




<b>PCN Number:</b>	20230531000.1	<b>PCN Date:</b>	May 31, 2023
<b>Title:</b>	Qualification of TI CDAT as an additional Assembly site for select package devices		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Aug 30, 2023	<b>Sample Requests accepted until:</b>	June 30, 2023*
*Sample requests received after June 30, 2023 will not be supported.			
<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 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
<b>PCN Details</b>			
<b>Description of Change:</b>			
Texas Instruments Incorporated is announcing the qualification of TI CDAT as an additional Assembly site for select devices. Material differences between sites are as follows:			
<b>Group 1 Device:</b>			
	<b>ASEN</b>	<b>TI CDAT</b>	
Wire type	0.8mils Au	0.8mils Cu	
Mount compound	1400336111	4226215	
Mold compound	1801512111	4222198	
<b>Group 2 Device:</b>			
	<b>JCET</b>	<b>TI CDAT</b>	
Wire type	0.8mils Au	0.8mils Cu	
Mount compound	120402001600	4226215	
Mold compound	120903003709	4222198	
<b>Reason for Change:</b>			
Continuity of Supply			
<b>Anticipated impact on Form, Fit, 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>			
<b>Assembly Site</b>			
ASEN	Assembly Site Origin (22L)	ASO: ASN	
JCET	Assembly Site Origin (22L)	ASO: JC8	
TI-CDAT	Assembly Site Origin (22L)	ASO: CDA	
Sample product shipping label (not actual product label)			

 <b>TEXAS INSTRUMENTS</b> MADE IN: Malaysia 2DC: 2Q:	 <b>G4</b>		(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				
<table border="1"> <tr> <td>MSL 2 / 260C / 1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 / 235C / UNLIM</td> <td>03/29/04</td> </tr> </table>	MSL 2 / 260C / 1 YEAR	SEAL DT	MSL 1 / 235C / UNLIM	03/29/04			
MSL 2 / 260C / 1 YEAR	SEAL DT						
MSL 1 / 235C / UNLIM	03/29/04						
OPT: ITEM: 39 <b>LBL: 5A (L)T0:1750</b>							
<b>Group 1 Product Affected:</b>							
INA190A1IRSWR	INA190A2IRSWT	INA190A4IRSWR	INA190A5IRSWT				
INA190A1IRSWT	INA190A3IRSWR	INA190A4IRSWT	TMUX154ERSWR				
INA190A2IRSWR	INA190A3IRSWT	INA190A5IRSWR					
<b>Group 2 Product Affected:</b>							
TS3A5223RSWR							

## Qualification Report

Approve Date 23-March-2023

### Product Attributes

Attributes	Qual Device: INA190A1IRSWR	Qual Device: INA190A3IRSWR	Qual Device: INA190A5IRSWR
Assembly Site	CDAT	CDAT	CDAT
Package Family	UQFN	UQFN	UQFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB	RFAB	RFAB
Wafer Process	LBC8LV	LBC8LV	LBC8LV

Qual Device INA190A1IRSWR is qualified at MSL1 260C

Qual Device INA190A3IRSWR is qualified at MSL1 260C

Qual Device INA190A5IRSWR is qualified at MSL1 260C

### Qualification Results

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

Type	Test Name / Condition	Conditions	Qual Device: INA190A1IRSWR	Qual Device: INA190A3IRSWR	Qual Device: INA190A5IRSWR
PC	Preconditioning	Level 1 - 260C	1/308/0	1/308/0	1/308/0
SAM	Post Preconditioning SAM	Level 1 - 260C	1/15/0	1/15/0	1/15/0
UHAST	Unbiased HAST, 110C	264 Hours	1/77/0	1/77/0	1/77/0
SAM	Post Unbiased HAST SAM	Devices	1/5/0	1/5/0	1/5/0
BHAST	Biased HAST, 110C	264 Hours	1/77/0	1/77/0	1/77/0
SAM	Post Biased HAST SAM	Devices	1/5/0	1/5/0	1/5/0
TC	Temperature Cycle, -55/125C	700 Cycles	1/77/0	1/77/0	1/77/0
SAM	Post Temperature Cycle SAM	Devices	1/5/0	1/5/0	1/5/0
HTSL	High Temp Storage Life, 150C	1000 Hours	1/77/0	1/77/0	1/77/0
HTOL	High Temp Op Life, 125C	1000 Hours	1/77/0	1/77/0	1/77/0
SD	Solderability, Pb-Free	155C Dry Bake	1/22/0	1/22/0	1/22/0
MQ	Manufacturability (Assembly)	(per mfg site requirements)	1/PASS	1/PASS	1/PASS
DSS	Die Shear Strength	Die	1/10/0	1/10/0	1/10/0
BBS	Ball Bond Shear	Ball Bonds	1/76/0	1/76/0	1/76/0
WBP	Wire Bond Pull	Wires	1/76/0	1/76/0	1/76/0
VM	Visual Mechanical Inspection	Devices	1/22/0	1/22/0	1/22/0
XR	Internal X-ray	Devices	1/5/0	1/5/0	1/5/0
PD	Physical Dimensions	(per pkg dwg requirements)	1/5/0	1/5/0	1/5/0
CHAR	Electrical Characterization	Devices	1/30/0	1/30/0	1/30/0
MSL	Moisture Sensitivity Level	Level 1 - 260C	1/15/0	1/15/0	1/15/0
YLD	FTY and Bin Summary	Lots	1/PASS	1/PASS	1/PASS

Preconditioning was performed for Unbiased HAST, Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable.

The following are equivalent HTOL options based on an activation energy of 0.7eV: 125C/1000 Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours.

The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1000 Hours, and 170C/420 Hours.

The following are equivalent Temp Cycle options per JESD47: -55C/125C/700 Cycles and -65C/150C/500 Cycles.

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 contacts shown below or your local Field Sales Representative.

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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