PCN Number:	20240123000.1	**PCN Date:**	January 24, 2024

Title:	Qualification of CDAT as an additional Assembly site for select devices

Customer Contact:	Change Management Team	**Dept:**	Quality Services
Proposed 1st Ship Date:	April 22, 2024	**Sample requests accepted until:**	Feb 23, 2024

***Sample requests received after Feb 23, 2024 will not be supported.**

Change Type:

☒	Assembly Site	☐	Design	☐	Wafer Bump Material
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Process
☒	Assembly Materials	☐	Part number change	☐	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Material
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing the qualification of CDAT as an additional Assembly site for the devices listed below. Construction differences are as follows:

	UTL1/3	HNA	ATXSZ (ASEN)	CDAT
Mold Compound	SID#CZ0135, SID#CZ0136	SID#450176	SID#1801512111	**4222198**
Mount Compound	SID#PZ0037	SID#400194	SID#1400336111	**4226215**
Bond wire composition, diameter	Au, 1.0 mil	Au, 0.8 mil	Au, 0.8 mil	**Cu, 0.8 mil**

Reason for Change:

Supply continuity

Anticipated impact on Form, Fit, 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
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
UTL1	NSE	THA	Bangkok
UTL3	UT3	THA	Bangpakong
ASEN	ASN	CHN	Suzhou
HNA	HNT	THA	Ayutthaya
CDAT	**CDA**	**CHN**	**Chengdu**

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS

Pb G4

MADE IN: Malaysia
2DC: 2Q:

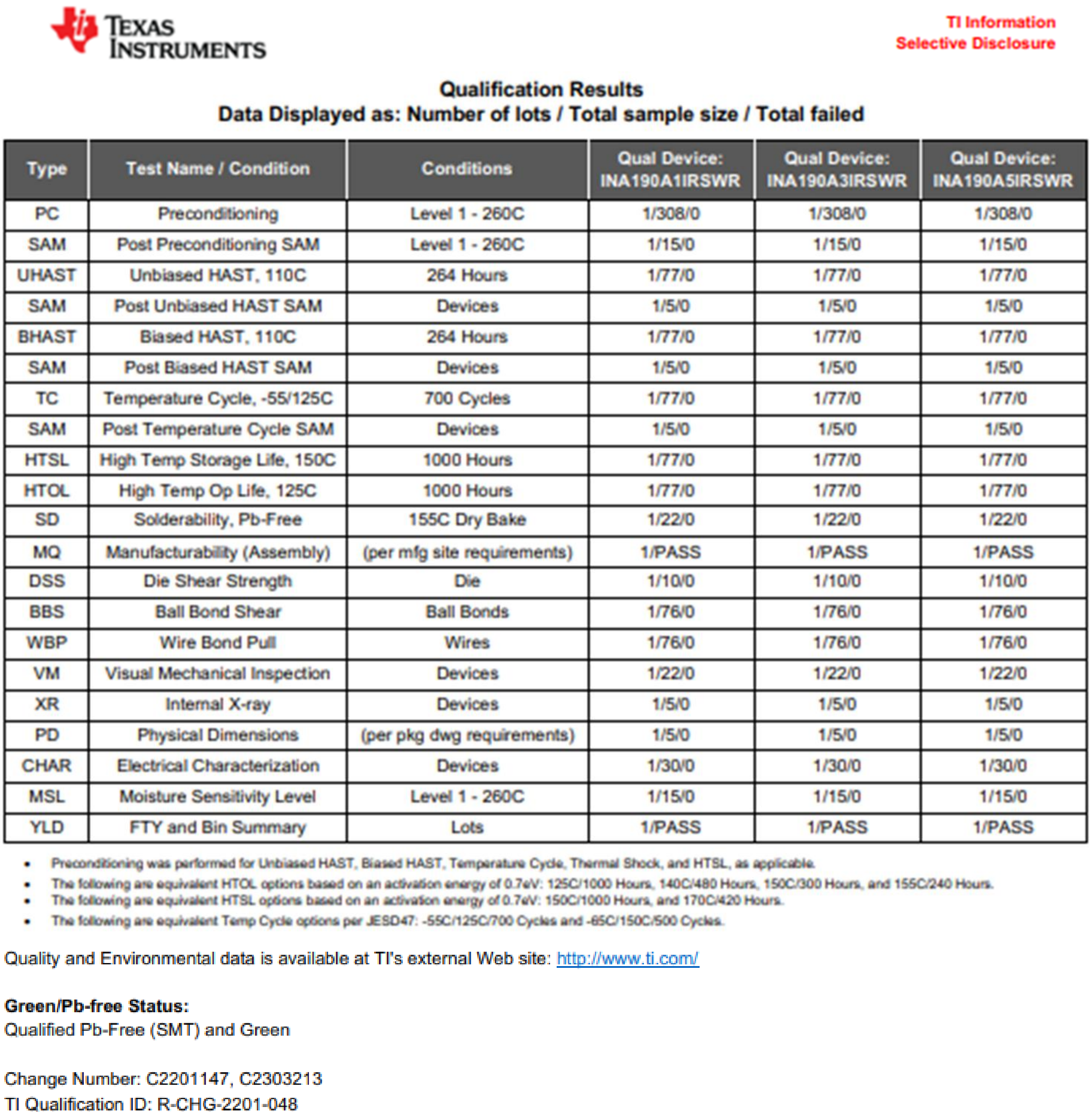
MSL 2 /260C/1 YEAR	SEAL DT
MSL 1 /235C/UNLIM	03/29/04

