



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**Notification# 20231130000.0  
Datasheet for LMC6482 and LMC649x  
Information Only**

**Date:** December 04, 2023

Dear Customer:

This is an information-only announcement of a change to a device that is currently offered by Texas Instruments.

The changes discussed within this notification are for your information only.

Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

For questions regarding this notice, contact your local Field Sales Representative or the Change Management team.

Sincerely,

Change Management Team  
SC Business Services

**20231130000.0**  
**Information Only Datasheet**  
**Attachments**

**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.

| <b>DEVICE</b>    | <b>CUSTOMER PART NUMBER</b> |
|------------------|-----------------------------|
| LMC6482IMX/NOPB  | null                        |
| LMC6482AIMX/NOPB | null                        |
| LMC6482IMMX/NOPB | null                        |
| LMC6482AIN/NOPB  | null                        |
| LMC6482IN/NOPB   | null                        |
| LMC6492AEMX/NOPB | null                        |
| LMC6492BEMX/NOPB | null                        |
| LMC6494BEMX/NOPB | null                        |
| LMC6494AEMX/NOPB | null                        |

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

|                          |                                   |                  |                   |
|--------------------------|-----------------------------------|------------------|-------------------|
| <b>PCN Number:</b>       | 20231130000.0                     | <b>PCN Date:</b> | December 04, 2023 |
| <b>Title:</b>            | Datasheet for LMC6482 and LMC649x |                  |                   |
| <b>Customer Contact:</b> | Change Management team            | <b>Dept:</b>     | Quality Services  |
| <b>Change Type:</b>      | Electrical Specification          |                  |                   |

## PCN Details

### Description of Change:

Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is being updated as summarized below. The following change history provides further details.



**LMC6482**

SNOS674H – OCTOBER 1997 – REVISED NOVEMBER 2023

| <b>Changes from Revision G (April 2020) to Revision H (November 2023)</b>                                                                                  | <b>Page</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| • Updated the numbering format for tables, figures, and cross-references throughout the document.....                                                      | 1           |
| • Deleted specifications are typical, high voltage gain, and power good output from <i>Features</i> .....                                                  | 1           |
| • Deleted M version device from data sheet; see the <a href="#">LMC6482QML</a> for more information.....                                                   | 1           |
| • Updated front page figures in <i>Description</i> .....                                                                                                   | 1           |
| • Updated <i>Pin Configuration and Functions</i> .....                                                                                                     | 2           |
| • Added $\pm$ to input offset voltage, input offset voltage drift, input bias current, and input offset current in <i>Electrical Characteristics</i> ..... | 4           |
| • Updated parameter names throughout <i>Electrical Characteristics</i> for consistency.....                                                                | 4           |
| • Deleted notes 1, 2, and 3 from <i>Electrical Characteristics</i> .....                                                                                   | 4           |
| • Changed supply current specification from total to per amplifier in <i>Electrical Characteristics</i> .....                                              | 4           |
| • Deleted Figure 11 to 13, Figure 19 to 23, Figure 32 to 33, and Figure 47 to 52.....                                                                      | 8           |
| • Updated functional block diagram.....                                                                                                                    | 15          |
| • Updated description of the input stage in <i>Amplifier Topology</i> .....                                                                                | 15          |
| • Added Input Offset Voltage vs Common-Mode Voltage plot in <i>Amplifier Topology</i> .....                                                                | 15          |
| • Updated the description in <i>Rail-to-Rail Output</i> .....                                                                                              | 16          |
| • Added an improved instrumentation amplifier circuit to <i>Instrumentation Circuits</i> .....                                                             | 18          |
| • Added Figure 7-7, <i>Open-Loop Output Impedance</i> and related content to <i>Capacitive Load Compensation</i> ...                                       | 20          |
| • Added OPA928 femtoampere-input bias-current op-amp recommendation to <i>Typical Single-Supply Applications</i> .....                                     | 23          |
| • Deleted references to the library disk in <i>Spice Macromodel</i> .....                                                                                  | 28          |

