

PCN Number:	20230327005.1A		PCN Date:	August 23, 2023	
Title:	Qualify additional Assembly site for select SOT-23-THIN Package devices				
Customer Contact:	PCN Manager		Dept:	Quality Services	
Proposed 1st Ship Date:	June 28, 2023		Sample requests accepted until:	N/A	
Change Type:					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Materials
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process
PCN Details					
Description of Change:					
<p>Revision A is to announce the <u>retraction</u> of select devices. These devices will continue to be manufactured as prior and will not be subjected to the change described in this notification. The retracted devices are highlighted under Group 2 of the Product Affected Section in bold font with a strikethrough.</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>					
Group 1 Device:					
SOT-23- THIN					
Assembly Sites		PHI, HNA, JCETC8, JCETJY, UTL2, TIEMA, CDAT			
Lead Finish		NiPdAu, Matte Sn			
Mount Compound		400180			
		400194			
		4207123			
		1120999A2			
		4223872			
Mold Compound		4226215			
		450207			
		450423			
		4222198			
Bond wire type		Au, Cu			
Bond wire diameter		120800005407			
		8097131			
		20.3 UM (0.8 MIL)			
		25.4 UM (1.0 MIL)			
		33 UM (1.3 MIL)			
Group 2 Device:					
SOT-23- THIN -FC					
Assembly Sites		PHI, HNA, JCETC8, JCETJY, UTL2, TIEMA, CDAT			
Lead Finish		NiPdAu, Matte Sn			
Mold Compound		450207			
		450423			
		4222198			
		120800005407			
		8097131			
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:																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3">Assembly Site</td> </tr> <tr> <td>UTAC</td> <td>Assembly Site Origin (22L)</td> <td>ASO: NS2</td> </tr> <tr> <td>Hana</td> <td>Assembly Site Origin (22L)</td> <td>ASO: HNT</td> </tr> <tr> <td>TI Philippines</td> <td>Assembly Site Origin (22L)</td> <td>ASO: PHI</td> </tr> <tr> <td>JCETJY</td> <td>Assembly Site Origin (22L)</td> <td>ASO: JCE</td> </tr> <tr> <td>JCETJ8</td> <td>Assembly Site Origin (22L)</td> <td>ASO: JC8</td> </tr> <tr> <td>TI Chengdu</td> <td>Assembly Site Origin (22L)</td> <td>ASO: CDA</td> </tr> <tr> <td>TI Melaka</td> <td>Assembly Site Origin (22L)</td> <td>ASO: CU6</td> </tr> </table>			Assembly Site			UTAC	Assembly Site Origin (22L)	ASO: NS2	Hana	Assembly Site Origin (22L)	ASO: HNT	TI Philippines	Assembly Site Origin (22L)	ASO: PHI	JCETJY	Assembly Site Origin (22L)	ASO: JCE	JCETJ8	Assembly Site Origin (22L)	ASO: JC8	TI Chengdu	Assembly Site Origin (22L)	ASO: CDA	TI Melaka	Assembly Site Origin (22L)	ASO: CU6	
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Sample product shipping label (not actual product label)																											
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>MADE IN: Malaysia 2DC: 2d: MSL 2 / 260C / 1 YEAR MSL 1 / 235C / UNLIM OPT: 39 ITEM: 5A (L)T0:1750</p> </div> <div style="flex: 1; text-align: center;"> <p>G4</p> </div> <div style="flex: 2;"> <p>(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</p> </div> </div>																											
Group 1 Product Affected:																											
TLV70012DDCR	TLV70032DDCT	TPS79915DDCR	TPS79933DDCT																								
TLV70012DDCT	TLV70033DDCR	TPS79915DDCT	TPS79942DDCR																								
TLV70013DDCR	TLV70033DDCT	TPS799185DDCR	TPS79942DDCT																								
TLV70013DDCT	TLV70036DDCR	TPS799185DDCT	REG71050DDCR																								
TLV70015DDCR	TLV70036DDCT	TPS79918DDCR	REG71050DDCT																								
TLV70015DDCT	TPS62240DDCR	TPS79918DDCT	REG71055DDCR																								
TLV70018DDCR	TPS62260DDCR	TPS79925DDCR	REG71055DDCT																								
TLV70018DDCT	TPS62260DDCT	TPS79925DDCT	TLV6703DDCR																								
TLV70019DDCR	TPS62561DDCR	TPS79927DDCR	TPS3700DDCR																								
TLV70019DDCT	TPS73401DDCR	TPS79927DDCT	TPS3700DDCR2																								
TLV70022DDCR	TPS73401DDCT	TPS799285DDCR	TPS3700DDCT																								
TLV70022DDCT	TPS73433DDCR	TPS799285DDCT	TPS3701DDCR																								
TLV70025DDCR	TPS73433DDCT	TPS79928DDCR	TPS3701DDCT																								
TLV70025DDCT	TPS79901DDCR	TPS79928DDCT	TPS3702CX33DDCR																								
TLV70028DDCR	TPS79901DDCT	TPS79930DDCR	TPS3710DDCR																								
TLV70028DDCT	TPS79912DDCR	TPS79930DDCT	TLV9062IDDFR																								
TLV70030DDCR	TPS79912DDCT	TPS799315DDCR	TLV9352IDDFR																								

TLV70030DDCT	TPS79913DDCR	TPS799315DDCT	
TLV70032DDCR	TPS79913DDCT	TPS79933DDCR	
Group 2 Product Affected:			
SN1804026DDFR	TPS563210DDFR	TPS562219ADDFR	TPS565201DDCR
THVD8000DDFR	TPS563219ADDFR	TPS562219ADDFR	TPS565201DDCT
THVD8010DDFR	TPS563219DDFR	TPS562219DDFR	TPS565208DDCR
TPS562210ADDFR	SN1706035DDCR	TPS563210ADDFR	TPS565208DDCT
TPS562210DDFR	SN1706035DDCT	TPS563210ADDFR	

Qualification Report (SOT-23-THN)

Qualification Results

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

	Stress Test	Duration	PHI TPS563249DDC	CDAT TPS563249DDC
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0
HAST/T HB	Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH	96 hours Or 264 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
UHA ST/ AC	Unbiased HAST, 130C/85%RH Or Autoclave 121C	96 hours	3/231/0	3/231/0
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 TPS563208DDC	JCETJY TLV62569PDDC
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0
HAST/T HB	Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH	96 hours Or 264 hours Or 1000 hours	3/231/0	3/231/0

	Stress Test	Duration	JCETC8 TPS563208DDC	JCETJY TLV62569PDDC
HTSL	High Temp. Storage Bake 150C Or High Temp. Storage Bake 170C	1000 hours Or 420 hours	3/231/0	3/231/0
UHA ST/ AC	Unbiased HAST, 130C/85%RH Or Autoclave 121C	96 hours	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0	3/66/0 (TPS27081A DDC)
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	UTL LM73CxQDDCRQ1	TIEM TPL5010QDDCRQ1	HNA LV2862XLV DDC
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0	3/231/0
HAST/T HB	Biased HAST 130C/85%RH Or Biased HAST 110C/85%RH Or Temperature Humidity Bias, 85C/85%RH	96 hours Or 264 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 (a)	3/231/0	3/135/0 (b)
UHA ST /AC	Unbiased HAST, 130C/85%RH Or Autoclave 121C	96 hours	3/231/0	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	2/44/0 (TPS62242QDDC)	2/44/0 (LM2734XQMK)	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 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

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