

<b>PCN Number:</b>	20210730004.1A	<b>PCN Date:</b>	August 20, 2021
<b>Title:</b>	Qualify additional Assembly site 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>	Nov 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>			
<p><b>Revision A</b> is to announce the <u>addition</u> of new devices that was not included on the original PCN notification. The new device is highlighted and <b>bolded</b> in the device list below. The expected first shipment date for the new device will be 90 days from this notice (Nov 20, 2021) for the newly added device only. The proposed 1<sup>st</sup> ship date of Nov 02, 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>			
<b>Group 1 Device:</b>			
<b>SOT-5X3 (DRL)</b>			
Assembly Sites	TIPI, HNA, JCETC8, JCETJY, CDAT		
Lead Finish	Matte Sn		
Mold Compound	4222198 450214 111020003809		
<b>Group 2 Device:</b>			
<b>SOT-23 (DDC)</b>			
Assembly Sites	TIPI, HNA, UTL, JCETC8, JCETJY, CDAT, TIEM		
Lead Finish	Matte Sn		
Mold Compound	4222198 450207 8097131 120800005407		
<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	Assembly Site Origin (22L)	ASO: PHI
Hana	Assembly Site Origin (22L)	ASO: HNT
UTL	Assembly Site Origin (22L)	ASO: NS2
JCETC8	Assembly Site Origin (22L)	ASO: JC8
JCETJY	Assembly Site Origin (22L)	ASO: JCE
TI Chengdu	Assembly Site Origin (22L)	ASO: CDA
TI Melaka	Assembly Site Origin (22L)	ASO: CU6

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS  
 MADE IN: Malaysia  
 2DC: 2d:  
 MSL 2 /260C/1 YEAR SEAL DT  
 MSL 1 /235C/UNLIM 03/29/04  
 OPT:  
 ITEM: 39  
 LBL: 5A (L)T0:1750

(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

**Group 1 Product Affected:**

<b>TPS562231DRLR</b>	<b>TPS562231DRLT</b>
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**Group 2 Product Affected:**

<b>SN1501019ADDCR</b>	TPS562231DRLR	<b>TPS563209DDCR</b>	<b>TPS54202DDCR</b>
<b>SN1501019DDCR</b>	<b>TPS54202DDCT</b>	<b>SN1706011DDCT</b>	TPS562231DRLT
<b>SN1501019DDCT</b>	<b>TPS54202HDDCR</b>	<b>SN1708041DDCR</b>	<b>TPS563209DDCT</b>
<b>SN1501020DDCR</b>	<b>TPS54202HDDCT</b>	<b>SN1708041DDCT</b>	TPS563240DDCR
<b>SN1501020DDCT</b>	<b>TPS561201DDCR</b>	<b>SN1711021DDCR</b>	TPS563240DDCT
<b>SN1504025DDCR</b>	<b>TPS561201DDCT</b>	<b>SN1711021DDCT</b>	TPS563249DDCR
<b>SN1504025DDCT</b>	<b>TPS561208DDCR</b>	<b>SN1711023DDCR</b>	TPS563249DDCT
<b>SN1504026DDCR</b>	<b>TPS561208DDCT</b>	<b>SN1711023DDCT</b>	<b>TPS56339DDCR</b>
<b>SN1504026DDCT</b>	<b>TPS562200DDCR</b>	<b>TPS27081ADDCR</b>	<b>TPS56339DDCT</b>
SN1611045DDCR	<b>TPS562200DDCT</b>	<b>TPS27082LDDCR</b>	TPS564201DDCR
<b>SN1702049DDCR</b>	<b>TPS562209DDCR</b>	<b>TPS54200DDCR</b>	TPS564201DDCT
<b>SN1704026DDCR</b>	<b>TPS562209DDCT</b>	<b>TPS54200DDCT</b>	TPS564208DDCR
<b>SN1704026DDCT</b>	<b>TPS563200DDCR</b>	<b>TPS54201DDCR</b>	TPS564208DDCT
<b>SN1706011DDCR</b>	<b>TPS563200DDCT</b>	<b>TPS54201DDCT</b>	

# Group 1 Qualification Report (SOT-5X3)

## Qualification Results

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

	Stress Test	Duration	TIPI TLV62568DRL	CDAT TPS562231DRL
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 150C	1000 hours	-	-
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
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	JCETC8 TLV62568PDRL	HNA TMP390A2DRL	JCETJY TMP302BDRL
TC	Temperature Cycling - 65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	-	3/231/0
HTSL	Biased HAST 110C/85%RH	264 hours	-	3/231/0	-
HTSL	High Temp. Storage Bake 170C	420 hours	3/231/0	3/231/0	3/231/0 (b)
UHAST	Unbiased HAST, 130C/85%RH	96 hours	-	3/231/0	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 (a)	3/66/0 (b)
MQ	Manufacturability	-	Pass	Pass	Pass

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

Note a – Data collected on SN74AVC1T45DRL

Note b – Data collected on TMP102AIDRL and TMP302BDRL

- 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

## Group 2 Qualification Report (SOT-23)

### Qualification Results

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

	Stress Test	Duration	TIPI	CDAT
			TPS563249DDC	TPS563249DDC
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 150C	1000 hours	-	-
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	3/231/0
AC	Autoclave 121C	96 hours	-	-
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0 (TPS563201DDC)	3/66/0
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	JCETC8	JCETJY
			TPS563208DDC	TLV62569PDDC
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 150C	1000 hours	-	-
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 (TPS27081ADDC)
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	UTL	TIEM	HNA
			LM73CxQDDCRQ1	TPL5010QDDCRQ1	LV2862XLVDDC
TC	Temperature Cycling - 65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	3/231/0	3/231/0
HTSL	High Temp. Storage Bake 150C	1000 hours	-	3/231/0	-
HTSL	High Temp. Storage Bake 170C	420 hours	3/231/0 (a)	-	3/135/0 (b)
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	2/44/0 (TPS62242QDDC)	2/44/0 (LM2734XQMK)	3/66/0 (b)

	Stress Test	Duration	UTL LM73CxQDDCRQ 1	TIEM TPL5010QDDCR Q1	HNA LV2862XLVDD C
		age or 155C Dry Bake			
MQ	Manufacturability	-	Pass	Pass	Pass

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

Note a – Data collected on TPS3702EX33QDDCRQ1 and LM73CxQDDCRQ1

Note b – Data collected on LMP8640QMKX-T/NOPB

- 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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