



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

**PCN20210915000.1**  
**Qualify additional Assembly sites for select SOT devices**  
**Change Notification / Sample Request**

**Date:** September 21, 2021

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.

Texas Instruments requires acknowledgement of 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 samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

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 or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team ([PCN\\_ww\\_admin\\_team@list.ti.com](mailto:PCN_ww_admin_team@list.ti.com)). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team  
SC Business Services

**20210915000.1**  
**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>
DS90LV011ATMF/NOPB	null
INA169NA/3K	null
INA193AIDBVT	null
INA197AIDBVT	null
LM2611AMF/NOPB	null
LM26CIM5-ZHA/NOPB	null
LM2731YMF/NOPB	null
LM2733YMF/NOPB	null
LM3671MFX-1.8/NOPB	null
LM3671MFX-ADJ/NOPB	null
LM397MFX/NOPB	null
LM4030CMFX-2.5/NOPB	null
LM4128BMF-3.3/NOPB	null
LM7301IM5/NOPB	null
LMC7101AIM5/NOPB	null
LMC7101AIM5X/NOPB	null
LMC7101BIM5X/NOPB	null
LMC7215IM5/NOPB	null
LMC7221BIM5X/NOPB	null
LMH6702MFX/NOPB	null
LMR62014XMF/NOPB	null
LMV331IDBVR	null
LMV7219M5/NOPB	null
LMV7239M5/NOPB	null
LMV7239M5X/NOPB	null
LP2980AIM5-3.3/NOPB	null
LP2980AIM5X-3.3/NOPB	null
LP2980AIM5X-5.0/NOPB	null
LP2980IM5-3.0/NOPB	null
LP2980IM5-3.3/NOPB	null
LP2981A-50DBVR	null
LP2981IM5-3.3/NOPB	null
LP2981IM5-3.6/NOPB	null
LP2982AIM5-5.0/NOPB	null
LP2982AIM5X-5.0/NOPB	null
LP2985-10DBVR	null
LP2985AIM5-4.0/NOPB	null
LP2985AIM5-5.0/NOPB	null
LP2985AIM5X-3.3/NOPB	null
LP2985IM5-3.3/NOPB	null
LP2985IM5-4.0/NOPB	null
LP2985IM5-5.0/NOPB	null
LP2985IM5X-3.3/NOPB	null
LP5907MFX-1.2/NOPB	null
LP5951MF-2.5/NOPB	null
OPA137N/3K	null
OPA140AIDBVR	null
OPA237NA/3K	null
OPA314AIDBVR	null
OPA314AIDBVT	null
OPA330AIDBVR	null
OPA333AIDBVR	null
OPA336N/3K	null
OPA340NA/3K	null
OPA348AIDBVR	null
OPA364AIDBVR	null
OPA364IDBVR	null

OPA365AIDBVR	null
OPA379AIDBVR	null
OPA735AIDBVR	null
SN6501DBVR	null
SN65LVDT2DBVR	null
SN74AHC1G00DBVR	null
SN74AHC1G14DBVR	null
SN74AHC1G32DBVR	null
SN74AHCT1G08DBVR	null
SN74LVC1G66DBVR	null
TL431AQDBVR	null
TL431BIDBVR	null
TL431CDBVR	null
TLV2401CDBVR	null
TLV2401IDBVR	null
TLV2471CDBVR	null
TLV2471IDBVR	null
TLV271CDBVR	null
TLV271IDBVR	null
TLV271IDBVT	null
TLV314IDBVR	null
TLV333IDBVR	null
TLV431BIDBVR	null
TLV62565DBVR	null
TLV70133DBVR	null
TLV70212DBVR	null
TLV70230DBVR	null
TLV70433DBVR	null
TLV70450DBVR	null
TLV71210DBVR	null
TMP709AIDBVT	null
TPS2041BDBVR	null
TPS3823-50DBVR	null
TPS560200DBVT	null
TPS61040DBVR	null
TPS70936DBVR	null
TPS72118DBVR	null
TPS72218DBVR	null
TPS73025DBVR	null
TPS73030DBVT	null
TPS73018DBVR	null
LMP2021MFX/NOPB	null
LMR64010XMF/NOPB	null
LMV7235M5X/NOPB	null
LP2981-33DBVR	null
LP2985-18DBVR	null
LP2985-33DBVR	null
LP2985-50DBVR	null
TLV73333PDBVR	null
TPS60403DBVT	null
TPS76333DBVR	null
74LVC1G125DBVRG4	null
74LVC1G126DBVTG4	null
ESDS314DBVR	null
INA138NA/250	null
INA138NA/3K	null
INA139NA/250	null
INA139NA/3K	null
INA168NA/250	null
INA180A2IDBVR	null
INA193AIDBVR	null
INA194AIDBVR	null
LM3410XMF/NOPB	null
LM4132AMF-2.5/NOPB	null
LM4132CMF-1.8/NOPB	null
LM73011M5X/NOPB	null
LM8261M5/NOPB	null
LMR62014XMF/NOPB	null
LMV321IDBVR	null
LP2980AIM5-2.5/NOPB	null

