


<b>PCN Number:</b>	20220721002.1	<b>PCN Date:</b>	July 21, 2022												
<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>	Oct 19, 2022	<b>Sample Requests accepted until:</b>	Aug 21, 2022*												
<b>*Sample requests received after Aug 21, 2022 will not be supported.</b>															
<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 information and all assembly sites are as follows:															
<table border="1"> <thead> <tr> <th colspan="2">SOT-23 (DBZ) Build Sites</th> </tr> </thead> <tbody> <tr> <td>Assembly Sites</td> <td>TFME, PHI, CDAT, HNA, HFTFAT, ASEWH, TIEMA</td> </tr> <tr> <td>Lead Finish</td> <td>NiPdAu, Matte Sn</td> </tr> <tr> <td>Mold Compound</td> <td>SID#R-27 SID#450179 4222198-0028</td> </tr> <tr> <td>Mount Compound</td> <td>SID#A-09 SID# A-03 4207123-0001 SID#400180 SID#1120999A2</td> </tr> <tr> <td>Bond Wire</td> <td>Au, Cu</td> </tr> </tbody> </table>				SOT-23 (DBZ) Build Sites		Assembly Sites	TFME, PHI, CDAT, HNA, HFTFAT, ASEWH, TIEMA	Lead Finish	NiPdAu, Matte Sn	Mold Compound	SID#R-27 SID#450179 4222198-0028	Mount Compound	SID#A-09 SID# A-03 4207123-0001 SID#400180 SID#1120999A2	Bond Wire	Au, Cu
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Bond Wire	Au, Cu														
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>TLV803EB33VDBZR</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>TLV803EB33VDBZR.G4</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.															
<b>RoHS</b>	<b>REACH</b>	<b>Green Status</b>	<b>IEC 62474</b>												
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change												
<b>Changes to product identification resulting from this PCN:</b>															

Assembly Site		
HNA	Assembly Site Origin (22L)	ASO: HNT
HFTF	Assembly Site Origin (22L)	ASO: HFT
TI Melaka (TIEM)	Assembly Site Origin (22L)	ASO: CU6
ASEWH	Assembly Site Origin (22L)	ASO: AWH
CDAT	Assembly Site Origin (22L)	ASO: CDA
TFME	Assembly Site Origin (22L)	ASO: NFM
TIPI	Assembly Site Origin (22L)	ASO: PHI


Sample product shipping label (not actual product label)



MADE IN: Malaysia  
2DC: 20:

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:**

SN1906047DBZR	TLV803EA43VDBZR	TLV809EA22DBZR	TLV810EA29DBZR
SN1906048DBZR	TLV803EB26RDBZR	TLV809EA26DBZR	TMP235A2DBZR
SN1907022DBZR	TLV803EB29DBZR	TLV809EA29DBZR	TMP235A2DBZT
SN1907023DBZR	TLV803EB33VDBZR	TLV809EA30DBZR	TMP235A4DBZR
TLV803EA22DBZR	TLV803EB42VDBZR	TLV809EA43DBZR	TMP235A4DBZT
TLV803EA26DBZR	TLV803EC29DBZR	TLV809EA45DBZR	TMP236A2DBZR
TLV803EA26RDBZR	TLV803EC30DBZR	TLV809EA46DBZR	TMP236A2DBZT
TLV803EA29DBZR	TLV803EC43DBZR	TLV809EC26DBZR	TMP236A4DBZR
TLV803EA29RDBZR	TLV803ED29DBZR	TLV809EC46DBZR	TMP236A4DBZT
TLV803EA42RDBZR	TLV803EF26DBZR	TLV809ED29DBZR	TPS61322DBZR
TLV803EA43DBZR	TLV803EF29DBZR	TLV809EF30DBZR	TPS61322DBZT
TLV803EA43RDBZR			

## SOT-23 Qualification Report

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

	Stress Test	Duration	PHI TPS76933DBV	CDAT TLV9061IDBV
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/150C	500 Cycles Or 1000 Cycles	3/231/0	3/231/0
HAST/ THB	Biased HAST 130C/85%RH Or Temperature Humidity Bias 85C/85%RH	96 hours Or 1000 hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0	3/231/0
AC/ UHASt	Autoclave 121C Or Unbiased HAST, 130C/85%RH	96 hours	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0
WBP	Wire Bond Pull	Wires	3/228/0	3/228/0
WBS	Wire Bond Shear	Wires	3/228/0	3/228/0
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	TFME SN74AHC1G14DBV	HNA INA293A1IDBV
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/150C	500 Cycles Or 1000 Cycles	3/231/0	3/231/0
HAST/ THB	Biased HAST 130C/85%RH Or Temperature Humidity Bias 85C/85%RH	96 hours Or 1000 hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0	3/231/0
AC/ UHASt	Autoclave 121C Or Unbiased HAST, 130C/85%RH	96 hours	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0 (SN74LVC1GU04DBV)
WBP	Wire Bond Pull	Wires	3/228/0	3/228/0
WBS	Wire Bond Shear	Wires	3/228/0	3/228/0
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	TIEMA DAC121S101CIMK	HFTAT TLV70333DBV	ASEWH TL431CDBV
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/150C	500 Cycles Or 1000 Cycles	3/231/0	3/231/0	3/231/0
HAST/ THB	Biased HAST 130C/85%RH Or Temperature Humidity Bias 85C/85%RH	96 hours Or 1000 hours	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0	3/231/0	3/231/0
AC/ UHAST	Autoclave 121C Or Unbiased HAST, 130C/85%RH	96 hours	3/231/0	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
WBP	Wire Bond Pull	Wires	3/228/0	3/228/0	3/228/0
WBS	Wire Bond Shear	Wires	3/228/0	3/228/0	3/228/0
MQ	Manufacturability	-	Pass	Pass	Pass

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

- 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

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