF CHANGE:**

<input type="checkbox"/> Die Technology	This notification is to advise our customers that IDT parts manufactured at Global Foundries Singapore on the CMOS 0.13um 1P6M process, are being converted to a 300mm wafer size from a 200mm wafer size. This change is being made to modernize the process tool set and provide productivity enhancements.
<input type="checkbox"/> Wafer Fabrication Process	
<input type="checkbox"/> Assembly Process	
<input checked="" type="checkbox"/> Equipment	There is no change to the product design or process technology.
<input type="checkbox"/> Material	There is also no change to the package, backend manufacturing process or the the data sheet with the exception of part # change on select devices.
<input type="checkbox"/> Testing	
<input type="checkbox"/> Manufacturing Site	Refer to attachment I for the qualification report.
<input type="checkbox"/> Data Sheet	
<input type="checkbox"/> Other	There is a change to the ordering part number on select devices. Refer to the affected parts list on attachment II for details on the means to distinguish the change.

**RELIABILITY/QUALIFICATION SUMMARY:**  
Based on wafer and component level qualification to date and characterization tests, there is no change to the performance or reliability of the product.

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

**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: _____	DATE: _____
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## ATTACHMENT I - PCN # : W1512-01

### Qualification Report

An updated Qualification report will be sent out in January 2016.

Test Description	Conditions	1 <sup>st</sup> Lot	2 <sup>nd</sup> Lot	3 <sup>rd</sup> Lot	Comments
		SS / Results	SS / Results	SS / Results	
High Temperature Operating Life	JESD22-A108, +125°C, Vccmax, 1000hrs	77/0 @ 500 hours/ (1000 hours due January 15, 2016)	77/0 @ 500 hours/ (1000 hours due January 15, 2016)	77/0 @ 500 hours/ (1000 hours due January 15, 2016)	
High Temperature Storage	JESD22-A103, +150C, 1000 hours	25/0	25/0	(In progress / due January 15, 2016)	
Temperature Cycle <sup>1</sup>	JESD22-A104, Condition B, 700 cycles	25/0	25/0	(In progress / due January 15, 2016)	
HAST <sup>1</sup>	JESD22-A110 130°C, 85% RH, Vcc max.	25/0	25/0	(In progress / due January 15, 2016)	
Bond Pull Strength	M2011	5/0	5/0	n/a	30 balls / 5 units 2 lots
ESD: Human Body Model	JESD22-A114 (JS-001) Classification	Pass @ 2500V	Pass @ 2500V	(In progress / due January 15, 2016)	
ESD: Charged Device Model	JESD22-C101 Classification	Pass @ 1500V	Pass @ 1500V	(In progress / due January 15, 2016)	
Latch Up	JESD78 TA at room and max ambient operating temperature per datasheet	6 /0	6/0	6/0	

Note 1: For HAST and Temperature Cycle, samples have been subjected to pre-conditioning per JESD22-A113

