



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN# 20150928000**  
**Qualification of TIPI as Additional Assembly and Test Site**  
**for Select SOT-23 Package Devices**  
**Change Notification / Sample Request**

**Date:** 9/29/2015  
**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](mailto:PCN_ww_admin_team@list.ti.com)).

Sincerely,

PCN Team  
SC Business Services




**20150928000**  
**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.

<b>DEVICE</b>	<b>CUSTOMER PART NUMBER</b>
TPS76933DBVR	null
TPS76933DBVT	null
TPS77025DBVT	null

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

<b>PCN Number:</b>	20150928000		<b>PCN Date:</b>	09/29/2015									
<b>Title:</b>	Qualification of TIPI as Additional Assembly and Test Site for Select SOT-23 Package Devices												
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services										
<b>Proposed 1<sup>st</sup> Ship Date:</b>	12/29/2015	<b>Estimated Sample Availability:</b>	Date Provided at Sample request										
<b>Change Type:</b>													
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>									
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>									
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>									
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>									
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>									
		<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										
<b>PCN Details</b>													
<b>Description of Change:</b>													
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.													
<b>Assembly Site</b>	<b>Assembly Site Origin</b>	<b>Assembly Country Code</b>	<b>Assembly Site City</b>										
NFME	NFM	CHN	Nantong, Jiangsu										
<a href="#">TI Philippines</a>	<a href="#">PHI</a>	<a href="#">PHL</a>	<a href="#">Baguio City</a>										
<b>Material Components:</b>													
	<b>Current</b>	<b>Additional Material</b>											
Mount Compound	SID #A-03	<a href="#">4207173</a>											
Wire Type	Au	<a href="#">Cu</a>											
Mold compound	SID #R-13	<a href="#">4222226</a>											
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.													
<b>Reason for Change:</b>													
Continuity of supply.													
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>													
None													
<b>Changes to product identification resulting from this PCN:</b>													
<table border="1"> <tr> <td colspan="3">Assembly Site</td> </tr> <tr> <td>NFME</td> <td>Assembly Site Origin (22L)</td> <td>ASO: NFM</td> </tr> <tr> <td><a href="#">TI-Philippines</a></td> <td>Assembly Site Origin (22L)</td> <td>ASO: <a href="#">PHI</a></td> </tr> </table>					Assembly Site			NFME	Assembly Site Origin (22L)	ASO: NFM	<a href="#">TI-Philippines</a>	Assembly Site Origin (22L)	ASO: <a href="#">PHI</a>
Assembly Site													
NFME	Assembly Site Origin (22L)	ASO: NFM											
<a href="#">TI-Philippines</a>	Assembly Site Origin (22L)	ASO: <a href="#">PHI</a>											
Sample product shipping label (not actual product label)													
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">  <p>MADE IN: Malaysia 2DC: 2d:</p> <table border="1"> <tr> <td>MSL '2 /260C/1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 /235C/UNLIM</td> <td>03/29/04</td> </tr> </table> <p>OPT: ITEM: 39</p> <p><b>LBL: 5A (L)T0:1750</b></p> </div> <div style="width: 20%; text-align: center;">  </div> <div style="width: 20%; text-align: center;">  </div> <div style="width: 30%;"> <p>(1P) <b>SN74LS07NSR</b></p> <p>(Q) <b>2000</b> (D) <b>0336</b></p> <p>(31T) LOT: 3959047MLA</p> <p>(4W) TKY (1T) 7523483SI2</p> <p>(P)</p> <p>(2P) REV: (V) 0033317</p> <p>(20L) CSO: SHE (21L) CCO:USA</p> <p>(22L) ASO: MLA (23L) ACO: MYS</p> </div> </div>					MSL '2 /260C/1 YEAR	SEAL DT	MSL 1 /235C/UNLIM	03/29/04					
MSL '2 /260C/1 YEAR	SEAL DT												
MSL 1 /235C/UNLIM	03/29/04												
ASSEMBLY SITE CODES: NFME = E, <a href="#">TIPI</a> = 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
<b>Die Attributes</b>	-
<b>Die Revision</b>	A
<b>Wafer Fab Supplier</b>	DL-LIN
<b>Wafer Process</b>	LBC3S
<b>Package Attributes</b>	-
<b>Assembly Site</b>	TIPI
<b>Package Family</b>	SOT
<b>Package Designator</b>	DBV
<b>Package Size (mils)</b>	62.99 X 114.17
<b>Body Thickness (mils)</b>	47.24
<b>Pin Count</b>	5
<b>Lead Frame Type</b>	CU
<b>Lead Finish</b>	NIPDAU
<b>Lead Pitch(mils)</b>	37.4
<b>Mount Compound</b>	4207173
<b>Mold Compound</b>	4222226
<b>Bond Wire Composition</b>	Cu
<b>Bond Wire Diameter(mils)</b>	1.0
<b>Flammability Rating</b>	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	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>