Product/Process Change Notice - PCN 19_0202 Rev. -

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.

PCN Title: LTC3636 Die Revision

Publication Date: 04-Sep-2019

Effectivity Date: 07-Dec-2019 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:
Initial Release

Description Of Change:

Please be advised that Analog Devices Inc. has discovered that the current LTC3636 die can potentially have a power FET shoot-through during startup when the output is pre-biased with a voltage higher than 2.5V. We have not seen any potential for shoot through in applications where the Vout pre-bias voltage is less than 2.5V or if there's no pre-bias at all.
Minor metal edits have been verified to resolve this potential shoot-through issue. The mask changes ensure that:
a) the top switch will not turn on until the Boost-SW voltage is high enough for the gate drive logic to behave properly
b) there's enough non-overlap time between the turn off of the top switch and the turn on of the bottom switch,

Reason For Change:

To improve performance in the application environment.

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

There is no change to fit, form and reliability for this device. Functionally the device will be immune to pre-bias voltage's on the SW output.

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

The parts that will be assembled with the new die will be identified by the datecode.

Summary of Supporting Information:

Qualification has been performed per Industry Standard Test Methods. See attached Qualification Results Summary.

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_19_0202_Rev_-_LTC3636_EC_Table_Review_New Die vs Current Die.pdf

Attachment 2: Type:

ADI_PCN_19_0202_Rev_-_LTC3636EUFD TRPBF ESD-LU.pdf

Attachment 3: Type: Delta Qualification Matrix

ADI_PCN_19_0202_Rev_-_PCN-Delta-Qualification-Matrix-ZVEI-3_1-LTC3636.xlsm

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 (14)				
LTC3636 / LTC3636EUFD#PBF	LTC3636 / LTC3636EUFD#TRMPBF	LTC3636 / LTC3636EUFD#TRPBF	LTC3636 / LTC3636EUFD#WPBF	LTC3636 / LTC3636EUFD#WTRPBF
LTC3636 / LTC3636EUFD-1#PBF	LTC3636 / LTC3636EUFD-1#TRPBF	LTC3636 / LTC3636IUFD#PBF	LTC3636 / LTC3636IUFD#PBF-ES	LTC3636 / LTC3636IUFD#TRPBF
LTC3636 / LTC3636IUFD#WPBF	LTC3636 / LTC3636IUFD#WTRPBF	LTC3636 / LTC3636IUFD-1#PBF	LTC3636 / LTC3636IUFD-1#TRPBF	

Appendix B - Revision History			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	04-Sep-2019	07-Dec-2019	Initial Release