## ATTACHMENT II - PCN # : W1512-01

### Affected Parts List

Part#	Means of Distinguishing Change
8T49N2083-01NLGI	"Y" character on top mark in the date code
8T49N2083-01NLGI#	"Y" character on top mark in the date code
8T49N2083-01NLGI8	"Y" character on top mark in the date code
8T49N2083NLGI	"Y" character on top mark in the date code
8T49N2083NLGI#	"Y" character on top mark in the date code
8T49N2083NLGI8	"Y" character on top mark in the date code
8T49N241-001NLGI	"Y" character on top mark in the date code
8T49N241-001NLGI8	"Y" character on top mark in the date code
8T49N241-002NLGI	"Y" character on top mark in the date code
8T49N241-002NLGI8	"Y" character on top mark in the date code
8T49N241-003NLGI	"Y" character on top mark in the date code
8T49N241-003NLGI8	"Y" character on top mark in the date code
8T49N241-005NLGI	"Y" character on top mark in the date code
8T49N241-005NLGI8	"Y" character on top mark in the date code
8T49N241-006NLGI	"Y" character on top mark in the date code
8T49N241-006NLGI8	"Y" character on top mark in the date code
8T49N241-007NLGI	"Y" character on top mark in the date code
8T49N241-007NLGI8	"Y" character on top mark in the date code
8T49N241-008NLGI	"Y" character on top mark in the date code
8T49N241-008NLGI8	"Y" character on top mark in the date code
8T49N241-501NLGI	"Y" character on top mark in the date code
8T49N241-501NLGI8	"Y" character on top mark in the date code
8T49N241-997NLGI	"Y" character on top mark in the date code
8T49N241-997NLGI8	"Y" character on top mark in the date code
8T49N241-998NLGI	"Y" character on top mark in the date code
8T49N241-998NLGI#	"Y" character on top mark in the date code
8T49N241-998NLGI8	"Y" character on top mark in the date code
8T49N241-999NLGI	"Y" character on top mark in the date code
8T49N241-999NLGI#	"Y" character on top mark in the date code
8T49N241-999NLGI8	"Y" character on top mark in the date code
8T49N241NLGI	"Y" character on top mark in the date code
8T49N241NLGI8	"Y" character on top mark in the date code
8T49N242-001NLGI	"Y" character on top mark in the date code
8T49N242-001NLGI8	"Y" character on top mark in the date code
8T49N242-002NLGI	"Y" character on top mark in the date code
8T49N242-002NLGI8	"Y" character on top mark in the date code
8T49N242-004NLGI	"Y" character on top mark in the date code
8T49N242-004NLGI8	"Y" character on top mark in the date code
8T49N242-006NLGI	"Y" character on top mark in the date code
8T49N242-006NLGI8	"Y" character on top mark in the date code
8T49N242-007NLGI	"Y" character on top mark in the date code
8T49N242-007NLGI8	"Y" character on top mark in the date code
8T49N242-008NLGI	"Y" character on top mark in the date code
8T49N242-008NLGI8	"Y" character on top mark in the date code
8T49N242-009NLGI	"Y" character on top mark in the date code
8T49N242-009NLGI8	"Y" character on top mark in the date code
8T49N242-010NLGI	"Y" character on top mark in the date code
8T49N242-010NLGI8	"Y" character on top mark in the date code
8T49N242-501NLGI	"Y" character on top mark in the date code
8T49N242-501NLGI8	"Y" character on top mark in the date code
8T49N242-502NLGI	"Y" character on top mark in the date code
8T49N242-502NLGI8	"Y" character on top mark in the date code
8T49N242-503NLGI	"Y" character on top mark in the date code
8T49N242-503NLGI8	"Y" character on top mark in the date code

**ATTACHMENT II - PCN # : W1512-01****Affected Parts List**

<b>Part#</b>	<b>Means of Distinguishing Change</b>
8T49N242-997NLGI	"Y" character on top mark in the date code
8T49N242-997NLGI8	"Y" character on top mark in the date code
8T49N242-998NLGI	"Y" character on top mark in the date code
8T49N242-998NLGI#	"Y" character on top mark in the date code
8T49N242-998NLGI8	"Y" character on top mark in the date code
8T49N242-999NLGI	"Y" character on top mark in the date code
8T49N242-999NLGI#	"Y" character on top mark in the date code
8T49N242-999NLGI8	"Y" character on top mark in the date code
8T49N242NLGI	"Y" character on top mark in the date code
8T49N242NLGI8	"Y" character on top mark in the date code
8T49N281B-001NLGI	8T49N281C-001NLGI
8T49N281B-001NLGI8	8T49N281C-001NLGI8
8T49N281B-003NLGI	8T49N281C-003NLGI
8T49N281B-003NLGI8	8T49N281C-003NLGI8
8T49N281B-004NLGI	8T49N281C-004NLGI
8T49N281B-004NLGI8	8T49N281C-004NLGI8
8T49N281B-005NLGI	8T49N281C-005NLGI
8T49N281B-005NLGI8	8T49N281C-005NLGI8
8T49N281B-006NLGI	8T49N281C-006NLGI
8T49N281B-006NLGI8	8T49N281C-006NLGI8
8T49N281B-007NLGI	8T49N281C-007NLGI
8T49N281B-007NLGI8	8T49N281C-007NLGI8
8T49N281B-009NLGI	8T49N281C-009NLGI
8T49N281B-009NLGI8	8T49N281C-009NLGI8
8T49N281B-011NLGI	8T49N281C-011NLGI
8T49N281B-011NLGI8	8T49N281C-011NLGI8
8T49N281B-013NLGI	8T49N281C-013NLGI
8T49N281B-013NLGI8	8T49N281C-013NLGI8
8T49N281B-014NLGI	8T49N281C-014NLGI
8T49N281B-014NLGI8	8T49N281C-014NLGI8
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8T49N281B-019NLGI8	8T49N281C-019NLGI8
8T49N281B-020NLGI	8T49N281C-020NLGI
8T49N281B-020NLGI8	8T49N281C-020NLGI8
8T49N281B-021NLGI	8T49N281C-021NLGI
8T49N281B-021NLGI8	8T49N281C-021NLGI8
8T49N281B-022NLGI	8T49N281C-022NLGI
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8T49N281B-024NLGI	8T49N281C-024NLGI
8T49N281B-024NLGI8	8T49N281C-024NLGI8
8T49N281B-025NLGI	8T49N281C-025NLGI
8T49N281B-025NLGI8	8T49N281C-025NLGI8
8T49N281B-026NLGI	8T49N281C-026NLGI
8T49N281B-026NLGI8	8T49N281C-026NLGI8
8T49N281B-027NLGI	8T49N281C-027NLGI

