

PCN Number:	20170727000			PCN Date:	Aug 1, 2017		
Title:	Transfer of select CS150 devices from GFAB to MAINEFAB Wafer Fab site						
Customer Contact:	PCN Manager			Dept:	Quality Services		
Proposed 1st Ship Date:	Nov 1, 2017		Estimated Sample Availability:	Date provided at sample request.			
Change Type:							
<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					
PCN Details							
Description of Change:							
This change notification is to announce the transfer of select CS150 devices from GFAB to the MAINEFAB Wafer Fab site for the selected devices listed in the "Product Affected" section of this document.							
Current				New			
Chip Site	Process	Wafer Diameter	Interlayer Dielectric	Chip Site	Process	Wafer Diameter	Interlayer Dielectric
GFAB6	CS150	150mm	TEOS Base ILD TEOS SOG/ SOG etchback	MAINEFAB*	CS150	200mm	TEOS CMP
GFAB8	CS150	200mm	TEOS Base ILD TEOS SOG/ SOG etchback	MAINEFAB*	CS150	200mm	TEOS CMP
Chip Site	Process	Wafer Diameter	Contact Plug	Chip Site	Process	Wafer Diameter	Contact Plug
GFAB6	CS150	150mm	Part of metallization	MAINEFAB*	CS150	200mm	W plug
GFAB8	CS150	200mm	Part of metallization	MAINEFAB*	CS150	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.							
Reason for Change:							
GFAB closure							
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):							
None							
Changes to product identification resulting from this PCN:							
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				
MAINEFAB	CUA	USA	South Portland				

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 20:



(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483S12
 (P)
 (2P) REV: (V) 0033517
 (20L) CS0: SHE (21L) CCO:USA
 (22L) AS0:MLA (23L) ACO: MYS

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

OPT:
 ITEM: 39
LBL: 5A (L) TO: 1750

Product Affected:

ADC12038CIWM/NOPB	ADC12130CIWMX/NOPB	ADC12138CIWM/NOPB	COPCG-AMD/V-MPC/MPGE725
ADC12038CIWMX/NOPB	ADC12138CIMSAX/NOPB	ADC12138CIWMX/NOPB	COPCG-AQQ/V-MPC/MPGE724
ADC12130CIWM/NOPB	ADC12138CIMSAX/NOPB		

Qualification Report
CS150 Technology Qualification - MFAB

Approve Date 21-July-2017

Product Attributes

Attributes	Qual Device: ADC12138CIMSAX/NOPB
Assembly Site	AMKOR AP1
Package Family	SSOP
Wafer Fab Supplier	MAINEFAB
Wafer Fab Process	CS150

- QBS: Qual By Similarity
 - Qual Device ADC12138CIMSAX/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: ADC12138CIMSAX/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	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com