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

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **W1510-01** DATE: **March 14, 2016**

Product Affected: 280G-50LF(T), 280G-57LF(T), 290GI-34LF(T)

Date Effective: **June 14, 2016**

MEANS OF DISTINGUISHING CHANGED DEVICES:

- ☐ Product Mark
- ☐ Back Mark
- ■ Date Code Prefix Z5 before datecode
- ☐ Other

Contact: IDT PCN DESK

E-mail: pcndesk@idt.com

Attachment: ■ Yes ☐ No

Samples: Available upon request

DESCRIPTION AND PURPOSE OF CHANGE:

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

This notification is to advise our customers that IDT has made a change to the wafer fabrication production site from United Microelectronics Corporation (UMC) to Taiwan Semiconductor Manufacturing Corporation (TSMC).
The UMC wafer technology is a .35um process and will be manufactured on a TSMC .35um process. This process has been previously qualified by IDT and with the same fab base used for the parts on this PCN.

There is no expected change to the data sheet, package or backend manufacturing process.

There is no change in ordering part number. The change will be indicated by a die step change on the top mark.

Please see attachments for qualification data.

RELIABILITY/QUALIFICATION SUMMARY:

Based on wafer and component level qualification 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: _____ ☐ ***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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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN # : W1510-01

PCN Type: Wafer Fab Manufacturing Site Change - UMC to TSMC

Data Sheet Change: No

Detail Of Change:

This notification is to advise our customers that IDT has made a change to the wafer fabrication production site from United Microelectronics Corporation (UMC) to Taiwan Semiconductor Manufacturing Corporation (TSMC). The UMC wafer technology is a .35um process and will be manufactured on a TSMC .35um process. This process has been previously qualified by IDT and with the same fab base used for the parts on this PCN.

There is no expected change to the data sheet, package or backend manufacturing process.

There is no change in ordering part number. The change will be indicated by a die step change on the top mark.

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

Integrated Device Technology, Inc.

Qualification Test Result Summary

Product: 280G-50LF

Foundry: TSMC

Technology Information: CMOS 0.35 μm

Report Date: Oct 15, 2015

Device Qual Test Results Summary

Test Description	Conditions	Sample Size	Rejects	Comments
ESD: Human Body Model	IDT Spec	3	0	2000V
ESD: Charged Device Model	JESD22-C101	3	0	750V
Latch-Up	JESD78	6	0	
Electrical Characterization	Per Datasheet	10*	-	

Note: * Sample size applies to base characterization

Integrated Device Technology, Inc.

Qualification Test Result Summary

Product: 280G-57LF

Foundry: TSMC

Technology Information: CMOS 0.35 μm

Report Date: Oct 15, 2015

Device Qual Test Results Summary

Test Description	Conditions	Sample Size	Rejects	Comments
ESD: Human Body Model	IDT Spec	3	0	2000V
ESD: Charged Device Model	JESD22-C101	3	0	750V
Latch-Up	JESD78	6	0	
Electrical Characterization	Per Datasheet	10*	-	

Note: * Sample size applies to base characterization

Integrated Device Technology, Inc.

Qualification Test Result Summary

Product: 290GI-34LF

Foundry: TSMC

Technology Information: CMOS 0.35 μm

Report Date: Oct 15, 2015

Device Qual Test Results Summary

Test Description	Conditions	Sample Size	Rejects	Comments
ESD: Human Body Model	IDT Spec	3	0	2000V
ESD: Charged Device Model	JESD22-C101	3	0	750V
Latch-Up	JESD78	6	0	
Electrical Characterization	Per Datasheet	10*	-	

Note: * Sample size applies to base characterization

Integrated Device Technology, Inc.

Qualification Test Result Summary

Foundry: TSMC

Technology Information: CMOS 0.35 μm

Qualification Test Result Summary – JESD47 Recommended Tests

Test /Conditions	Conditions	Sample Size	Rejects	Comments
High Temperature Operating Life (Dynamic)	JESD22-A108D, +125°C, Vccmax @ 1000 hours or equivalent	77 77 77	0 0 0	
Temperature Cycle	JESD22-A104D, -55°C to +125°C, 700 cycles	25 25 25	0 0 0	
High Temperature Storage Bake	JESD22-A-103D, 150°C, 1000 hrs	25 25 25	0 0 0	
Highly Accelerated Stress Test (HAST)	EIA/JESD22-A110D, 130°C/85%R.H. Vcc max for 100 hours.	25 25 25	0 0 0	
Ball Shear Test	JESD22-B116A, Ball Shear Strength	5	0	

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