| PCN Number: 20220414001 | | | 01.1 | | | | | PCN Date: | | April 19, 2022 | | |
|---|-----------|-----------|---------|---|-------------|--------------|---------------------------------------|-----------------|---------------------|---------------------|---------|--|
| Title: Qualification of CDAT as an alternate Assembly site for select devices | | | | | | | | | | | | |
| Customer Contact: PCN Manager Dept: Quality Services | | | | | | | | | | | | |
| | | | | | Estimated 9 | | | ed Sa | | | | |
| Proposed 1 st Ship Date: July 19, 2022 Availability: Sample reques | | | | | | | | | | le request | | |
| Change | | | | | | | | | | | | |
| Assembly Site | | | | Design | | | | Wafer Bump Site | | | | |
| Assembly Process | | | | | Data Sheet | | | | | Wafer Bump Material | | |
| Assembly Materials | | | | Part number change | | | | | Wafer Bump Process | | | |
| Mechanical Specification | | | | Test Site | | | | | Wafer Fab Site | | | |
| Packing/Shipping/Labeling | | | | Test Process | | | | | Wafer Fab Materials | | | |
| | | | | | | | | | Wafer Fab Process | | | |
| PCN Details | | | | | | | | | | | | |
| Description of Change: | | | | | | | | | | | | |
| | | | | | | | ne qualification onstruction diffe | | | | | |
| 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 | | | REA | CH | Green Status | | | | IE | C 62474 | |
| No Change | | | | | | | | | | No C | hange | |
| | | | | | | | <u> </u> | | | | | |
| Change | s to proc | luct id | entific | ation | result | tina | from this PCN | • | | | | |
| Changes to product identification resulting from this PCN: Assembly Site | | | | | | | | | embly City | | | |
| | TIPI PHI | | | _ , , , , , , , , , , , , , , , , , , , | | PHL | | - | | aguio City | | |
| CD | CDAT CDA | | Α | | | CHN | | C | hengdu | | | |
| Sample product shipping label (not actual product label) TEXAS INSTRUMENTS 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) T0: 1750 (1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY(1T) 7523483\$I2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CC0: USA (22L) AS0: MLA (23L) ACO: MYS | | | | | | | | | | | | |
| Product | Affecte | <u>d:</u> | | | | ı | | | | | | |
| L CNECSS | USDBIB | | TPS563 | 20206 | DI D | | TPS563202SDRI | R | | | | |



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

| Туре | Test Name / Condition | Duration | Qual Device: TPS562231DRLR |
|-------|---|-------------------------------|-------------------------------|
| ED | Electrical Characterization, side by side | (per datasheet) | Pass |
| FLAM | Flammability (UL-1694) | - | 3/15/0 |
| HAST | Biased HAST, 130C/85%RH | 96 Hours | 3/231/0 |
| HTOL | Life Test, 125C | 1000 Hours | 3/231/0 |
| HTSL | High Temp Storage Bake 170C | 420 Hours | 3/231/0 |
| LFA | Lead Finish Adhesion | Leads | 3/45/0 |
| LI | Lead Fatigue | Leads | 3/54/0 |
| LI | Lead Pull | Leads | 3/72/0 |
| MQ | Manufacturability (Assembly) | (per mfg. Site specification) | Pass |
| PD | Physical Dimensions | (per mechanical drawing) | 3/15/0 |
| SA | Salt Atmosphere | 24 Hrs | 3/66/0 |
| SD | Solderability | Pb Free | 3/66/0 |
| TC | Temperature Cycle, -65/150C | 500 Cycles | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 Hours | 3/231/0 |
| VM | Visual / Mechanical | - | 3/984/0 |

⁻ Qual Device TPS562231DRLR is qualified at LEVEL1-260CG

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/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/1k 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/1k 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

TI Qualification ID: 20200213-132963

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 | PCN www admin_team@list.ti.com |

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