

PCN Number:	20180215002	PCN Date:	Feb 26, 2018
Title:	Transfer of select MGCMOS devices from GFAB to SFAB Wafer Fab site		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	May 26, 2018	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 MGCMOS devices from GFAB to the SFAB (SH-BIP-1) Wafer Fab site for the selected devices listed in the "Product Affected" section.

Current Fab Site			New Fab Site		
Current Fab Site	Process	Wafer Diameter	New Fab Site	Process	Wafer Diameter
GFAB6	MGCMOS	150 mm	SH-BIP-1	MGCMOS	150 mm

GFAB Die Metallization	SH-BIP-1 Die Metallization
Al/1%Si	Al/1%Si/0.5%Cu

Added 0.5% Cu to Al, which is a best practice for Electromigration.

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

New Fab Site:

New Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
SH-BIP-1	SHE	USA	Sherman

Sample product shipping label (not actual product label)



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



(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483S12
(P)
(2P) REV: (V) 0033317
(20L) CSO: SHE (21L) CCO:USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

ADC0808CCV/NOPB	ADC0834CCN/NOPB	ADC0848CCVX/NOPB	LMC7660IN/NOPB
ADC0808CCVX/NOPB	ADC0834CCWM/NOPB	DS14C88M/NOPB	MF10CCWM/NOPB
ADC0809CCV/NOPB	ADC0834CCWMX/NOPB	DS14C88MX/NOPB	MF10CCWMX/NOPB
ADC0809CCVX/NOPB	ADC0838CCWM/NOPB	DS14C89AM/NOPB	MM145453V/NOPB
ADC0831CCN/NOPB	ADC0838CCWMX/NOPB	DS14C89AMX/NOPB	MM145453VX/NOPB
ADC0831CCWM/NOPB	ADC0838CIWM/NOPB	DS14C89AN/NOPB	MM5452V/NOPB
ADC0831CCWMX/NOPB	ADC0838CIWMX/NOPB	LMC7660IM	MM5452VX/NOPB
ADC0832CCN/NOPB	ADC0848BCV/NOPB	LMC7660IM/NOPB	MM5453V/NOPB
ADC0832CCWM/NOPB	ADC0848BCVX/NOPB	LMC7660IMX	MM5453VX/NOPB
ADC0832CCWMX/NOPB	ADC0848CCV/NOPB	LMC7660IMX/NOPB	MM5483V/NOPB

Qualification Report

SFAB Process Qualification MGC MOS - SSGADC0838CIS - ADC0838CCWM/NOPB

Approve Date 26-Sep-2017

Product Attributes

Attributes	Qual Device: ADC0838CCWM/NOPB	Qual Device: PADC0838CCN/NOPB
Assembly Site	TIEM	TIEM
Package Family	SOIC	SOIC
Flammability Rating	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	SFAB	SFAB
Wafer Process	MGC MOS	MGC MOS

- Qual Devices PADC0838CCN/NOPB is qualified at LEVEL1-NACG
- Qual Device ADC0838CCWM/NOPB is qualified at LEVEL3-260CG

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: ADC0838CCWM/NOPB	Qual Device: PADC0838CCN/NOPB
AC	Autoclave 121C	96 Hours	3/231/0	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	3/2400/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-
HBM	ESD - HBM	2500 V	3/9/0	-
CDM	ESD - CDM	1500 V	3/9/0	-
HTOL	Life Test, 125C	1000 Hours	-	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	-
LU	Latch-up	(per JESD78)	3/18/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-
MQ	Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	-
PC	Preconditioning	Level 3-260C	3/720/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	-

- 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 Bake 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