

# Product/Process Change Notice - PCN 09\_0031 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 receiving this notification. The information contained within this PCN is considered proprietary and should not be shared outside of your company. ADI contact information is listed below.

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

PCN Title: ADXL320, ADXL330, ADXL340 Families Capping and Fab Process Transfer

Publication Date: 22-Jul-2009 Samples Available Date: 17-Aug-2009

**Effectivity Date:** 02-Nov-2009 (the earliest date that a customer could expect to receive changed material)

#### **Description Of Change**

ADI has decided to close the 6" Cambridge, MA USA wafer fab in 2009 to better align its internal manufacturing capability. This decision affects the wafer fabrication process location of the XL320, XL330 and XL340 family products which includes the following steps:

- Sensor creation
- Metallization
- · Sensor release
- · Cap wafer formation
- Cap Sensor wafer bonding

All of the above process steps will be transferred to ADI's internal wafer fabrication site at Wilmington, MA USA. Cap – Sensor wafer bonding process will be carried out at both Cambridge and Wilmington until the closure of Cambridge where upon the bonding process will be exclusively carried out at the ADI Wilmington capping facility.

In conjunction with the capping line transfer the following change is also planned for the listed devices:

• The bond pad metallization will be changed from 1% AlCu to 0.5% AlCu

## Reason For Change

ADI wafer fabs share many of the same process tools, equipment, and associated unit process steps. This standardization has facilitated process transfers between different internal ADI wafer fabs in past years, allowing ADI to proactively manage manufacturing assets, technology development, and continuous improvement initiatives. For these reasons, ADI is consolidating front-end manufacturing operations. Products transferring to Wilmington will incorporate the qualified and proven enhancements detailed above to provide standardized manufacturing flows.

Quality and reliability levels, electrical performance, and package dimensions will not be affected by these changes. All transferred product will have comparable or improved manufacturing process capabilities.

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

This change will not affect the form, fit or function of the devices.

## **Summary of Supporting Information**

The qualification plan follows Analog Devices' specification ADI0012: Procedure for Qualification of New or Revised Processes or Products.

The Qualification Plan is provided with this PCN

## **Supporting Documents**

Attachment 1: ADI\_PCN\_09\_0031\_Rev\_A\_Qual Plan.pdf

For questions on this	PCN, send email to the region	nal contacts below or contact your	local ADI sales representitive
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 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 (18)						
ADXL320 / ADXL320JCP	ADXL320 / ADXL320JCP-REEL	ADXL320 / ADXL320JCP-REEL7	ADXL321 / ADXL321JCP	ADXL321 / ADXL321JCP-REEL	ADXL321 / ADXL321JCP-REEL7	
ADXL322 / ADXL322JCP	ADXL322 / ADXL322JCP-REEL	ADXL322 / ADXL322JCP-REEL7	ADXL323 / ADXL323KCPZ	ADXL323 / ADXL323KCPZ-RL	ADXL323 / ADXL323KCPZ-RL7	
ADXL330 / ADXL330KCPZ	ADXL330 / ADXL330KCPZ-RL	ADXL330 / ADXL330KCPZ-RL7	ADXL340 / AD22340Z	ADXL340 / AD22340Z-RL	ADXL340 / AD22340Z-RL7	

Appendix B - Revision History				
Rev	Publish Date	Rev Description		
Rev	19-Mar-2009	Initial Release		
Rev. A	22-Jul-2009	Changed 1% AlCu metallization on cap to include device wafer. "The cap's bond pad metallization will be changed from 1% AlCu to 0.5% AlCu" to "The bond pad metallization will be changed from 1% AlCu to 0.5% AlCu"		

Analog Devices, Inc.

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