

PCN Number: 20150520001 **PCN Date:** 5/21/2015

Title: Qualification of Clark as new Assembly Site and conversion to lead-free assembly process of TPS6208(X)RLT family of devices

Customer Contact: [PCN Manager](#) **Dept:** Quality Services

Proposed 1st Ship Date: 08/21/2015 **Estimated Sample Availability:** Provided upon Request

Change Type:					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input checked="" 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:

Texas Instruments is pleased to announce the qualification of TI Clark for the devices listed below. Devices assembled in TI Clark facility will be Pb-Free/RoHS Compliant. Devices assembled in UTAC will remain RoHS Exempt. Site differences are noted below.

	UTAC	TI Clark
Pillar Solder Composition	SnPb	SnAg
ECAT	E4	G4

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.

Reason for Change:

Continuity of Supply

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

None

Changes to product identification resulting from this PCN:

Assembly Site		
UTAC	Assembly Site Origin (22L)	ASO: NSE
TI Clark	Assembly Site Origin (22L)	ASO: QAB

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 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
 (Pb) 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

Topside Device marking:

Assembly site code for NSE= J
Assembly site code for QAB = I

Product Affected			
TPS62085RLTR	TPS62086RLTR	TPS62087RLTR	TPS62087RLTT
TPS62085RLTT	TPS62086RLTT		



TI Information
Selective Disclosure

Qualification Report

TPS62085RLT
Approved
05/06/2015

Product Attributes

Attributes	Qual Device: TPS62085RLT	QBS Product: TPS62085RLT	QBS Process: TPS62110RSA
Assembly Site	CLARK AT	UTAC	CAR
Package Family	SON	SON	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	MIHO8	MIHO8	MIHO8
Wafer Fab Process	LBC7	LBC7	LBC7

- QBS: Qual By Similarity
- Qual Device TPS62085RLT is qualified at LEVEL1-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS62085RLT	QBS Product: TPS62085RLT	QBS Process: TPS62110RSA
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0	-	3/231/0
AC	Autoclave 121C	96 Hours	3/231/0	-	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	3/231/0	-	-
TC	Temperature Cycle, -55/125C	700 Cycles	3/231/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	1/77/0	3/231/0
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	-	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	3/231/0
TS	Thermal Shock, -65/150C	500 Cycles	-	-	3/231/0
HTOL	Life Test, 150C	300 Hours	-	1/77/0	-
HTOL	Life Test, 140C	480 Hours	-	-	3/231/0
ELFR	Early Life Failure Rate, 140C	48 Hours	-	-	3/1881/0
SD	Solderability	8 Hours Steam Age	3/66/0	-	-
PD	Physical Dimensions	--	3/15/0	-	-

HBM	ESD HBM	2500 V	-	1/3/0	-
CDM	ESD - CDM	1500 V	3/9/0	-	-
LU	Latch-up	(per JESD78)	-	1/6/0	3/15/0
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 your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
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