



## Product/Process Change Notice - PCN 24\_0025 Rev. -

Analog Devices, Inc. One Analog Way, Wilmington, MA 01887, 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. **Any inquiries or requests with this PCN (additional data or samples) must be sent to ADI within 30 days of publication date.** ADI contact information is listed below.

<b>PCN Title:</b>	Under-fill Material Change for Select Digital Angular Rate Sensing Products
<b>Publication Date:</b>	14-Mar-2024
<b>Effectivity Date:</b>	16-Jun-2024 <i>(the earliest date that a customer could expect to receive changed material)</i>
<b>Revision Description:</b>	Initial Release.

### Description Of Change:

ADI is qualifying HB Fuller HF8303 underfill material as an alternate source for material supply chain resiliency.

### Reason For Change:

ADI is qualifying a second source to ensure a continued source of product supply.

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

No change to form fit or function or reliability.

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

Changed material will be identified by Date Code 2422 or greater.

### Summary of Supporting Information:

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

### Supporting Documents

**Attachment 1: Type:** Qualification Results Summary

[ADI\\_PCN\\_24\\_0025\\_Rev\\_-\\_ADIS16135\\_with\\_New\\_Underfill\\_Qualification.pdf...](#)

Note: If applicable, the device material declaration will be updated due to material change.

### 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:
PCN_Americas@analog.com	PCN_Europe@analog.com	PCN_Japan@analog.com	PCN_Korea@analog.com	PCN_ROA@analog.com

## Appendix A - Affected ADI Models:

### Added Parts On This Revision - Product Family / Model Number (4)

ADIS16135 / ADIS16135BMLZ

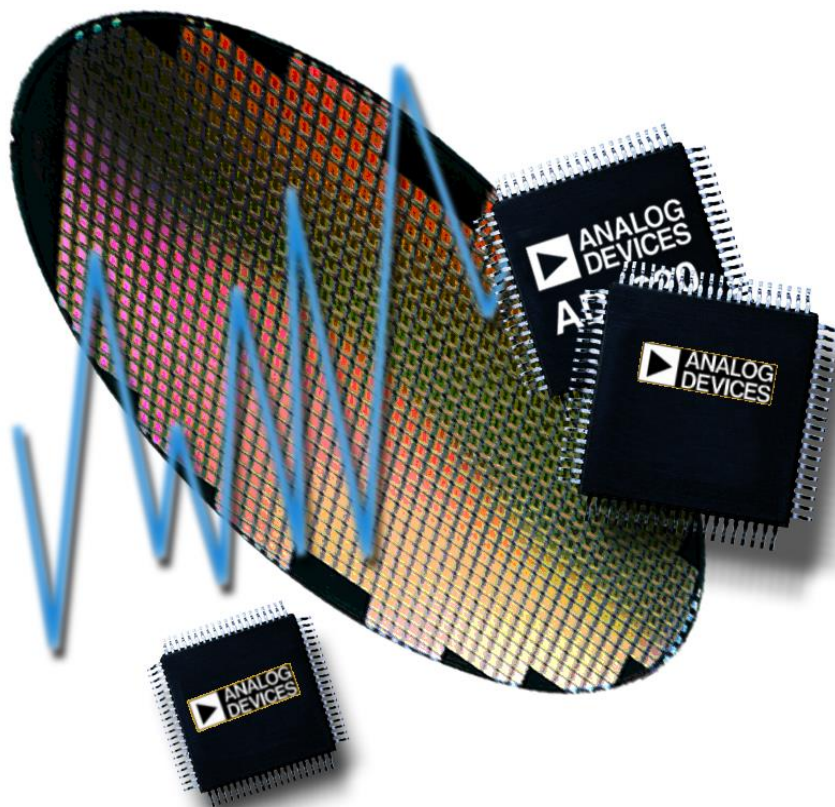
ADIS16136 / ADIS16136AMLZ

ADIS16136 / ADIS16136BMLZ

ADIS16137 / ADIS16137BMLZ

**Appendix B - Revision History:**

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	14-Mar-2024	16-Jun-2024	Initial Release.



# ***Reliability Report***

**Report Title:** ADIS16135 with New Underfill Qualification

**Report Number:** 21530

**Revision:** A

**Date:** 12 Feb 2024

## Summary

This report documents the successful completion of the reliability qualification requirements for the release of ADIS16135 with new underfill material, FH8303. The ADIS16135 is a high performance, digital gyroscope sensing system that operates autonomously and requires no user configuration to produce accurate rate sensing data.

## Package/Assembly Product Characteristics

**Table 1: Package/Assembly Product Characteristics – 24-MCML at ENGENT**

Product Characteristics	Product(s) to be Qualified
Generic/Root Part #	ADIS16135
Package	24-MCML
Body Size (mm)	36 x 44 x 14
Assembly Location	ENGENT
SMD Material	96.5Sn_3.0Ag_0.5Cu
Underfill Material	FH8303
Gyro Core	Process Code: IMEM3WL1M24.A0 Fab Site: I_WILM1B 06
Microcontroller	Process Code: 0.25E2P4M33.25 Fab Site: E_TSMC3C08

**Package/Assembly Test Results**

Table 2 shows the qualification results for product made with the same technology as shown in Table 1.

**Table 2: ADIS16135 Test Results - 24-MCML at Engent**

Test Name	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS
Temperature Cycling (TC)	JESD22-A104	-40°C/+105°C, 1,000 Cycles	ADIS16135	Q20530.TC1	0/16

**Table 3: ADIS16135 Qualification Extension Data - 24-MCML at Engent**

Test Name	Spec	Conditions	Generic/Root Part #	Lot #	Fail/SS
High Temperature Operating Life (HTOL)	JESD22-A108	Ta=85°C, Biased, 5,00 Hours	ADIS16136	TRB#20112069	0/16
Temperature Cycling (TC)	JESD22-A104	-40°C/+85°C, 500 Cycles	ADIS16136	TRB#20112069	0/15
		-40°C/+105°C, 500 Cycles	ADIS16135	Q21618.TC1	0/16

## Approvals

Reliability Engineer: Scot Solimine