

PCN Number:	20180927003.2		PCN Date:	Oct. 15, 2018	
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:					
This change notification is to announce a total PO Thickness change from 24kA to 39kA by increasing the 2 nd Oxide Teos thickness from 3kA to 18kA on the LBC7 process node for the selected devices listed in the "Product Affected" section.					
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

- 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 you can contact your local Field Sales Representative.

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USA	PCNAmericasContact@list.ti.com
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Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com