



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN# 20130513000**

**Qualification of Aizu Facility as an additional FAB source for select devices in the  
CMOS9T devices in the 50HPA07 Process Nodes  
Change Notification / Sample Request**

**Date:** 5/15/2013  
**To:** MOUSER PCN

Dear Customer:

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)).

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

**20130513000**  
**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>
LP5907SNX-1.2/NOPB	null
LP5907SNX-1.8/NOPB	null
LP5907SNX-2.8/NOPB	null
LP5907SNX-3.0/NOPB	null
LP5907SNX-3.1/NOPB	null
LP5907SNX-3.3/NOPB	null
OPA4188AID	null

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

<b>PCN Number:</b>	PCN20130513000		<b>PCN Date:</b>	05/15/2013	
<b>Title:</b>	Qualification of Aizu Facility as an additional FAB source for select devices in the CMOS9T devices in the 50HPA07 Process Nodes				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	08/15/2013	<b>Estimated Sample Availability:</b>	Date provided at sample request.		
<b>Change Type:</b>					
<input type="checkbox"/> Assembly Site	<input type="checkbox"/>	<input type="checkbox"/> Assembly Process	<input type="checkbox"/>	<input type="checkbox"/> Assembly Materials	
<input type="checkbox"/> Design	<input type="checkbox"/>	<input type="checkbox"/> Electrical Specification	<input type="checkbox"/>	<input type="checkbox"/> Mechanical Specification	
<input type="checkbox"/> Test Site	<input type="checkbox"/>	<input type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/>	<input type="checkbox"/> Test Process	
<input type="checkbox"/> Wafer Bump Site	<input type="checkbox"/>	<input type="checkbox"/> Wafer Bump Material	<input type="checkbox"/>	<input type="checkbox"/> Wafer Bump Process	
<input checked="" type="checkbox"/> Wafer Fab Site	<input type="checkbox"/>	<input type="checkbox"/> Wafer Fab Materials	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Wafer Fab Process	
<b>PCN Details</b>					
<b>Description of Change:</b>					
<p>This notification is to announce the qualification of AIZU facility as an additional wafer FAB source for the select devices in the CMOS9T and 50HPA07 process nodes. The affected devices are listed in "Product Affected" section.</p>					
<b>Currently Qualified Sites, Process, Wafer Dia.</b>			<b>Additional Site, Process, Wafer Dia.</b>		
MAINEFAB, CMOS9T Process, 200mm			<a href="#">AIZU, CMOS9T Process, 200mm</a>		
DP1DM5, 50HPA07 Process, 200mm			<a href="#">AIZU, 50HPA07 Process, 200mm</a>		
<b>Device Groups:</b>					
<b>Group 1: CMOS9T Devices</b>					
<b>Group 2: 50HPA07 Devices</b>					
<p>The CMOS9T process qualification for Aizu is in progress. The 50HPA07 process was previously qualified in June 2011. Qualification details are provided in the Qual Data Section.</p>					
<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>					
<b>Current</b>					
Chip Site	Chip site code (20L)	Chip country code (21L)			
MAINEFAB	CUA	USA			
DP1DM5	DM5	USA			
<b>New</b>					
Chip Site	Chip site code (20L)	Chip country code (21L)			
<a href="#">AIZU</a>	<a href="#">CU2</a>	<a href="#">JPN</a>			

Sample product shipping label (not actual product label)

 <b>TEXAS INSTRUMENTS</b> MADE IN: Malaysia 2DC: 20:	 <b>G4</b>		(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CCO: USA (22L) A50: MLA (23L) A60: MYS
MSL 2 /260C/1 YEAR MSL 1 /235C/UNLIM SEAL DT 03/29/04 OPT: ITEM: 39 <b>LBL: 5A (L)T0:1750</b>			

