



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20180927003.2A
PO Thickness change on the LBC7 process node
Change Notification / Sample Request

Date: January 04, 2019
To: PREMIER FARNELL PCN

Dear Customer:

PCN Revision A is to announce the retraction of select devices.

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

Texas Instruments requires acknowledgement of receipt of this notification within **30** days of the date of this notice. If samples or additional data are required, requests must be received within 30 days of acknowledgement as samples are not built ahead of the change. You may contact the PCN Manager or your local Field Sales Representative to acknowledge this PCN and request samples or additional data.

The changes discussed within this PCN will not take effect until TI receives written customer approval. In order to assure continuity of supply, customer approval is requested no later than 1 month prior to the proposed 1st ship date indicated on the following pages.

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 Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services

20180927003.2A
Attachment: 1

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
TPS62170QDSGTQ1	null

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

PCN Number:	20180927003.2A		PCN Date:	Jan. 4, 2019				
Title:	LBC7 change total PO thickness from 24kA to 39kA							
Customer Contact:	PCN Manager		Dept:	Quality Services				
Proposed 1st Ship Date:	Apr. 15, 2019		Estimated Sample Availability:	Date provided at sample request.				
Change Type:								
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Assembly Process	<input 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 checked="" type="checkbox"/> Wafer Fab Process						
	<input type="checkbox"/> Part number change							
PCN Details								
Description of Change:								
<p>The purpose of PCN Revision A is to announce the retraction of select devices. Retracted devices are identified with a strikethrough and are highlighted in yellow in the Product Affected Section. The retracted devices will not be affected by this PCN.</p> <p>This change notification is to announce a total PO Thickness change from 24kA to 39kA by increasing the 2nd Oxide Teos thickness from 3kA to 18kA on the LBC7 process node for the selected devices listed in the "Product Affected" section.</p>								
<table border="1"> <thead> <tr> <th>Change From</th> <th>Change To</th> </tr> </thead> <tbody> <tr> <td>13kA HDP Oxide + 3kA Teos Oxide + 8kA Nitride passivation</td> <td>13kA HDP Oxide + 18kA Teos Oxide + 8kA Nitride passivation</td> </tr> </tbody> </table>		Change From	Change To	13kA HDP Oxide + 3kA Teos Oxide + 8kA Nitride passivation	13kA HDP Oxide + 18kA Teos Oxide + 8kA Nitride passivation			
Change From	Change To							
13kA HDP Oxide + 3kA Teos Oxide + 8kA Nitride passivation	13kA HDP Oxide + 18kA Teos Oxide + 8kA Nitride passivation							
Qual details are provided in the Qual Data Section.								
Reason for Change:								
Continuity of supply.								
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):								
None								
Changes to product identification resulting from this PCN:								
None								
Product Affected:								
LM74610QDGKRQ1	LP5912Q1.8DRVRQ1	PLP5912Q1.25DRVTQ1	TPS62160QDSGRQ1					
LM74610QDGKTQ1	LP5912Q1.8DRVTQ1	PLP5912Q1.2DRVTQ1	TPS62160QDSGTQ1					
LM74670QDGKRQ1	LP5912Q2.5DRVRQ1	PLP5912Q1.5DRVTQ1	TPS62162QDSGRQ1					
LM74670QDGKTQ1	LP5912Q2.5DRVTQ1	PLP5912Q1.8DRVTQ1	TPS62162QDSGTQ1					
LP5912Q0.9DRVRQ1	LP5912Q2.8DRVRQ1	PLP5912Q2.7DRVTQ1	TPS62170QDSGRQ1					
LP5912Q0.9DRVTQ1	LP5912Q2.8DRVTQ1	PLP5912Q2.8DRVTQ1	TPS62170QDSGTQ1					
LP5912Q1.1DRVRQ1	LP5912Q3.0DRVRQ1	PLP5912Q3.0DRVTQ1	TPS62171QDSGRQ1					
LP5912Q1.1DRVTQ1	LP5912Q3.0DRVTQ1	PLP5912Q3.3DRVTQ1	TPS62171QDSGTQ1					
LP5912Q1.2DRVRQ1	LP5912Q3.3DRVRQ1	PLP5912Q5.5DRVTQ1	TPS62172QDSGRQ1					
LP5912Q1.2DRVTQ1	LP5912Q3.3DRVTQ1	PTPL7407LQPWRQ1	TPS62172QDSGTQ1					
LP5912Q1.5DRVRQ1	P74610QDGKTQ1	TPL7407LQPWRQ1	TPS7A8801QRTJRQ1					
LP5912Q1.5DRVTQ1	PLP5912Q1.1DRVTQ1							

Qualification Report

Miho: LBC7 - Thick TEOS at PO 2nd OX DEP

Approve Date 6-September-2018

Product Attributes

Attributes	Qual Device: TPS563201DDCR
Assembly Site	JCET
Package Family	SOT-23-T
Wafer Fab Supplier	Miho
Wafer Process	LBC7
Flammability Rating	UL 94 V-0

- Qual Devices qualified at LEVEL 1-NACG: Devices TPS563201DDCR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS563201DDCR
HAST	Biased HAST, 130C/85%RH	192 Hours	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/Pass
TC	Temperature Cycle, -65/150C	750 Cycles	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

Qualification Report

FFAB: LBC7 - Thick TEOS at PO 2nd OX DEP

Approve Date 10-September-2018

Product Attributes

Attributes	Qual Device: TPS62175DQCR	Qual Device: TPS62177DQCR
Assembly Site	CLARK	CLARK
Package Family	WSON	WSON
Wafer Fab Supplier	FFAB	FFAB
Wafer Process	LBC7	LBC7
Flammability Rating	UL 94 V-0	UL 94 V-0

- Qual Devices qualified at LEVEL 2-NACG: Devices TPS62175DQCR and TPS62177DQCR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS62175DQCR	Qual Device: TPS62177DQCR
HAST	Biased HAST, 130C/85%RH	192 Hours	3/231/0	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	3/231/0	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	3/Pass	3/Pass
TC	Temperature Cycle, -65/150C	750 Cycles	3/231/0	3/231/0

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

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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 you can contact your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com