

Product/Process Change Notice - PCN 2444A -

Analog Devices, Inc. One Analog Way, Wilmington, MA01887, USA

This notice is to inform you of a change that will be made to certain ADI products (see Appendix A) that you may have purchased in the last 2 years. An acceptance or concern response should be submitted to ADI promptly. Any requests for samples of changed material or additional information must be made within 30 days of the notification. In accordance with JEDEC Standard 046, customers should acknowledge receipt of the PCN within 30 days of the PCN delivery. ADI contact information is listed below. Note: Revised fields are indicated by a red field name. See Appendix B for revision history.

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change. After the acknowledgment, a lack of additional requests within 90 days constitutes acceptance of the change.

PCN Title:	Wafer Size Change from 6-in to 8-in for ADI Products in 5um BiCMOS High Voltage Fab Process
Publication Date:	29-Apr-2026
Effectivity Date:	28-Jul-2026 <i>(the earliest date that a customer could expect to receive changed material)</i>
Revision Description:	Initial Release.

Description Of Change:

Analog Devices Beaverton/USA is moving from current 6-inch wafer size to 8-inch wafer size.

Reason For Change:

Analog Devices Beaverton/USA fab is moving to the 8-inch process to ensure adequate capacity for supply continuity.

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

There are no changes to the form, fit, function, quality, or reliability of the device.

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

Analog Devices maintains full traceability by device marking, packaging labels and shipment documents.

Summary of Supporting Information:

Qualification has been performed per Industry Standard Test Methods. See attached Qualification Results Summary.

Supporting Documents:

Attachment 1: Type: Qualification Report Summary

[5um BiCMOS High Voltage Process Qualification.pdf](#)

ADI Contact Information:

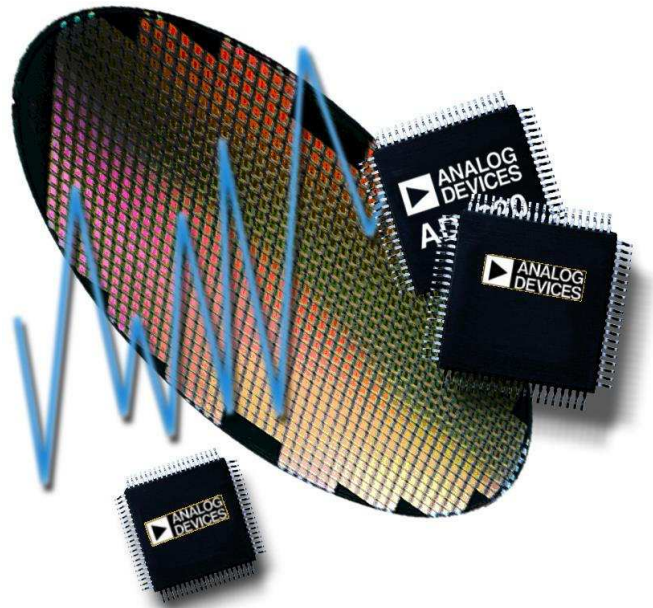
For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.

Americas:	Europe:	Japan:	Korea:	Rest of Asia:

Appendix A - Impacted items, see csv PN listing in PCN Zip file

Appendix B - Revision History:

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	29-Apr-2026	28-Jul-2026	Initial Release.



Reliability Report

Report Title: B5HV Process at Analog Devices
Beaverton Qualification

Report Number: 044422

Revision: A

Date: 16 April 2026

Summary

This report documents the successful completion of the reliability qualification requirements for the release of the B5HV Process at Analog Devices Beaverton. This is a wafer diameter conversion from 150mm to 200mm for the 5um BiCMOS process. The products listed below were selected to cover the technology being released:

The MAX313F, a quad, rail-to-rail, fault-protected, single pole/single-throw (SPST) Analog Switches in 16L Narrow SOIC package.

The MAX351, a precision, quad, single pole/single-throw (SPST) Analog Switches in 16L Narrow SOIC package.

The DG406, an Improved, 16-Channel/Dual 8-Channel, CMOS Analog Multiplexers in 28L Wide SOIC package.

Die/Fab Product Characteristics

Table 1: Die/Fab Product Characteristics- 5um BiCMOS at Analog Devices Beaverton

Product Characteristic	Product(s) to be Qualified		
Generic/Root Part #	MAX313F	MAX351	DG406
Die Id	AH87A	AG38A	AG60A
Die Size (mm)	2.18 x 4.57	2.03 x 2.46	2.49 x 4.67
Wafer Fabrication Site	Analog Devices Beaverton	Analog Devices Beaverton	Analog Devices Beaverton
Wafer Fabrication Process	5um BiCMOS	5um BiCMOS	5um BiCMOS
Die substrate	Si	Si	Si
Metallization/# layers	AlCu /1	AlCu /1	AlCu /1
Polyimide	No	No	No
Passivation	SiN/SiO ₂	SiN/SiO ₂	SiN/SiO ₂

Die/Fab Test Results
Table 2: Die/Fab Test Results– 5um BiCMOS at Analog Devices Beaverton