**ATTACHMENT II - PCN # : W1512-01****Affected Parts List**

<b>Part#</b>	<b>Means of Distinguishing Change</b>
8T49N281B-027NLGI8	8T49N281C-027NLGI8
8T49N281B-998NLGI	8T49N281C-998NLGI
8T49N281B-998NLGI8	8T49N281C-998NLGI8
8T49N281B-999NLGI	8T49N281C-999NLGI
8T49N281B-999NLGI8	8T49N281C-999NLGI8
8T49N281BNLGI	8T49N281CNLGI
8T49N281BNLGI8	8T49N281CNLGI8
8T49N282B-002NLGI	8T49N282C-002NLGI
8T49N282B-002NLGI8	8T49N282C-002NLGI8
8T49N282B-004NLGI	8T49N282C-004NLGI
8T49N282B-004NLGI8	8T49N282C-004NLGI8
8T49N282B-005NLGI	8T49N282C-005NLGI
8T49N282B-005NLGI8	8T49N282C-005NLGI8
8T49N282B-013NLGI	8T49N282C-013NLGI
8T49N282B-013NLGI8	8T49N282C-013NLGI8
8T49N282B-014NLGI	8T49N282C-014NLGI
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8T49N282B-015NLGI	8T49N282C-015NLGI
8T49N282B-015NLGI8	8T49N282C-015NLGI8
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8T49N282B-017NLGI8	8T49N282C-017NLGI8
8T49N282B-998NLGI	8T49N282C-998NLGI
8T49N282B-998NLGI8	8T49N282C-998NLGI8
8T49N282B-999NLGI	8T49N282C-999NLGI
8T49N282B-999NLGI8	8T49N282C-999NLGI8
8T49N282BNLGI	8T49N282CNLGI
8T49N282BNLGI8	8T49N282CNLGI8
8T49N283B-002NLGI	8T49N283C-002NLGI
8T49N283B-002NLGI8	8T49N283C-002NLGI8
8T49N283B-004NLGI	8T49N283C-004NLGI
8T49N283B-004NLGI8	8T49N283C-004NLGI8
8T49N283B-005NLGI	8T49N283C-005NLGI
8T49N283B-005NLGI8	8T49N283C-005NLGI8
8T49N283B-006NLGI	8T49N283C-006NLGI
8T49N283B-006NLGI8	8T49N283C-006NLGI8
8T49N283B-007NLGI	8T49N283C-007NLGI
8T49N283B-007NLGI8	8T49N283C-007NLGI8
8T49N283B-008NLGI	8T49N283C-008NLGI
8T49N283B-008NLGI8	8T49N283C-008NLGI8
8T49N283B-009NLGI	8T49N283C-009NLGI
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8T49N283B-011NLGI#	8T49N283C-011NLGI#
8T49N283B-011NLGI8	8T49N283C-011NLGI8
8T49N283B-012NLGI	8T49N283C-012NLGI
8T49N283B-012NLGI8	8T49N283C-012NLGI8
8T49N283B-013NLGI	8T49N283C-013NLGI
8T49N283B-013NLGI8	8T49N283C-013NLGI8
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8T49N283B-014NLGI8	8T49N283C-014NLGI8
8T49N283B-015NLGI	8T49N283C-015NLGI
8T49N283B-015NLGI8	8T49N283C-015NLGI8
8T49N283B-998NLGI	8T49N283C-998NLGI

