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|---|--|---------------------------------------|--|--------------------------|---------------------|
| PCN Number: | 20201204000.1 | | PCN Date: | Dec. 4, 2020 | |
| Title: | Qualification of CDAT as an alternate AT site for Select Devices | | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | | |
| Proposed 1st Ship Date: | Mar. 4, 2021 | Estimated Sample Availability: | Date provided at sample request | | |
| Change Type: | | | | | |
| <input checked="" type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Design | <input type="checkbox"/> | Wafer Bump Site |
| <input type="checkbox"/> | Assembly Process | <input type="checkbox"/> | Data Sheet | <input type="checkbox"/> | Wafer Bump Material |
| <input type="checkbox"/> | Assembly Materials | <input type="checkbox"/> | Part number change | <input type="checkbox"/> | Wafer Bump Process |
| <input type="checkbox"/> | Mechanical Specification | <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Wafer Fab Site |
| <input type="checkbox"/> | Packing/Shipping/Labeling | <input type="checkbox"/> | Test Process | <input type="checkbox"/> | Wafer Fab Materials |
| | | | | <input type="checkbox"/> | Wafer Fab Process |
| PCN Details | | | | | |
| Description of Change: | | | | | |
| Texas Instruments Incorporated is announcing the qualification of CDAT as an additional AT site for the list of devices shown below. There are no construction differences between the two sites. | | | | | |
| Reason for Change: | | | | | |
| Supply continuity | | | | | |
| Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative): | | | | | |
| None | | | | | |
| Anticipated impact on Material Declaration | | | | | |
| <input checked="" type="checkbox"/> | No Impact to the Material Declaration | <input type="checkbox"/> | Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained at the site link below http://www.ti.com/quality/docs/materialcontentsearch.tsp | | |
| Changes to product identification resulting from this PCN: | | | | | |
| Assembly Site | Assembly Site Origin (22L) | Assembly Country Code (23L) | Assembly City | | |
| CLARK | QAB | PHL | Angeles City, Pampanga | | |
| CDAT | CDA | CHN | Chengdu | | |
| Sample product shipping label (not actual product label) | | | | | |
| <p> 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 </p> <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> | | | | | |

| Product Affected: | | | | |
|-------------------|--------------|--------------|--------------|--|
| BQ771802DPJR | BQ771803DPJR | BQ771809DPJR | BQ771817DPJR | |
| BQ771802DPJT | BQ771803DPJT | BQ771809DPJT | BQ771817DPJT | |



TI Information
Selective Disclosure

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

| Type | Test Name / Condition | Duration | Qual Device: BQ771802DPJ | Qual Device: BQ771809DPJ | Qual Device: BQ771817DPJ | QBS Product Reference: BQ771800DPJ | QBS Process Reference: TPS51217DSC | QBS Package Reference: BQ771811DPJ |
|------|--------------------------------------|------------------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| - | Manufacturability (TQ - Testability) | (per mfg. Site specification) | 1/Pass | 1/Pass | 1/Pass | - | - | 1/Pass |
| AC | Autoclave 121C | 96 hours | - | - | - | 1/77/0 | 3/231/0 | 3/231/0 |
| CDM | ESD - CDM | 1500 V | - | - | - | - | 3/9/0 | - |
| DS | Die Shear | QSS 009-009 | - | - | - | - | - | 3/30/0 |
| ED | Electrical Characterization | Per Datasheet Parameters | - | - | - | 1/Pass | 3/60/0 | 1/Pass |
| HAST | Biased HAST 130C/85%RH | 96 Hours | - | - | - | - | 3/231/0 | - |
| HBM | ESD - HBM | 2000 V | - | - | - | - | 3/9/0 | - |
| HTSL | High Temp Storage Bake, 170C | 420 Hours | - | - | - | - | 3/231/0 | - |
| LU | Latch-up | (per JESD78) | - | - | - | 1/6/0 | 3/18/0 | 1/6/0 |
| MSL | Thermal Path Integrity, JEDEC, L2 | (MSL 2 / 260C) | - | - | - | - | - | 3/36/0 |
| PD | Physical Dimensions | (per mechanical drawing) | - | - | - | - | - | 3/15/0 |
| SD | Solderability | Steam age, 8 hours; Pb-Free solder | - | - | - | - | - | 3/66/0 |
| TC | Temperature Cycle - 65/150C | 500 Cycles | - | - | - | 1/77/0 | 3/231/0 | 3/231/0 |
| WBP | Bond Pull | 76 Wires, 3 units min | - | - | - | - | - | 3/228/0 |
| WBS | Ball Bond Shear | 76 balls, 3 units min | - | - | - | - | - | 3/228/0 |
| XRAY | X-ray | (top side only) | - | - | - | - | 3/15/0 | 3/15/0 |

- 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
- QBS: Qual By Similarity
- Qual Device BQ771802DPJ is qualified at LEVEL2-260C
- Qual Device BQ771809DPJ is qualified at LEVEL2-260C
- Qual Device BQ771817DPJ is qualified at LEVEL2-260C

For questions regarding this notice, e-mails can be sent to the contacts shown below or your local Field Sales Representative.

| Location | E-Mail |
|--------------|--|
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| Europe | PCNEuropeContact@list.ti.com |
| Asia Pacific | PCNAsiaContact@list.ti.com |
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