



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20140714001
Qualification of FFAB/MIHO8/RFAB as additional Fab
site option for select devices
Change Notification / Sample Request

Date: 7/16/2014
To: MOUSER 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).

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

20140714001
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.

DEVICE	CUSTOMER PART NUMBER
BQ24295RGET	null
BQ24296RGET	null
BQ24297RGET	null
TPA6013A4PWP	null
TPA6013A4PWPR	null
TPS51367RVET	null
TPS54427DDA	null
TPS54427DDAR	null
TPS54427DRCT	null
TPS54428DDA	null
TPS54428DDAR	null
TPS54428DRCT	null
TPS54625PWP	null
TPS54626PWP	null
TPS54627DDA	null
TPS54628DDA	null

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

PCN Number:	20140714001		PCN Date:	07/16/2014																															
Title:	Qualification of FFAB/MIHO/RFAB as additional Fab site options for select devices																																		
Customer Contact:	PCN Manager	Phone:	+1(214)480-6037		Dept: Quality Services																														
*Proposed 1st Ship Date:	10/16/2014		Estimated Sample Availability:	Date provided at sample request.																															
Change Type:																																			
☐	Assembly Site	☐	Assembly Process	☐	Assembly Materials																														
☐	Design	☐	Electrical Specification	☐	Mechanical Specification																														
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process																														
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process																														
☒	Wafer Fab Site	☒	Wafer Fab Materials	☐	Wafer Fab Process																														
		☐	Part number change																																
PCN Details																																			
Description of Change:																																			
This change notification is to announce the addition of FFAB, MIHO8, and RFAB as additional Fab site options for select devices as shown below: Device Groups: (Affected devices in Product Affected Section) <table border="1"> <tr> <th colspan="2">Group 1 MIHO8: Adding FFAB</th> </tr> <tr> <td>Site, Process, Wafer diameter</td> <td>Additional Site, Process, Wafer Dia.</td> </tr> <tr> <td>MIHO8, LBC7, 200mm</td> <td>FFAB, LBC7, 200mm</td> </tr> </table> <table border="1"> <tr> <th colspan="2">Group 2 RFAB: Adding FFAB</th> </tr> <tr> <td>Site, Process, Wafer diameter</td> <td>Additional Site, Process, Wafer Dia.</td> </tr> <tr> <td>RFAB, LBC7, 300mm</td> <td>FFAB, LBC7, 200mm</td> </tr> </table> <table border="1"> <tr> <th colspan="2">Group 3 RFAB: Adding MIHO8</th> </tr> <tr> <td>Site, Process, Wafer diameter</td> <td>Additional Site, Process, Wafer Dia.</td> </tr> <tr> <td>RFAB, LBC7, 300mm</td> <td>MIHO8, LBC7, 200mm</td> </tr> </table> <table border="1"> <tr> <th colspan="2">Group 4 MIHO6: Adding MIHO8</th> </tr> <tr> <td>Site, Process, Wafer diameter</td> <td>Additional Site, Process, Wafer Dia.</td> </tr> <tr> <td>MIH, 50A12, 150mm</td> <td>MIHO8, 50A12, 200mm</td> </tr> </table> <table border="1"> <tr> <th colspan="2">Group 5 MIHO8: Adding RFAB</th> </tr> <tr> <td>Site, Process, Wafer diameter</td> <td>Additional Site, Process, Wafer Dia.</td> </tr> <tr> <td>MIHO8, LBC7, 200mm</td> <td>RFAB, LBC7, 300mm</td> </tr> </table> The LBC7 process was previously qualified at FFAB on 10/31/2007 and at MIHO on 1/14/2005. Qualification details are shown in the Qual Data Section of this document.						Group 1 MIHO8: Adding FFAB		Site, Process, Wafer diameter	Additional Site, Process, Wafer Dia.	MIHO8, LBC7, 200mm	FFAB, LBC7, 200mm	Group 2 RFAB: Adding FFAB		Site, Process, Wafer diameter	Additional Site, Process, Wafer Dia.	RFAB, LBC7, 300mm	FFAB, LBC7, 200mm	Group 3 RFAB: Adding MIHO8		Site, Process, Wafer diameter	Additional Site, Process, Wafer Dia.	RFAB, LBC7, 300mm	MIHO8, LBC7, 200mm	Group 4 MIHO6: Adding MIHO8		Site, Process, Wafer diameter	Additional Site, Process, Wafer Dia.	MIH, 50A12, 150mm	MIHO8, 50A12, 200mm	Group 5 MIHO8: Adding RFAB		Site, Process, Wafer diameter	Additional Site, Process, Wafer Dia.	MIHO8, LBC7, 200mm	RFAB, LBC7, 300mm
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Reason for Change:																																			
Continuity of Supply																																			
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																																			
None																																			

Changes to product identification resulting from this PCN:

Chip Site:

Current

Chip Site	Chip site code (20L)	Chip country code (21L)
RFAB	RFB	USA
MIHO6	MIH	JPN
MIHO8	MH8	JPN

New

Chip Site	Chip site code (20L)	Chip country code (21L)
FR-BIP-1	TID	DEU
MIHO8	MH8	JPN
RFAB	RFB	USA

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) 7523483SI2
(P)
(2P) REV: (V) 0033317
(20L) CS0: SHE (21L) CCO:USA
(22L) AS0: MLA (23L) AG0: MYS

Product Affected:

Group 1 MIHO8: Adding FFAB (LBC7)			
FX026	HPA02240RVER	TPS51363RVER	TPS51367RVET
FX033	TPS51362RVER	TPS51363RVET	TPS59367RVER
FX033Z	TPS51362RVET	TPS51367RVER	TPS59367RVET
Group 2 RFAB: Adding FFAB (LBC7)			
TPS65132A0YFFR	TPS65132B0YFFR	TPS65132B5YFFR	TPS65132LYFFR
TPS65132AYFFR	TPS65132B2YFFR	TPS65132BYFFR	TPS65132YFFR
Group 3 RFAB: Adding MIHO8 (LBC7)			
BQ24295RGER	SN2807RGER	TPS54427DRCR	TPS54626PWP
BQ24295RGET	SN2807RGET	TPS54427DRCT	TPS54626PWPR
BQ24296RGER	SN2808RGER	TPS54428DDA	TPS54627DDA
BQ24296RGET	SN2808RGET	TPS54428DDAR	TPS54627DDAR
BQ24297RGER	SN2910RGER	TPS54428DRCR	TPS54628DDA
BQ24297RGET	SN2910RGET	TPS54428DRCT	TPS54628DDAR
SN2800RGER	TPS54427DDA	TPS54625PWP	TPS56628DDA
SN2800RGET	TPS54427DDAR	TPS54625PWPR	TPS56628DDAR
Group 4 MIHO6: Adding MIHO8 (50A12)			
TPA6013A4PWP	TPA6013A4PWPR		
Group 5 MIHO8: Adding RFAB (LBC7)			
TPS22993PRLWR	TPS22993PRLWT		

Reference Qualification Data: LBC7 Process at FFAB

Qualification Data: (Approved: 10/31/2007)

This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.

Qualification Device: TCA6416PW

Wafer Fab Site:	FFAB	Metallization:	TiN/AlCu.5/TiN		
Wafer Fab Process:	LBC7	Wafer diameter:	200mm		
Qualification: ☐ Plan ☒ Test Results					
Reliability Test		Conditions	Sample Size /Fail		
			Lot#1	Lot#2	Lot#3
** Steady-State Life Test 150C		300 Hrs	116/0	116/0	116/0
**Biased HAST, 130C/85%RH		96 hours	77/0	77/0	77/0
**Autoclave 121C		96 Hrs	77/0	77/0	77/0
**Temp Cycle -65C/+150C		1000 Cycles	77/0	77/0	77/0
**High Temp. Storage Bake 150C		1000 Hours	77/0	77/0	77/0
ESD HBM		1000V	3/0	-	-
ESD CDM		250V	3/0	-	-
Latch-up		(per JESD78, Class II)	9/0	-	-
Electrical Char		Per datasheet spec	Pass	Pass	Pass
Manufacturability		(approved by mfg. site)	Pass	Pass	Pass
**Preconditioning: MSL 1@260C					

Reference Qualification Data: LBC7 Process at MIHO8

Qualification Data: (Approved 01/14/2005)

This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.

