PCN Nun	ıber:	20240215001.1	PCN Date:	February 15, 2024
Title:	Qualification select device	of RFAB using qualified Process To	echnology and	Die Revision for

Customer Contact: Change Management team **Dept:** Quality Services

Proposed 1st Ship
Date:

May 15, 2024

May 15, 2024

March 16, 2024*

accepted until:

*Sample requests received after March 16, 2024 will not be supported.

Change Type:

Assembly Site	Design		Wafer Bump Material
Assembly Process	Data Sheet		Wafer Bump Process
Assembly Materials	Part number change	X	Wafer Fab Site
Mechanical Specification	Test Site	X	Wafer Fab Material
Packing/Shipping/Labeling	Test Process	X	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of RFAB using the LBC9 qualified process technology in addition to a new die revision option for the devices listed below in the product affected section.

Cur	rent Technolo	ogy	New Technology					
Fab Site	Process	Wafer Diameter	Fab Site	Process	Wafer Diameter			
MIHO	LBC8	200 mm	RFAB	LBC9	300 mm			

The die was also changed as a result of the process change.

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:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City	
MIHO8	MH8	JPN	Ibaraki	
RFAB	RFB	USA	Richardson	

Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
В	C

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS

MADE IN: Malaysia 2DC: 2Q:

MSL 2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04

OPT: ITEM:

5A (L)T0:39750 LBL:



(1P) \$N74L\$07N\$R (Q) 2000 (D) 0336 (31T)LOT: 3959047MLA (4W) TKY(1T) 7523483812

(P) (2P) REV:

(2P) REV: (V) 0033317 (20L) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

DRV5055A1QDBZR DRV5055A2QDBZR DRV5055A3QDBZR DRV5055A4QDBZR

Qualification Results

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

	Data Displayed as: Number of lots / lotal sample size / lotal failed													
Туре	=	Test Name	Condition	Duration	Qual Device: DRV5055A1QDBZR	Qual Device: DRV5055A2QDBZR	Qual Device: DRV5055A3QDBZR	Qual Device: DRV5055A4QDBZR	QBS Reference: TLV62568DBVR	QBS Reference: TLV62569DBVR	QBS Reference: DRV5013ADEDBZRQ1	QBS Reference: DRV5013ADQDBZRQ1	QBS Reference: TL431BQDBZRQ1	QBS Reference: PTMAG5253BA3IQDB
HAST	A2	Biased HAST	130C	96 Hours					3/231/0	3/231/0			-	
HAST	A2	Biased HAST	130C/8596RH	96 Hours			-		3/231/0	3/231/0	3/231/0	3/231/0	3/231/0	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-		3/231/0	3/231/0	-	-	-	-
UHAST	A3	Unbiased HAST	130C/8596RH	96 Hours	-	-	-	-	-	-	3/231/0	3/231/0	3/231/0	-
тс	Α4	Temperature Cycle	-55C/150C	1000 Cycles	-	-	-	-	-	-	-	3/231/0	-	-
тс	Α4	Temperature Cycle	-55C/150C	1500 Cycles			-		-	-	3/231/0	-	-	-
тс	Α4	Temperature Cycle	-65/150C	500 Cycles					3/231/0	3/231/0		-		1/77/0
тс	Α4	Temperature Cycle	-65C/150C	500 Cycles					3/231/0	3/231/0			3/231/0	1/77/0
HTSL	A 6	High Temperature Storage Life	150C	1000 Hours		-			-	3/231/0	-	3/135/0	3/231/0	-
HTSL	A 5	High Temperature Storage Life	150C	2000 Hours	-	-		-	-	-	3/135/0	-	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-		-	3/231/0	-	-	-	-	-
HTOL	B1	Life Test	125C	1000 Hours						3/231/0		•	-	
HTOL	B1	Life Test	150C	1000 Hours					-	-	1/77/0	•	-	
HTOL	81	Life Test	150C	300 Hours		-	-		3/231/0	-	-	1/77/0	-	-
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-		3/3000/0	3/2400/0			-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)			-	-		-	-	1/15/0	1/15/0	-	-
Туре	#	Test Name	Condition	Duration	Qual Device: DRV5055A1QDBZR	Qual Device: DRV5055A2QDBZR	Qual Device: DRV5055A3QDBZR	Qual Device: DRV5055A4QDBZR	QBS Reference: TLV62568DBVR	QBS Reference: TLV62569DBVR	QBS Reference: DRV5013ADEDBZRQ1	QBS Reference: DRV5013ADQDBZRQ1	QBS Reference: TL431BQDBZRQ1	QBS Reference: PTMAG5253BA3IQDB
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-		-	-	1/15/0	1/15/0		-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB- Free Solder;				-	·		-	-	-	-	1/22/0
PD	C4	Physical Dimensions	Cpl>1.67		-	-	-	-	-	-	3/30/0	3/30/0	3/30/0	-
ESD	E2	ESD CDM		1500 Velte					1/3/0	3/9/0				_