Test Name	Spec	Conditions	Generic/ Root Part #	Lot #	Fails/SS
Preconditioning (PC)	J-STD-020 JESD22-A113	MSL 1	MAX313F	R44422A	0/240
			MAX351	R44422B	0/240
			DG406	R44422C	0/240
Biased HAST(BHAST) ¹	JESD22-A110	130°C, 85%RH, Biased, 96 Hours	MAX313F	R44422A	0/77
			MAX351	R44422B	0/77
			DG406	R44422C	0/77
High Temperature Operating Life (HTOL)	JESD22-A108	125°C < Tjmax < 150°C, Biased, 1000 Hours, TA 125C	MAX313F	R44422A	0/77
			MAX351	R44422B	0/77
			DG406	R44422C	0/77
Early Life Failure Rate (ELFR)	JESD22-A108	125°C < Tjmax < 150°C, Biased, 48 Hours, TA 125C	MAX313F	R44422A	0/800
			MAX351	R44422B	0/800
			DG406	R44422C	0/800

¹These samples were subjected to preconditioning at MSL 1 with 3x reflow peak temp of 260°C prior to the start of the stress test

Package/Assembly Product Characteristics

Table 3.1: Package/Assembly Product Characteristics – 16L SOIC-NARROW at UTAC Thai Limited

Product Characteristic	Product(s) to be Qualified	
Generic/Root Part #	MAX313F	MAX351
Package	16L SOIC-NARROW	16L SOIC-NARROW
Body Size (mm)	10.00 x 4.00 x 1.75	10.00 x 4.00 x 1.75
Assembly Location	UTAC Thai Limited	UTAC Thai Limited
MSL/Peak Reflow Temperature (°C)	1 / 260°C	1 / 260°C
Mold Compound	Sumitomo G600	Sumitomo G600
Die Attach	Ablestik AB2200D	Ablestik AB2200D
Leadframe Material	Copper	Copper
Lead Finish	100% MATTE TIN	100% MATTE TIN
Wire Bond Material/Diameter (mils)	Au / 1.0	Au / 1.3

Table 3.2: Package/Assembly Product Characteristics – 28L SOIC-WIDE at Carsem Malaysia

Product Characteristic	Product(s) to be Qualified
Generic/Root Part #	DG406
Package	28L SOIC-WIDE
Body Size (mm)	18.10 x 7.60 x 2.65
Assembly Location	Carsem Malaysia
MSL/Peak Reflow Temperature (°C)	1 / 260°C
Mold Compound	Hitachi CEL8240HF10-LXC
Die Attach	Henkel QMI-519
Leadframe Material	Copper
Lead Finish	100% MATTE TIN
Wire Bond Material/Diameter (mils)	Au / 1.3

Package/Assembly Test Results

Table 4: Package/Assembly Test Results

Test Name	Spec	Conditions	Generic/ Root Part #	Lot #	Fails/SS
Preconditioning(PC)	J-STD-020 JESD22-A113	MSL 1	MAX313F	R44422A	0/240
			MAX351	R44422B	0/240
			DG406	R44422C	0/240
Biased HAST(BHAST) ¹	JESD22-A110	130°C, 85%RH, Biased, 96 Hours	MAX313F	R44422A	0/77
			MAX351	R44422B	0/77
			DG406	R44422C	0/77
Unbiased HAST(UHAST) ¹	JESD22-A118	130°C, 85%RH Unbiased, 96 Hours	MAX313F	R44422A	0/77
			MAX351	R44422B	0/77
			DG406	R44422C	0/77
Temperature Cycle(TC) ¹	JESD22-A104	-65°C/+150°C, 500 Cycles	MAX313F	R44422A	0/77
			MAX351	R44422B	0/77
			DG406	R44422C	0/77
High Temperature Storage Life (HTSL)	JESD22- A103	150°C, 1000 hours	MAX313F	R44422A	0/77
			MAX351	R44422B	0/77
			DG406	R44422C	0/77
Solder Heat Resistance (SHR)	J-STD-020	MSL 1	MAX313F	R44422A	0/22
			MAX351	R44422B	0/22
			DG406	R44422C	0/22
Wire Bond Pull- Post TC	MIL-STD883 Method 2011	30 bonds min.	MAX313F	R44422A	0/5
			MAX351	R44422B	0/5
			DG406	R44422C	0/5

¹These samples were subjected to preconditioning at MSL 1 with 3x reflow peak temp of 260°C prior to the start of the stress test.

ESD and Latch-Up Test Results

Table 5: ESD Test Result

ESD Model	Generic/Root Part #	Package	ESD Test Spec	RC Network	Highest Pass Level	Class
FICDM	MAX313F	16L SOIC-NARROW	JS-002	1Ω, Cpkg	±1000V	C3
	MAX351	16L SOIC-NARROW	JS-002	1Ω, Cpkg	±1250V	C3
	DG406	28L SOIC-WIDE	JS-002	1Ω, Cpkg	±1250V	C3
HBM	MAX313F	16L SOIC-NARROW	JS-001	1.5kΩ, 100pF	±500V	1B
	MAX351	16L SOIC-NARROW	JS-001	1.5kΩ, 100pF	±4000V	3A
	DG406	28L SOIC-WIDE	JS-001	1.5kΩ, 100pF	±4000V	3A

Table 6: Latch-Up Test Result

LU Test Spec	Generic/Root Part #	Passing Current	Passing Over-Voltage	Temperature (Ta)	Class
JESD78	MAX313F	±200mA	+22.5V, -6.75V	85C	II
JESD78	MAX351	±200mA	+30V	85C	II
JESD78	DG406	±100mA	+30V, -30V	85C	II

Approvals

Reliability Engineer: