

PCN# 20150821001 Qualification of FFAB as an additional Wafer Fab site option for select devices in the BICMOS13 process Change Notification / Sample Request

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 (<u>PCN_ww_admin_team@list.ti.com</u>).

PCN Team SC Business Services

PCN# 20150821001 Attachment: 1

Products Affected:

According to our records, there are the affected device(s) that you have purchased within the past twenty-four (24) months. Technical details of this Product Change follow on the next page(s).

PCN Number:		20150821001						PCN Date: 08/24/2015				
Title: Qualification of FFAB as an additional Wafer Fab site option for select devices in BICMOS13 Technology												
Customer Contact:		<u>P</u>	PCN Manager				Dept:			Qua	ality Services	
Proposed 1 st Ship Date:		: 1	11/24/2015			Estimated Sample Availability:			Date provided at sample request.			
Change T	уре:			_								
	nbly Site		Assembly Process					Assembly Materials				
Design				Electrical Specification					Mechanical Specification			on
Test S						hipping/Labeling			Test Process			
	<u>Bump Site</u> Fab Site					o Material			Wafer Bump Process Wafer Fab Process			
			Wafer Fab Materials Part number change									
	PCN Details											
Descripti	Description of Change:											
for the pro	This change notification is to announce the addition of FFAB as an additional Wafer Fab site option for the products listed in the product affected section of this document.											
	Wafer Fab Sit	e	Process			Wafer Diame			amete	er	ļ	
MAINEFA	В			BICM	OS13		200mm	۱				
Additional Wafer Fab Site			Process				Wafer Diameter			er]	
FFAB			BICMOS13				200mm					
Reason for	or Change:											
Continuity	11.5											
Anticipat	ed impact on	Form	, Fit	t, Fun	nction, (Quality or R	eliabilit	у (positiv	ve /	negative):	
None												
Changes	to product ide	entific	atio	on re	sulting	from this P	CN:					
Current												-
Chip Site	Chip Site	Origir	gin (20L) Chip Site (ite Country C	e Country Code (21L)			Chip Site City		
MAINEFAB CUA				USA				South Portland				
New												
Chip Site Chip Site Origin			jin (20L) Chip Site Count			ite Country C	Code (21L) Chip			Site	City]
FR-BIP-1 TID				DEU					Freising			1
Sample product shipping label (not actual product label) TEXAS MADE IN: Malaysia 20: MSL '2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: BL: 5A (L)T0:1750 (not actual product label) (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) NEV: (20L) CS0: SHE (21L) CC0:USA (21L) CC0:USA (21L) CC0:USA												

Product Affected:						
DS100BR210SQ/NOPB	DS110DX410SQ/NOPB	DS125BR820NJYR	DS80PC1800SQ/NOPB			
DS100BR210SQE/NOPB	DS110DX410SQE/NOPB	DS125BR820NJYT	DS80PC1800SQE/NOPB			
DS100DX410SQ/NOPB	DS125BR210SQ/NOPB	DS125DF111SQ	DS80PCI810NJYR			
DS100DX410SQE/NOPB	DS125BR210SQE/NOPB	DS125DF111SQE	DS80PCI810NJYT			
DS100KR401SQ/NOPB	DS125BR401SQ/NOPB	DS125DF410SQ/NOPB	LM97937RMER			
DS100KR401SQE/NOPB	DS125BR401SQE/NOPB	DS125DF410SQE/NOPB	LM97937RMET			
DS100KR800SQ/NOPB	DS125BR800SQ/NOPB	DS125RT410SQ/NOPB	LMX2581SQ/NOPB			
DS100KR800SQE/NOPB	DS125BR800SQE/NOPB	DS125RT410SQE/NOPB	LMX2581SQE/NOPB			
DS110DF111SQ/NOPB	DS125BR810NJYR	DS80PCI402SQ/NOPB	LMX2581SQX/NOPB			
DS110DF111SQE/NOPB	DS125BR810NJYT	DS80PCI402SQE/NOPB				

Qualification Report

BiCMOS13 Process (LMX2581B) Release at FFAB

Approve Date 31-Jul-2015 Product Attributes

Die Attributes	Qual Device: LMX2581 SQENOPB
Wafer Fab Supplier	FFAB
Wafer Fab Process	BC13
Wafer Diameter	200mm

- QBS: Qual by Similarity

- Qual Device LMX2581SQENOPB is qualified at LEVEL3-260CG

Qualification Results

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

Туре	Test Name / Condition	Duration	Qual Device: LMX2581SQENOPB
ELFR	Early Life Failure Rate, Tj=160C	48 Hours	3/2400/0
HTOL	Life Test, Tj=160C	500 Hours	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
TC	Temperature Cycle, -40/125C	1000 Cycles	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0
HBM	ESD - HBM	2000 V	3/9/0
CDM	ESD - CDM	750 V	3/9/0
LU	Latch-up	(per JESD78)	3/18/0
ED	Electrical Characterization	Per datasheet parameters	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