**ATTACHMENT II - PCN # : W1512-01****Affected Parts List**

<b>Part#</b>	<b>Means of Distinguishing Change</b>
8T49N283B-998NLGI#	8T49N283C-998NLGI#
8T49N283B-998NLGI8	8T49N283C-998NLGI8
8T49N283B-999NLGI	8T49N283C-999NLGI
8T49N283B-999NLGI#	8T49N283C-999NLGI#
8T49N283B-999NLGI8	8T49N283C-999NLGI8
8T49N283BNLGI	8T49N283CNLGI
8T49N283BNLGI8	8T49N283CNLGI8
8T49N285-001NLGI	8T49N285A-001NLGI
8T49N285-001NLGI8	8T49N285A-001NLGI8
8T49N285-002NLGI	8T49N285A-002NLGI
8T49N285-002NLGI8	8T49N285A-002NLGI8
8T49N285-003NLGI	8T49N285A-003NLGI
8T49N285-003NLGI8	8T49N285A-003NLGI8
8T49N285-004NLGI	8T49N285A-004NLGI
8T49N285-004NLGI8	8T49N285A-004NLGI8
8T49N285-006NLGI	8T49N285A-006NLGI
8T49N285-006NLGI8	8T49N285A-006NLGI8
8T49N285-007NLGI	8T49N285A-007NLGI
8T49N285-007NLGI8	8T49N285A-007NLGI8
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8T49N285-008NLGI8	8T49N285A-008NLGI8
8T49N285-009NLGI	8T49N285A-009NLGI
8T49N285-009NLGI8	8T49N285A-009NLGI8
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8T49N285-017NLGI8	8T49N285A-017NLGI8
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8T49N285-998NLGI	8T49N285A-998NLGI
8T49N285-998NLGI8	8T49N285A-998NLGI8
8T49N285-999NLGI	8T49N285A-999NLGI
8T49N285-999NLGI8	8T49N285A-999NLGI8
8T49N285NLGI	8T49N285ANLGI
8T49N285NLGI8	8T49N285ANLGI8
8T49N286-001NLGI	8T49N286A-001NLGI
8T49N286-001NLGI8	8T49N286A-001NLGI8
8T49N286-002NLGI	8T49N286A-002NLGI
8T49N286-002NLGI8	8T49N286A-002NLGI8
8T49N286-003NLGI	8T49N286A-003NLGI
8T49N286-003NLGI8	8T49N286A-003NLGI8
8T49N286-004NLGI	8T49N286A-004NLGI
8T49N286-004NLGI8	8T49N286A-004NLGI8
8T49N286-005NLGI	8T49N286A-005NLGI
8T49N286-005NLGI8	8T49N286A-005NLGI8
8T49N286-006NLGI	8T49N286A-006NLGI
8T49N286-006NLGI8	8T49N286A-006NLGI8
8T49N286-007NLGI	8T49N286A-007NLGI
8T49N286-007NLGI8	8T49N286A-007NLGI8

