PCN Number:	20230503000.1**A**	PCN Date:	July 05, 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:	Aug 4, 2023	**Sample requests accepted until:**	August 5, 2023*

***Sample requests received after August 5, 2023 will not be supported.**

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:

Revision A is to announce the addition of new devices that were not included on the original PCN notification. The new devices are highlighted in yellow and **bolded** in the product affected section below. The expected first shipment date for the new devices will be 90 days from this notice for these newly added devices only. The proposed 1st ship date of August 4, 2023 still applies for the original set of devices.

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 Sites			Additional Sites		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab Site**	**Process**	**Wafer Diameter**
MAINEFAB	BICMOS13	200 mm	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

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

New Fab Site

Chip Site	Chip Site Origin (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:

LMK03318RHSR	LMK03318RHSTC2	LMK03328RHSRC8	LMK03328RHSTC8
LMK03318RHSRA1	LMK03318RHSTC3	LMK03328RHSRC9	LMK03328RHSTC9
LMK03318RHSRB1	LMK03318RHSTL1	LMK03328RHSRI1	LMK03328RHSTI1
LMK03318RHSRBC1	LMK03318RHSTN1	LMK03328RHSRN1	LMK03328RHSTN1
LMK03318RHSRC1	LMK03318RHSTP1	LMK03328RHSRP1	LMK03328RHSTP1
LMK03318RHSRC2	LMK03318RHSTT1	LMK03328RHSRP2	LMK03328RHSTP2
LMK03318RHSRC3	LMK03318RHSTT2	LMK03328RHSRP3	LMK03328RHSTP3
LMK03318RHSRL1	LMK03328EVM	LMK03328RHSRP4	LMK03328RHSTP5
LMK03318RHSRN1	LMK03328RHSR	LMK03328RHSRP5	LMK03328RHSTS1
LMK03318RHSRP1	LMK03328RHSRB2	LMK03328RHST	**LMX2582RHAR**
LMK03318RHSRT1	LMK03328RHSRB3	LMK03328RHSTB2	**LMX2582RHAT**
LMK03318RHSRT2	LMK03328RHSRC1	LMK03328RHSTC1	**LMX2592RHAR**
LMK03318RHST	LMK03328RHSRC2	LMK03328RHSTC2	**LMX2592RHAT**
LMK03318RHSTA1	LMK03328RHSRC3	LMK03328RHSTC3	PLMK03318RHSTPX
LMK03318RHSTB1	LMK03328RHSRC4	LMK03328RHSTC4	PLMK03328RHSTPX
LMK03318RHSTBC1	LMK03328RHSRC6	LMK03328RHSTC6	PLMK03328RHSTS1
LMK03318RHSTC1	LMK03328RHSRC7	LMK03328RHSTC7	**PLMX2592RHAT**

Qualification Report
Approve Date 20-MARCH -2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LMK03318RHST	Qual Device: LMK03328RHST	QBS Reference: DS560MB410ZASR	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	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	3/2399/0	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	-	250 Volts			1/3/0	-
ESD	E2	ESD CDM	-	500 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	-	-	1/3/0	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-			1/3/0	1/6/0

- QBS: Qual By Similarity
- Qual Device LMK03318RHST is qualified at MSL3 260C
- Qual Device LMK03328RHST 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/

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

PCN Rev A Qual Results

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LMX2582RHAT	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
LU	E4	Latch-Up	Per JESD78	-	-	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	3/90/0

- QBS: Qual By Similarity
- Qual Device LMX2582RHAT is qualified at NOT CLASSIFIED 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/

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