



Product/Process Change Notice - PCN 11_0128 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: AD592 Mask Revision

Publication Date: 11-May-2012

Effectivity Date: 09-Aug-2012 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Revision to include addition of a polyimide layer to the AD590 devices.

Description Of Change

The layout of one resistor was modified to optimize the AD592 performance to the wafer fab process. Only the resistor and metal mask were changed. No schematic design changes were made to the device.

For the AD590 devices, a polyimide layer was also added on top of the existing glassivation layer.

Reason For Change

As part of ADI's ongoing Continuous Improvement Program, ADI is implementing the change to improve the manufacturability of the AD592, which will result in more predictable delivery to our customers.

The polyimide addition to the AD590 offers the following advantages: improved ESD robustness, enhanced protection against die scratches, package stresses, Surface ESD/EOS events and radiation.

Numerous ADI products have always had a polyimide passivation layer on top of the glassivation layer. These products have proven highly reliable through numerous qualifications and many years of field application.

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

This change will have no impact on the electrical performance, form, fit, or function of the device.

Summary of Supporting Information

Full wafer level test and final package test Cpk analysis was performed and all parameters were the same or better than current production material.

In addition, qualification has been performed per ADI0012, Procedure for Qualification of New or Revised Processes. See attached Qualification Report

Comments

The AD592 devices already have polyimide (covered by PCN 07_0083).

Supporting Documents

Attachment 1: Type: Qualification Report Summary

ADI_PCN_11_0128_Rev_A_Qual Summary.pdf

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 (15)

AD590 / AD590JR	AD590 / AD590JRZ	AD590 / AD590JRZ-RL	AD590 / AD590KR	AD590 / AD590KR-REEL
AD590 / AD590KRZ	AD590 / AD590KRZ-RL	AD592 / AD592ACHIPS	AD592 / AD592AN	AD592 / AD592ANZ
AD592 / AD592BN	AD592 / AD592BNZ	AD592 / AD592BNZ-AMO	AD592 / AD592CN	AD592 / AD592CNZ

Appendix B - Revision History

Rev	Publish Date	Rev Description
Rev. -	06-Mar-2012	Initial Release
Rev. A	11-May-2012	Revision to include addition of a polyimide layer to the AD590 devices.

Analog Devices, Inc.

DocId:1918 Parent DocId:None Layout Rev:6