



# Product/Process Change Notice - PCN 19\_0097 Rev. A

Analog Devices, Inc. One Analog Way, Wilmington, MA 01887

**\*\*\*\*\* ATTENTION: THIS PCN IS BEING CANCELLED! \*\*\*\*\***

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:** Data Sheet and Die Revision for AD9171/AD9172/AD9173

**Publication Date:** 22-Oct-2021

**Effectivity Date:** Effective upon publication.

**Revision Description:**

R4 revision and Data Sheet revision is cancelled. R2 revision will continue to ship for AD9171, AD9172 and AD9173.

**Description Of Change:**

1. Added buffers to the direct clock path.
2. Clock redesign of the HB filters.
3. Improved digital layout.
4. Changed default value for SPI register 0x006 from value 0x2 to value 0x4. See "REGISTER SUMMARY" table in the relevant product data sheet.

**Reason For Change:**

1. Improve performance of the duty cycle control loop.
2. Reduces spurious levels at Fs/32, Fs/48, and Fs/64.
3. Digital layout re-synthesized due to change #2.
4. Indicates the die revision "4a" of the new material

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

1. Improves close-in Phase Noise performance, when using direct-clock mode.
2. Reduces spurious levels at Fs/32, Fs/48, and Fs/64. increases spurious levels at Fs/8, Fs/12, and Fs/16.
3. Improved power consumption on the DVDD1.0 supply domain.
4. SPI register value change. No impact otherwise

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

SPI register read of register 0x006 shall return a value of 0x4.

**Summary of Supporting Information:**

Qualification has been performed per Industry Standard Test Methods. See attached Qualification Results Summary. Data Sheet changes will be reflected in revision B of the Product Data Sheet.

**Supporting Documents**

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

ADI\_PCN\_19\_0097\_Rev\_A\_Qualification Results Summary\_AD9171\_AD9172\_AD9173.pdf

**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:**  
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 (10)**

AD9171 / AD9171-FMC-FX3-EBZ	AD9171 / AD9171BBPZ	AD9171 / AD9171BBPZRL	AD9172 / AD9172BBPZ	AD9172 / AD9172BBPZRL
AD9172 / AD9172HUAWEI-DIE	AD9173 / AD9173-FMC-FX3-EBZ	AD9173 / AD9173-FX3-EBZ	AD9173 / AD9173BBPZ	AD9173 / AD9173BBPZRL

**Appendix B - Revision History**

<b>Rev</b>	<b>Publish Date</b>	<b>Effectivity Date</b>	<b>Rev Description</b>
Rev. -	25-Jun-2019	27-Sep-2019	Initial Release.
Rev. A	22-Oct-2021	22-Oct-2021	R4 revision and Data Sheet revision is cancelled. R2 revision will continue to ship for AD9171, AD9172 and AD9173.

Analog Devices, Inc.

DocId:8672 Parent DocId:None Layout Rev:8