

PCN Number:	20180927003.1A	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:	Jan. 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"/>	Design	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>		<input type="checkbox"/>	Test Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process
<input type="checkbox"/>		<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>			
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:			
CSD97370Q5M	SN1602018RVFR	TPS51716RUKT	TPS563208DDCT
DRV10863DSNR	SN1602018RVFT	TPS51916RUKT	TPS563209DDCR
DRV777DR	SN1607023RVER	TPS53211ARGTR	TPS563209DDCT
DRV777PWR	SN1611045DDCR	TPS53211ARGTT	TPS563210ADDFR
FX003	SN1611045DDCT	TPS53211RGTR	TPS563210ADDFT
FX004	SN1612030DDCR	TPS53211RGTT	TPS563210DDFR
FX026	SN1612030DDCT	TPS53603ADRGR	TPS563210DDFT
HPA02240RVER	SN1701036DSNR	TPS53603ADRGT	TPS563219ADDFR
LP5912-0.9DRVR	SN1704026DDCR	TPS53603DRGR	TPS563219ADDFT
LP5912-0.9DRVT	SN1704026DDCT	TPS53603DRGT	TPS563219DDFR
LP5912-1.1DRVR	SN1706011DDCR	TPS53819ARGTR	TPS563219DDFT
LP5912-1.1DRVT	SN1706011DDCT	TPS53819ARGTT	TPS564201DDCR
LP5912-1.2DRVR	SN1708041DDCR	TPS53819RGTR	TPS564201DDCT
LP5912-1.2DRVT	SN1708041DDCT	TPS53819RGTT	TPS564208DDCR
LP5912-1.5DRVR	SN1709020DDCR	TPS54200DDCR	TPS564208DDCT

LP5912-1.5DRVT	SN1709020DDCT	TPS54200DDCT	TPS59367RVER
LP5912-1.8DRVR	SN1711023DDCR	TPS54202DDCR	TPS59367RVET
LP5912-1.8DRVT	SN1711023DDCT	TPS54202DDCT	TPS62160DGKR
LP5912-2.5DRVR	SN25027Y	TPS54202HDDCR	TPS62160DGKT
LP5912-2.5DRVT	SN62160DSGR	TPS54202HDDCT	TPS62160DSGR
LP5912-2.8DRVR	SN62160DSGT	TPS54302DDCR	TPS62160DSGT
LP5912-2.8DRVT	TLC59731D	TPS54302DDCT	TPS62161DSGR
LP5912-3.0DRVR	TLC59731DR	TPS543B20RVFR	TPS62161DSGT
LP5912-3.0DRVT	TLC5973D	TPS543B20RVFT	TPS62162DSGR
LP5912-3.3DRVR	TLC5973DR	TPS543C20RVFR	TPS62162DSGT
LP5912-3.3DRVT	TPL0102-100PWR	TPS543C20RVFT	TPS62163DSGR
PLM74610	TPL0102-100RUCR	TPS546C20ARVFR	TPS62163DSGT
PLM74611DGKR	TPL0102DSYRUCR	TPS546C20ARVFT	TPS62170DSGT
PLP5912-0.9DRVT	TPL0202-10MRTER	TPS546C20RVFR	TPS62171DSGR
PLP5912-1.2DRVT	TPL0202-10RUCR	TPS546C20RVFT	TPS62171DSGT
PLP5912-1.7DRVT	TPL7407LDR	TPS546C23RVFR	TPS62172DSGR
PLP5912-3.3DRVT	TPL7407LPWR	TPS546C23RVFT	TPS62172DSGT
PLP5912-4.5DRVT	TPS27081ADDCR	TPS546C23ZRVFR	TPS62173DSGR
PLP5912-5.0DRVT	TPS27082LDDCR	TPS546C23ZRVFT	TPS62173DSGT
PTPS54202DDCR	TPS40310RHFR	TPS548B22RVFR	TPS62175DQCR
PTPS54202DDCT	TPS40310RHFT	TPS548B22RVFT	TPS62175DQCT
PTPS562201DDCR	TPS40310RHLR	TPS548D21RVFR	TPS62177DQCR
PTPS562201DDCT	TPS40310RHLT	TPS548D21RVFT	TPS62177DQCT
PTPS563201DDCR	TPS40610RHFR	TPS548D22RVFR	TPS65291PWPR
PTPS563201DDCT	TPS40610RHFT	TPS548D22RVFT	TPS65291PWPT
PTPS564208DDCR	TPS40610RHLR	TPS549B22RVFR	TPS7A8701RTJR
PTPS564208DDCT	TPS40610RHLT	TPS549B22RVFT	TPS7A8701RTJT
PTPS65291PWPR	TPS51206DSQR	TPS549D22RVFR	TPS7A8801RTJR
SM74611KTTR	TPS51206DSQR-P	TPS549D22RVFT	TPS7A8801RTJT
SN1306023RUKR	TPS51206DSQT	TPS549D23RVFT	TPS7A8901RTJR
SN1308008RUKR	TPS51216RUKR	TPS549D23RVFR	TPS7A8901RTJT
SN1311035RVER	TPS51216RUKT	TPS549D23RVFT	TPS7A9101DRBT
SN1409027RVER	TPS51219RTER	TPS562200DDCR	TPSM846C24MOLR
SN1409030RUKR	TPS51219RTET	TPS562200DDCT	TS3A5223RSWR
SN1501019ADDCR	TPS51362RVER	TPS562209DDCR	TS3USBA225RUTR
SN1501019ADDCCT	TPS51362RVET	TPS562209DDCT	TX125PWR
SN1501019DDCR	TPS51363RVER	TPS562210ADDFR	TX125YS
SN1501019DDCT	TPS51363RVET	TPS562210ADDFT	ULN2003LVDR
SN1501020DDCR	TPS51367RVER	TPS562210DDFR	ULN2003LVPW
SN1501020DDCT	TPS51367RVER-P	TPS562210DDFT	ULN2003LVPWR
SN1504025DDCR	TPS51367RVET	TPS562219ADDFR	ULN2003V12DR
SN1504025DDCT	TPS51418RVER	TPS562219ADDFT	ULN2003V12PWR
SN1504026DDCR	TPS51418RVET	TPS562219DDFR	XCSD97370Q5M
SN1504026DDCT	TPS51518RUKR	TPS562219DDFT	XDF543C20RVFT
SN1602003RVFR	TPS51518RUKT	TPS563200DDCR	XPS543B20RVFT
SN1602003RVFT	TPS51716RUKR	TPS563200DDCT	XPS543C20RVFR

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.

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