OPT:
ITEM: 39
LBL: 5A (L)TO: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

Product Affected:

BQ24392RSER	INA199C1RSWT	INA212BIRSWR	INA214CIRSWR
INA199A1RSWR	INA199C2RSWR	INA212CIRSWR	INA215BIRSWR
INA199A1RSWT	INA199C3RSWR	INA213AIRSWR	INA215CIRSWR
INA199A2RSWR	INA199C3RSWT	INA213AIRSWT	INA216A1RSWR
INA199A3RSWR	INA210AIRSWR	INA213BIRSWR	INA216A1RSWT
INA199B1RSWR	INA210BIRSWR	INA213CIRSWR	INA216A2RSWR
INA199B2RSWR	INA210CIRSWR	INA213CIRSWT	INA216A2RSWT
INA199B3RSWR	INA211BIRSWR	INA214AIRSWR	INA216A3RSWR
INA199C1RSWR	INA211CIRSWR	INA214BIRSWR	INA216A4RSWR



TI Information
Selective Disclosure

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

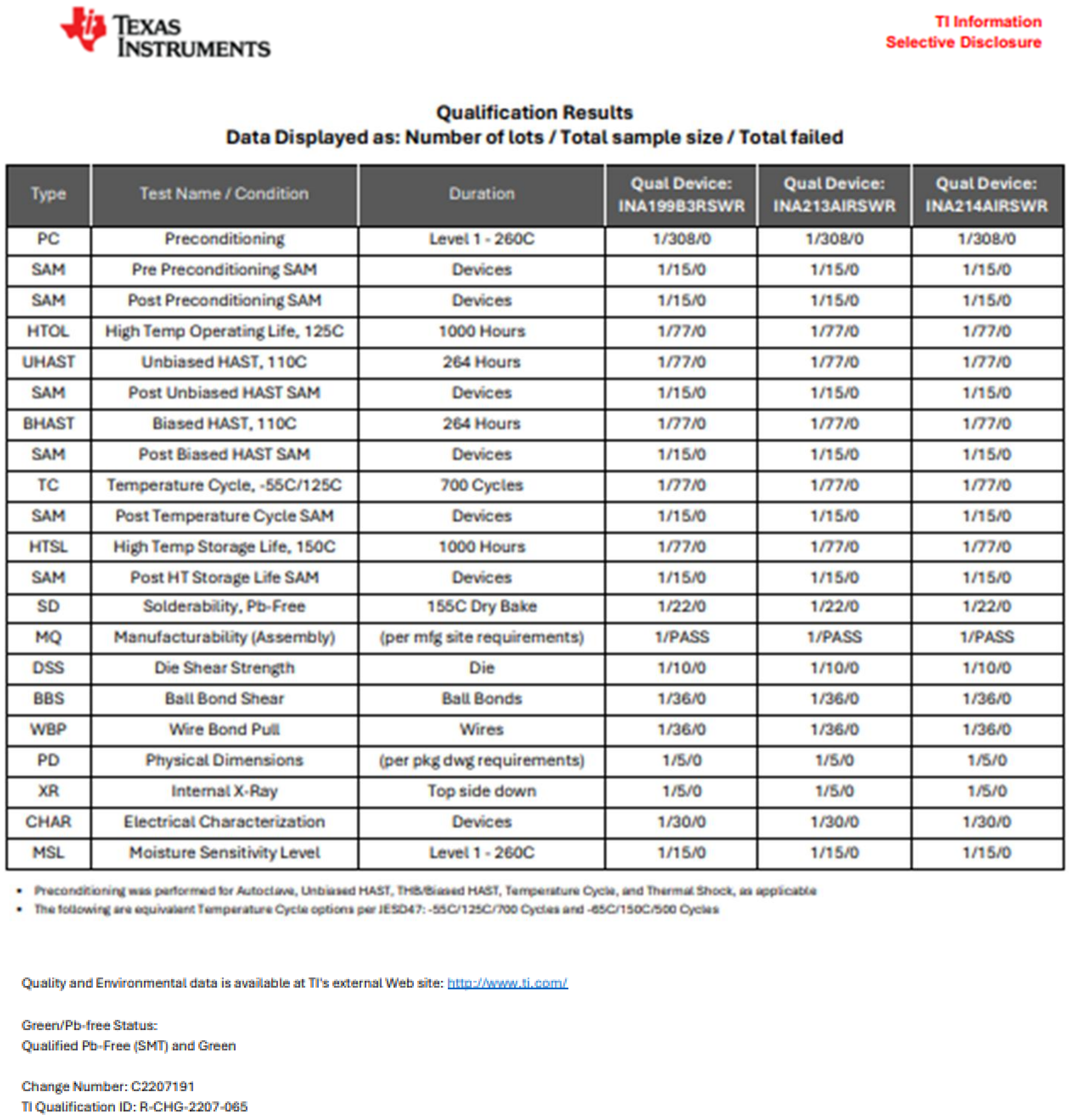
Type	Test Name / Condition	Conditions	Qual Device: INA190A1IRSWR	Qual Device: INA190A3IRSWR	Qual Device: INA190A5IRSWR
PC	Preconditioning	Level 1 - 260C	1/308/0	1/308/0	1/308/0
SAM	Post Preconditioning SAM	Level 1 - 260C	1/15/0	1/15/0	1/15/0
UHAST	Unbiased HAST, 110C	264 Hours	1/77/0	1/77/0	1/77/0
SAM	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

Change Number: C2201147, C2303213
TI Qualification ID: R-CHG-2201-048



TI Information
Selective Disclosure

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

Type	Test Name / Condition	Duration	Qual Device: INA199B3RSWR	Qual Device: INA213AIRSWR	Qual Device: INA214AIRSWR
PC	Preconditioning	Level 1 - 260C	1/308/0	1/308/0	1/308/0
