



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20240202002.1

**Qualification of RFAB using qualified Process Technology, Die Revision and
additional Assembly Site option for select devices
Change Notification / Sample Request**

Date: February 02, 2024

To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) [process](#).

TI 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 and approval of this change. If samples or additional data are required, requests must be received within 30 days of this notification, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the Change Management team. For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

Change Management Team
SC Business Services

20240202002.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

| DEVICE | CUSTOMER PART NUMBER |
|-------------------|-----------------------------|
| LMC6772AIMM/NOPB | NULL |
| LMC6772AIMMX/NOPB | NULL |

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

| | | | |
|---|--|---------------------------------------|---------------------|
| PCN Number: | 20240202002.1 | PCN Date: | February 02, 2024 |
| Title: | Qualification of RFAB using qualified Process Technology, Die Revision and additional Assembly Site for select devices | | |
| Customer Contact: | Change Management team | Dept: | Quality Services |
| Proposed 1st Ship Date: | May 2, 2024 | Estimated Sample Availability: | Mar 2, 2024* |
| *Sample requests received after March 2, 2024 will not be supported. | | | |
| Change Type: | | | |
| <input checked="" type="checkbox"/> Assembly Site | <input checked="" type="checkbox"/> Design | <input type="checkbox"/> | Wafer Bump Material |
| <input checked="" type="checkbox"/> Assembly Process | <input type="checkbox"/> Data Sheet | <input type="checkbox"/> | Wafer Bump Process |
| <input checked="" type="checkbox"/> Assembly Materials | <input type="checkbox"/> Part number change | <input checked="" type="checkbox"/> | Wafer Fab Site |
| <input type="checkbox"/> Mechanical Specification | <input type="checkbox"/> Test Site | <input checked="" type="checkbox"/> | Wafer Fab Materials |
| <input checked="" type="checkbox"/> Packing/Shipping/Labeling | <input type="checkbox"/> Test Process | <input checked="" type="checkbox"/> | Wafer Fab Process |

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of RFAB using the LBC9 qualified process technology in addition to an Assembly site option for the devices listed below.

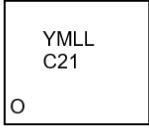
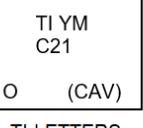
| Current Fab Site | | | Additional Fab Site | | |
|------------------|---------|----------------|---------------------|---------|----------------|
| Current Fab Site | Process | Wafer Diameter | Additional Fab Site | Process | Wafer Diameter |
| GFAB6/8 | P2CMOS | 150/200 mm | RFAB | LBC9 | 300 mm |
| DFAB | | 200 mm | | | |

The die was also changed as a result of the process change.

Additionally, there will be Assembly site & BOM options introduced for these devices as follows:

| | TIEM | MLA |
|----------------|------------|-------------|
| Wire diam/type | 0.96mil Cu | 0.80 mil Cu |
| Mount compound | 8075531 | 4147858 |
| Mold Compound | 8096859 | 4211880 |
| Lead finish | Matte Sn | NiPdAu |
| ECAT | G3 | G4 |

Package marking change:

| | Current | Proposed |
|---------------------------------|---|--|
| Package Marking (Sample) |  YMLL C21 O YM = YEAR MONTH DATE CODE LL = ASSEMBLY LOT CODE O = PIN 1 INDICATOR |  TI YM C21 O (CAV) TI = TI LETTERS YM = YEAR MONTH DATE CODE O = PIN 1 INDICATOR CAV = CAVITY NUMBER |

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

Anticipated impact on Form, Fit, Function, Quality or Reliability (positive /

negative):

None

Impact on Environmental Ratings:

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

| RoHS | REACH | Green Status | IEC 62474 |
|---|---|---|---|
| <input checked="" type="checkbox"/> No Change |

Changes to product identification resulting from this PCN:

Fab Site

Information:

| Chip Site | Chip Site Origin Code (20L) | Chip Site Country Code (21L) | Chip Site City |
|-------------|-----------------------------|------------------------------|-------------------|
| GFAB6 | GF6 | GBR | Greenock |
| GFAB8 | GF8 | GBR | Greenock |
| DFAB | DLN | USA | Dallas |
| RFAB | RFB | USA | Richardson |

Die Rev:

Current

New

| | |
|--------------|---------------------|
| Die Rev [2P] | Die Rev [2P] |
| C | C |

Assembly Site Information:

| Assembly Site | Assembly Site Origin Code (22L) | Assembly Country Code (23L) | Assembly City |
|---------------|---------------------------------|-----------------------------|---------------------|
| TIEMA | CU6 | MYS | Melaka |
| MLA | MLA | MYS | Kuala Lumpur |

Sample product shipping label (not actual product label)



Product Affected:

| | |
|------------------|-------------------|
| LMC6772AIMM/NOPB | LMC6772AIMMX/NOPB |
|------------------|-------------------|

For alternate parts with similar or improved performance, please visit the product page on TI.com

Qualification Results

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

| Type | # | Test Name | Condition | Duration | Qual Device: LMC6772AIMMX/NOPB | QBS Reference: OPA2205ADGKR | QBS Reference: OPA2206ADGKR | QBS Reference: BQ79616PAPRQ1 | QBS Reference: TLV1812QDGKRQ1 | QBS Reference: TLV1822QDGKRQ1 |
|-------|----|-------------------------------|------------|------------|-----------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|
| HAST | A2 | Biased HAST | 130C/85%RH | 96 Hours | - | 1/77/0 | 2/154/0 | - | 1/77/0 | - |
| UHAST | A3 | Unbiased HAST | 130C/85%RH | 96 Hours | - | 1/77/0 | 2/154/0 | - | 1/77/0 | - |
| TC | A4 | Temperature Cycle | -65/150C | 500 Cycles | - | 1/77/0 | 2/154/0 | - | 1/77/0 | - |
| HTSL | A6 | High Temperature Storage Life | 170C | 420 Hours | - | 1/77/0 | 2/154/0 | - | - | - |
| HTSL | A6 | High Temperature Storage Life | 175C | 500 Hours | - | - | - | - | 1/77/0 | - |
| HTOL | B1 | Life Test | 125C | 1000 Hours | - | - | - | 3/231/0 | - | - |
| HTOL | B1 | Life Test | 150C | 300 Hours | - | - | - | - | 1/77/0 | - |
| ESD | E2 | ESD CDM | - | 500 Volts | 1/3/0 | - | - | - | 1/3/0 | 1/3/0 |
| ESD | E2 | ESD HBM | - | 2000 Volts | - | - | - | - | 1/3/0 | 1/3/0 |
| LU | E4 | Latch-Up | Per JESD78 | - | - | - | - | - | 1/6/0 | 1/6/0 |
| FTY | E6 | Final Test Yield | - | - | Pass | - | - | - | - | - |

- QBS: Qual By Similarity
- Qual Device LMC6772AIMMX/NOPB is qualified at MSL1 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-2312-001

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

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