



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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: L1301-01	DATE: April 3, 2013	MEANS OF DISTINGUISHING CHANGED DEVICES: <input checked="" type="checkbox"/> Product Mark Device Step (prefix prior Date Code) changed from A4 to A5 <input type="checkbox"/> Back Mark <input type="checkbox"/> Date Code <input type="checkbox"/> Other
Product Affected: 74LVCHR162245APAG 74LVCHR162245APAG8		
Date Effective: July 3, 2013		

Contact: IDT PCN DESK	Attachment: <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
E-mail: pcndesk@idt.com	Samples:	Please contact your local IDT sales representative for sample request

DESCRIPTION AND PURPOSE OF CHANGE:

<input type="checkbox"/> Die Technology	
<input type="checkbox"/> Wafer Fabrication Process	This notification is to advise our customers that IDT has successfully completed the transfer of 74LVCHR162245APAG/8 wafer Fab production from IDT Hillsboro, Oregon (Fab4) to Taiwan Semiconductor Manufacturing Corporation (TSMC).
<input type="checkbox"/> Assembly Process	
<input type="checkbox"/> Equipment	
<input type="checkbox"/> Material	Fab 4 is now closed and all new wafer fab production will be from TSMC.
<input type="checkbox"/> Testing	
<input checked="" type="checkbox"/> Manufacturing Site	There is no change to ordering part number and device top mark .
<input type="checkbox"/> Data Sheet	Refer to Attachment 1 & 2 for details.
<input type="checkbox"/> Other	

RELIABILITY/QUALIFICATION SUMMARY:
Please refer Attachment 2.

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# : _____

CUSTOMER COMMENTS: _____

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____	DATE: _____
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ATTACHMENT 1 - PCN # : L1301-01

PCN Type: Wafer Fab Manufacturing Site Change - IDT Fab 4 to TSMC

Data Sheet Change: None

Detail Of Change:

This notification is to advise our customers that IDT has successfully completed the transfer of 74LVCHR162245APAG/8 wafer Fab production from IDT Hillsboro, Oregon (Fab4) to Taiwan Semiconductor Manufacturing Corporation (TSMC).

Fab 4 is now closed and all new wafer fab production will be from TSMC.

There is no change to ordering part number and device top mark .

Characterization data of material manufactured at TSMC is comparable to material manufactured at IDT Fab 4, Hillsboro.

Please contact your local IDT sales representative to request samples or additional information.



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ATTACHMENT 2 - PCN # : L1301-01

TSMC Transfer Qualification Test Result Summary

Technology Information: 0.5 μm

Fab Location: TSMC Fab 3

Technology Qualification Vehicle Test Summary – JESD47 Recommended Tests

Test / Conditions	Lead Vehicle: LVC16244A (40056X)
	Sample Size / Rejects/ each lot
High Temperature Operating Life (Dynamic) JESD22-A108B, +125°C @ 1000 hours or equivalent	79 / 0
Temperature Cycle JESD22-A104B, -55°C /125°C, 1000 cycles	45 / 0
High Temperature Storage Bake JESD22-A-103-B, 150°C, 1000 hrs	77 / 0
ESD: Human Body Model JESD22-A114F, >2000V	5 / 0
ESD: Charged Device Model JEDEC 22-101C, >500V	5 / 0
ESD: Machine Model JESD22-A115B, >200V	5 / 0
Latch-up JESD78B	6 / 0
Electrical Characterization per Datasheet conditions	5 / 0

Technology Qualification Vehicle Test Summary – Supplemental Tests

Test / Conditions	Lead Vehicle: : LVC16244A (40056X)
	Sample Size / Rejects/ each lot
Ball Shear Test JESD22-B116-A, Ball Shear Strength > 5.7g	5 / 0
Highly Accelerated Stress Test (HAST) EIA/JESD22-A110B, 130°C/85%R.H. Vcc max for 100 hours.	45 / 0
Autoclave EIA/JESD22-A102C, 168hrs @ 2 ATM, Saturated Steam @ 121°C	45 / 0

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