PCN Number:	20200924004.1	**PCN Date:**	Oct. 1, 2020
Title:	Qualification of FFAB as an additional Fab site option for select BICMOS13 devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Jan. 1, 2021	**Estimated Sample Availability:**	Date provided at sample request.

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:

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 Group:

DS250DF200ABMR	DS250DF800ABVR	DS280MB810ZBLR	LMH1219RTWR
DS250DF200ABMT	DS250DF800ABVT	DS280MB810ZBLT	LMH1219RTWT
DS250DF210ABMR	DS250DF810ABVR	LMH0324RTWR	LMH1226RTWR
DS250DF210ABMT	DS250DF810ABVT	LMH0324RTWT	LMH1226RTWT

DS250DF230ZLSR	DS280BR800ZBFR	LMH0397RTVR	LMH1228RTVR
DS250DF230ZLST	DS280BR800ZBFT	LMH0397RTVT	LMH1228RTVT
DS250DF400ABMR	DS280BR810ZBFR	LMH0604RTWR	LMH1297RTVR
DS250DF400ABMT	DS280BR810ZBFT	LMH0604RTWT	LMH1297RTVT
DS250DF410ABMR	DS280BR820ZBLR	LMH1208RTVR	
DS250DF410ABMT	DS280BR820ZBLT	LMH1208RTVT	

Qualification Report
Approve Date 28-July-2020

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

Type	Test Name / Condition	Duration	Qual Device: LMH1297RTVTR	QBS Process Device: DS280DF810ABWT	QBS Process Reference LMX2581SQENOPB	QBS Package Reference DS110DF1610SFB
ELFR	Early Life Failure Rate, Ta=115C, Tj~160C	48 Hrs	-	-	3/2400/0	-
HTOL	Life Test, Ta=115C, Tj~160C	500 Hrs	-	-	3/231/0	-
HTOL	Life Test, Ta=125C	1000 Hrs	2/154/0	1/77/0	-	-
AC	Autoclave 121C	96 Hrs	-	-	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96 Hrs	-	-	3/231/0	3/231/0
TC	Temperature Cycle, -55/125C	700 Cycles	-	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hrs	-	-	3/231/0	3/231/0
HBM	ESD - HBM	2000V	-	1/3/0	3/9/0	-
HBM	ESD – HBM (all pins)	5000V	1/3/0	-	-	-
HBM	ESD – HBM (exclude pins 13, 27, 29)	6000V	1/3/0	-	-	-
CDM	ESD - CDM	1000V	-	1/3/0	-	-
LU	Latch-up	25C	-	1/6/0	3/18/0	-
LU	Latch-up	85C	-	1/6/0	3/18/0	-
LU	Latch-up	125C	1/6/0	-	-	-

- QBS: Qual By Similarity
- Qual Device LMH1297RTVTR is qualified at LEVEL3-260CG

- 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

Qualification Report
Approve Date 22-April-2020

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

Type	Test Name / Condition	Duration	Qual Device: DS280DF810ABWT	QBS Process Device: LMH1297RTVT R	QBS Process Reference LMX2581SQENOPB	QBS Package Reference DS110DF1610SFB
ELFR	Early Life Failure Rate, Ta=115C, Tj~160C	48HRS	-	-	3/2400/0	-
HTOL	Life Test, Ta=115C, Tj~160C	500HRS	-	-	3/231/0	-
HTOL	Life Test, Ta=125C	1000HRS	1/77/0	2/154/0	-	-
AC	Autoclave 121C	96HRS	-	-	3/231/0	-
HAST	Biased HAST, 130C/85%RH	96HRS	-	-	3/231/0	3/231/0
TC	Temperature Cycle, -55/125C	700CYC	-	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000HRS	-	-	3/231/0	3/231/0
HBM	ESD - HBM	2000V	1/3/0	-	3/9/0	-
CDM	ESD - CDM	1000V	1/3/0	-	-	-
LU	Latch-up	25C	1/6/0	-	3/18/0	-
LU	Latch-up	85C	1/60	-	3/18/0	-

- QBS: Qual By Similarity
- Qual Device DS280DF810ABWT is qualified at LEVEL3-260CG

- 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

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