**PCN Number:** 20240311000.1 PCN Date: March 11, 2024 Qualification of FFAB using qualified Process Technology and Die Revision change Title: for select devices **Customer Contact:** Change Management Team Dept: **Quality Services** Sample Proposed 1<sup>st</sup> Ship June 09, 2024 April 10, 2024\* requests Date: accepted until:

\*Sample requests received after April 10, 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	$\boxtimes$	Wafer Fab Site		
	Mechanical Specification		Test Site	$\boxtimes$	Wafer Fab Material		
	Packing/Shipping/Labeling		Test Process	$\boxtimes$	Wafer Fab Process		

### **PCN Details**

### **Description of Change:**

Texas Instruments is pleased to announce the qualification of its FFAB fabrication facility as an additional Wafer Fab option for the devices listed below.

C	urrent Fab Sit	te	Additional Fab Site			
<b>Current Fab</b>	Process	Wafer	Additional	Process	Wafer	
Site		Diameter	Fab Site		Diameter	
SEMEFAB	DI-452	100 mm	FFAB	BICOM-3XHV	200 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	
SEMEFAB	DISOL	USA	Glenrothes	
FR-BIP-1	TID	DEU	Freising	

### Die Rev:

Current		New		
	Die Rev [2P]	Die Rev [2P]		
	A. K	A		

Sample product shipping label (not actual product label):





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

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

Product Affected:					
BUF634U	BUF634U/2K5				

#### **Qualification Results**

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

Туре	#	Test Name	Condition	Duration	Qual Device: <u>BUF634U</u>	QBS Product Reference: BUF634AIDR	QBS Package/Process Reference: <u>INA828ID</u>	QBS Process Reference: <u>OPA1644AID</u>
HAST	A2	Biased HAST	130C	96 Hours	-	-	3/231/0	-
UHAST	А3	Autoclave	121C/15psig	96 Hours	-	-	-	1/77/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	1/77/0	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	3/231/0	1/77/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/231/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0	-
HTOL	B1	Life Test	150C	300 Hours	-	1/77/0	-	-
ESD	E2	ESD CDM	-	250 Volts	-	1/3/0	1/3/0	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	-	1/3/0	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/3/0	1/6/0	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	1/30/0	3/90/0	1/30/0
FTY	E6	Final Test Yield	-	-	1/Pass	-	-	-

- · QBS: Qual By Similarity
- . Qual Device BUF634U is qualified at MSL3 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: 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/

TI Qualification ID: R-CHG-2311-013

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

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