

PCN Number:	20230327004.1	PCN Date:	March 30, 2023
Title:	Qualify additional Assembly site for select SOT-SC70 Package devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	June 28, 2023	Sample requests accepted until:	Apr 28, 2023
*Sample requests received after (Apr. 28, 2023) will not be supported.			
Change Type:			
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input checked="" 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"/>		<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process
PCN Details			
Description of Change:			
<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-SC70			
Assembly Sites	TFME, HFTAT, HNA, ASEWH, UTL2, CDAT, TIEMA		
Lead Finish	NiPdAu, NiPdAuAg, Matte Sn		
Mount Compound	A-09 A-03 4207123 400180 A-16 1120999A2 A-21		
Mold Compound	450179 R-27 4222198 R-21 450042 8097131 R-07		
Bond wire type	Au, Cu		
Bond wire diameter	15.24 UM (0.6 MIL) 20.3 UM (0.8 MIL) 25.4 UM (1.0 MIL) 33 UM (1.3 MIL)		
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		
TFME	Assembly Site Origin (22L)	ASO: NFM
Hana	Assembly Site Origin (22L)	ASO: HNT
ASEWH	Assembly Site Origin (22L)	ASO: AWH
UTAC	Assembly Site Origin (22L)	ASO: NS2
HFTFAT	Assembly Site Origin (22L)	ASO: HFT
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: 20:
 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) 7523483S12
 (P)
 (2P) REV: (V) 0033317
 (20L) CSO: SHE (21L) CCO:USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

74AVC1T45DCKR	INA215CIDCKT	SN74LVC1G00DCKR	TLV803EA24DCKR
BQ500100DCKR	LM321LVIDCKR	SN74LVC1G02DCKR	TLV803EA26DCKR
BQ500100DCKT	LM66100DCKR	SN74LVC1G02DCKT	TLV803EA29DCKR
INA186A1IDCKR	LM66100DCKT	SN74LVC1G06DCKR	TLV803EA30DCKR
INA186A1IDCKT	LMV321AIDCKR	SN74LVC1G11DCKR	TLV803EA43DCKR
INA186A2IDCKR	LMV321IDCKR	SN74LVC1G125DCKR	TLV803EB22DCKR
INA186A2IDCKT	LMV321IDCKT	SN74LVC1G126DCKR	TLV803EB46DCKR
INA186A3IDCKR	LMV721IDCKR	SN74LVC1G14DCKR	TLV803EC29DCKR
INA186A3IDCKT	MCP6291IDCKR	SN74LVC1G175DCKR	TLV809EA26DCKR
INA186A4IDCKR	OPA1671IDCKR	SN74LVC1G17DCKR-NC	TLV809EA29DCKR
INA186A4IDCKT	OPA1671IDCKT	SN74LVC1G19DCKR	TLV809EA30DCKR
INA186A5IDCKR	OPA313IDCKR	SN74LVC1G240DCKR	TLV809EA45DCKR
INA186A5IDCKT	OPA313IDCKT	SN74LVC1G27DCKR	TLV809EA46DCKR
INA190A1IDCKR	OPA314AIDCKR	SN74LVC1G332DCKR	TLV9001IDCKR
INA190A1IDCKT	OPA314AIDCKT	SN74LVC1G34DCKR	TLV9001SIDCKR
INA190A2IDCKR	OPA316IDCKR	SN74LVC1G373DCKR	TLV9001TIDCKR
INA190A2IDCKT	OPA316IDCKT	SN74LVC1G374DCKR	TLV9051IDCKR
INA190A3IDCKR	OPA330AIDCKR	SN74LVC1G38DCKR	TLV9061IDCKR
INA190A3IDCKT	OPA330AIDCKT	SN74LVC1G57DCKR	TMP126DCKR
INA190A4IDCKR	OPA333AIDCKR	SN74LVC1G58DCKR	TMP126NDCKR
INA190A4IDCKT	OPA333AIDCKT	SN74LVC1G79DCKR	TMP235A2DCKR
INA190A5IDCKR	OPA376AIDCKR	SN74LVC1G79DCKT	TMP235A2DCKT
INA190A5IDCKT	OPA376AIDCKT	SN74LVC1G80DCKR	TMP235A4DCKR
INA199A1DCKR	OPA377AIDCKR	SN74LVC1G86DCKR	TMP235A4DCKT
INA199A1DCKT	OPA377AIDCKT	SN74LVC1G97DCKR	TMP236A2DCKR
INA199A2DCKR	SN0710019DCKR	SN74LVC1G98DCKR	TMP236A2DCKT