Туре		Test Name	Condition	Duration	Qual Device: DRV5055A1QDBZR	Qual Device: DRV5055A2QDBZR	Qual Device: DRV5055A3QDBZR	Qual Device: DRV5055A4QDBZR	QBS Reference: TLV62568DBVR	Reference: TLV62569DBVR	QBS Reference: DRV5013ADEDBZRQ1	QBS Reference: DRV5013ADQDBZRQ1	QBS Reference: TL431BQDBZRQ1	QBS Reference: PTMAG5253BA3IQDBZR
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-		-	-	-	-	-	1/15/0	1/15/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB- Free Solder;			-	-		-	-		-	-	1/22/0
PD	C4	Physical Dimensions	Cplo1.67	-	•	-				-	3/30/0	3/30/0	3/30/0	-
ESD	E2	ESD CDM		1500 Volts		-			1/3/0	3/9/0		-	-	-
ESD	E2	ESD CDM		250 Volts		-	1/3/0			•			-	-
ESD	E2	ESD CDM	-	500 Volts							1/3/0	1/3/0	-	
ESD	E2	ESD HBM	-	1000 Volts			1/3/0						-	
ESD	E2	ESD HBM		2000 Volts		-	1/3/0			3/9/0	1/3/0	1/3/0	-	-
ESD	E2	ESD HBM		3500 Volts	-	-			1/3/0	3/9/0		-	-	-
LU	E4	Latch-Up	Per JESD78	-		-	1/3/0		1/6/0	3/9/0	1/6/0	1/6/0	-	-
CHAR	E5	Electrical Characterization	Min, Typ, Max Temp	-	-	-	1/30/0	-	1/30/0	3/90/0	-	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters			-	1/30/0	-	1/30/0	3/90/0				-
CHAR	E5	Electrical Distributions	Cplo1.67 Room, hot, and cold		-	-	-	-			2/60/0	3/90/0	3/90/0	-
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	-	1/1/0	-	-	-	-	1/1/0	-

- QBS: Qual By Similarity
 Qual Device DRV5055A1Q0BZR is qualified at MSL1 260C
 Qual Device DRV5055A2Q0BZR is qualified at MSL1 260C
 Qual Device DRV5055A3Q0BZR is qualified at MSL1 260C
 Qual Device DRV5055A4Q0BZR is qualified at MSL1 260C
- 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 1.150/Lik Hours, 1400/480 Hours, 1500/300 Hours, and 1550/240 Hours
 The following are equivalent HTOL, options based on an activation energy of 0.7eV 1.150/Lik Hours, and 1700/420 Hours
 The following are equivalent Temp Cycle options per JESO47: .550/1250/700 Cycles and .650/1500/500 Cycles
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 The following Area Cycles Cycles Cycles Cycles Cycles Cycles Cycles Cycle

Quality and Environmental data is available at TI's external Web site: http://www.ti.com/

TI Qualification ID: R-NPD-2303-072

For questions regarding this notice, e-mails can be sent to Change Management team or your local Field Sales Representative.

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