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

PCN# 20130130000
Notification of Die Revision for TPS6216x and TPS6217x Devices
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 (PCN_ww_admin_team@list.ti.com).

Sincerely,

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

PCN Number:	20130130000	**PCN Date:**	02/20/2013

Title:	Die Revision for TPS6216x and TPS6217x Devices

Customer Contact:	PCN Manager	**Phone:**	+1(214)480-6037	**Dept:**	Quality Services

Proposed 1st Ship Date:	5/21/2013	**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

PCN Details

Description of Change:

The purpose of this notification is to inform of a die revision for TPS6216x and TPS6217x devices.

In order to continuously improve our products, a design change of this device family is done covering the following points:

- Redesign of the High side gate Driver, IPTAT generator & POR.
- Input Buffer hysteresis increased (metal change).
- Version code was changed.
- Die designator was changed.
- ESD: No change.

This design change does not affect the electrical performance and functionality of the device.
The datasheet remains unchanged.

Details on the die revision name are provided below.

Die Revision:

Device Family	Change From:	Change To:
TPS6216x	LTPS6216XC	**LTPS6216XD**
TPS6217x	LTPS6217XC	**LTPS6216XD**

Reason for Change:

To provide continuous quality improvement of TI products.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):

None

Changes to product identification resulting from this PCN:

Die Rev designator will change as shown in table & sample label below:

Current	**New**
Die Rev [2P]	**Die Rev [2P]**
C	**D**

Sample product shipping label to indicate die rev location (**not actual product label**)

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:

TPS62160DGKR	TPS62161DSGT	TPS62170DSGR	TPS62172DSGR
TPS62160DGKT	TPS62162DSGR	TPS62170DSGT	TPS62172DSGT
TPS62160DSGR	TPS62162DSGT	TPS62171DSGR	TPS62173DSGR
TPS62160DSGT	TPS62163DSGR	TPS62171DSGT	TPS62173DSGT
TPS62161DSGR	TPS62163DSGT		

Qualification Data: Approved 2/12/2013

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: TPS62160DSG

Die Construction Details

Wafer Fab Site:	MIH8	Wafer Fab Process:	LBC7X
Wafer Diameter:	200mm	Mold Compound:	4208625
Assembly Site:	MLA	Mount Compound:	4208458
# Pins-Designator, Family:	8-DSG, TQFN	Die Revision:	D

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

Reliability Test	**Conditions**	**Sample Size/Fail**
ESD CDM	250V	3/0
ESD HBM	1000V	3/0
Electrical Characterization	--	Pass
Latch-up	Per JESD78	6/0

Reference Qualification Data: Approved 11/03/2011

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: TPS62160DSG

Die Construction Details

Wafer Fab Site:	MIH8	Wafer Fab Process:	LBC7X
Wafer Diameter:	200mm	Mold Compound:	4208625
Assembly Site:	MLA	Mount Compound:	4208458
# Pins-Designator, Family:	8-DSG, TQFN	Die Revision:	C

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

Reliability Test	**Conditions**	**Sample Size/Fail**
**Life Test	150C (168 Hrs)	77/0
**Temperature Cycle	-65/+150C (500 Cyc)	77/0
ESD CDM	250V	3/0
ESD HBM	1000V	3/0
Electrical Characterization	--	Pass
Latch-up	Per JESD78	6/0

**Preconditioning sequence: level 2 @ 260C

Reference Qualification Data: Approved 10/09/2009

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: TPSX6120DRC

Die Construction Details

Wafer Fab Site:	MIH8	Wafer Fab Process:	LBC7
Wafer Diameter:	200mm	Mold Compound:	4208625
Assembly Site:	MLA	Mount Compound:	4208458
# Pins-Designator, Family:	10-DRC, SON	Die Revision:	C

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

Reliability Test	Conditions	Sample Size/Fails		
		Lot#1	Lot#2	Lot#3
**Autoclave 121C	121C, 2 ATM (96 Hrs)	77/0	77/0	77/0
**Life Test	150C (300 Hrs), Vcc Max	77/0	77/0	77/0
**High Temp. Storage Bake	150C (168 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65C/+150C (500 Cyc)	77/0	77/0	77/0
ESD CDM	500V	3/0	–	–
Electrical Characterization	Full Temp & Voltage range	Pass	Pass	Pass

**Preconditioning sequence: level 2 @ 260C

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