PCN Number:	20161215002	**PCN Date:**	Dec 16, 2016
Title:	Qualification of RFAB as additional Fab site option for select LBC8 devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Mar 16, 2017	**Estimated Sample Availability:**	Date provided at sample request.

Change Type:		
☐ Assembly Site	☐ Assembly Process	☐ Assembly Materials
☐ Design	☐ Electrical Specification	☐ Mechanical Specification
☐ Test Site	☐ Packing/Shipping/Labeling	☐ Test Process
☐ Wafer Bump Site	☐ Wafer Bump Material	☐ Wafer Bump Process
☒ 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 RFAB fabrication facility as an additional Wafer Fab source for the selected devices listed in "Product Affected" section.

Current Fab Site			Additional Fab Site		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
DP1DM5	LBC8	200 mm	RFAB	LBC8	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:

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

New Fab Site:

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

Sample product shipping label (not actual product label)

Product Affected:

DRV5013AGQDBZR	DRV5013BCQDBZT	DRV5053OAQDBZR	DRV5053PAQDBZT
DRV5013AGQDBZT	DRV5033AJQDBZR	DRV5053OAQDBZT	DRV5053VAQDBZR
DRV5013BCQDBZR	DRV5033AJQDBZT	DRV5053PAQDBZR	DRV5053VAQDBZT

Qualification Report

DMOS5 offload to RFAB Hall Sensor devices (3 chips)
Approved 12/14/2016

Product Attributes

Attributes	Qual Device: DRV5013AGQDBZR	Qual Device: DRV5033AJQDBZR	Qual Device: DRV5053OAQDBZR	QBS Product Reference: C5013ADA1	QBS Product Reference: DRV5013ADEDBZRQ1	QBS Process Reference: SN96019PFP
Assembly Site	HNT	HNT	HNT	HNT	HANA (HNT)	PHI (TIPI)
Package Family	SOT	SOT	SOT	SOT	SOT	HTQFP
Wafer Fab Supplier	RFAB	RFAB	RFAB	RFAB	DFAB/DMOS5	RFAB
Wafer Process	LBC8	LBC8	LBC8	LBC8	LBC8	LBC8

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260C: DRV5013AGQDBZR, DRV5053OAQDBZR, DRV5033AJQDBZR

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: DRV5013AGQDBZR	Qual Device: DRV5033AJQDBZR	Qual Device: DRV5053OAQDBZR	QBS Product Reference: C5013ADA1	QBS Product Reference: DRV5013ADEDBZRQ1	QBS Process Reference: SN96019PFP
AC	Autoclave 121C	96 Hours	-	-	-	3/231/0	3/231/0	3/231/0
ED	Auto Electrical Distributions	Cpk>1.33, Ppk>1.67 Room, hot, and cold test	-	-	-	-	1/30/0	-
ED	Electrical Characterization	Per Datasheet Parameters	Conditional	Conditional	Conditional	1/30/0	-	1/30/0
ELFR	Early Life Failure Rate, 150C	48 Hours	-	-	-	-	3/2400/0	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	3/231/0	3/231/0	3/231/0
HBM	ESD - HBM	2500 V	-	-	-	-	1/3/0	-
CDM	ESD - CDM	1000 V	-	-	-	-	1/3/0	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-	-	3/231/0
HTOL	Life Test, 150C	1000 Hours	-	-	-	1/77/0	3/231/0	-
HTSL	High Temp. Storage Bake, 170C	420 Hours	-	-	-	-	-	3/231/0
HTSL	High Temp. Storage Bake, 175C	500 Hours	-	-	-	-	1/47/0	-
LU	Latch-up	(per JESD78)	-	-	-	-	2/12/0	1/6/0
SD	Surface Mount Solderability	Pb Free	-	-	-	-	1/15/0	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	3/231/0	3/231/0	3/231/0
WBP	Bond Pull	Wires	-	-	-	-	1/5/0	-

- 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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