#### Product Affected:

Group 1: CMOS9T Process devices, adding Aizu Fab			
LM3565TLE/NOPB	LP5907SNX-1.2/NOPB	LP5907SNX-3.0/NOPB	LP8556TMX-E09/NOPB
LM3565TLX/NOPB	LP5907SNX-1.8/NOPB	LP5907SNX-3.1/NOPB	LP8556TMX-E09/S1
LP3925RME-E/NOPB	LP5907SNX-2.7/NOPB	LP5907SNX-3.2/NOPB	LP8556TMX-E09/S7003056
LP3925RMX-E/NOPB	LP5907SNX-2.8/NOPB	LP5907SNX-3.3/NOPB	
LP5562TME/NOPB	LP5907SNX-2.85/NO	LP5907SNX-4.5/NOPB	
LP5562TMX/NOPB	LP5907SNX-2.85/NOPB	LP8556TME-E09/NOPB	
Group 2: 50HPA07 Process devices, adding Aizu Fab			
OPA4188AID	OPA4188AIDR		

#### Qualification Plan: (CMOS9T Process)

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>Qualification Schedule:</b>	<b>Start:</b>	03/2013	<b>End:</b>	07/2013		
<b>Qual Vehicle 1: LP5907UVX-3.3</b>						
Wafer Fab Site:	AIZU	Metallization:	Al 0.5%Cu 0.505uM			
Wafer Fab Process:	CMOS9T	Wafer diameter:	200mm			
<b>Qualification:</b>	<input checked="" type="checkbox"/> <b>Plan</b> <input type="checkbox"/> <b>Test Results</b>					
Reliability Test	Conditions	Sample Size/Fail				
		Lot#1	Lot#2	Lot#3		
Life Test	125C (1000 Hrs)	77/0	77/0	77/0		
EFR	125C (48 hrs)	305/0	305/0	305/0		
**High Temp. Storage Bake	150C (1000 Hrs)	77/0	77/0	-		
Biased HAST	85C/85%RH (1000 Hrs)	77/0	77/0	77/0		
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0		
**T/C -65C/150C	-65C/+150C (500 Cycles)	77/0	77/0	77/0		
ESD HBM	Per JEDEC	3/0	3/0	3/0		
ESD CDM	Per JEDEC	3/0	3/0	3/0		
Latch-up	(per JESD78)	6/0	6/0	6/0		
** Preconditioning sequence: level 1 @ 260C						

## Qualification Data: (50HPA07 Process) Approved 6/3/2011

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.

### Qual Vehicle 1: TMP431BDGK

Wafer Fab Site:	AIZU	Metallization:	0.2kÅTi/0.425kÅTiN/5.4kÅAlCu0.5%/0.275kÅTiN
Wafer Fab Process:	50HPA07	Wafer diameter:	200mm

**Qualification:** ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
Life Test	150C (300 Hrs)	77/0	77/0	-
Electrical Characterization	Over temp	Pass	Pass	-
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	-
**Unbiased HAST	130C/85%RH/33.3 psia (96 Hrs)	77/0	77/0	-
**T/C -65C/150C	-65C/+150C (500 Cycles)	77/0	77/0	-
ESD HBM	Per JEDEC	3/0	-	-
ESD CDM	Per JEDEC	3/0	-	-
Wafer level Reliability	Per Site Specification	Pass	Pass	Pass
Latch-up	(per JESD78)	6/0	-	-
Manufacturability	(per mfg. Site specification)	Pass	Pass	-

\*\* Preconditioning sequence: level 2 @ 260C

### Qual Vehicle 2: OPA2333AIDGK

Wafer Fab Site:	AIZU	Metallization:	Ti/TiN/AlCu .5
Wafer Fab Process:	50HPA07	Wafer diameter:	200mm

**Qualification:** ☐ Plan ☒ Test Results

Reliability Test	Conditions	Sample Size/Fail		
		Lot#1	Lot#2	Lot#3
Life Test	150C (300 Hrs)	77/0	-	-
Electrical Characterization	Over temp	Pass	-	-
**Biased HAST	130C/85%RH (96 Hrs)	80/0	-	-
**Unbiased HAST	130C/85%RH/33.3 psia (96 Hrs)	80/0	-	-
**T/C -65C/150C	-65C/+150C (500 Cycles)	80/0	-	-
ESD HBM	Per JEDEC	3/0	-	-
ESD CDM	Per JEDEC	3/0	-	-
Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	-	-
Latch-up	(per JESD78)	6/0	-	-
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-	-
Wafer Level Reliability	(per mfg. Site specification)	Pass		

\*\* 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>