LP2981-50DBVR	null
LP2981A-33DBVR	null
LP2981A-33DBVT	null
LP2985-25DBVR	null
LP2985-30DBVR	null
LP2985-33DBVT	null
LP2985A-33DBVR	null
LP2985A-33DBVT	null
LP2985A-50DBVR	null
LP2985A-50DBVT	null
OPA137NA/250	null
OPA237NA/250	null
OPA313IDBVR	null
OPA335AIDBVR	null
OPA335AIDBVT	null
OPA336N/250	null
OPA340NA/250	null
OPA343NA/250	null
OPA347NA/3K	null
OPA348AIDBVT	null
OPA349NA/3K	null
OPA353NA/3K	null
OPA354AIDBVR	null
OPA354AIDBVT	null
OPA356AIDBVR	null
OPA365AIDBVT	null
OPA378AIDBVT	null
OPA705NA/250	null
OPA705NA/3K	null
OPA820IDBVR	null
OPA830IDBVR	null
SN6501DBVT	null
SN65LVDS1DBVR	null
SN65LVDS1DBVT	null
SN65LVDS2DBVR	null
SN65LVDS2DBVT	null
SN74AHC1G02DBVR	null
SN74AHC1G04DBVR	null
SN74AHC1G08DBVR	null
SN74AHC1G09DBVR	null
SN74AHC1G125DBVR	null
SN74AHC1G126DBVR	null
SN74AHC1G86DBVR	null
SN74AHCT1G00DBVR	null
SN74AHCT1G02DBVR	null
SN74AHCT1G04DBVR	null
SN74AHCT1G125DBVR	null
SN74AHCT1G126DBVR	null
SN74AHCT1G14DBVR	null
SN74AHCT1G32DBVR	null
SN74AHCT1G86DBVR	null
SN74AUC1G32DBVR	null
SN74AUP1G04DBVR	null
SN74AUP1G08DBVR	null
SN74CBTLV1G125DBVR	null
SN74LV1T08DBVR	null
SN74LV1T125DBVR	null
SN74LV1T34DBVR	null
SN74LVC1G00DBVR	null
SN74LVC1G00DBVT	null
SN74LVC1G02DBVT	null
SN74LVC1G04DBVR	null
SN74LVC1G04DBVT	null
SN74LVC1G06DBVR	null
SN74LVC1G07DBVR	null
SN74LVC1G07DBVT	null
SN74LVC1G125DBVT	null
SN74LVC1G126DBVR	null
SN74LVC1G132DBVR	null
SN74LVC1G14DBVR	null

