| PCN Number: 20211108000.1 | | | | PCN D | ate: | December 17, 2021 | | | |
|---|-----------|------------------------|-----------------|------------|-------------------------------------|----------------------|--|--|--|
| Title: Qualification of a new mount compound for select devices | | | | | | | | | |
| Customer Contact: PCN Manager Dept: Quality Services | | | | | | | | | |
| Proposed 1 st Ship Date: | Mar 17 | | Estimated | | ample Date provided at | | | | |
| - | Mai. 17, | .7, 2022 Ava | | ilability: | ability: sample request | | | | |
| Change Type: | | | | | | | | | |
| Assembly Site | | Design | Wafer Bump Site | | | | | | |
| Assembly Process | | Data Sh | | | | | | | |
| Assembly Materials Machanical Specification | | | mber change | | | | | | |
| Mechanical SpecificationPacking/Shipping/Labeling | | Test Site Test Process | | | Wafer Fab Site Wafer Fab Materials | | | | |
| | ig L | _ Test Fit | ocess | | Wafer Fab Process | | | | |
| PCN Details | | | | | | | | | |
| Description of Change: | | | | | | | | | |
| This PCN is to inform of a new mount compound qualification for the devices in the product affected section as follows: What Current New | | | | | | | | | |
| Mount Compound | | | ID#A-18 | SID#A-22 | | | | | |
| Reason for Change: | | | | | | | | | |
| Continuity of supply | | | | | | | | | |
| 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 | СН | Green Statu | S | IEC | 62474 | | | |
| No Change | No Chang | ge | No Change | | | | | | |
| | | | | | | | | | |
| Changes to product identification resulting from this PCN: | | | | | | | | | |
| changes to product identifi | ication | resulting | from this PCN: | | | | | | |
| None | ication i | resulting | from this PCN: | | | | | | |
| <u> </u> | ication | resulting | from this PCN: | | | | | | |



Approve Date 15-Apr-2020

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

| Туре | Test Name / Condition | Duration | Qual Device: TPS62842DGR |
|------------|---|----------------|-----------------------------|
| AC | Autoclave 121C | 96 hours | 3/231/0 |
| CDM | ESD - CDM | 500V | 1/3/0 |
| HAST | Biased HAST, 130C/85%RH | 96 hours | 3/231/0 |
| HBM | ESD - HBM | 1000 V | 1/3/0 |
| HTOL | High Temperature operating life, 150C | 300 hours | 3/231/0 |
| HTSL | High Temp Storage Life 170C | 420 Hours | 3/231/0 |
| LU | Latch-up | 100mA | 1/3/0 |
| TC | Temperature Cycle, -65/150C | 500 cycles | 3/231/0 |
| Additional | reliability testing on the leads: | | |
| SD | Solderability test with 155C Dry Bake preconditioning | Pb Free solder | 3/66/0 |
| LP | Lead pull | - | 3/18/0 |
| LF | Lead Fatigue | - | 3/66/0 |
| LFA | Lead finish adhesion | - | 3/45/0 |

- Qual Device TPS62842DGR is qualified at LEVEL1-260C
- 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/1k Hours, 140C/480 Hours, 150C/300 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

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.

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