



## Product/Process Change Notice - PCN 14\_0055 Rev. -

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.

**PCN Title:** Increase Cap Cavity to 175 $\mu$ m and Increase TiW Barrier to 2000 $\text{Å}$  for GC800A.

**Publication Date:** 14-Mar-2014

**Effectivity Date:** 12-Jun-2014 *(the earliest date that a customer could expect to receive changed material)*

### Revision Description:

Initial Release

### Description Of Change

Change the TiW thickness on the metal interconnect stack from 1250 $\text{Å}$  to 2000 $\text{Å}$  and increase the cavity etch depth from 85 $\mu$ m to 175 $\mu$ m.

### Reason For Change

The barrier thickness increase is to provide additional resistance to sensitivity shifts on the GC800A during assembly.  
The cavity etch depth increase to reduce defectivity and standardize with other iMEMS gyros.

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

The cavity etch depth change will change the cross section of the part as the cap cavity is increasing in height. It may result in lower occurrence of metal damage from the capping process.  
The barrier thickness change will change the cross section of the part as well.

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

Both changes shall be traceable via our standard control plan.

### Summary of Supporting Information

Qualification has been performed per AEC-Q100, Stress Test Qualification for Integrated Circuits. See attached Qualification Report Summary.

### Supporting Documents

**Attachment 1: Type:** Qualification Report Summary

ADI\_PCN\_14\_0055\_Rev\_-\_Q10191 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****Added Parts On This Revision - Product Family / Model Number (14)**

ADXRS450 / ADXRS450BEYZ	ADXRS450 / ADXRS450BEYZ-RL	ADXRS450 / ADXRS450BRGZ	ADXRS450 / ADXRS450BRGZ-RL	ADXRS453 / ADXRS453BEYZ
ADXRS453 / ADXRS453BEYZ-RL	ADXRS453 / ADXRS453BRGZ	ADXRS453 / ADXRS453BRGZ-RL	ADXRS800 / ADXRS800WBEYZ	ADXRS800 / ADXRS800WBEYZ-RL
ADXRS800 / ADXRS800WBRGZ	ADXRS800 / ADXRS800WBRGZ-RL	ADXRS810 / ADXRS810WBRGZ-RL	ADXRS810 / ADXRS810WXRGZ-RL	

**Appendix B - Revision History**

<b>Rev</b>	<b>Publish Date</b>	<b>Effectivity Date</b>	<b>Rev Description</b>
Rev. -	14-Mar-2014	12-Jun-2014	Initial Release

Analog Devices, Inc.

DocId:2791 Parent DocId:None Layout Rev:7