

PCN Number: 20160308000B **PCN Date:** Dec. 5, 2016

Title: Qualification of DMOS6 for TPS65982ABZQZR **(Adding TPS65986ABZQZR)**

Customer Contact: PCN Manager **Dept:** Quality Services

Proposed 1st Ship Date: Mar 5, 2017 **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 checked="" 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:

The purpose of Revision B of this PCN is to add the TPS65986ABZQZR device to the product affected section of this PCN.

Texas Instruments is pleased to announce the qualification of its DMOS6 fabrication facility as an additional wafer FAB source for TPS65982ABZQZR.

Current Sites			Additional Sites		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
RFAB	LBC8LV	300 mm	DMOS6	LBC8LV	300 mm

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:

Current

Chip Sites	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
RFAB	RFB	USA	Richardson

New

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DMOS6	DM6	USA	Dallas

Sample product shipping label (not actual product label)

 MADE IN: Malaysia 2DC: 20: MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: LBL: 5A (L)T0:1750		(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483S12 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CCO:USA (22L) ASO: MCA (23L) AGO: MYS
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Product Affected:

SN1508014ZQZR

SN1508015ZQZR

TPS65982ABZQZR

TPS65986ABZQZR**Qualification Report****TPS65982ABZQZR LBC8LV release in DM6 wafer fab
Approve Date 16-Feb-2016****Product Attributes**

Attributes	Qual Device: PCD3215B00 BZQZR	Qual Device: PCD3215B00DZ QZR	Qual Device: TPS65982AB ZQZR	QBS Process Reference: CD3215B00 ZQZR	QBS Process Reference: CD3215B00Z QZR	QBS Process Reference: TAS2552YFF	QBS Process Reference: TAS2553YFF
Wafer Fab Supplier	DM0S6	DMOS6	DM0S6	DMOS6	DMOS6	RFAB/DMOS6	RFAB/DMOS6
Wafer Process	LBC8LV	LBC8LV	LBC8LV	LBC8LV	LBC8LV	LBC8LV	LBC8LV

Qualification Results

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

Test Name / Condition	Duration	Qual Device: PCD3215B00BZQZR	Qual Device: PCD3215B00DZQZR	Qual Device: TPS65982ABZQZR.	QBS Process Reference: CD3215B00ZQZR	QBS Process Reference: CD3215B00ZQZR	QBS Process Reference: TAS2552YFF	QBS Process Reference: TAS2553YFF
ESD - CDM	1000 V	1/3/0	1/3/0	-	2/6/0	1/3/0	-	-
ESD - CDM	1500 V	-	-	1/3/0	-	-	-	3/9/0
Electrical Characterization	Per Datasheet Parameters	Pass	Pass	Pass	Pass	Pass	-	Pass
Early Life Failure Rate, 125C	48 Hours	-	-	-	2/2000/0	1/1000/0	-	-
Early Life Failure Rate, 125C	48 Hours	-	-	-	-	-	-	3/3000/0
Biased HAST, 110C/85%RH	264 Hours	1/77/0	1/77/0	1/77/0	2/154/0	1/77/0	-	-
Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/231/0	-
ESD - HBM	1500 V	1/3/0	-	-	-	1/3/0	-	3/9/0
ESD - HBM	2000 V	-	-	1/3/0	-	-	-	-
ESD - HBM	2500 V	-	1/3/0	-	2/6/0	-	-	3/9/0
Life Test, 125C	1000 Hours	-	-	-	1/168/0	-	-	-
Life Test, 125C	1000 Hours	1/77/0	1/77/0	1/77/0	2/154/0	1/77/0	-	3/231/0
High Temp. Storage Bake, 150C	1000 Hours	1/77/0	1/77/0	-	2/90/0	1/77/0	-	-
High Temp. Storage Bake, 170C	420 Hours	-	-	1/77/0	-	-	3/228/0	-
Latch-up	(per JESD78)	1/6/0	1/6/0	1/6/0	2/12/0	1/6/0	-	3/18/0
Temperature Cycle, -55/125C	700 Cycles	1/77/0	1/77/0	1/77/0	-	-	3/231/0	-
Unbiased HAST, 110C/85%RH	264 Hours	1/77/0	1/77/0	1/77/0	-	-	-	-
Unbiased HAST, 130C/85%RH	96 Hours	-	-	-	-	-	3/228/0	-

- 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
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