Qual Vehicle: TPS62110RSA

Wafer Fab Site:	MIHO8	Metallization:	TiN/AlCu.5/TiN		
Wafer Fab Process:	LBC7	Die Protective Coating:	Oxynitride 8000A		
Qualification: ☐ Plan ☒ Test Results					
Reliability Test	Conditions	Sample Size /Fail			
		Lot#1	Lot#2	Lot#3	
**Life Test, 140C	480 Hours	130/0	130/0	130/0	
**HAST 130C/85%RH	96 Hours	77/0	77/0	77/0	
**Autoclave, 121C	240 Hours	77/0	77/0	77/0	
**Thermal Shock, -65/150C	1000 Cycles	77/0	77/0	77/0	
**Temp Cycle, -65/+150C	1000 Cycles	77/0	77/0	77/0	
**High-Temp Storage, 170C	420 hours	77/0	77/0	77/0	
ESD HBM	1000V	3/0	3/0	3/0	
ESD CDM	250V	3/0	3/0	3/0	
Latch-up @ 70C	(per JESD78)	5/0	5/0	5/0	
Electrical Characterization	Per datasheet spec	PASS	PASS	PASS	
Manufacturability	Wafer Fab Approved	PASS	PASS	PASS	
Manufacturability	Assembly Site Approved	PASS	PASS	PASS	
**Preconditioning: MSL 2@260C					

Reference Qualification Data: 50A12 Process at MIHO8
Qualification Data: (1/08/2010)

This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

Qual Vehicle 1: TLV5630IDW

Wafer Fab Site:	MIHO 8 (MIHO)	Wafer Size	200 mm		
Wafer Fab Process:	50A12				
Qualification:		☐ Plan ☒ Test Results			
Reliability Test	Conditions	Sample Size (PASS/FAIL)			
		Lot#1	Lot#2	Lot#3	
Life Test	125C, 1000 Hrs	112/0	112/0	112/0	
Biased Temp Humidity	85C/85%RH(500 Hrs)	77/0	77/0	77/0	
Autoclave*	+121C, 240 Hrs.	77/0	77/0	77/0	
Temp Cycle*	-65/+150C, 1000 cycles	77/0	77/0	77/0	
Thermal Shock*	-65/150C, 1000 Cycles	77/0	77/0	77/0	
High Temp Storage Bake	+150C, 1000 Hrs.	77/0	77/0	77/0	
ESD – HBM (3 Units/level)	500V, 1kV, 1.5kV, 2kV	12/0	12/0	12/0	
ESD – CDM (3 Units/level)	500V	3/0	3/0	3/0	
*Preconditioning: Level 2 @ 260C					

Qual Vehicle 2: TPA6203A1DRB

Wafer Fab Site:	MIHO 8 (MIHO)	Wafer Size	200 mm		
Wafer Fab Process:	50A12				
Qualification: ☐ Plan ☒ Test Results					
Reliability Test	Conditions	Sample Size (PASS/FAIL)			
		Lot#1	Lot#2	Lot#3	
Manufacturability (Wafer Fab)	Per mfg. site spec	Pass	-	-	
Electrical Characterization	Side by side comparison	30/0	-	-	

Qual Vehicle 3: TPA6205A1DRB

Wafer Fab Site:	MIHO 8 (MIHO)	Wafer Size	200 mm			
Wafer Fab Process:	50A12					
Qualification: ☐ Plan ☒ Test Results						
Reliability Test	Conditions	Sample Size (PASS/FAIL)				
		Lot#1	Lot#2	Lot#3		
Manufacturability (Wafer Fab)	Per mfg. site spec	Pass	-	-		
Electrical Characterization	Side by side comparison	30/0	-	-		

Reference Qualification Data: LBC7 Process at RFAB
Qualification Data – (Approved 06/03/2014)

Attributes	Qual Device: TPS22993PRLW	QBS Process: TPS54620RGYR	QBS Process: CD3230A0YFF
Wafer Fab Site	RFAB	RFAB	RFAB
Wafer Fab Process	LBC7	LBC7	LBC7
Wafer Diameter	200mm	200mm	200mm

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

Type	Test Name / Condition	Duration	QBS Product: TPS22993PRLW	QBS Process: TPS54620RGYR	QBS Process: CD3230A0YFF
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	3/250/0
AC	Autoclave 121C	96 Hours	3/267/0	6/230/0	-
UHA	Unbiased HAST 130C/85%RH	96 Hours	-	-	2/169/0
TC	Temperature Cycle, -55/125C	700 cycles	-	-	2/164/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/269/0	6/231/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	3/273/0	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	6/231/0	3/239/0
HTOL	Life Test, 125C	1000 Hours	-	-	3/240/0
HTOL	Life Test, 150C	300 Hours	1/79/0	-	-
HTOL	Life Test, 155C	240 Hours	-	6/228/0	-
HBM	ESD - HBM	1000 V	1/3/2000	3/9/2000	3/9/2000
CDM	ESD - CDM	250 V	1/3/2000	3/9/2000	3/9/2000
LU	Latch-up	(per JESD78)	1/6/2000	6/18/2000	3/36/0
ED	Electrical Characterization.	Per Datasheet Parameters	1/Pass	-	3/Pass

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