**Changes from Revision D (March 2013) to Revision E (November 2023)**
**Page**

|                                                                                                                                                                                                                                                                                                                      |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| • Updated <i>Features</i> .....                                                                                                                                                                                                                                                                                      | 1  |
| • Updated the numbering format for tables, figures, and cross-references throughout the document.....                                                                                                                                                                                                                | 1  |
| • Added the <i>Pin Configuration and Functions, Specifications, ESD Ratings, Thermal Information, Application and Implementation, Application Information, Typical Applications, Layout, Layout Guidelines, Device and Documentation Support, and Mechanical, Packaging, and Orderable Information</i> sections..... | 1  |
| • Deleted P (PDIP) packages from data sheet.....                                                                                                                                                                                                                                                                     | 1  |
| • Changed application circuit in <i>Description</i> .....                                                                                                                                                                                                                                                            | 1  |
| • Moved ESD tolerance value from <i>Absolute Maximum Ratings</i> to <i>ESD Ratings</i> .....                                                                                                                                                                                                                         | 4  |
| • Updated note 1 of <i>Absolute Maximum Ratings</i> .....                                                                                                                                                                                                                                                            | 4  |
| • Changed <i>Operating Conditions</i> to <i>Recommended Operating Conditions</i> and deleted redundant table note....                                                                                                                                                                                                | 4  |
| • Moved thermal information values from <i>Operating Conditions</i> to <i>Thermal Information</i> .....                                                                                                                                                                                                              | 4  |
| • Updated format of <i>Electrical Characteristics</i> .....                                                                                                                                                                                                                                                          | 5  |
| • Deleted table notes 1, 2, and 3 from <i>Electrical Characteristics</i> to be consistent with standard TI data sheets..                                                                                                                                                                                             | 5  |
| • Added $\pm$ to input offset voltage, input offset voltage drift, input bias current, and input offset current in <i>Electrical Characteristics</i> .....                                                                                                                                                           | 5  |
| • Updated parameter names to be consistent with modern data sheets.....                                                                                                                                                                                                                                              | 5  |
| • Moved the <i>AC Electrical Characteristics</i> and <i>DC Electrical Characteristics</i> to <i>Electrical Characteristics</i> .....                                                                                                                                                                                 | 5  |
| • Changed supply current specification from total to per amplifier in <i>Electrical Characteristics</i> .....                                                                                                                                                                                                        | 5  |
| • Deleted Figures 13 to 15, Figures 21 to 25, Figures 34 to 35, and Figures 51 to 54.....                                                                                                                                                                                                                            | 8  |
| • Added Input Offset Voltage vs Common-Mode Voltage plot in <i>Amplifier Topology</i> and related description ....                                                                                                                                                                                                   | 14 |
| • Updated description of <i>Rail-to-Rail Output</i> .....                                                                                                                                                                                                                                                            | 15 |

The datasheet number will be changing.

| Device Family | Change From: | Change To:      |
|---------------|--------------|-----------------|
| LMC6482       | SNOS674G     | <b>SNOS674H</b> |
| LMC649x       | SNOS724D     | <b>SNOS724E</b> |

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/LMC6482>

<http://www.ti.com/product/LMC6492>

**Reason for Change:**

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.

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

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device

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

None.

**Product Affected:**

|                 |                 |                  |                  |  |
|-----------------|-----------------|------------------|------------------|--|
| LMC6482AIM      | LMC6482AIM/NOPB | LMC6482AIMX      | LMC6482AIMX/NOPB |  |
| LMC6482AIN/NOPB | LMC6482IM       | LMC6482IM/NOPB   | LMC6482IMM       |  |
| LMC6482IMM/NOPB | LMC6482IMMX     | LMC6482IMMX/NOPB | LMC6482IMX       |  |

|                  |                  |                  |                  |  |
|------------------|------------------|------------------|------------------|--|
| LMC6482IMX/NOPB  | LMC6482IN/NOPB   | LMC6492AEMX/NAK2 | LMC6492AEMX/NOPB |  |
| LMC6492BEMX/NOPB | LMC6494AEMX/NOPB | LMC6494BEMX/NOPB |                  |  |

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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