



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20190502001.1

**Qualification of an additional Substrate Manufacturing Subcontractor for select devices
Change Notification / Sample Request**

Date: May 03, 2019

To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If you require samples or additional data to support your evaluation, please request within 30 days.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Team ([PCN ww_admin_team@list.ti.com](mailto:PCN_admin_team@list.ti.com)). For sample requests or sample related questions, contact the TI Samples Team at pcn_sr_team@list.ti.com.

Sincerely,

PCN Team
SC Business Services

20190502001.1
Change Notification / Sample Request
Attachments

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
TPS82085SILT	null
TPS82085SILR	null
TPS82084SILR	null

Technical details of this Product Change follow on the next page(s).

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:																							
<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"/>		<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" 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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Adhesive	AD225	N/A																					
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																							
<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:		
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.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
WW PCN Team	PCN_ww_admin_team@list.ti.com