

Product/Process Change Notice - PCN 19_0080 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 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.

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

PCN Title: ADIS1649X Layout Change

Publication Date: 26-Aug-2019

Effectivity Date: 28-Sep-2019 (the earliest date that a customer could expect to receive changed material)

Revision Description:

Revised to clarify reason for change.

Description Of Change:

Add voltage supervisory circuitry to limit the in-rush current of the module during turn on, which requires a layout change and additional components.

Reason For Change:

This PCN covers an ADIS16490, ADIS16495 and ADIS16497 IMU design change which brings the observable in-rush current during power-up initialization sequence to 300 mA. During the initial power on sequence, a nominal peak of 500mA will still be experienced during the ramp of the VDD supply which is unchanged and follows: $I = C \times dVDD/dt$, where $C = 46\mu F$. While there is no reliability concern for the existing IMU design, this change helps ensure that customers' IMU power supplies are not overstressed during IMU power-up.

The peak current consumption at power-up for existing ADIS16490, ADIS16495 and ADIS16497 IMUs is 3.2A at VDD = +3.6V. A plot of the VDD current with respect to time is a triangular profile with a total duration of less than 100µs. Note that a lower VDD will result in a peak current level that is less than 3.2A.

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

Removes the most stressing current demand at turn on.

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

Earliest Possible date that will include the change is DC1932

Summary of Supporting Information:

Qualification will be performed per Industry Standard Test Methods. See attached Qualification Plan.

Supporting Documents

Attachment 1: Type: Qualification Plan

ADI_PCN_19_0080_Rev_A_PCN19_0080Attachment.docx

For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.					
Americas: PCN_Americas@analog.com	Europe:	Japan:	Rest of Asia:		
	PCN_Europe@analog.com	PCN_Japan@analog.com	PCN_ROA@analog.com		

Appendix A - Affected ADI Models						
Existing Parts - Product Family / Model Number (8)						
ADIS16490 / ADIS16490BMLZ	ADIS16495 / AD24495	ADIS16495 / ADIS16495-1BMLZ	ADIS16495 / ADIS16495-2BMLZ	ADIS16495 / ADIS16495-3BMLZ		
ADIS16497 / ADIS16497-1BMLZ	ADIS16497 / ADIS16497-2BMLZ	ADIS16497 / ADIS16497-3BMLZ				

Appendix B - Revision History					
Rev	Publish Date	Effectivity Date	Rev Description		
Rev	26-Jun-2019	28-Sep-2019	Initial Release		
Rev. A	26-Aug-2019	28-Sep-2019	Revised to clarify reason for change.		

Analog Devices, Inc.

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