

PCN Number:	20210915000.1A	PCN Date:	October 28, 2021
Title:	Qualify additional Assembly sites for select SOT devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Dec 20, 2021	Estimated Sample Availability:	Provided upon Request
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 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:			
<p>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 1st ship date of Dec 20, 2021 still applies for the original set of devices.</p> <p>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:</p>			
SOT-23 (DBV)			
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		
R-04			
450042			
4222198			
<p>Upon expiration of this PCN, TI will combine lead free solutions in a single <u>standard part 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. <u>INA193AIDBVRG4.</u></p>			
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
<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
TI Chengdu (CDAT)	Assembly Site Origin (22L)	ASO: CDA
TI Melaka (TIEM)	Assembly Site Origin (22L)	ASO: CU6


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)T0:1750



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:

SN74LVC1G02DBVR	SN74LVC1G08DBVR	SN74LVC1G125DBVR
SN74LVC1G02DBVRG4	SN74LVC1G08DBVRG4	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
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	-

	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
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.

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