

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

Date:October 28, 2021To:TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

**Revision A** is to announce the <u>addition</u> of a new devices that was not included on the original PCN notification.

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 (<u>PCN ww admin team@list.ti.com</u>). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team SC Business Services

### 20210915000.1A 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.

#### DEVICE

SN74LVC1G08DBVR SN74LVC1G125DBVR **CUSTOMER PART NUMBER** 

null null

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

PCN Number:		2	20210915000.1A			PC	N Date:	October 28, 2021		
Title: Qualify additional Assembly sites for select SOT devices										
Custom	er Contact:	P	PCN Manager			Dept:	Quality Se	Quality Services		
Proposed 1 <sup>st</sup> Ship Date:			Dec 20, 2021		Estimated Sample Availability:			Provided upon Request		
Change	Туре:									
Asse	Assembly Site				Design			Wafer Bu	ump Site	
Assembly Process				Data Sheet				Wafer Bu	Wafer Bump Material	
	embly Materia	s			Part number change			Wafer Bu	Imp Process	
Mechanical Specificat		tion		Test Site				Wafer Fab Site		
Packing/Shipping/Labeling		beling		Test Process 📃 Wafe		Wafer Fa	Wafer Fab Materials			
									Wafer Fa	b Process
PCN Details										

## **Description of Change:**

**Revision A** is to announce the <u>addition</u> of new devices that was not included on the original PCN notification. The new devices are listed on the Product Affected section below. The expected first shipment date for the new device will be 90 days from this notice (Jan. 27, 2022) for the newly added device only. The proposed 1<sup>st</sup> ship date of Dec 20, 2021 still applies for the original set of devices.

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:

SOT-23 (DBV)					
Assembly Sites	TIPI, ASEWH, HFTF, HNA, TFME, TIEM, CDAT				
Lead Finish	NiPdAu; NiPdAuAg; Matte Sn				
	400180				
	A-03				
Mount compound	4213245				
	400194				
	4207123				
	R-27				
	8097131				
	R-13				
Mold Compound	450413				
	R-04				
	450042				
	4222198				

Upon expiration of this PCN, TI will combine lead free solutions in a single <u>standard part</u> <u>number</u>, for example; <u>INA193AIDBVR</u>- 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. **INA193AIDBVRG4.**<sup>"</sup>

### **Reason for Change:**

Continuity of Supply

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

None

## **Impact on Environmental Ratings**

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					
🛛 No Change	🛛 No Change	🛛 No Change	🛛 No Change					
Changes to product identification resulting from this PCN:								
Assembly Site								
TI Philippines (TIPI)	Assembly Site Origin (22	Assembly Site Origin (22L) ASO: PHI						
ASEWH	Assembly Site Origin (22	L) ASO: AWH						
HFTF	Assembly Site Origin (22	L) ASO: HFT						
HNA	Assembly Site Origin (22	L) ASO: HNT						
TFME	Assembly Site Origin (22	L) ASO: NFM						
TI Chengdu (CDAT)	Assembly Site Origin (22	L) ASO: CDA						
TI Melaka (TIEM)	Assembly Site Origin (22	L) ASO: CU6						
Sample product shipping label (not actual product label) E4/G4: NiPdAu E3/G3: Matte Sn (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) TEXAS SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: ITEM: SA (L)T0:1750 (not actual product label) (1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2D) CS0: SHE (21L) CC0:USA (22L) AS0: MLA (23L) ACO: MYS								
Product Affected:	Product Affected:							
SN74LVC1G02DBVR	SN74LVC1G08DBVR	SN74LVC1G125	DBVR					
SN74LVC1G02DBVRG4	SN74LVC1G08DBVRG	4 TLV9041UIDBVR						

# 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
тс	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	-

	Stress Test	Duration	PHI TPS76933DBV	CDAT TLV9061IDBV
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	TFME SN74AHC1G14DBV	HNA INA293A1IDBV
тс	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
тс	Temperature Cycling -65/150C	500 Cycles	-	3/231/0	3/231/0
тс	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: <u>http://www.ti.com/</u>

#### 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
Japan	PCNJapanContact@list.ti.com

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