



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20200424001.1

**Qualification of FFAB as an additional Fab Site option for select BICMOS13 devices
Change Notification / Sample Request**

Date: April 28, 2020
To: PREMIER FARNELL PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments requires acknowledgement of receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance of the change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team (PCN_ww_admin_team@list.ti.com). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team
SC Business Services

20200424001.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

| DEVICE | CUSTOMER PART NUMBER |
|----------------|-----------------------------|
| DS280DF810ABVT | null |

Technical details of this Product Change follow on the next page(s).

| | | | |
|---|--|---------------------------------------|----------------------------------|
| PCN Number: | 20200424001.1 | PCN Date: | Apr 28, 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: | Jul 28, 2020 | Estimated Sample Availability: | Date provided at sample request. |
| Change Type: | | | |
| <input type="checkbox"/> | Assembly Site | <input type="checkbox"/> | Assembly Process |
| <input type="checkbox"/> | Design | <input type="checkbox"/> | Assembly Materials |
| <input type="checkbox"/> | Test Site | <input type="checkbox"/> | Electrical Specification |
| <input type="checkbox"/> | Wafer Bump Site | <input type="checkbox"/> | Mechanical Specification |
| <input checked="" type="checkbox"/> | Wafer Fab Site | <input type="checkbox"/> | Packing/Shipping/Labeling |
| | | <input type="checkbox"/> | Test Process |
| | | <input type="checkbox"/> | Wafer Bump Material |
| | | <input type="checkbox"/> | Wafer Bump Process |
| | | <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 "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: 39
 ITEM:
LBL: 5A (L)T0:1750

(1P) SN74LS07NSR
 (Q) 2000 (D) 0336
 (31T) LOT: 3959047MLA
 (4W) TKY (1T) 7523483S12
 (P)
 (2P) REV: (V) 0033317
 (20L) CS0: SHE (21L) CCO: USA
 (22L) AS0: MLA (23L) ACO: MYS

Product Affected Group:

| | | | |
|----------------|----------------|----------------|----------------|
| DS280DF810ABVR | DS280DF810ABVT | DS280DF810ABWR | DS280DF810ABWT |
|----------------|----------------|----------------|----------------|

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 | 1/6/0 | - | 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 JEDEC47: -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 regional contacts shown below, or you can contact your local Field Sales Representative.

| Location | E-Mail |
|--------------|--|
| USA | PCNAmericasContact@list.ti.com |
| Europe | PCNEuropeContact@list.ti.com |
| Asia Pacific | PCNAsiaContact@list.ti.com |
| WW PCN Team | PCN_ww_admin_team@list.ti.com |

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.