



Product/Process Change Notice - PCN 12_0148 Rev. -

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This notice is to inform you of a change that will be made to certain ADI products (see Material Report). Any issues with this PCN or requirements to qualify the change (additional data or samples) must be sent to ADI within 30 days of publication date. ADI contact information is listed below.

PCN Title: Minor Metal Mask Revision and Data Sheet Change for ADE7878, ADE7868, ADE7858 and ADE7854

Publication Date: 18-Sep-2012

Effectivity Date: 22-Oct-2012 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Initial Release

Description Of Change

A minor change was implemented on the ADE7878, ADE7868, ADE7858 and ADE7854 version 5 silicon that adds a DC offset injection circuit. This change results in the following changes to the datasheet:

1. DC Offset Error Typical spec

From: +/- 2mV

To: +/- 23mV typical

2. Change in Recommended Start-Up Procedure

The DC offset may increase the amount of settling time needed before normal operation can begin. A general description of the new procedure is:

- power on
- start DSP
- configure registers
- perform read with reset
- begin metering

3. Die Version register located at address 0xE707 changes from a value of 4 to 5.

These changes will be reflected in Rev. F of the product datasheet.

Please consult the datasheet for a more detailed description of the recommended start-up procedure.

Reason For Change

This change improves measurement accuracy at low input signal conditions by adding a small DC offset voltage.

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

There is no change to the fit or form, and the changes described above will have no negative impact on the quality or reliability of the device.

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

A date code of 1238 will correspond to the new version 5 silicon with these changes included.

An internal Die Version register located at address 0xE707 can be read by the user and will have a value of 5.

Summary of Supporting Information

Additional characterization data can be supplied upon request.

Supporting Documents None

For questions on this PCN, send email to the regional contacts below or contact your local ADI sales representative

Americas: PCN_Americas@analog.com

Europe: PCN_Europe@analog.com

Japan: PCN_Japan@analog.com

Rest of Asia: PCN_ROA@analog.com

Appendix A - Affected ADI Models**Added Parts On This Revision - Product Family / Model Number (11)**

ADE7854 / ADE7854ACPZ	ADE7854 / ADE7854ACPZ-RL	ADE7858 / ADE7858ACPZ	ADE7858 / ADE7858ACPZ-RL	ADE7868 / ADE7868ACPZ
ADE7868 / ADE7868ACPZ-RL	ADE7878 / AD71129ACPZ	ADE7878 / AD71129ACPZ-RL	ADE7878 / ADE7878ACPZ	ADE7878 / ADE7878ACPZ-REF
ADE7878 / ADE7878ACPZ-RL				

Appendix B - Revision History

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	18-Sep-2012	22-Oct-2012	Initial Release

Analog Devices, Inc.

DocId:2009 Parent DocId:None Layout Rev:7