

<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**



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

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

(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: MYS

**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 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

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.

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>