

PCN Number:	20150928000	PCN Date:	09/29/2015
Title:	Qualification of TIPI as Additional Assembly and Test Site for Select SOT-23 Package Devices		

Customer Contact:	PCN Manager	Dept:	Quality Services
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Proposed 1st Ship Date:	12/29/2015	Estimated Sample Availability:	Date Provided at Sample request
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Change Type:			
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site
<input checked="" 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

PCN Details

Description of Change:
Texas Instruments Incorporated is announcing the qualification of TIPI as Additional Assembly and Test Site for select devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.

Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City
NFME	NFM	CHN	Nantong, Jiangsu
TI Philippines	PHI	PHL	Baguio City

Material Components:

	Current	Additional Material
Mount Compound	SID #A-03	4207173
Wire Type	Au	Cu
Mold compound	SID #R-13	4222226

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


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:

Assembly Site		
NFME	Assembly Site Origin (22L)	ASO: NFM
TI-Philippines	Assembly Site Origin (22L)	ASO: PHI

Sample product shipping label (not actual product label)



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



(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

ASSEMBLY SITE CODES: NFME = E, [TIPI](#) = W

Product Affected:

TPS76933DBVR	TPS76933DBVT	TPS77025DBVR	TPS77025DBVT
TPS76933DBVRG4	TPS76933DBVTG4	TPS77025DBVRG4	

Qualification Report

TIPI SOT: Phase-1 (5pin DBV) Qualification

Product Attributes

Attributes	Qual Device: TPS76933DBVR
Die Attributes	-
Die Revision	A
Wafer Fab Supplier	DL-LIN
Wafer Process	LBC3S
Package Attributes	-
Assembly Site	TIPI
Package Family	SOT
Package Designator	DBV
Package Size (mils)	62.99 X 114.17
Body Thickness (mils)	47.24
Pin Count	5
Lead Frame Type	CU
Lead Finish	NIPDAU
Lead Pitch(mils)	37.4
Mount Compound	4207173
Mold Compound	4222226
Bond Wire Composition	Cu
Bond Wire Diameter(mils)	1.0
Flammability Rating	UL 94 V-0

- QBS: Qual By Similarity

- Qual Device TPS76933DBVR is qualified at LEVEL1-260CG

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS76933DBVR
AC	Autoclave 121C	96 Hours	3/231/0
CDM	ESD - CDM	1500 V	3/9/0
DS	Die Shear	-	3/30/0
ED	Electrical Characterization, side by side	Per Datasheet Parameters	Pass
FLAM	Flammability (UL 94V-0)	--	3/15/0
HAST	Biased HAST, 130C/85%RH	96 Hours	3/231/0
HBM	ESD - HBM	4000 V	3/9/0
HTOL	Life Test, 150C	300 Hours	3/230/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0
LI	Lead Fatigue	Leads	3/66/0
LI	Lead Pull to Destruction	Leads	3/66/0
MISC	Salt Atmosphere	24 Hours	3/66/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass
MSL	Moisture Sensitivity, JEDEC	Level 1-260C	3/36/0
PD	Physical Dimensions	(per mechanical drawing)	3/15/0
PKG	Lead Finish Adhesion	Leads	3/45/0

Type	Test Name / Condition	Duration	Qual Device: TPS76933DBVR
SD	Solderability	8 Hours Steam Age	3/66/0
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0
VM	Visual / Mechanical	(per mfg. Site specification)	3/984/0
VM	Visual Quality Reliability Inspection	Post Autoclave	3/6/0
VM	Visual Quality Reliability Inspection	Post Biased HAST	3/6/0
VM	Visual Quality Reliability Inspection	Post Temperature Cycle	3/6/0
WBP	Bond Pull	Wires	3/228/0
WBS	Ball Bond Shear	Wires	3/228/0
XRAY	X-ray	(top side only)	3/15/0

- 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 your local Field Sales Representative.

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