

| PCN Number: | 20201112000.1 | | PCN Date: | Nov 19, 2020 | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------------------------------------|--|--------------------------|---------------------|-----------------------|---------------------|--------------------|--------|----------------|-------------|--------|----------------|----------|-------|------------|---------------|-----|-------------------|-------------|---------|----------------|----------------|-----|------------|
| Title: | Qualification of an additional Substrate Manufacturing Subcontractor for select devices | | | | | | | | | | | | | | | | | | | | | | | | |
| Customer Contact: | PCN Manager | Dept: | Quality Services | | | | | | | | | | | | | | | | | | | | | | |
| Proposed 1st Ship Date: | Feb 19, 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 checked="" type="checkbox"/> | Assembly Process | <input type="checkbox"/> | Data Sheet | <input type="checkbox"/> | Wafer Bump Material | | | | | | | | | | | | | | | | | | | | |
| <input checked="" 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: | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>TI is qualifying an additional substrate manufacturing subcontractor (ACCESS) for the devices in the product affected section shown below. Assembly site origin (ASO) will remain unchanged. Construction differences are as follows:</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th></th> <th>Current (ATNS)</th> <th>New (ACCESS)</th> </tr> </thead> <tbody> <tr> <td>Substrate Material</td> <td>R1551W</td> <td>6785GTK</td> </tr> <tr> <td>Solder mask</td> <td>XV501T</td> <td>SR7300G</td> </tr> <tr> <td>Adhesive</td> <td>AD222</td> <td>N/A</td> </tr> <tr> <td>Cavity Filler</td> <td>N/A</td> <td>ABF GX-T31</td> </tr> <tr> <td>L1/L2 metal</td> <td>23um Cu</td> <td>15um Cu</td> </tr> <tr> <td>Surface Finish</td> <td>OSP</td> <td>OSP</td> </tr> </tbody> </table> | | | | | | Current (ATNS) | New (ACCESS) | Substrate Material | R1551W | 6785GTK | Solder mask | XV501T | SR7300G | Adhesive | AD222 | N/A | Cavity Filler | N/A | ABF GX-T31 | L1/L2 metal | 23um Cu | 15um Cu | Surface Finish | OSP | OSP |
| | Current (ATNS) | New (ACCESS) | | | | | | | | | | | | | | | | | | | | | | | |
| Substrate Material | R1551W | 6785GTK | | | | | | | | | | | | | | | | | | | | | | | |
| Solder mask | XV501T | SR7300G | | | | | | | | | | | | | | | | | | | | | | | |
| Adhesive | AD222 | N/A | | | | | | | | | | | | | | | | | | | | | | | |
| Cavity Filler | N/A | ABF GX-T31 | | | | | | | | | | | | | | | | | | | | | | | |
| L1/L2 metal | 23um Cu | 15um Cu | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Finish | OSP | OSP | | | | | | | | | | | | | | | | | | | | | | | |
| Reason for Change: | | | | | | | | | | | | | | | | | | | | | | | | | |
| Continuity of Supply | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative): | | | | | | | | | | | | | | | | | | | | | | | | | |
| None | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anticipated impact on Material Declaration | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | No Impact to the Material Declaration | <input checked="" 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: | | | | | | | | | | | | | | | | | | | | | | | | | |
| N/A | | | | | | | | | | | | | | | | | | | | | | | | | |
| Product Affected: | | | | | | | | | | | | | | | | | | | | | | | | | |
| TPS82740ASIPR | TPS82740ASIPT | TPS82740BSIPR | TPS82740BSIPT | | | | | | | | | | | | | | | | | | | | | | |

Qualification Report

Approve Date 16-Oct-2020

Qualification Results

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

| Type | Test Name / Condition | Duration | Qual Device: TPS82740ASIPR | QBS Process Reference: TPS82130PSIL |
|-------|-------------------------------------|---------------------|-------------------------------|---|
| HAST | Biased HAST, 110C/85%RH | 264 Hours | 1/77/0 | 2/231/0 |
| HTSL | High Temp Storage Bake 150C | 1000 Hours | QBS | 3/231/0 |
| SD | Pb Free Surface Mount Solderability | 4 hour @ 155C aging | 1/22/0 | - |
| TC | Temperature Cycle, -55/125C | 700 Cycles | 1/77/0 | 3/239/0 |
| UHAST | Unbiased HAST 110C/85%RH | 264 Hours | - | 3/231/0 |
| UHAST | Unbiased HAST 130C/85%RH | 96 hours | 1/77/0 | - |

- QBS: Qual By Similarity
 - Qual Device TPS82740xSIPR devices are qualified at LEVEL2-260CG
 - Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
 - 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 contacts shown below or your local Field Sales Representative.

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