



Product/Process Change Notice - PCN 10_0165 Rev. A

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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.

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

PCN Title: ADR42X Front End Manufacturing Change

Publication Date: 05-Aug-2010

Effectivity Date: 03-Nov-2010 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Added parts in the material list.

Description Of Change

Change doping method of ADR42x NPN transistor Emitters.

From: Phosphorus deposition (POCL)

To: Implanted phosphorous and implanted arsenic

Rev A

Note: The parts from Rev- will maintain original effectivity date of 24-Oct-2010. Added parts will have the standard 90 day effectivity.

Reason For Change

The change results in improved manufacturability for the affected products. In the formation of the Bipolar transistor, the Implanted Emitter process has a positive effect, as compared to POCL, primarily by lowering residual damage in the emitter/base. As a result, there is a reduction of recombination at deep levels in the emitter/base depletion layer and thereby lower noise.

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

The changes to the device will not impact form, fit, function, quality or reliability.

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

ADR42x parts with Date Code 1042 or #042 and thereafter will use the implanted emitter process.

Summary of Supporting Information

Implanted Emitter process had been previously qualified on ADR43x and ADR44x per PCN#08_0098. A Qualification Results Summary Table is provided.

Supporting Documents

Attachment 1: Type: Qualification Plan Summary

ADI_PCN_10_0165_Rev_A_Qual Results Summary Table.doc

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 (31)**

ADR420 / ADR420ARMZ	ADR420 / ADR420ARMZ-REEL7	ADR420 / ADR420ARZ	ADR420 / ADR420ARZ-REEL7	ADR420 / ADR420BRZ	ADR420 / ADR420BRZ-REEL7
ADR421 / ADR421AR	ADR421 / ADR421ARM	ADR421 / ADR421ARM-REEL7	ADR421 / ADR421ARMZ	ADR421 / ADR421ARMZ-REEL7	ADR421 / ADR421ARZ
ADR421 / ADR421ARZ-REEL7	ADR421 / ADR421BR	ADR421 / ADR421BR-REEL7	ADR421 / ADR421BRZ	ADR421 / ADR421BRZ-REEL7	ADR423 / ADR423ARMZ
ADR423 / ADR423ARMZ-REEL7	ADR423 / ADR423ARZ	ADR423 / ADR423ARZ-REEL7	ADR423 / ADR423BRZ	ADR423 / ADR423BRZ-REEL7	ADR425 / ADR425ARMZ
ADR425 / ADR425ARMZ-REEL7	ADR425 / ADR425ARZ	ADR425 / ADR425ARZ-REEL7	ADR425 / ADR425BR	ADR425 / ADR425BR-REEL7	ADR425 / ADR425BRZ
ADR425 / ADR425BRZ-REEL7					

Added Parts On This Revision - Product Family / Model Number (19)

ADR420 / ADR420ARMZ-REEL7	ADR420 / ADR420ARZ-REEL7	ADR420 / ADR420BRZ-REEL7	ADR421 / ADR421AR	ADR421 / ADR421ARM	ADR421 / ADR421ARM-REEL7
ADR421 / ADR421ARMZ-REEL7	ADR421 / ADR421ARZ-REEL7	ADR421 / ADR421BR	ADR421 / ADR421BR-REEL7	ADR421 / ADR421BRZ-REEL7	ADR423 / ADR423ARMZ-REEL7
ADR423 / ADR423ARZ-REEL7	ADR423 / ADR423BRZ-REEL7	ADR425 / ADR425ARMZ-REEL7	ADR425 / ADR425ARZ-REEL7	ADR425 / ADR425BR	ADR425 / ADR425BR-REEL7
ADR425 / ADR425BRZ-REEL7					

Appendix B - Revision History

Rev	Publish Date	Rev Description
Rev. -	26-Jul-2010	Initial Release
Rev. A	05-Aug-2010	Added parts in the material list.

Analog Devices, Inc.

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