



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20180112000**  
**Transfer of select CS150/CS200 devices from GFAB to MAINEFAB Wafer Fab site**  
**Change Notification / Sample Request**

**Date:** January 22, 2018  
**To:** PREMIER FARNELL 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

**20180112000**  
**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>
DS26C32ATM/NOPB	null
DS34C87TM/NOPB	null
DP8570AV/NOPB	null
DP8573AV/NOPB	null
DS26C31TM/NOPB	null
DS26C31TMX/NOPB	null
DS26C32ATMX/NOPB	null
DS26LV31TM/NOPB	null
DS26LV31TMX/NOPB	null
DS26LV32ATM/NOPB	null
DS26LV32ATMX/NOPB	null
DS34C86TM/NOPB	null
DS34C86TMX/NOPB	null
DS34C87TMX/NOPB	null
DS34LV86TM/NOPB	null
DS34LV86TMX/NOPB	null
DS34LV87TM/NOPB	null
DS89C21TM/NOPB	null
DS89C21TMX/NOPB	null
LM12458CIV/NOPB	null
LM12H458CIV/NOPB	null

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

<b>PCN Number:</b>	20180112000		<b>PCN Date:</b>	Jan 22, 2018			
<b>Title:</b>	Transfer of select CS150/CS200 devices from GFAB to MAINEFAB Wafer Fab site						
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>		<b>Dept:</b>	Quality Services			
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Apr 22, 2018		<b>Estimated Sample Availability:</b>	Date provided at sample request.			
<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 checked="" type="checkbox"/>	Wafer Fab Materials	<input checked="" type="checkbox"/>	Wafer Fab Process		
		<input type="checkbox"/>	Part number change				
<b>PCN Details</b>							
<b>Description of Change:</b>							
This change notification is to announce the transfer of select CS150/CS200 devices from GFAB to the MAINEFAB Wafer Fab site for the selected devices listed in the "Product Affected" section.							
<b>Current</b>				<b>New</b>			
<b>Chip Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Interlayer Dielectric</b>	<b>Chip Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Interlayer Dielectric</b>
GFAB6	CS150/CS200	150mm	TEOS Base ILD TEOS SOG/ SOG etchback	MAINEFAB*	CS150/CS200	200mm	TEOS CMP
GFAB8	CS150/CS200	200mm	TEOS Base ILD TEOS SOG/ SOG etchback	MAINEFAB*	CS150/CS200	200mm	TEOS CMP
<b>Chip Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Contact Plug</b>	<b>Chip Site</b>	<b>Process</b>	<b>Wafer Diameter</b>	<b>Contact Plug</b>
GFAB6	CS150/CS200	150mm	Part of metallization	MAINEFAB*	CS150/CS200	200mm	W plug
GFAB8	CS150/CS200	200mm	Part of metallization	MAINEFAB*	CS150/CS200	200mm	W plug
*Interlayer Dielectric (ILD) and Contact plug processes will be upgraded to MaineFab's standardized Chemical-Mechanical Planarization (CMP) ILD and Tungsten (W) Contact plug processes.							
Qual details are provided in the Qual Data Section.							
<b>Reason for Change:</b>							
GFAB closure							
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>							
None							
<b>Changes to product identification resulting from this PCN:</b>							

**Current:**

Current Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
GFAB6	GF6	GBR	Greenock
GFAB8	GF8	GBR	Greenock

**New Fab Site:**

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
<b>MAINEFAB</b>	<b>CUA</b>	<b>USA</b>	<b>South Portland</b>

Sample product shipping label (not actual product label)


**TEXAS INSTRUMENTS**  
 MADE IN: Malaysia  
 2DC: 20:

  
 G4



(1P) SN74LS07NSR  
 (Q) 2000 (D) 0336  
 (31T) LOT: 3959047MLA  
 (4W) TKY (1T) 7523483SI2  
 (P)  
 (2P) REV: (V) 0033317  
 (20L) CSO: SHE (21L) CCO:USA  
 (22L) ASO:MLA (23L) ACO:MY5

