<b>PCN Num</b>	ber:	20240325001.1		PCN Date:	March 26, 2024
Title: Qualification of LFAB as an additional Wafer Fab site option for select device					
<b>Customer Contact:</b>		Change Management Team		Dept:	Quality Services
Proposed Date:	1 <sup>st</sup> Ship	June 24, 2024	a	Sample requests accepted until:	April 25, 2024*

\*Sample requests received after April 25, 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		Wafer Fab Material
	Packing/Shipping/Labeling	Test Process		Wafer Fab Process

## **PCN Details**

# **Description of Change:**

Texas Instruments is pleased to announce the addition of LFAB as an additional Wafer Fab site option for the products listed in the "Product Affected" section of this document.

Curre		Additional Fab Site			
Current Fab Site Process Wafer		Additional	Process	Wafer	
		Diameter	Fab Site		Diameter
UMC12i / UMC12A	C014.M	300mm	LFAB	C014.M	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):

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
UMC12i	UMI	SGP	Singapore
UMC12A	F12	TWN	Taiwan
LFAB	LHI	USA	Lehi

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:**

AM3351BZCE30	AM3352BZCZA60	AM3356BZCZ80	SN14085660BZCZDR
AM3351BZCE30R	AM3352BZCZA60R	AM3356BZCZA30	SN15065260BZCZ
AM3351BZCE60	AM3352BZCZA80	AM3356BZCZA60	SN150752100BZCZAR

AM3351BZCE60R	AM3352BZCZD30	AM3356BZCZA80	SN15075260BZCZ
AM3351BZCEA30	AM3352BZCZD60	AM3356BZCZD30	SN15095260BZCZ
AM3351BZCEA30R	AM3352BZCZD80	AM3356BZCZD60	SN15095660BZCZR
AM3351BZCEA60	AM3352ZZCZA60	AM3357BZCZA30	SN15125260BZCZD
AM3352BZCE30	AM3354BZCE60	AM3357BZCZA60	SN16085660BZCZAR
AM3352BZCE30R	AM3354BZCE60R	AM3357BZCZA80	SN17035280BZCZDR
AM3352BZCE60	AM3354BZCEA60	AM3357BZCZD30	SN17085280BZCZA
AM3352BZCEA30	AM3354BZCED60	AM3357BZCZD60	SN17105280BZCZA
AM3352BZCEA30R	AM3354BZCZ100	AM3358BZCE60	SN190752100BZCZA
AM3352BZCEA60	AM3354BZCZ30	AM3358BZCZ100	SN210558100BZCZA
AM3352BZCEA60R	AM3354BZCZ60	AM3358BZCZ60	SN21065680BZCZA
AM3352BZCED30	AM3354BZCZ80	AM3358BZCZ80	SN21065680BZCZAR
AM3352BZCED60	AM3354BZCZA100	AM3358BZCZA100	SN21075480BZCZ
AM3352BZCZ100	AM3354BZCZA60	AM3358BZCZA80	SN21075480BZCZR
AM3352BZCZ100R	AM3354BZCZA80	AM3359BZCZA80	SN22035260BZCZ
AM3352BZCZ30	AM3354BZCZA80R	AMIC110BZCZA	SN22035260BZCZR
AM3352BZCZ60	AM3354BZCZD60	FX053013	SN278792960
AM3352BZCZ60R	AM3354BZCZD80	KUN110BZCZA	SUBARCTICBDEVZCZ
AM3352BZCZ80	AM3354BZCZD80R	SN12065850BZCE	XAM3359BZCZ100
AM3352BZCZA100	AM3356BZCEA60	SN12095260BZCE	
AM3352BZCZA100R	AM3356BZCZ30	SN14015260BZCZ	
AM3352BZCZA30	AM3356BZCZ60	SN14025260BZCZ	

### Qualification Results

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

Туре	#	Test Name	Condition	Duration	Qual Device: <u>AM3352BZCZ60</u>
HAST	A2	Temperature Humidity Bias	85C/85%RH	1000 Hours	3/231/0
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	3/231/0
TC	A4	Temperature Cycle	-55C/125C	1000 Cycles	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	3/2400/1 <sup>1</sup>
PD	C4	Physical Dimensions	Cpk>1.67	-	3/30/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0
LU	E4	Latch-Up	Per JESD78 <sup>2</sup>	-	1/3/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	3/90/0

- 1. A single SRAM fail occurred at an 8 hr readpoint in the ELFR stress test. Corrective actions were defined and include process improvements and improved SRAM test screening.
- 2. Latchup performance listed in the AM335x Sitara™ Processors datasheet.
- Device AM3352BZCZ60 is qualified at MSL3 260C.
- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- $\bullet \quad \text{The following are equivalent HTOL options based on an activation energy of 0.7eV: } 125\text{C}/1\text{k} \text{ Hours, } 140\text{C}/480 \text{ Hours, } 150\text{C}/300 \text{ Hours, } \text{and } 155\text{C}/240 \text{ Hours, } 140\text{C}/480 \text{ Hours, }$
- 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-2312-064, R-CHG-2208-009

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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