



Product/Process Change Notice - PCN 11_0205 Rev. A

Analog Devices, Inc. Three Technology Way Norwood, Massachusetts 02062-9106

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.

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

PCN Title: AD5421 Minor Metal Mask Edit

Publication Date: 19-Dec-2011

Effectivity Date: 19-Dec-2011 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Update PCN to advise of additional specification improvements and date code changeover

Description Of Change

A minor metal edit is being made to the AD5421 die to improve the device's overall system performance. The proposed change will alter the load regulation specification of the DVdd pin from 11mV per mA to approximately 45mV per mA (Rev 0 of this PCN advised 30mV per mA). Effectively the resistance of the DVdd pin has changed.

Rev A - Additional Specification Improvements:

Internal Rset Mode

Total Unadjusted Error (TUE) from $\pm 0.22\%$ FSR to $\pm 0.18\%$ FSR for B Grade over -40°C to $+105^{\circ}\text{C}$.

Total Unadjusted Error (TUE) from $\pm 0.12\%$ FSR to $\pm 0.06\%$ FSR for B Grade at 25°C

Relative Accuracy (INL) from ± 0.08 to $\pm 0.012\%$ FSR B Grade.

External Rset Mode

Total Unadjusted Error (TUE) from $\pm 0.12\%$ FSR to $\pm 0.08\%$ FSR for B Grade over -40°C to $+105^{\circ}\text{C}$.

Total Unadjusted Error (TUE) from $\pm 0.06\%$ FSR to $\pm 0.04\%$ FSR for B Grade at 25°C

Relative Accuracy (INL) from ± 0.08 to $\pm 0.012\%$ FSR B Grade.

Reference Temperature Coefficient from 10 ppm/ $^{\circ}\text{C}$ to 8 ppm/ $^{\circ}\text{C}$

ESD, Field Induced Charged Device Model Max Ratings table from 1.5kV to 2kV.

Additional Specification Changes

Downscale Alarm Current from 3.19 - 3.21 to 3.08 - 3.21mA

Upscale Alarm Current from 22.79 - 22.81 to 22.78 - 23mA

Reason For Change

To enhance the overall system performance of the AD5421 by reducing the output noise when RegOut is loaded close to the loop current.

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

This change will not affect the form, fit or function of the AD5421 except for the above outlined change in the load regulation of DVdd. This change in load regulation is only relevant if current is drawn from the DVdd to supply other PCB components/circuitry.

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

Shipments of changed product are targeted for December 2011 (Rev O, Stated November 2011). The change will be effective from date code 1138 onwards.

Summary of Supporting Information

Evaluation data will be available on request. The above specification changes will be included in Rev. B of the AD5421 data sheet.

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

Existing Parts - Product Family / Model Number (14)

AD5421 / AD5421ACPZ-REEL7	AD5421 / AD5421BCPZ-REEL7	AD5421 / AD5421BCPZ-U1	AD5421 / AD5421BCPZ-U2	AD5421 / AD5421BREZ
AD5421 / AD5421BREZ-REEL	AD5421 / AD5421BREZ-REEL7	AD5421 / AD5421CREZ	AD5421 / AD5421CREZ-RL	AD5421 / AD5421CREZ-RL7
DAC-DUMP / AD5421ACPZ-REEL	DAC-DUMP / AD5421AREZ-REEL	DAC-DUMP / AD5421AREZ-REEL7	DAC-DUMP / AD5421BCPZ-REEL	

Appendix B - Revision History

Rev	Publish Date	Rev Description
Rev. -	15-Aug-2011	
Rev. A	19-Dec-2011	Update PCN to advise of additional specification improvements and date code changeover

Analog Devices, Inc.

DocId:1773 Parent DocId:None Layout Rev:6