

PCN Number:	20190502001.1			PCN Date:	May 3 2019																		
Title:	Qualification of an additional Substrate Manufacturing Subcontractor for select devices																						
Customer Contact:	PCN Manager	Dept:	Quality Services																				
Proposed 1st Ship Date:	Aug 3 2019	Estimated Sample Availability:	Date provided at sample request																				
Change Type:																							
☒	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:																							
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: <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th>What</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>AD225</td> <td>N/A</td> </tr> <tr> <td>Cavity Filler</td> <td>N/A</td> <td>SD#ABF GX-T31</td> </tr> <tr> <td>Surface Finish</td> <td>ENiG</td> <td>ENEPIG</td> </tr> </tbody> </table>						What	Current (ATNS)	New (ACCESS)	Substrate Material	R1551W	6785GTK	Solder mask	XV501T	SR7300G	Adhesive	AD225	N/A	Cavity Filler	N/A	SD#ABF GX-T31	Surface Finish	ENiG	ENEPIG
What	Current (ATNS)	New (ACCESS)																					
Substrate Material	R1551W	6785GTK																					
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Cavity Filler	N/A	SD#ABF GX-T31																					
Surface Finish	ENiG	ENEPIG																					
Reason for Change:																							
Continuity of Supply																							
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):																							
None																							
Anticipated impact on Material Declaration																							
☐	No Impact to the Material Declaration	☒	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:		
TPS82084SILR	TPS82085SILR	TPS82085SILT

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

Type	Test Name / Condition	Duration	Qual Device: TPS82085SILR	QBS Product Reference: TPS82085PSIL	QBS Product Reference: TPS82130SIL	QBS Process Reference: TPS62110RSA	QBS Package Reference: TPS82130PSIL
HAST	Biased HAST, 110C/85%RH	264 Hours	1/77/0	-	-	-	2/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	1/77/0	3/231/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	1/77/0	1/77/0	3/231/0	-	3/231/0
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	3/231/0	-
UHAST	Unbiased HAST 110C/85%RH	264 Hours	-	-	-	-	3/231/0
UHAST	Unbiased HAST 130C/85%RH	96 Hours	-	1/77/0	3/231/0	-	-
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	3/231/0	-	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	3/231/0	-
MSL	Moisture Sensitivity, L3	Test/Elect.	-	1/12/0	-	-	-
PD	Physical Dimensions	(per mechanical drawing)	-	1/10/0	3/30/0	-	3/30/0
ED	Electrical Characterization	Approved	-	Pass	Pass	-	-
ED	Electrical Characterization, incremental	--	-	-	-	-	Pass
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	3/231/0
HTOL	Life Test, 140C	480 Hours	-	-	-	3/231/0	-
CDM	ESD - CDM	1500V	-	1/3/0	1/3/0	-	1/3/0
HBM	ESD - HBM	4000V	-	1/3/0	1/3/0	-	-
LU	Latch-up	(per JESD78)	-	-	1/6/0	-	-

- QBS: Qual By Similarity
- Qual Device TPS82085SILR is qualified at LEVEL2-260C
- 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, 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

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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USA	PCNAmericasContact@list.ti.com
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