

PCN Number:	20170619000		PCN Date:	June 27 2017															
Title:	Qualification of an additional Substrate Manufacturing Subcontractor for the TPS82130SIL																		
Customer Contact:	PCN Manager	Dept:	Quality Services																
Proposed 1st Ship Date:	Sept 27 2017	Estimated Sample Availability:	Provided upon Request																
Change Type:																			
<input checked="" type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials														
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification														
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process														
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process														
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process														
		<input type="checkbox"/>	Part number change																
PCN Details																			
Description of Change:																			
<p>TI is qualifying an additional substrate manufacturing subcontractor (ACCESS) for TPS82130SIL. Construction differences are as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>What</th> <th>Current (ATNS)</th> <th>New (ACCESS)</th> </tr> </thead> <tbody> <tr> <td>Substrate Material</td> <td>R1570</td> <td>SD#EN02J01037A</td> </tr> <tr> <td>Solder mask</td> <td>XV501T</td> <td>SR7300G</td> </tr> <tr> <td>Adhesive</td> <td>SID#704654</td> <td>N/A</td> </tr> <tr> <td>Cavity Filler</td> <td>N/A</td> <td>SD#ABF GX-T31</td> </tr> </tbody> </table>					What	Current (ATNS)	New (ACCESS)	Substrate Material	R1570	SD#EN02J01037A	Solder mask	XV501T	SR7300G	Adhesive	SID#704654	N/A	Cavity Filler	N/A	SD#ABF GX-T31
What	Current (ATNS)	New (ACCESS)																	
Substrate Material	R1570	SD#EN02J01037A																	
Solder mask	XV501T	SR7300G																	
Adhesive	SID#704654	N/A																	
Cavity Filler	N/A	SD#ABF GX-T31																	
Reason for Change:																			
Continuity of Supply																			
Anticipated impact on Fit, Form, 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 from the TI ECO website .																
Changes to product identification resulting from this PCN:																			
None																			
Product Affected																			
TPS82130SILR	TPS82130SILT																		



Qualification Report

TPS82130SIL, TPS82140SIL, TPS82150SIL Qualification Memo Approve Date 02-May-2017

Product Attributes

Attributes	Qual Device: TPS82130SIL	QBS Product Reference: TPS82130SIL	QBS Process Reference: TPS62110RSA
Assembly Site	PTI-TAIWAN	PTI-TAIWAN	CAR
Package Family	MicroSIP	MicroSIP	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MIHO8-CLARK/BP	MIHO8-CLARK/BP	MIHO8
Wafer Process	LBC7	LBC7	LBC7

- QBS: Qual By Similarity

- Qual Device TPS82130SIL is qualified at LEVEL2-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS82130SIL	QBS Product Reference: TPS82130SIL	QBS Process Reference: TPS62110RSA
AC	Autoclave 121C	96 Hours	-	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	-
ELFR	Early Life Failure Rate, 140C	48 Hours	-	-	3/1881/0
FLAM	Flammability (IEC 695-2-2)	--	1/5/0	-	-
FLAM	Flammability (UL 94V-0)	--	1/5/0	-	-
FLAM	Flammability (UL-1694)	--	1/5/0	-	-
HAST	Biased HAST, 110C/85%RH	264 Hours	2/154/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	1/77/0	3/231/0
HBM	ESD - HBM	2500 V	1/3/0	1/3/0	-
CDM	ESD - CDM	1500 V	1/3/0	1/3/0	-
HTOL	Life Test, 125C	1000 Hours	3/266/0	-	-
HTOL	Life Test, 140C	480 Hours	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	3/240/0	3/231/0	-
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	3/231/0
LU	Latch-up	(per JESD78)	-	1/8/0	3/15/0
PD	Physical Dimensions	--	Pass	Pass	-
SD	Solderability	8 Hours Steam Age	3/66/0	-	-
TC	Temperature Cycle, -55/125C	700 Cycles	3/231/0	3/231/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	3/231/0
TS	Thermal Shock, -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	-	3/231/0	-

- 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

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

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
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