INA199A2DCKT	SN1805022IDCKR	SN74LVC1G98DCKT	TMP236A4DCKR
INA199A3DCKR	SN74AUC1G125DCKR	SN74LVC1GU04DCKR	TMP236A4DCKT
INA199A3DCKT	SN74AUC1G240DCKR	SN74LVC1GU04DCKT	TMUX1119DCKR
INA199B1DCKR	SN74AUP1G00DCKR	SN74LVC1GX04DCKR	TMUX1219DCKR
INA199B1DCKT	SN74AUP1G02DCKR	SN74LVC1GX04DCKT	TMUX1247DCKR
INA199B2DCKR	SN74AUP1G04DCKR	SN74LVC1T45DCKR	TMUX1248DCKR
INA199B2DCKT	SN74AUP1G06DCKR	SN74LVC1T45DCKT	TMUX4157NDCKR
INA199B3DCKR	SN74AUP1G06DCKT	SN74LVC2G04DCKR	TPD2E2U06DCKR
INA199B3DCKT	SN74AUP1G07DCKR	SN74LVC2G06DCKR	TPD4E1B06DCKR
INA199C1DCKR	SN74AUP1G08DCKR	SN74LVC2G07DCKR	TPD4E1U06DCKR
INA199C1DCKT	SN74AUP1G125DCKR	SN74LVC2G17DCKR	TPS22919DCKR
INA199C2DCKR	SN74AUP1G126DCKR	SN74LVC2G34DCKR	TPS22919DCKT
INA199C2DCKT	SN74AUP1G126DCKT	SN74LVC2GU04DCKR	TPS71701DCKR
INA199C3DCKR	SN74AUP1G14DCKR	SN74LVC2GU04DCKT	TPS71701DCKT
INA199C3DCKT	SN74AUP1G17DCKR	SN74LXC1T45DCKR	TPS71710DCKR
INA210AIDCKR	SN74AUP1G240DCKR	TLV1701AIDCKR	TPS71710DCKT
INA210AIDCKT	SN74AUP1G240DCKT	TLV1701AIDCKT	TPS71711DCKR
INA210BIDCKR	SN74AUP1G32DCKR	TLV313IDCKR	TPS71711DCKT
INA210BIDCKT	SN74AUP1G34DCKR	TLV313IDCKT	TPS71712DCKR
INA210CIDCKR	SN74AUP1G57DCKR	TLV314IDCKR	TPS71712DCKT
INA210CIDCKT	SN74AUP1G58DCKR	TLV314IDCKT	TPS71713DCKR
INA211AIDCKR	SN74AUP1G79DCKR	TLV316IDCKR	TPS71713DCKT
INA211AIDCKT	SN74AUP1G80DCKR	TLV316IDCKT	TPS71715DCKR
INA211BIDCKR	SN74AUP1G80DCKT	TLV333IDCKR	TPS71715DCKT
INA211BIDCKT	SN74AUP1G97DCKR	TLV333IDCKT	TPS71718DCKR
INA211CIDCKR	SN74AUP1G98DCKR	TLV6001IDCKR	TPS71718DCKT
INA211CIDCKT	SN74AUP1G98DCKT	TLV6001IDCKT	TPS71719DCKR
INA212AIDCKR	SN74AUP1T00DCKR	TLV70012DCKR	TPS71719DCKT
INA212AIDCKT	SN74AUP1T02DCKR	TLV70012DCKT	TPS71721DCKR
INA212BIDCKR	SN74AUP1T04DCKR	TLV70015DCKR	TPS71721DCKT
INA212BIDCKT	SN74AUP1T08DCKR	TLV70015DCKT	TPS71725DCKR
INA212CIDCKR	SN74AUP1T14DCKR	TLV70018DCKR	TPS71725DCKT
INA212CIDCKT	SN74AUP1T157DCKR	TLV70018DCKT	TPS71726DCKR
INA213AIDCKR	SN74AUP1T158DCKR	TLV70025DCKR	TPS71726DCKT
INA213AIDCKT	SN74AUP1T17DCKR	TLV70025DCKT	TPS71727DCKR
INA213BIDCKR	SN74AUP1T32DCKR	TLV70028DCKR	TPS71727DCKT
INA213BIDCKT	SN74AUP1T34DCKR	TLV70028DCKT	TPS717285DCKR
INA213CIDCKR	SN74AUP1T50DCKR	TLV70030DCKR	TPS717285DCKT
INA213CIDCKT	SN74AUP1T86DCKR	TLV70030DCKT	TPS71728DCKR
INA214AIDCKR	SN74AUP1T87DCKR	TLV70033DCKR	TPS71728DCKT
INA214AIDCKT	SN74AUP2G04DCKR	TLV70033DCKT	TPS71729DCKR
INA214BIDCKR	SN74AUP2G06DCKR	TLV7011DCKR	TPS71729DCKT
INA214BIDCKT	SN74AUP2G07DCKR	TLV7011DCKT	TPS71730DCKR
INA214CIDCKR	SN74AUP2G14DCKR	TLV7021DCKR	TPS71730DCKT
INA214CIDCKT	SN74AUP2G17DCKR	TLV7021DCKT	TPS71733DCKR
INA215AIDCKR	SN74AUP2G34DCKR	TLV7031DCKR	TPS71733DCKT
INA215AIDCKT	SN74AVC1T45DCKR	TLV7031DCKT	TSV911AIDCKR
INA215BIDCKR	SN74AVCH1T45DCKR	TLV7041DCKR	TXS0101DCKR
INA215BIDCKT	SN74AXC1T45DCKR	TLV7041DCKT	TXS0101DCKT
INA215CIDCKR	SN74AXCH1T45DCKR	TLV803EA22DCKR	

Qualification Report (SOT-SC70)

Qualification Results

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

	Stress Test	Duration	TIEMA LMV7275MG/NOPB LMH6601MG/NOPB	HFTFAT TMUX1119DCK
TC	Temperature Cycling -65/150C Or Temperature Cycling -55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0
HAST/THB	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
UHAST/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 (LM4041CIM7X-1.2/NOPB)	3/66/0 (INA210AIDCK)
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	HNA SN74AUP1T34QDCKRQ1 TMUX1119DCK	TFME SN74LVC1G17DCKR
TC	Temperature Cycling - 65/150C Or Temperature Cycling - 55/125C	500 Cycles Or 700 Cycles	3/231/0	3/231/0
HAST/ THB	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
UHAST/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 (TL431BDCK)	3/66/0
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	ASEWH TPD4E1 U06DCK	CDAT LMV721IDCK TLV9061IDBV	UTL2 TLV70228DCK
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/THB	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	3/231/0	3/231/0
UHAST /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	3/66/0	3/66/0	3/66/0 (REF3312AIDCK)
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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