MSL 2 / 260C / 1 YEAR	SEAL DT
MSL 1 / 235C / UNLIM	03/29/04

OPT:  
 ITEM: 39  
**LBL: 5A (L)T0:1750**

**Product Affected:**

ADC10738CIWM/NOPB	DS26C31TMX/NOPB	DS34C86TMX/NOPB	DS89C21TM/NOPB
ADC10738CIWMX/NOPB	DS26C32ATM/NOPB	DS34C87TM/NOPB	DS89C21TMX/J7002999
DP8570AV/NOPB	DS26C32ATMX/NOPB	DS34C87TMX/NOPB	DS89C21TMX/NOPB
DP8570AVX/NOPB	DS26LV31TM/NOPB	DS34LV86TM/NOPB	LM12458CIV/NOPB
DP8573AV/NOPB	DS26LV31TMX/NOPB	DS34LV86TMX/NOPB	LM12458CIVX/NOPB
DP8573AVX/NOPB	DS26LV32ATM/NOPB	DS34LV87TM/NOPB	LM12H458CIV/NOPB
DP8573A-W	DS26LV32ATMX/NOPB	DS34LV87TMX/NOPB	SCL1033-V0/E7001896
DS26C31TM/NOPB	DS34C86TM/NOPB		

## Qualification Report

### MAINEFAB CS200 Technology Qualification Approve Date 21-Dec-2017

#### Product Attributes

Attributes	Qual Device: ADC10664CIWM/NOPB_QL
Assembly Site	AMKOR AP1
Package Family	SOIC
Wafer Fab Supplier	MAINEFAB
Wafer Fab Process	CS200

- QBS: Qual By Similarity
- Qual Device ADC10664CIWM/NOPB is qualified at LEVEL3-260C

#### Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: ADC10664CIWM/NOPB
AC	Autoclave 121C	96 Hours	3/240/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/240/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/240/0
ELFR	Early Life Failure Rate, 125C	48 Hours	3/2400/0
HTOL	Life Test, 125C	1000 Hours	3/240/0
HTSL	High Temp Storage Bake 150C	1000 Hours	3/240/0
HBM	ESD - HBM	2500 V	3/9/0
CDM	ESD - CDM	500 V	3/9/0
LU	Latch-up	(per JESD78)	3/18/0
ED	Electrical Characterization	Per Datasheet Parameters	3/90/0
MQ	Assembly MQ	-	Passed
MQ	Wafer FAB MQ	-	Passed

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

#### Green/Pb-free Status:

Qualified Pb-Free (SMT) and Green

## Qualification Report

### CS150 Technology Qualification - MFAB

Approve Date 21-July-2017

#### Product Attributes

Attributes	Qual Device: ADC12138CIMSA/NOPB
Assembly Site	AMKOR AP1
Package Family	SSOP
Wafer Fab Supplier	MAINEFAB
Wafer Fab Process	CS150

- QBS: Qual By Similarity
- Qual Device ADC12138CIMSA/NOPB is qualified at LEVEL3-260C

**Qualification Results**  
**Data Displayed as: Number of lots / Total sample size / Total failed**

Type	Test Name / Condition	Duration	Qual Device: ADC12138CIMS/NOPB
AC	Autoclave 121C	96 Hours	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
ELFR	Early Life Failure Rate, 125C	48HRS	3/2400/0
HTOL	Life Test, 125C	1000 Hours	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	3/231/0
HBM	ESD - HBM - Q100	1500 V	3/9/0
CDM	ESD - CDM - Q100	500 V	3/9/0
LU	Latch-up	(Per JESD78)	3/18/0
ED	Electrical Characterization	Per Datasheet Parameters	3/90/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
MQ	Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass

- Preconditioning was performed for Auto clave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

**Green/Pb-free Status:**

Qualified Pb-Free (SMT) and Green

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

<b>Location</b>	<b>E-Mail</b>
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>