



Product/Process Change Notice - PCN 22_0207 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.

PCN Title: AD9542 Data Sheet Specification Revision

Publication Date: 03-Oct-2022

Effectivity Date: 05-Jan-2023 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Initial Release.

Description Of Change:

Specification changes related to the System Clock Input:

System Clock Inputs, XOB and XOB specification table (Table 4, pg. 6 of the AD9542 Rev0 Product Data Sheet):

- a) Comment added to REFERENCE INPUT path heading: "Do not enable the frequency doubler when using the REFERENCE INPUT path."
- b) Removal of the System Clock Input Doubler specification from the Input Frequency Range specification in the REFERENCE INPUT path section of the table.
- c) Removal of the System Clock Input Doubler Duty Cycle specification from the REFERENCE INPUT path section of the table.
- d) Addition of a Duty Cycle specification to the REFERENCE INPUT path section of the table with 40%/60% Min/Max limits.
- e) Comment added to the CRYSTAL RESONATOR path heading: "The crystal resonator path includes an optional frequency doubler".
- f) The Max specification for the crystal resonator increases from 60 MHz to 80 MHz.

Serial Port Specification, I2C Mode (Table 18, pg. 13 of the AD9542 Rev0 Product Data Sheet):

- a) In the Conditions/Comments column of the SCL/SDA Fall Time, tF line item, addition of the following: Min specification requires configuring SDIO/SDA pin for low drive strength (bit 7 in register 0x0109 set to 1).
- b) In the Conditions/Comments column of the Data Hold Time, tHD;DAT line item, addition of the following: Not compliant with the I2C specification of 0 μ s min, 0.9 μ s max in fast mode.

Reason For Change:

Data Sheet clarification only.

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

No impact on fit, form, function or reliability of the device.

Summary of Supporting Information:

These changes will be reflected in Product Data Sheet Rev A.

Supporting Documents None

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

Added Parts On This Revision - Product Family / Model Number (2)

AD9542 / AD9542BCPZ

AD9542 / AD9542BCPZ-REEL7

Appendix B - Revision History

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	03-Oct-2022	05-Jan-2023	Initial Release.

Analog Devices, Inc.

DocId:8997 Parent DocId:None Layout Rev:8