

PCN Number:	20230831003.1	PCN Date:	August 31, 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:	Dec 1, 2023	Sample requests accepted until:	Oct 1, 2023*

***Sample requests received after October 1, 2023 will not be supported.**

Change Type:

<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>	Wafer Fab Process
		<input type="checkbox"/>	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	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

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)

TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 20:
 MSL 2 / 260C/1 YEAR SEAL DT
 MSL 1 / 235C/UNLIM 03/29/04
 OPT:
 ITEM: 39
 LBL: 5A (L)T0:1750

(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483SI2
 (P)
 (2P) REV: 0033317
 (20L) CSO: SHE (21L) CCO:USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected:

LMK60A0-148M35SIAR	LMK61A2-312M50SIAR	LMK61E2-156M25SIAR	LMK61E2-I5SIAR
LMK60A0-148M35SIAT	LMK61A2-312M50SIAT	LMK61E2-156M25SIAT	LMK61E2-I5SIAT

LMK60A0-148M50SIAR	LMK61A2-644M53SIAR	LMK61E2-312M50SIAR	LMK61E2-I6SIAR
LMK60A0-148M50SIAT	LMK61A2-644M53SIAT	LMK61E2-312M50SIAT	LMK61E2-I6SIAT
LMK60E0-156257SIAR	LMK61E0-050M00SIAR	LMK61E2BAA-SIAR	LMK61E2-I7SIAR
LMK60E0-156257SIAT	LMK61E0-050M00SIAT	LMK61E2BAA-SIAT	LMK61E2-I7SIAT
LMK60E2-150M00SIAR	LMK61E0-155M52SIAR	LMK61E2BBA-SIAR	LMK61E2-SIAR
LMK60E2-150M00SIAT	LMK61E0-155M52SIAT	LMK61E2BBA-SIAT	LMK61E2-SIAT
LMK61A2-100M00SIAR	LMK61E0-156M25SIAR	LMK61E2-I1SIAR	LMK61I2-100M00SIAR
LMK61A2-100M00SIAT	LMK61E0-156M25SIAT	LMK61E2-I1SIAT	LMK61I2-100M00SIAT
LMK61A2-125M00SIAR	LMK61E2-100M00SIAR	LMK61E2-I3SIAR	LMK61PD0A2-SIAR
LMK61A2-125M00SIAT	LMK61E2-100M00SIAT	LMK61E2-I3SIAT	LMK61PD0A2-SIAT
LMK61A2-156M25SIAR	LMK61E2-125M00SIAR	LMK61E2-I4SIAR	
LMK61A2-156M25SIAT	LMK61E2-125M00SIAT	LMK61E2-I4SIAT	

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LMK61E2-SIAT	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
TC	A7	Temperature Cycle	-65 to 150C	500 Cycles		3/231/0
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 Distributions	Cpk>1.67 Room, hot, and cold	-	1/30/0	3/90/0

- QBS: Qual By Similarity
- Qual Device LMK61E2-SIAT 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/>

TI Qualification ID: R-CHG-2306-046

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

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (www.ti.com/legal/termsofsale.html) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.