



**PCN# 20110607001A**

**Qualification of Vanguard Facility as an additional FAB site source for selected devices in the 0.60UM Process**  
**Change Notification / Sample Request**

**Date:** 6/6/2013  
**To:** MOUSER PCN

Dear Customer:

The purpose of Revision A is to remove AMC7823xxx and ADS7828xxx devices from this change.

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The changes discussed within this PCN will not take effect any earlier than **90** days from the date of this notification, unless customer agreement has been reached on an earlier implementation of the change. This notification period is per TI's standard process.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager ([PCN\\_ww\\_admin\\_team@list.ti.com](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

PCN Team  
SC Business Services  
Phone: +1(214) 480-6037  
Fax: +1(214) 480-6659

**20110607001A****Attachment: 1****Products Affected:**

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
ADS7828E/250	null
AMC7823IRTAT	null
ADS7828EB/250	null

Technical details of this Product Change follow on the next page(s).

<b>PCN Number:</b>	PCN20110607001A			<b>PCN Date:</b>	06/07/2013													
<b>Title:</b>	Qualification of Vanguard Facility as an additional FAB site source for selected devices in the 0.60UM process																	
<b>Customer Contact:</b>	PCN Manager	<b>Phone:</b>	+1(214)480-6037		<b>Dept:</b>	Quality Services												
<b>*Proposed 1<sup>st</sup> Ship Date:</b>	06/07/2013																	
<b>Change Type:</b>																		
<input type="checkbox"/> Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials														
<input type="checkbox"/> Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification														
<input type="checkbox"/> Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process														
<input type="checkbox"/> Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process														
<input checked="" type="checkbox"/> Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process														
<b>PCN Details</b>																		
<b>Description of Change:</b>																		
<p>The purpose of Rev A is to <u>remove</u> <u>AMC7823xxx</u> and <u>ADS7828xxx</u> devices from this change. They are identified in the Product Affected Section in yellow highlight, bold font and strikethrough. These devices will continue to be sourced out of TSMC-WF2. The remaining devices are qualified for this change.</p> <p>Texas Instruments is pleased to announce the qualification of its Vanguard fabrication facility as an additional wafer FAB source for the selected devices listed in "Product Affected" section.</p>																		
Currently Qualified Sites, Process, wafer dia.		<b>Additional Site, Process, wafer dia.</b>																
TSMC-WF2, 0.60UM, 200mm		<b>Vanguard, VIS 0.6/0.5UM DPDM, 200mm</b>																
The Vanguard .5um/ .6um DPDM process was previously qualified on 6/12/2006. Qualification details are provided in the Qual Data Section.																		
<b>Reason for Change:</b>																		
Continuity of Supply																		
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																		
None																		
<b>Changes to product identification resulting from this PCN:</b>																		
<p><b>Current</b></p> <table border="1"> <tr> <td>Chip Site</td> <td>Chip site code (20L)</td> <td>Chip country code (21L)</td> </tr> <tr> <td>TSMC-WF2</td> <td>TS2</td> <td>TWN</td> </tr> </table> <p><b>New</b></p> <table border="1"> <tr> <td>Chip Site</td> <td>Chip site code (20L)</td> <td>Chip country code (21L)</td> </tr> <tr> <td><b>Vanguard (VIS)</b></td> <td><b>VAN</b></td> <td><b>TWN</b></td> </tr> </table>							Chip Site	Chip site code (20L)	Chip country code (21L)	TSMC-WF2	TS2	TWN	Chip Site	Chip site code (20L)	Chip country code (21L)	<b>Vanguard (VIS)</b>	<b>VAN</b>	<b>TWN</b>
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<b>Vanguard (VIS)</b>	<b>VAN</b>	<b>TWN</b>																
Sample product shipping label (not actual product label)																		
<p>TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20: MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750</p> <p>(P) SN74LS07NSR (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ACO:MLA (23L) ACO:MYS</p>																		

<b>Product Affected:</b>				
<b>ADS7828E/250</b>	ADS7830IPWR	DDC112U	DDC112Y/250	
<b>ADS7828E/250G4</b>	ADS7830IPWRG4	DDC112U/1K	DDC112Y/250G4	
<b>ADS7828E/2K5</b>	ADS7830IPWT	DDC112U/1KG4	DDC112Y/2K	
<b>ADS7828E/2K5G4</b>	ADS7830IPWTG4	DDC112UG4	DDC112Y/2KG4	
<b>ADS7828EB/250</b>	<b>AMC7823IRTAR</b>	DDC112UK	DDC112YK/250	
<b>ADS7828EB/250G4</b>	<b>AMC7823IRTARG4</b>	DDC112UK/1K	DDC112YK/250G4	
<b>ADS7828EB/2K5</b>	<b>AMC7823IRTAT</b>	DDC112UK/1KG4	HPA00476EB/2K5	
<b>ADS7828EB/2K5G4</b>	<b>AMC7823IRTATG4</b>	DDC112UKG4		

