




PCN Number:		20160504000		PCN Date:		05/06/2016	
Title:		TPS650 Die Revision Change					
Customer Contact:		PCN Manager		Dept:		Quality Services	
Proposed 1st Ship Date:		08/06/2016		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 checked="" 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 type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process		
<input type="checkbox"/>		<input type="checkbox"/>	Part number change				
PCN Details							
Description of Change:							
<p>This notification is to inform of a die revision change to select devices. A design change was performed in order to improve the robustness against Vin dips to correct issues observed at different fall/raise time and durations. The design change does not affect the form fit or function of the device. There will be no accompanying changes to the device specifications. The design changes do not affect the device's guaranteed datasheet specifications or electrical performance.</p> <p>Affected devices are listed in the product affected section of this document.</p>							
Reason for Change:							
Improved product performance							
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 the table and sample label below:							
Current		New					
Die Rev [2P]		Die Rev [2P]					
B		C					
Sample product shipping label (not actual product label)							
 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2Q:		 G4				(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) <u>(2P) REV:</u> (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS	
MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750							
Product Affected:							
TPS63050YFFR		TPS63050YFFT		TPS63051YFFR		TPS63051YFFT	

Qualification Report

TPS63050YFF and TPS63051YFF Die Rev C
Approve Date 26-Apr-2016

Product Attributes

Attributes	Qual Device: TPS63050YFF	Qual Device: TPS63051YFF	QBS Product Reference: TPS63050RMW	QBS Product Reference: TPS63050YFF	QBS Process Reference: TPS65830YFF	QBS Package Reference: TPS63010YFF
Assembly Site	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT	CLARK AT
Package Family	WCSP	WCSP	HotRod	WCSP	WCSP	WCSP
Wafer Fab Supplier	RFAB/CLARK-BUMP	RFAB	RFAB	RFAB/CLARK-BUMP	RFAB	MIHO8
Wafer Process	LBC7X	LBC7	LBC7	LBC7x	LBC7	LBC7

-QBS: Qual by Similarity
-Qual Devices qualified at LEVEL1-260C: TPS63051YFF, TPS63050YFF

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS63050YFF	Qual Device: TPS63051YFF	QBS Product Reference: TPS63050RMW	QBS Product Reference: TPS63050YFF	QBS Process Reference: TPS65830YFF	QBS Package Reference: TPS63010YFF
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	Pass	Pass	-	Pass
HAST	Biased HAST 130C,85%RH	96 Hours	-	-	-	-	-	3/231/0
HBM	ESD - HBM	1750 V	-	-	-	1/3/0	-	-
CDM	ESD - CDM	1000 V	-	-	1/3/0	1/3/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	-	-	-	3/231/0	3/231/0
LU	Latch-up	(per JESD78)	1/6/0	-	1/6/0	1/6/0	3/18/0	-
YLD	MPY and Bin Summary	--	Pass	Pass	-	-	-	-
PD	Physical Dimensions	--	-	-	3/90/0	-	-	3/15/0
SBS	Solder Ball Shear	--	-	-	-	-	-	3/150/0
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	1/77/0	-	3/229/0	3/231/0
TC	Temperature Cycle, -65/150C	500/-65/+150	-	-	1/77/0	-	-	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-	3/228/0	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 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