

**PCN Number:** 20221207003.1 **PCN Date:** December 09, 2022

**Title:** Qualification of LFAB as an additional Wafer Fab site option for select devices

**Customer Contact:** [PCN Manager](#) **Dept:** Quality Services

**Proposed 1<sup>st</sup> Ship Date:** Mar 9, 2023 **Sample Requests accepted until:** Jan 9, 2023

**\*Sample requests received after January 9, 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 checked="" type="checkbox"/> | Wafer Fab Process        |
|                                     |                 | <input type="checkbox"/> | Part number change        |                                     |                          |

**PCN Details**

**Description of Change:**

Texas Instruments is pleased to announce the addition of LFAB as an additional Wafer Fab site option for the products listed in the "Product Affected" section of this document.

| Current Fab Site |         |                | Additional Fab Site |         |                |
|------------------|---------|----------------|---------------------|---------|----------------|
| Current Fab Site | Process | Wafer Diameter | New Fab Site        | Process | Wafer Diameter |
| TSMC-F14         | F021    | 300mm          | LFAB                | F65     | 300mm          |
| UMC12i / DM6     | F65     | 300mm          |                     |         |                |

Qual details are provided in the Qual Data Section.

**Reason for Change:**

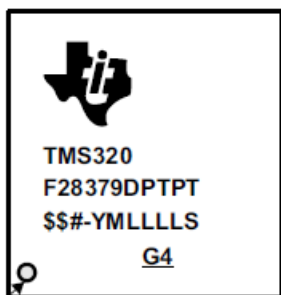
Continuity of supply

**Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):**

None

**Changes to product identification resulting from this PCN:**

**Device Symbol:**



Package Pin 1

- YMLLLS = Lot Trace Code
- YM = 2-Digit Year/Month Code
- LLLL = Assembly Lot
- S = Assembly Site Code
- \$\$ = Wafer Fab Code as applicable
- # = Silicon Revision Code
- G4 = Green (Low Halogen and RoHS-compliant)

**Original Fab Field:**

- \$\$ = YF → TSMC-F14
- Or
- \$\$ = \$7 → UMC 12i
- Or
- \$\$ = \$4 → DMOS6

**Updated Fab Field:**

- \$\$ = YF → TSMC-F14
- Or

\$\$ = \$7 → UMC 12i  
 Or  
 \$\$ = \$4 → DMOS6  
 Or  
 \$\$ = 3L → LFAB

**Current Fab Site Information:**

| Chip Site | Chip Site Origin Code (20L) | Chip Site Country Code (21L) | Chip Site City |
|-----------|-----------------------------|------------------------------|----------------|
| TSMC-F14  | T14                         | TWN                          | Tainan City    |
| UMC 12i   | UMI                         | SGP                          | Singapore      |
| DMOS6     | DM6                         | USA                          | Dallas         |

**New Fab Site:**

| New Chip Site | Chip Site Origin Code (20L) | Chip Site Country Code (21L) | Chip Site City |
|---------------|-----------------------------|------------------------------|----------------|
| <b>LFAB</b>   | <b>LHI</b>                  | <b>USA</b>                   | <b>Lehi</b>    |

Sample product shipping label (not actual product label)

**Product Affected:**

|                    |                    |                   |                    |
|--------------------|--------------------|-------------------|--------------------|
| F28PLC90DPZPS      | TMS320F28374SPZPS  | TMS320F28376DZWTT | TMS320F28378SPZPS  |
| F28PLC90DPZPSR     | TMS320F28374SPZPT  | TMS320F28376SPTPS | TMS320F28379DPTPS  |
| F28PLC91DPZPSR     | TMS320F28374SZWTS  | TMS320F28376SPTPT | TMS320F28379DPTPT  |
| F28PLC92DPZPSR     | TMS320F28374SZWTT  | TMS320F28376SPZPS | TMS320F28379DZWTS  |
| FDC5000PZPT        | TMS320F28374SZWTRR | TMS320F28376SPZPT | TMS320F28379DZWTT  |
| SVTF28379SZWTSR    | TMS320F28375DPTPS  | TMS320F28376SZWTS | TMS320F28379SPTPS  |
| TMS320F28075PTPS   | TMS320F28375DPTPT  | TMS320F28376SZWTT | TMS320F28379SPTPT  |
| TMS320F28075PTPT   | TMS320F28375DPZPS  | TMS320F28377DPTPS | TMS320F28379SPZPS  |
| TMS320F28075PZPS   | TMS320F28375DZWTS  | TMS320F28377DPTPT | TMS320F28379SPZPT  |
| TMS320F28075PZPT   | TMS320F28375DZWTT  | TMS320F28377DZWTS | TMS320F28379SZWTS  |
| TMS320F28076PTPS   | TMS320F28375SPTPS  | TMS320F28377DZWTT | TMS320F28379SZWTT  |
| TMS320F28076PZPS   | TMS320F28375SPTPT  | TMS320F28377SPTPS | TMS320F2837HDPTPS  |
| TMS320F2807NPTPT   | TMS320F28375SPZPS  | TMS320F28377SPTPT | TMS320F2837HDPTPT  |
| TMS320F28374DPTPS  | TMS320F28375SPZPT  | TMS320F28377SPZPS | TMS320F2837HDZWTS  |
| TMS320F28374DPTPT  | TMS320F28375SZWTS  | TMS320F28377SPZPT | TMS320F2837HDZWTT  |
| TMS320F28374DZWTS  | TMS320F28375SZWTT  | TMS320F28377SZWTS | TMS320F28475DPTPT  |
| TMS320F28374DZWTT  | TMS320F28376DPTPS  | TMS320F28377SZWTT | TMS320FF28374SPTPT |
| TMS320F28374SPTPS  | TMS320F28376DPTPT  | TMS320F28378DPTPS | TMS320PLC90DPZPS   |
| TMS320F28374SPTPSR | TMS320F28376DZWTS  | TMS320F28378SPTPS | TMS320PLC90DPZPSR  |
| TMS320F28374SPTPT  |                    |                   |                    |

**Qualification Report**  
**Approve Date 06-December-2022**

**Qualification Results**

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

| Type  | #  | Test Name                         | Condition  | Duration   | Qual Device: <a href="#">TMS320F28379SPTPQ</a> |
|-------|----|-----------------------------------|------------|------------|--|
| HAST  | A2 | Biased HAST                       | 130C/85%RH | 96 Hours   | 3/231/0  |
| UHAST | A3 | Unbiased HAST                     | 130C/85%RH | 96 Hours   | 3/231/0  |
| TC    | A4 | Temperature cycling               | -65C/150C  | 500 cycles | 3/231/0  |
| HTOL  | B1 | High Temperature operational Life | 125C       | 1000 Hours | 3/231/0  |
| HTSL  | B3 | High Temperature storage life     | 150C       | 1000 Hours | 3/231/0  |
| ESD   | E2 | ESD CDM                           | -          | 500 Volts  | 1/3/0  |
| ESD   | E2 | ESD HBM                           | -          | 2000 Volts | 1/3/0  |
| LU    | E3 | Latchup                           | -          | 125C       | 1/3/0  |

- QBS: Qual By Similarity
- Qual Device TMS320F28379SPTPQ is qualified at MSL3 260C.
- Preconditioning was performed for Unbiased HAST, Biased HAST and Temperature Cycling
- Flash memory was cycled with programming/erasing operations prior to HTOL and HTSL which serves as flash memory data retention tests.

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 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> |

**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 disdaims 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](http://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.