PCN Number:	20231107003.1	PCN Date:	November 09, 2023
Title:	Qualification of FFAB as an additional Fab site option for select BICMOS13 devices		
Customer Contact:	Change Management team	Dept:	Quality Services
Proposed 1st Ship Date:	Feb 9, 2024	Sample requests accepted until:	Dec 9, 2023*

***Sample requests received after December 9, 2023 will not be supported.**

Change Type:

☐	Assembly Site	☐	Design	☐	Wafer Bump Material
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Process
☐	Assembly Materials	☐	Part number change	☒	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 qualification of its FFAB fabrication facility as an additional Wafer Fab source for the selected devices listed in the "Product Affected" section.

Current Site			Additional Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
MAINEFAB	BICMOS13	200mm	FFAB	BICMOS13	200mm

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 Fab Site:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
MAINEFAB	CUA	USA	South Portland

Additional Fab Site:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
FR-BIP-1	**TID**	**DEU**	**Freising**

Sample product shipping label (not actual product label)

Product Affected:			
DS100DF400SQ/NOPB	DS100DF410SQE/NOPB	DS110DF410SQ/NOPB	DS110RT410SQE/NOPB
DS100DF400SQE/NOPB	DS100RT410SQ/NOPB	DS110DF410SQE/NOPB	DS125BR401ANJYR
DS100DF410SQ/NOPB	DS100RT410SQE/NOPB	DS110RT410SQ/NOPB	DS125BR401ANJYT

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: DS125BR401ANJYT	Qual Device: DS100DF400SQE/NOPB	Qual Device: DS110DF410SQE/NOPB	QBS Reference: DS90UH926QET65-ASY
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	150C	500 Hours	-	-	-	1/45/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0
ESD	E2	ESD CDM	-	500 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	1/3/0

Type	#	Test Name	Condition	Duration	Qual Device: DS125BR401ANJYT	Qual Device: DS100DF400SQE/NOPB	Qual Device: DS110DF410SQE/NOPB	QBS Reference: DS90UH926QET65-ASY
LU	E4	Latch-Up	Per JESD78	-	-	-	-	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	-	3/90/0

- QBS: Qual By Similarity
- Qual Device DS125BR401ANJYT is qualified at MSL2 260C
- Qual Device DS100DF400SQE/NOPB is qualified at MSL3 260C
- Qual Device DS110DF410SQE/NOPB 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-2204-059

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

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