TEXAS INSTRUMENTS 12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20131025002
Qualification of CFAB and Miho 8 as additional Fab site options for select devices in the C10, LBC7 and LBC5 process technologies
Change Notification / Sample Request

Date: 11/8/2013
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).

Sincerely,

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

20131025002
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
SN74AUP1G08DCKR	null
SN74LVC1G11DRYR	null
SN74LVC1G11DSFR	null
SN74LVC1G32DRYR	null
SN74LVC1G66DRYR	null
SN74LVC1G66DSFR	null
SN74LVC1G97DRYR	null
SN74LVC1G97DSFR	null
SN74LVC1G98DRYR	null
SN74LVC1G98DSFR	null
SN74LVC1G3157DSFR	null

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

PCN Number:	20131025002			**PCN Date:**	11/08/2013
Title:	Qualification of CFAB and Miho 8 as an additional Fab site options for select devices in the C10, LBC7 and LBC5 process technologies				
Customer Contact:	PCN Manager	**Phone:**	+1(214)480-6037	**Dept:**	Quality Services
***Proposed 1st Ship Date:**	02/08/2014	**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 CFAB and Miho 8 as additional Fab site options for select devices in the C10, LBC7 and LBC5 process technologies.

Device Groupings	**Current**	**Additional**
	Site/Process/Wafer Diameter	**Site/Process/Wafer Diameter**
Group 1	DM5/LBC5 Process/200mm	**CFAB/LBC5 Process/200mm**
Group 2	FFAB/C10 Process/200mm	**CFAB/C10 Process/200mm**
Group 3	RFAB/LBC7 Process/300mm	**MIHO 8/LBC7 Process/200mm**

The LBC5 process was qualified at CFAB on 8/23/2013. The C10 process was previously qualified at CFAB on 12/4/2012. The LBC7 process was previously qualified in Miho 8 on 1/14/2005. Qualification results are shown below.

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:

Sample Product Shipping Label (not actual product label)

Current:

Chip Site	Chip Site Code (20L)	Chip Country Code (21L)
DP1DM5	DM5	USA
FR-BIP-1	TID	DEU
RFAB	RFB	USA

New:

Chip Site	Chip Site Code (20L)	Chip Country Code (21L)
CFAB	CU3	CHN
MIHO8	MH8	JPN

TEXAS INSTRUMENTS
MADE IN: Malaysia
2DC: 2Q:
MSL 2 /260C/1 YEAR | SEAL DT
MSL 1 /235C/UNLIM | 03/29/04
OPT:
ITEM: 39
LBL: 5A (L)TO:1750

G4

(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:

Group 1: Device Currently at DM5, adding CFAB

TPS65195YFFR	

Group 2: Devices Currently at FFAB, adding CFAB

SN74AUP1G08DCKR	SN74LVC1G11DSFR	SN74LVC1G66DRYR	SN74LVC1G98DRYR
SN74AUP1G08DCKRE4	SN74LVC1G3157DSFR	SN74LVC1G66DSFR	SN74LVC1G98DSFR
SN74AUP1G08DCKRG4	SN74LVC1G32DRYR	SN74LVC1G97DRYR	TXB0102YZPR
SN74LVC1G11DRYR	SN74LVC1G32DRYRG4	SN74LVC1G97DSFR	TXB0104YZTR

Group 3: Devices Currently at RFAB, adding MIHO 8

BQ24738HRGRR	BQ24738HRGRT	

Reference Qualification Data

CFAB for TPS65195YFF (Group 1 device)

Qualification Data: (Approved: 8/23/2013)

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: TPS65195YFF

Package / Die Attributes

Wafer Fab Site:	CFAB	Metallization:	TiW/TiN/AlCu.5%/TiN
Wafer Fab Process:	LBC5X	Wafer Diameter:	200mm

Qualification: ☐ **Plan** ☒ **Test Results**				
Reliability Test	Conditions	Sample Size / Fail Lot#1	 Lot#2	 Lot#3
**Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**High Temp Storage Bake	170C (420 Hrs)	77/0	77/0	77/0
Latch-up	(per JESD78)	6/0	6/0	6/0
Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	Pass	Pass
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Electrical Characterization	(per datasheet spec)	Pass	Pass	Pass
**Temp Cycle	-55/+125C (700 Cycles)	77/0	77/0	77/0
Life Test	150C (300 Hrs)	77/0	77/0	77/0
ESD CDM	500V	3/0	3/0	3/0
ESD HBM	1500V	3/0	3/0	3/0
**Preconditioning: Level 1@260C				

Qualification of C10 process technology in CFAB (Group 2 devices)

Qualification Data: (Approved: 12/04/2012)

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: TXS0102DQE

Wafer Fab Site:	CFAB	Metallization:	Ti/TiN/NCu0.5%/TiN
Wafer Fab Process:	C10	Wafer Diameter:	200mm
		Passivation	10KACN

Qualification: ☐ **Plan** ☒ **Test Results**				
Reliability Test	Conditions	Sample Size/Fails Lot#1	 Lot#2	 Lot#3
Bond Strength	76 ball bonds, min. 3 units	76/0	76/0	76/0
X-ray	(top side only)	5/0	5/0	5/0
**Autoclave 121C	121C, (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cycles)	77/0	77/0	77/0
ESD HBM	2500V	3/0	3/0	3/0
ESD CDM	1500V	3/0	3/0	3/0
Electrical Characterization	-	77/0	77/0	77/0
Biased HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
Life Test	150C (300 Hrs)	79/0	79/0	79/0
Latch-up	(per JESD78, Class II)	6/0	6/0	6/0
Wafer Fab MQ	Per site spec	Pass	Pass	Pass
Assembly / Test MQ	(per mfg. Site specification)	Pass	Pass	Pass
**Preconditioning: Level 1@260C				

LBC7 Process Qualification in MIHO 8 (Group 3 devices)

Qualification Data: (Approved 01/14/2005)			
This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications**.**			
Qual Vehicle 1: TPS62110RSA			
Package Construction Details			
Wafer Fab Site:	Miho8	Wafer Fab Process:	LBC7
Wafer Diameter:	200mm	Metallization:	TiN/AlCu.5/TiN
Passivation:	Oxynitride 8000A		

Qualification: ☐ **Plan** ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fails		
		Lot 1	Lot2	Lot 3
**Life Test	140C (480 Hrs)	130/0	130/0	130/0
**HAST	130C/85%RH (96 Hrs)	77/0	77/0	77/0
**Autoclave	121C (96 Hrs)	77/0	77/0	77/0
**Thermal Shock	-65C/150C (500 Cyc)	77/0	77/0	77/0
**Temp Cycle	-65C/150C (500 Cyc)	77/0	77/0	77/0
**High Temp. Storage Bake	170C (420 Hrs)	77/0	77/0	77/0
ESD HBM	2000V	3/0	3/0	3/0
ESD CDM	500V	3/0	3/0	3/0
Latch-up	JESD78	5/0	5/0	5/0
Manufacturability (Wafer Fab)	(per mfg. Site specification)	Pass	Pass	Pass
Wafer Level Reliability	Approved	Pass	Pass	Pass
EFR	140C, 48 Hrs	626/0	636/0	619/0
**Preconditioning sequence: Level 2-260C				

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or 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