Silicon Anomaly

This anomaly list describes the known issues with the ADE9153A silicon identified by the Version (address 0x4FE) and VERSION_DSP (address 0x241) register's.

Analog Devices, Inc., is committed, through future silicon revisions, to continuously improve silicon functionality. Analog Devices tries to ensure that these future silicon revisions remain compatible with your present software/ systems by implementing the recommended workarounds outlined here.

Table 8. ADE9153A Functionality Issues Outline

Silicon Revision Identifier	Chip Marking	Silicon Status	Anomaly Sheet	No. of Reported Issues
Version: 0x25 VERSION_DSP: 0x536	ADE9153AACPZ	Released	Rev. A	1 (er001)

Functionality Issues

Table 9. MS_ACAL	_xCERT Registers	can Overflow Resulti	ing in Negative Certain	ty Values
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Background	In the presence of large amounts of noise, the MS_ACAL_AICERT, MS_ACAL_BICERT and MS_ACAL_AVCERT registers can overflow, giving negative certainty values or if overflowing far enough, positive certainty values which are incorrect.
Issue	Any values above a certainty of 100% are not clipped to 100% and therefore can cause an overflow.
Workaround	If a negative value is read from any of the 3 MS_ACAL_xCERT register's then there is a significant source of noise in the system. Verify that the hardware is design per guidelines and that no connections are open or shorted.
Related Issues	None

Table 10. ADE9153A Functionality Issues Status

Reference Number	Description	Status
er001	MS_ACAL_xCERT Registers can Overflow Resulting in Negative Certainty Values	Fixed on Version: 0x25, VERSION_DSP: 0x588