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|---|---|---------------------------------------|-----------------------|-------------------------------------|---------------------|
| PCN Number: | 20210806000.1 | | PCN Date: | August 11, 2021 | |
| Title: | Qualify TI Malaysia as an additional Assembly site for select devices | | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | | |
| Proposed 1st Ship Date: | Nov 11, 2021 | Estimated Sample Availability: | Provided upon 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 checked="" 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 TI Malaysia as an additional Assembly site for devices listed below in the product affected section. No material differences between assembly sites. | | | | | |
| 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 |
| Changes to product identification resulting from this PCN: | | | | | |
| Assembly Site | | | | | |
| TI Taiwan | Assembly Site Origin (22L) | ASO: TAI | | | |
| TI Malaysia | Assembly Site Origin (22L) | ASO: MLA | | | |
| Sample product shipping label (not actual product label) | | | | | |
|   <p>(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CGO: USA (22L) ASO: MLA (23L) ACO: MYS</p> <p>MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750</p> | | | | | |
| Product Affected: | | | | | |
| TPA3116D2DADR | TPA3116HD2DADR | | | | |

Qualification Report

Approved 10-Jul-2021

Qualification Results

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

| Type | Test Name / Condition | Duration | Qual Device: TPA3116D2DADR | QBS Device: TPS92520QDADQ1 |
|-------|---|-------------------------------|-------------------------------|-------------------------------|
| PC | Preconditioning | Level 3 - 260C | 1/231/0 | 3/231/0 |
| HTOL | High Temp Operating Life, 150C | 300 Hours | -- | 3/231/0 |
| AC | Autoclave, 121C | 96 Hours | 1/77/0 | 3/21/0 |
| BHAST | Biased HAST, 130C | 96 Hours | -- | 3/231/0 |
| TC | Temperature Cycle, -65C/150C | 500 Cycles | 1/77/0 | 3/231/0 |
| HTSL | High Temp. Storage Bake, 170C | 420 Hours | 1/77/0 | 3/135/0 |
| ED | Electrical Characterization, side by side | per datasheet requirements | 1/30/0 | 3/90/0 |
| MQ | Manufacturability (Assembly) | (per mfg. site specification) | 1/Pass | 3/PASS |
| PD | Physical Dimensions | (per mechanical drawing) | 1/5/0 | 3/30/0 |
| LP | Lead Pull | Leads | -- | 3/150/0 |
| WBP | Wire Pull | Wires | 1/30/0 | 3/90/0 |
| TPI | Thermal Path Integrity (Cu Wire) | Level 3 - 260C | 1/12/0 | |
| YLD | FTY and Bin Summary | - | 1/Pass | 1/PASS |

- QBS: Qual By Similarity

- Qual Device TPA3116D2DADR is qualified at LEVEL3-260C

- 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/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 regional contacts shown below or your local Field Sales Representative.

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