Product/Process Change Notice - PCN 22_0096 Rev. B

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.

Note: Revised fields are indicated by a red field name. See Appendix B for revision history.

PCN Title:	AD7124-4/AD7124-8 Standard Grade Redesign - Metal Edit. Applies to LFCSP Packages Only
Publication Date:	20-Nov-2024
Effectivity Date:	13-Oct-2022 *(the earliest date that a customer could expect to receive changed material)*
Revision Description:	Added change over date code.

Description Of Change:

Metal Edits to improve
1. Performance at -40'C with low power supply when there are large steps in the common mode voltage to the PGA.
2. Prevent a reset of the device when the analog input on a channel is outside the datasheet operating conditions and converting the internal 20mV diagnostic on another channel.

Other changes
1. ID Register value changed to 0x07 (AD7124-4) and 0x17 (AD7124-8)
2. When V_20MV_P/ V_20MV_M is selected as the analog input to the ADC, the absolute voltage on V_20MV_M will be at AVSS which may cause the AINM_UV_ERR flag to be set (if AINM_UV_ERR_EN=1). So, if the AINM_UV_ERR check is enabled, the user should ignore the value of AINM_UV_ERR when the channel V_20MV_P/ V_20MV_M is being measured.
3. The re-designed silicon includes a pre-charge buffer which ensures that the first conversion after switching channels is settled. On the current silicon, there is no pre-charge buffer so at fast output data rates, the first conversion may not be completely settled if large resistive loads are placed on the analog input.
4. An additional excitation current of 100nA is included on the part. Setting the Excitation Current bits to b111 enables the 100nA current. This setting generated a 1mA excitation current on the previous silicon.
5. The excitation currents, if enabled, remain active in standby mode. The currents were automatically disabled in standby mode on the previous silicon.

Reason For Change:

Improve robustness and performance of the part.

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

No change to fit, form, function and reliability of the device.

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

Change over date code for all parts is 2421.

Changes will be reflected in the following Data Sheet Revisions.
AD7124-4 Data Sheet Rev E
AD7124-8 Data Sheet Rev F

Summary of Supporting Information:

No qual required.

Supporting Documents:

None

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:

Existing Parts - Product Family / Model Number (7)

AD7124-4 / AD7124-4BCPZ	AD7124-4 / AD7124-4BCPZ-RL	AD7124-4 / AD7124-4BCPZ-RL7	AD7124-8 / AD70/034Z-0RL7	AD7124-8 / AD7124-8BCPZ
AD7124-8 / AD7124-8BCPZ-RL	AD7124-8 / AD7124-8BCPZ-RL7			

Appendix A - Affected ADI Models::

Removed Parts On All Revisions - Product Family / Model Number (3)

AD7124-4 / AD70/046Z-0	AD7124-4 / AD70/046Z-0RL	AD7124-4 / AD70/046Z-0RL7

Appendix B - Revision History:			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	11-Jul-2022	13-Oct-2022	Initial Release
Rev. A	06-Feb-2024	10-May-2024	Removing parts.
Rev. B	20-Nov-2024	13-Oct-2022	Added change over date code.