



Product/Process Change Notice - PCN 25_0025 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. An acceptance or concern response should be submitted to ADI promptly. Any requests for samples of changed material or additional information must be made within 30 days of the notification. In accordance with JEDEC Standard 046, customers should acknowledge receipt of the PCN within 30 days of the PCN delivery. ADI contact information is listed below. Note: Revised fields are indicated by a red field name. See Appendix B for revision history.

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change. After the acknowledgment, a lack of additional requests within 90 days constitutes acceptance of the change.

PCN Title:	ADXL380/ADXL382 Die and Data Sheet Revision
Publication Date:	25-Nov-2025
Effectivity Date:	27-Feb-2026 <i>(the earliest date that a customer could expect to receive changed material)</i>
Revision Description:	Initial Release.

Description Of Change:

1. Die Revision:

- The new revision includes the improvements on multiple features, including interpolation, SPI chattering, gain scaler overflow, consistent over-range threshold on "xl380 + double speed mode + 16 gee" mode, sensor robustness.

2. Test Change:

- Wider coverage and test time reduction.

3. Data Sheet Specification Changes:

- Improved temperature range from 85°C to 125°C for ADXL380.

- Improved error sensitivity at 25°C from 3.1 to 1.8% on Z-axis for ADXL382.

- Updated 0g Offset vs Temperature from 2.0 to 2.3mg/°C for ADXL382.

- Updated bias repeatability:

For ADXL380: from 100ug to 110mg on X and Y-axis and from 120ug to 60mg on Z-axis.

For ADXL382: from 220ug to 230mg on X and Y-axis and from 400ug to 90mg on Z-axis.

- Updated Velocity Random Walk from 10 to 14 mm/sec/vhr on X and Y-axis and from 12 to 17 mm/sec/vhr on Z-axis for ADXL380.

- Added option to switch CS from pin5 to pin12.

- Renamed registers 0x04 to 0x0A.

- Update PART_ID_REV_ID from C2 to C3.

Reason For Change:

The new sensor revision is derived from the released version, with changes on enhancing sensor robustness and functionality. The Data Sheet has been updated to accurately reflect the device's enhanced capabilities.

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

These changes maintain fit, form, and reliability while improving functionality.

Summary of Supporting Information:

Qualification has been performed per Industry Standard Test Methods. See attached Qualification Results.

Data Sheet Changes are documented in Product Data Sheets Revision A.

Supporting Documents:

Attachment 1: Type: Qualification Results Summary

ADI_PCN_25_0025_Rev_-_Qualification Results ADXL380_ADXL382.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:	Korea:	Rest of Asia:
PCN_Americas@analog.com	PCN_Europe@analog.com	PCN_Japan@analog.com	PCN_Korea@analog.com	PCN_ROA@analog.com

Appendix A - Affected ADI Models:

Added Parts On This Revision - Product Family / Model Number (8)

ADXL380 / ADXL380-1BCCZ-RL	ADXL380 / ADXL380-1BCCZ-RL7	ADXL380 / ADXL380-2BCCZ-RL	ADXL380 / ADXL380-2BCCZ-RL7	ADXL382 / ADXL382-1BCCZ-RL
ADXL382 / ADXL382-1BCCZ-RL7	ADXL382 / ADXL382-2BCCZ-RL	ADXL382 / ADXL382-2BCCZ-RL7		

Appendix B - Revision History:

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	25-Nov-2025	27-Feb-2026	Initial Release.