SN74LVC1G17DBVR	null
SN74LVC1G240DBVR	null
SN74LVC1G32DBVR	null
SN74LVC1G34DBVR	null
SN74LVC1G38DBVR	null
SN74LVC1G80DBVR	null
SN74LVC1G86DBVR	null
SN74LVC1GU04DBVR	null
TL331IDBVR	null
TL331IDBVT	null
TL331KDBVR	null
TL331KDBVT	null
TL343IDBVT	null
TL431ACDBVR	null
TL431AIDBVR	null
TL431IDBVR	null
TLV1701AIDBVT	null
TLV2371IDBVR	null
TLV2371IDBVT	null
TLV2461CDBVR	null
TLV2711IDBVR	null
TLV271CDBVT	null
TLV2771IDBVR	null
TLV3201AIDBVR	null
TLV3491AIDBVR	null
TLV3491AIDBVT	null
TLV379IDBVR	null
TLV379IDBVT	null
TLV431ACDBVR	null
TLV431AIDBVR	null
TLV431BCDBVR	null
TLV431IDBVR	null
TLV70218DBVR	null
TLV70218DBVT	null
TLV70220PDBVR	null
TLV70229DBVR	null
TLV70233DBVR	null
TLV70245DBVR	null
TLV70245DBVT	null
TLV70430DBVR	null
TLV71318PDBVR	null
TLV71330PDBVT	null
TLV71333PDBVR	null
TLV7211AIDBVR	null
TLV7211IDBVR	null
TLV73318PDBVR	null
TPS2041CDBVR	null
TPS2051BDBVR	null
TPS2051BDBVT	null
TPS2051CDBVR	null
TPS2065CDBVT-2	null
TPS2065DBVR	null
TPS2065DBVT	null
TPS2530DBVR	null
TPS3820-33DBVR	null
TPS3820-50DBVR	null
TPS3823-30DBVT	null
TPS3823-33DBVR	null
TPS3823-33DBVT	null
TPS3823-50DBVT	null
TPS3823A-33DBVR	null
TPS3823A-33DBVT	null
TPS3825-33DBVR	null
TPS3828-33DBVR	null
TPS3828-33DBVT	null
TPS3828-50DBVR	null
TPS3828-50DBVT	null
TPS3836J25DBVR	null
TPS3836L30DBVR	null
TPS3838K33DBVR	null

TPS3847085DBVR	null
TPS560200DBVR	null
TPS60400DBVT	null
TPS60402DBVR	null
TPS60403DBVR	null
TPS61041DBVR	null
TPS62200DBVR	null
TPS62203DBVT	null
TPS70633DBVR	null
TPS70933DBVR	null
TPS70933DBVT	null
TPS70939DBVR	null
TPS70950DBVR	null
TPS72218DBVT	null
TPS73033DBVR	null
TPS73033DBVT	null
TPS73101DBVR	null
TPS73101DBVT	null
TPS731125DBVR	null
TPS73118DBVT	null
TPS73130DBVR	null
TPS73133DBVR	null
TPS73150DBVT	null
TPS73201DBVR	null
TPS73218DBVR	null
TPS73230DBVR	null
TPS73250DBVT	null
TPS73601DBVR	null
TPS73601DBVT	null
TPS73633DBVR	null
TPS73633DBVT	null
TPS76301DBVT	null
TPS76316DBVT	null
TPS76350DBVR	null
TPS76350DBVT	null
TPS76901DBVR	null
TPS76901DBVT	null
TPS76915DBVR	null
TPS76918DBVR	null
TPS76928DBVR	null
TPS76930DBVR	null
TPS76930DBVT	null
TPS76933DBVR	null
TPS76933DBVT	null
TPS76950DBVR	null
TPS76950DBVT	null
TPS77033DBVR	null
TPS77033DBVT	null
TPS79118DBVR	null
TPS79133DBVR	null
TPS79325DBVR	null
TPS79330DBVR	null
TPS79333DBVR	null
TPS793475DBVR	null
TPS7B6933DBVR	null
TS321IDBVR	null
TS5A1066DBVR	null
UCC27517ADBVR	null

