PCN Date: May 31, 2018 **PCN Number:** 20180530001.1 Qualification of DMOS6 as an additional Wafer Fab Site option for select devices in Title: LBC8LV Technology **Customer Contact: PCN Manager** Dept: **Quality Services Estimated Sample** Date provided at sample **Proposed 1st Ship Date:** Aug 31, 2018 **Availability:** request. **Change Type: Assembly Site Assembly Process Assembly Materials Electrical Specification Mechanical Specification** Design **Test Site** Packing/Shipping/Labeling **Test Process** Wafer Bump Process Wafer Bump Site Wafer Bump Material Wafer Fab Site Wafer Fab Materials Wafer Fab Process Part number change

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of its DMOS6 fabrication facility as an additional Wafer Fab source for the selected devices listed in "Product Affected" section.

Current Sites			Additional Sites		
Current Fab Site	Process	Wafer Diameter	Additional Process Fab Site		Wafer Diameter
DP1DM5	LBC8LV	200mm	DMOS6	LBC8LV	300mm

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):

Changes to product identification resulting from this PCN:

Current

Chip Site	Chip Site Origin (20L)	Chip Site Country Code (21L)	Chip Site City
DP1DM5	DM5	USA	Dallas

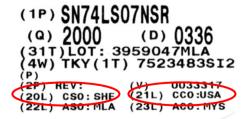
New Fab Site

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

Sample product shipping label (not actual product label)







Product Affected:			
AFE2256GRTDR	AFE2256GRTDX	AFE2256TDR	AFE2256TDU
AFE2256GRTDU	AFE2256TDQ	AFE2256TDT	AFE2256TDX

Qualification Report

AFE2256 offload from DMOS5 to DMOS6 Approve Date 16-May-2018

Product Attributes

Attributes	Qual Device: AFE2256GRTDU	QBS Product Reference: AFE2256TDU (PG2.0)	QBS Product Reference: AFE2256TDU (A2)	QBS Process Reference: DDC2256AZZF	QBS Process Reference: TAS2552YFF	QBS Process Reference: TAS2553YFF
Assembly Site	CHIPBOND	CHIPBOND	CHIPBOND	AMKOR K4	CLARK-AT	CLARK-AT
Package Family	COF	COF	COF	NFBGA	DSBGA	DSBGA
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	-	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	RFAB / DMOS6	DMOS5	DMOS5	RFAB / DMOS6, RFAB/DMOS6	RFAB/DMOS6 (MFF)	RFAB/DMOS6 (MFF)
Wafer Process	LBC8LV	LBC8LV	LBC8LV	LBC8LV	LBC8LV	LBC8LV

Qualification Results

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

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Туре	Test Name / Condition	Duration	Qual Device: AFE2256GRTDU	QBS Product Reference: AFE2256TDU (PG2.0)	QBS Product Reference: AFE2256TDU (A2)	QBS Process Reference: DDC2256AZZF	QBS Process Reference: TAS2552YFF	QBS Process Reference: TAS2553YFF
ED	Electrical Characterization	Per Datasheet Parameters	Pass	Pass	-	Pass	-	Pass
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-	-	-	3/3000/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	•	-	3/231/0	-
HBM	ESD - HBM	1000 V	1/3/0	-	-	-	-	3/9/0
CDM	ESD - CDM	1500 V	-	-	-	1/3/0	-	3/9/0
HTOL	Life Test, 125C	1000 Hours	-	-	•	1/77/0	-	3/231/0
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	3/228/0	-
LU	Latch-up	(per JESD78)	1/6/0	1/6/0	-	1/6/0	-	3/18/0
SBS	Bump-Shear	-	-	-	1/12/0	-	3/108/0	-
TC	Temperature Cycle, -55/125C	700 Cycles	1/77/0	-	3/231/0	1/77/0	3/231/0	-
UHAST	Unbiased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-	3/228/0	-
WBP	Bond Pull	Wires	-	-	-	1/76/0	-	-
WBS	Ball Bond Shear	Wires	-	-	•	1/76/0	-	-

⁻ 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 0.7 eV: 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours are represented by the following are equivalent to the following are
- 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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QBS: Qual By Similarity
 Qual Device AFE2256GRTDU is qualified at Not Classified