<b>Qualification Data:</b>				
This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.				
<b>Qual Vehicle: ADS7830IPW (Approved: 12/6/2011)</b>				
Wafer Fab Site:	Vanguard	Metallization:	0.3kÅTi/1kÅTiN/ 4kÅAlCu/1.4kÅTiN	
Wafer Fab Process:	VIS 0.6/0.5UM DPDM	Wafer diameter:	200mm	
<b>Qualification:</b> <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size		
		Lot#1	Lot#2	Lot#3
Electrical Characterization	Per Datasheet	Pass	-	-
ESD HBM	Per JEDEC	3/0	-	-
Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	-	-
<b>(Vanguard .5um/ .6um DPDM process Approved 6/12/2006)</b>				
<b>Qual Vehicle 1: DDC112Y</b>				
Wafer Fab Site:	Vanguard	Metallization:	0.3kÅTi/1kÅTiN/ 4kÅAlCu/1.4kÅTiN	
Wafer Fab Process:	VIS 0.6/0.5UM DPDM	Wafer diameter:	200mm	
<b>Qualification:</b> <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size		
		Lot#1	Lot#2	Lot#3
**Steady-state Life Test	150C (300 Hrs)	116/0	-	-
Electrical Char.	Per Datasheet	Pass	-	-
**High Temp. Storage Bake	170C (168, 420hrs)	77/0	-	-
**Biased HAST	130C/85%RH (96 Hrs)	77/0	-	-
**Autoclave 121C	121C, 15 PSI (240 Hrs)	77/0	-	-
**T/C -65C/150C	-65C/+150C (1000 Cyc)	77/0	-	-
ESD HBM	Per JEDEC	3/0	-	-
ESD CDM	Per JEDEC	3/0	-	-
Electromigration	-	Pass	-	-
Hot Electron Injection	-	Pass	-	-
Die Shear	(MQ)	10/0	-	-
Latch-up	(per JESD78)	6/0	-	-
Manufacturability	(per mfg. Site specification)	Pass	-	-
**Thermal Shock	-65C/+150C (1000 Cyc)	77/0	-	-
Ball Bond Shear	50 Ball bonds, min 5 units	50/0	-	-
** Preconditioning sequence: level 2 @ 260C				

<b>Qual Vehicle 2: OPA343U</b>							
Wafer Fab Site:	Vanguard	Metallization:	0.3kÅTi/1kÅTiN/ 4kÅAlCu/1.4kÅTiN				
Wafer Fab Process:	VIS 0.6/0.5UM DPDM	Wafer diameter:	200mm				
<b>Qualification:</b> <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results							
Reliability Test		Conditions		Sample Size			
				Lot#1	Lot#2		
**Steady-state Life Test		150C (300 Hrs)		116/0	-		
Wire Pull		-		10/0	-		
Electrical Characterization		-		Pass	-		
**Autoclave 121C		121C, 15 PSI (96 Hrs)		80/0	-		
**T/C -65C/150C		-65C/+150C (500 Cyc)		80/0	-		
ESD HBM		Per JEDEC		3/0	-		
Electromigration		-		Pass	-		
Hot Electron Injection		-		Pass	-		
Latch-up		(per JESD78)		24/0	-		
Bond Shear		-		40/0	-		
** Preconditioning sequence: level 2 @ 260C							
<b>Qual Vehicle 3: TSC2046IPW</b>							
Wafer Fab Site:	Vanguard	Metallization:	0.3kÅTi/1kÅTiN/ 4kÅAlCu/1.4kÅTiN				
Wafer Fab Process:	VIS 0.6/0.5UM DPDM	Wafer diameter:	200mm				
<b>Qualification:</b> <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results							
Reliability Test		Conditions		Sample Size			
				Lot#1	Lot#2		
**Steady-state Life Test		150C (300 Hrs)		116/0	-		
Electrical Char.		Per Datasheet		Pass	-		
**High Temp. Storage Bake		170C (168, 420hrs)		77/0	-		
**Biased HAST		130C/85%RH (96 Hrs)		77/0	-		
**Autoclave 121C		121C, 15 PSI (240 Hrs)		77/0	-		
**T/C -65C/150C		-65C/+150C (1000 Cyc)		77/0	-		
ESD HBM		Per JEDEC		3/0	-		
ESD CDM		Per JEDEC		3/0	-		
Bond Strength		76 ball bonds, min. 3 units		76/0	-		
Electromigration		-		Pass	-		
Hot Electron Injection		-		Pass	-		
Die Shear		-		10/0	-		
Latch-up		(per JESD78)		6/0	-		
Manufacturability		(per mfg. Site specification)		Pass	-		
**Thermal Shock		-65C/+150C (1000 Cyc)		77/0	-		
** Preconditioning sequence: level 2 @ 260C							

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>