# ANALOG DEVICES

## Product/Process Change Notice - PCN 23_0053  Rev. -

Analog Devices, Inc.   One Analog Way, Wilmington, MA 01887, USA

This notice is to inform you of a change that will be made to certain ADI products (see Appendix A) that you may have purchased in the last 2 years. **Any inquiries or requests with this PCN (additional data or samples) must be sent to ADI within 30 days of publication date.** ADI contact information is listed below.

| | |
|---|---|
| **PCN Title:** | AD4695/6/7/8 Family Datasheet Specification Update |
| **Publication Date:** | 21-Apr-2023 |
| **Effectivity Date:** | 21-Apr-2023   *(the earliest date that a customer could expect to receive changed material)* |
| **Revision Description:** | Initial Release |

### Description Of Change:

Improved DC specifications and increased AVDD range on AD4695, AD4696, AD4697, AD4698

### Reason For Change:

Improvement to Datasheet limits to more accurately reflect parts capability

### Impact of the change (positive or negative) on fit, form, function & reliability:

No change to fit, form function or reliability.

### Product Identification *(this section will describe how to identify the changed material)*

There is no change to the product. Updated Datasheet Rev B will contain changes. See attached datasheet comparison for specification changes.

### Summary of Supporting Information:

Qualification not required

### Supporting Documents

**Attachment 1: Type**: Datasheet Specification Comparison

[ADI_PCN_23_0053_Rev_-_AD469X PCN for DC Spec and AVDD Extension.pdf...](#)

Note: If applicable, the device material declaration will be updated due to material change.

### ADI Contact Information:

For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.

| **Americas:** | **Europe:** | **Japan:** | **Rest of Asia:** |
|---|---|---|---|
| PCN_Americas@analog.com | PCN_Europe@analog.com | PCN_Japan@analog.com | PCN_ROA@analog.com |

## Appendix A - Affected ADI Models:

### Added Parts On This Revision - Product Family / Model Number (12)

| | | | | |
|---|---|---|---|---|
| AD4695 / AD4695BCBZ-RL7 | AD4695 / AD4695BCPZ | AD4695 / AD4695BCPZ-RL7 | AD4696 / AD4696BCBZ-RL7 | AD4696 / AD4696BCPZ |
| AD4696 / AD4696BCPZ-RL7 | AD4697 / AD4697BCBZ-RL7 | AD4697 / AD4697BCPZ | AD4697 / AD4697BCPZ-RL7 | AD4698 / AD4698BCBZ-RL7 |
| AD4698 / AD4698BCPZ | AD4698 / AD4698BCPZ-RL7 | | | |

## Appendix B - Revision History:

| Rev | Publish Date | Effectivity Date | Rev Description |
|---|---|---|---|
| Rev. - | 21-Apr-2023 | 21-Apr-2023 | Initial Release |

# AD469X PCN for DC Spec and AVDD Extension

# AD469x Data Sheet Changes

# AVDD Range Expansion

▶ AVDD min change from 3.15 V to 2.7 V:

▶ Specifications
  ▪ (Table 1)
  ▪ Change min AVDD in Table 1 disclaimer
  ▪ Specify AVDD = 5 V as condition for all AC PERFORMANCE specs
  ▪ Change min AVDD in POWER REQUIREMENTS section

▶ Timing Specifications
  ▪ (Table 2)
  ▪ Change min AVDD in Table 2 disclaimer

▶ TPC Section:
  ▪ AVDD Current vs. AVDD Voltage → extrapolating supply currents from 3.15V to 2.7V minimum

▶ Misc. other sections that mention AVDD min = 3.15V:
  ▪ Pin Configuration section
  ▪ Power Supplies section

# DC Specifications Summary

| Spec | Previous | Updated | Comments |
|---|---|---|---|
| Offset Error | ±430 uV<br><br>(5.6 LSBs) | ±360 uV<br><br>(4.7 LSBs) | -40°C to +125°C |
| Offset Drift | None | 1.1 uV/°C<br><br>(0.22 ppm/°C)<br>(14.4 mLSB/°C) | Typical drift spec using box method with -40°C to +125°C temperature range |
| Gain Error | ±0.025 %FS<br><br>(16.4 LSBs) | ±0.0125 %FS<br><br>(8.2 LSBs) | -40°C to +125°C<br><br>Reduced by half the original data sheet specs |
| Gain Drift | None | 0.08 ppm/°C<br><br>(5.2 mLSB/°C) | Typical drift spec using box method with -40°C to +125°C temperature range |
| Full-Scale Error | None | ±11 LSBs | -40°C to +125°C<br><br>New spec for AD4695 data sheet. Gives the guaranteed total Gain + Offset error for each device. |
| Full-Scale Error Drift | None | 0.25 ppm/°C<br><br>(16.6 mLSB/°C) | Typical drift spec using box method with -40°C to +125°C temperature range |
| Input Leakage Current* | 10nA | 2 nA | Typical spec at +25°C, input voltage = 5V<br>Also adding leakage current TPC plots in slide 5<br>*In the ANALOG INPUT section |

