



Product/Process Change Notice - PCN 22_0234 Rev. -

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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:	AD7124-4 Metal Edit and Assembly Site Change. Applies to TSSOP package only
Publication Date:	27-Feb-2023
Effectivity Date:	01-Jun-2023 <i>(the earliest date that a customer could expect to receive changed material)</i>
Revision Description:	Initial Release

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
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.

Assembly Move:

1. Assembly location has changed from Amkor Philippines to ASE Chung Li.

Reason For Change:

Improve robustness and performance of the part and ensure continuity of supply.

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)*

Changeover date code will be notified on later Revision of this PCN.

Changes will be reflected in the following Datasheet Revisions.

AD7124-4 datasheet rev E

Summary of Supporting Information:

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

Supporting Documents

Attachment 1: Type: Other

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 (4)

AD7124-4 / AD70030Z-0RL7

AD7124-4 / AD7124-4BRUZ

AD7124-4 / AD7124-4BRUZ-RL

AD7124-4 / AD7124-4BRUZ-RL7

Appendix B - Revision History:

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	27-Feb-2023	01-Jun-2023	Initial Release