SAM	Pre Preconditioning SAM	Devices	1/15/0	1/15/0	1/15/0
SAM	Post Preconditioning SAM	Devices	1/15/0	1/15/0	1/15/0
HTOL	High Temp Operating Life, 125C	1000 Hours	1/77/0	1/77/0	1/77/0
UHAST	Unbiased HAST, 110C	264 Hours	1/77/0	1/77/0	1/77/0
SAM	Post Unbiased HAST SAM	Devices	1/15/0	1/15/0	1/15/0
BHAST	Biased HAST, 110C	264 Hours	1/77/0	1/77/0	1/77/0
SAM	Post Biased HAST SAM	Devices	1/15/0	1/15/0	1/15/0
TC	Temperature Cycle, -55C/125C	700 Cycles	1/77/0	1/77/0	1/77/0
SAM	Post Temperature Cycle SAM	Devices	1/15/0	1/15/0	1/15/0
HTSL	High Temp Storage Life, 150C	1000 Hours	1/77/0	1/77/0	1/77/0
SAM	Post HT Storage Life SAM	Devices	1/15/0	1/15/0	1/15/0
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	1/36/0	1/36/0	1/36/0
WBP	Wire Bond Pull	Wires	1/36/0	1/36/0	1/36/0
PD	Physical Dimensions	(per pkg dwg requirements)	1/5/0	1/5/0	1/5/0
XR	Internal X-Ray	Top side down	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

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, and Thermal Shock, as applicable
- The following are equivalent Temperature 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

Change Number: C2207191
TI Qualification ID: R-CHG-2207-065

For questions regarding this notice, e-mails can be sent to Change Management team or your local Field Sales Representative.

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