## ATTACHMENT II - PCN # : W1512-01

### Affected Parts List

Part#	Means of Distinguishing Change
8T49N286-008NLGI	8T49N286A-008NLGI
8T49N286-008NLGI8	8T49N286A-008NLGI8
8T49N286-009NLGI	8T49N286A-009NLGI
8T49N286-009NLGI8	8T49N286A-009NLGI8
8T49N286-011NLGI	8T49N286A-011NLGI
8T49N286-011NLGI8	8T49N286A-011NLGI8
8T49N286-012NLGI	8T49N286A-012NLGI
8T49N286-012NLGI8	8T49N286A-012NLGI8
8T49N286-997NLGI	8T49N286A-997NLGI
8T49N286-997NLGI8	8T49N286A-997NLGI8
8T49N286-998NLGI	8T49N286A-998NLGI
8T49N286-998NLGI#	8T49N286A-998NLGI#
8T49N286-998NLGI8	8T49N286A-998NLGI8
8T49N286-999NLGI	8T49N286A-999NLGI
8T49N286-999NLGI8	8T49N286A-999NLGI8
8T49N286NLGI	8T49N286ANLGI
8T49N286NLGI8	8T49N286ANLGI8
8T49N287-001NLGI	8T49N287A-001NLGI
8T49N287-001NLGI8	8T49N287A-001NLGI8
8T49N287-002NLGI	8T49N287A-002NLGI
8T49N287-002NLGI8	8T49N287A-002NLGI8
8T49N287-003NLGI	8T49N287A-003NLGI
8T49N287-003NLGI#	8T49N287A-003NLGI#
8T49N287-003NLGI8	8T49N287A-003NLGI8
8T49N287-004NLGI	8T49N287A-004NLGI
8T49N287-004NLGI8	8T49N287A-004NLGI8
8T49N287-005NLGI	8T49N287A-005NLGI
8T49N287-005NLGI8	8T49N287A-005NLGI8
8T49N287-006NLGI	8T49N287A-006NLGI
8T49N287-006NLGI8	8T49N287A-006NLGI8
8T49N287-007NLGI	8T49N287A-007NLGI
8T49N287-007NLGI8	8T49N287A-007NLGI8
8T49N287-008NLGI	8T49N287A-008NLGI
8T49N287-008NLGI8	8T49N287A-008NLGI8
8T49N287-009NLGI	8T49N287A-009NLGI
8T49N287-009NLGI8	8T49N287A-009NLGI8
8T49N287-010NLGI	8T49N287A-010NLGI
8T49N287-010NLGI8	8T49N287A-010NLGI8
8T49N287-011NLGI	8T49N287A-011NLGI
8T49N287-011NLGI8	8T49N287A-011NLGI8
8T49N287-012NLGI	8T49N287A-012NLGI
8T49N287-012NLGI8	8T49N287A-012NLGI8
8T49N287-014NLGI	8T49N287A-014NLGI
8T49N287-014NLGI8	8T49N287A-014NLGI8
8T49N287-016NLGI	8T49N287A-016NLGI
8T49N287-016NLGI8	8T49N287A-016NLGI8
8T49N287-017NLGI	8T49N287A-017NLGI
8T49N287-017NLGI8	8T49N287A-017NLGI8
8T49N287-018NLGI	8T49N287A-018NLGI
8T49N287-018NLGI8	8T49N287A-018NLGI8
8T49N287-019NLGI	8T49N287A-019NLGI
8T49N287-019NLGI8	8T49N287A-019NLGI8
8T49N287-020NLGI	8T49N287A-020NLGI
8T49N287-020NLGI8	8T49N287A-020NLGI8
8T49N287-021NLGI	8T49N287A-021NLGI
8T49N287-021NLGI8	8T49N287A-021NLGI8

## ATTACHMENT II - PCN # : W1512-01

### Affected Parts List

Part#	Means of Distinguishing Change
8T49N287-996NLGI	8T49N287A-996NLGI
8T49N287-996NLGI8	8T49N287A-996NLGI8
8T49N287-998NLGI	8T49N287A-998NLGI
8T49N287-998NLGI#	8T49N287A-998NLGI#
8T49N287-998NLGI8	8T49N287A-998NLGI8
8T49N287-999NLGI	8T49N287A-999NLGI
8T49N287-999NLGI#	8T49N287A-999NLGI#
8T49N287-999NLGI8	8T49N287A-999NLGI8
8T49N287NLGI	8T49N287ANLGI
8T49N287NLGI8	8T49N287ANLGI8
8V49N305NLGI	"Y" character on top mark in the date code
8V49N305NLGI8	"Y" character on top mark in the date code
8V97051NLGI	"Y" character on top mark in the date code
8V97051NLGI/W	"Y" character on top mark in the date code
8V97051NLGI8	"Y" character on top mark in the date code