Product/Process Change Notice - PCN 19_0208 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: LTC4364 Notification of Die Revision Change

Publication Date: 28-Oct-2019

Effectivity Date: 30-Jan-2020 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:
Updating verbiage in PCN.

Description Of Change:

The following enhancements have been made to the LTC4364-1 and LTC4364-2 product die:

1. EpiFETs were replaced with depletion-mode PMOS transistors. Associated thin film resistors were also adjusted. These changes improve manufacturing yield for the Vcc, SENSE and OUT pin currents in shutdown mode and the SHDN# pin current.

2. A third layer of metal was added for increased robustness.

3. Thin film resistors were added to the ESD cells of all high voltage pins to increase robustness.

Reason For Change:

The die changes were made to facilitate improvement in manufacturing yield and to increase robustness.

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

This change does not impact on fit, form, function and reliability.
Product specifications are not affected by these changes, and the datasheet remains unchanged.

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

The new silicon can be identified with date code and lot traceability identification.

Summary of Supporting Information:

Qualification has been performed per industry standard test methods. The changes were qualified by performing characterization over the full operating junction temperature range and through rigorous engineering evaluation across a broad range of application conditions. In addition, the revised die has successfully passed 1000 hours High Temperature Operating Life stress test, and three separate fab lots have passed HAST with MSL1 preconditioning.

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_19_0208_Rev_A_rLTC4364_RelData.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 (39)				
LTC4364 / LTC4364CDE-1#PBF	LTC4364 / LTC4364CDE-1#TRPBF	LTC4364 / LTC4364CDE-2#PBF	LTC4364 / LTC4364CDE-2#TRPBF	LTC4364 / LTC4364CMS-1#PBF
LTC4364 / LTC4364CMS-1#TRPBF	LTC4364 / LTC4364CMS-2#PBF	LTC4364 / LTC4364CMS-2#TRMPBF	LTC4364 / LTC4364CMS-2#TRPBF	LTC4364 / LTC4364CS-1#PBF
LTC4364 / LTC4364CS-1#TRPBF	LTC4364 / LTC4364CS-2#PBF	LTC4364 / LTC4364CS-2#TRPBF	LTC4364 / LTC4364HDE-1#PBF	LTC4364 / LTC4364HDE-1#TRMPBF
LTC4364 / LTC4364HDE-1#TRPBF	LTC4364 / LTC4364HDE-2#PBF	LTC4364 / LTC4364HDE-2#TRPBF	LTC4364 / LTC4364HMS-1#PBF	LTC4364 / LTC4364HMS-1#TRPBF
LTC4364 / LTC4364HMS-2#PBF	LTC4364 / LTC4364HMS-2#TRPBF	LTC4364 / LTC4364HS-1#PBF	LTC4364 / LTC4364HS-1#TRPBF	LTC4364 / LTC4364HS-2#PBF
LTC4364 / LTC4364HS-2#TRPBF	LTC4364 / LTC4364IDE-1#PBF	LTC4364 / LTC4364IDE-1#TRPBF	LTC4364 / LTC4364IDE-2#PBF	LTC4364 / LTC4364IDE-2#TRMPBF
LTC4364 / LTC4364IDE-2#TRPBF	LTC4364 / LTC4364IMS-1#PBF	LTC4364 / LTC4364IMS-1#TRPBF	LTC4364 / LTC4364IMS-2#PBF	LTC4364 / LTC4364IMS-2#TRPBF
LTC4364 / LTC4364IS-1#PBF	LTC4364 / LTC4364IS-1#TRPBF	LTC4364 / LTC4364IS-2#PBF	LTC4364 / LTC4364IS-2#TRPBF	

Appendix B - Revision History			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	11-Sep-2019	14-Dec-2019	Initial Release
Rev. A	28-Oct-2019	30-Jan-2020	Updating verbiage in PCN.

Analog Devices, Inc. DocId:6879 Parent DocId:None Layout Rev:7

ANALOG DEVICES
AHEAD OF WHAT'S POSSIBLE™
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RELIABILITY DATA
LTC4364 Die Revision
8/30/2019

• OPERATING LIFE TEST

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	K DEVICE HOURS AT +150°C	NUMBER OF FAILURES
SOIC	154	1749	1908	154	0
Total	154			154	0

• BIASED HIGHLY ACCELERATED STRESS TEST AT +130°C / 85%RH *

PACKAGE TYPE	SAMPLE SIZE	OLDEST DATE CODE	NEWEST DATE CODE	Equivalent K DEVICE HOURS AT +85°C**	NUMBER OF FAILURES
SOIC	489	1749	1913	938.8	0
Total	489			938.8	0

* Test is preceded by JEDEC Preconditioning: 168h 85°C/85% R.H. plus 3x IR at 260°C.

** Assumes 20X acceleration from +85˚C to +130˚C