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

<b>PCN Number:</b>	20210915000.1	<b>PCN Date:</b>	September 21, 2021
<b>Title:</b>	Qualify additional Assembly sites for select SOT devices		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Dec 20, 2021	<b>Estimated Sample Availability:</b>	Provided upon Request
<b>Change Type:</b>			
<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 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
<b>PCN Details</b>			
<b>Description of Change:</b>			
Texas Instruments Incorporated is announcing the qualification of additional Assembly sites for devices listed below in the product affected section. Construction differences and current assembly sites are as follows:			
<b>SOT-23 (DBV)</b>			
Assembly Sites	TIPI, ASEWH, HFTF, HNA, TFME, TIEM, CDAT		
Lead Finish	NiPdAu; NiPdAuAg; Matte Sn		
Mount compound	400180		
	A-03		
	4213245		
	400194		
Mold Compound	4207123		
	R-27		
	8097131		
	R-13		
	450413		
Mold Compound	R-04		
	450042		
	4222198		
Upon expiration of this PCN, TI will combine lead free solutions in a single <b><u>standard part number</u></b> , for example; <b><u>INA193AIDBVR</u></b> – can ship with both Matte Sn and NiPdAu. When available customers may specify NiPdAu finish by ordering the part with the G4 suffix, e.g. <b><u>INA193AIDBVRG4.</u></b>			
<b>Reason for Change:</b>			
Continuity of Supply			
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>			
None			
<b>Impact on Environmental Ratings</b>			


Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change

**Changes to product identification resulting from this PCN:**

Assembly Site		
TI Philippines (TIPI)	Assembly Site Origin (22L)	ASO: PHI
ASEWH	Assembly Site Origin (22L)	ASO: AWH
HFTF	Assembly Site Origin (22L)	ASO: HFT
HNA	Assembly Site Origin (22L)	ASO: HNT
TFME	Assembly Site Origin (22L)	ASO: NFM
<a href="#">TI Chengdu (CDAT)</a>	Assembly Site Origin (22L)	<a href="#">ASO: CDA</a>
<a href="#">TI Melaka (TIEM)</a>	Assembly Site Origin (22L)	<a href="#">ASO: CU6</a>


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



E4/G4: NiPdAu  
E3/G3: Matte Sn

(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:**

Refer to page 2 of this document to view your affected products

## DBV (SOT-23) Qualification Report

### Qualification Results

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

	Stress Test	Duration	PHI TPS76933DBV	CDAT TLV9061IDBV
TC	Temperature Cycling -65/150C	500 Cycles	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	3/231/- (Note a)
HTSL	High Temp. Storage Bake 170C	420 hours	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 hours	-	3/231/0
AC	Autoclave 121C	96 hours	3/231/0	-
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0



	Stress Test	Duration	PHI TPS76933DBV	CDAT TLV9061IDBV
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	TFME SN74AHC1G14DBV	HNA INA293A1IDBV
TC	Temperature Cycling -65/150C	500 Cycles	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 170C	420 hours	3/231/0	3/231/0
UHAST	Unbiased HAST, 130C/85%RH	96 hours	-	3/231/0
AC	Autoclave 121C	96 hours	3/231/0	-
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0 (SN74LVC1GU04DBV)
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	TIEMA DAC121S101CIMK	HFTAT TLV70333DBV	ASEWH TL431CDBV
TC	Temperature Cycling -65/150C	500 Cycles	-	3/231/0	3/231/0
TC	Temperature Cycling -55/150C	1000 Cycles	3/231/0	-	-
HAST	Biased HAST 130C/85%RH	96 hours	-	3/231/0	3/231/0
THB	Temperature Humidity Bias 85C/85%RH	1000 hours	3/231/0	-	-
HTSL	High Temp. Storage Bake 150C	1000 hours	3/231/0	-	3/231/0
HTSL	High Temp. Storage Bake 170C	420 hours	-	3/231/0	-
UHAST	Unbiased HAST, 130C/85%RH	96 hours	-	3/231/0	-
AC	Autoclave 121C	96 hours	3/231/0	-	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0 (LM2660MM/NOPB)	3/66/0 (TLV74333PDBV)	3/66/0
MQ	Manufacturability	-	Pass	Pass	Pass

All qualification devices in the tables are qualified at L1-260C MSL rating.

Note a – Data collection in progress. Data will be made available upon request after completion.

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, and HTSL, as applicable

- The following are equivalent HTSL options based on activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours  
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.

<b>Location</b>	<b>E-Mail</b>
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>

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