

<b>PCN Number:</b>	20220728000.1	<b>PCN Date:</b>	July 28, 2022
<b>Title:</b>	Qualification of FFAB as an additional Fab site option for select BICMOS13 devices		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Oct 28, 2022	<b>Sample requests accepted until:</b>	August 28, 2022*

**\*Sample requests received after August 28, 2022 will not be supported.**

<b>Change Type:</b>			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials
		<input type="checkbox"/>	Part number change
<input type="checkbox"/>		<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>		<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>		<input type="checkbox"/>	Test Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>		<input type="checkbox"/>	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 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
<b>FR-BIP-1</b>	<b>TID</b>	<b>DEU</b>	<b>Freising</b>

Sample product shipping label (not actual product label)



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: (V) 0033317  
(20L) CSO: SHE (21L) CCO:USA  
(22L) ASO: MLA (23L) ACO: MYS

**Product Affected:**

DS160PR410RNQR	SN75LVPE3410RNQR	SN75LVPE4410RNQR	
DS160PR410RNQT	SN75LVPE3410RNQT	SN75LVPE4410RNQT	

**Qualification Report**  
**Approve Date 25-July-2022**

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

Type	Test Name / Condition	Duration	Qual Device: DS160PR410RNQT	QBS Process Device: DS280DF810ABWT	QBS Process Reference LMX2581SQENOPB	QBS Package Reference: BQ294504DRVR	QBS Package Reference: TUSB1002IRMQ
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	-	1/77/0	-	-	-
AC	Autoclave 121C	96 Hrs	-	-	3/231/0	3/231/0	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hrs	-	-	3/231/0	3/231/0	-
TC	Temperature Cycle, -55/250C	700 Cycles	-	-	3/231/0	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	-	-	-	3/231/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hrs	-	-	-	-	3/231/0
HBM	ESD - HBM	2000V	1/3/0	1/3/0	3/9/0	-	-
CDM	ESD - CDM	1000V	-	1/3/0	-	-	-
CDM	ESD - CDM	500V	1/3/0	-	-	-	-
LU	Latch-up	25C	1/6/0	1/6/0	3/18/0	-	-
LU	Latch-up	85C	1/6/0	1/6/0	3/18/0	-	-

- QBS: Qual By Similarity

- Qual Device DS160PR410RNQT is qualified at LEVEL2-260CG

- 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

For questions regarding this notice, e-mails can be sent to the contact shown below, or you can contact your local Field Sales Representative.

Location	E-Mail
WW Change Management Team	<a href="mailto:PCN_ww_admin_team@list.ti.com">PCN_ww_admin_team@list.ti.com</a>

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