Product/Process Change Notice - PCN 10_0152 Rev. -

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This notice is to inform you of a change that will be made to certain ADI products (see Material Report). Any issues with this PCN or requirements to qualify the change (additional data or samples) must be sent to ADI within 30 days of publication date. ADI contact information is listed below.

PCN Title: Minor Metal Mask Revision and Datasheet Change on AD9553

Publication Date: 30-Aug-2010

Effectivity Date: 03-Sep-2010 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Initial Release

Description Of Change

A metal mask revison has been implemented and the following changes will be reflected in the datasheet rev. A for AD9553 devices:

- Additionnal pin programming mode to allow high loop bandwidth 25MHz IN and 125MHz/25MHz OUT with low jitter. The loop bandwidth is 20kHz for this mode.
- Default CMOS configuration in pin programming mode enables CMOS signals on both positive and negative outputs

We also implemented the following changes :
- Switchover and Holdover transition performance have been improved
- Outputs will now be disabled during VCO calibration

Reason For Change

Low jitter requirement for the combination 25MHz/125MHz outputs from a 25MHz Input was required. The AD9553 now provides an additionnal mode for the 25MHz IN and 25MHz/125MHz OUT combination with <1ps RMS jitter on 12kHz - 20MHz integration bandwidth.

A higher number of CMOS outputs in pin programming mode was required.
In pin programming mode, when using CMOS outputs, both positive and negative CMOS output signals will toggle, and they are in phase.

The change on the Switchover / Holdover was implemented to reduce the phase transcient during switchover amnd Holdover events. This will allow a better switchover and Holdover transition performance.

The decision has been made to disable the outputs during VCO calibration to avoid any possible invalid output frequencies present at the output during VCO calibration.

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

The changes described above will not have any impact on the quality or reliability of the device.

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

All material ordered with a date code of 1031 and beyond will be with the new revision

Summary of Supporting Information

Qualification will be performed per ADI0012, Procedure for Qualification of New or Revised Processes. See attached Qualification Plan.

Comments

N/A

Supporting Documents

Attachment 1: Type: Qualification Plan Summary

ADI_PCN_10_0152_Rev_-_PCN Table.pdf

For questions on this PCN, send email to the regional contacts below or contact your local ADI sales representative					
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 (3)		
AD9553 / AD9553/PCBZ	AD9553 / AD9553BCPZ	AD9553 / AD9553BCPZ-REEL7

Appendix B - Revision History		
Rev	**Publish Date**	**Rev Description**
Rev. -	30-Aug-2010	Initial Release