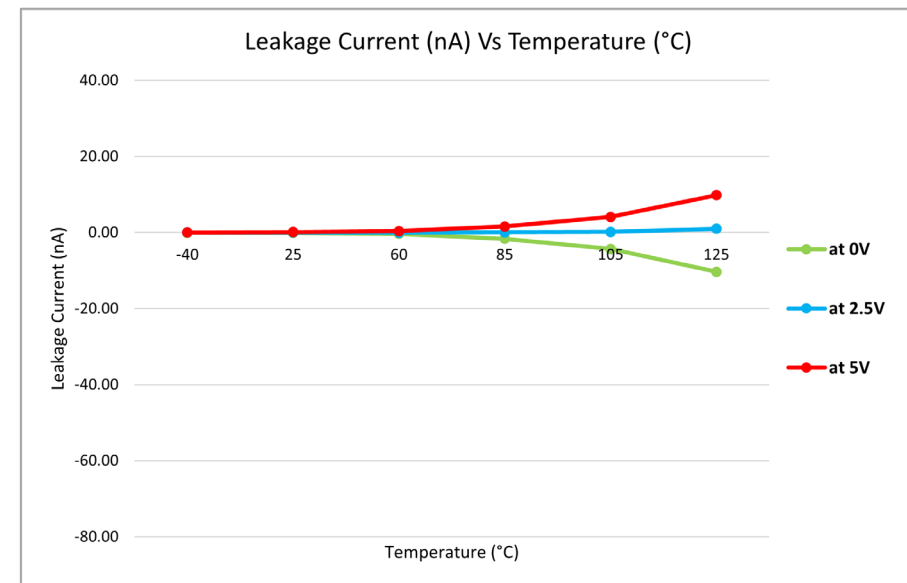# NEW Input Leakage Current TPCs

► Leakage Current vs. Temperature

  ▪ For input voltages = 0 V, 2.5 V, and 5 V

► Slotting into Figure 63 for convenience

  ▪ Would have been better to group with other Analog Input TPCs but would disrupt the document too much...
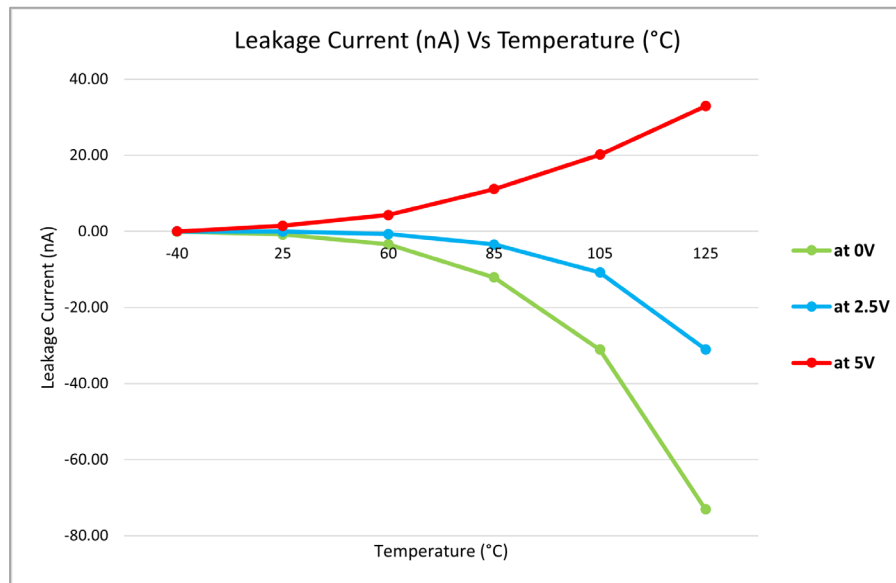


Channel Selected



Channel Not Selected