



Product/Process Change Notice - PCN 20_0127 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: Supplier Material Change for μ Module

Publication Date: 05-Feb-2020

Effectivity Date: 09-May-2020 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Initial Release

Description Of Change:

OnSemi is changing the process in manufacturing their component. OnSemi is changing from 1.3mil Gold gate wire to 1.0mil Palladium Coated Copper (PCC) gate wire.

Reason For Change:

The vendor, OnSemi, is obsoleting the part using the Gold wire bond and replacing the part with one that uses a Copper Wire Bond. The obsoleted part will no longer be available. List of affected part numbers is included with this PCN.

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

The change is transparent in customer applications since there is no change in form, fit, function, quality or reliability of the products. The product datasheet is unchanged.

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

The approximate date code of the first units assembled will be available from PCN effectivity date.

Summary of Supporting Information:

The replacement component has been qualified through characterization over the full operating junction temperature range and through rigorous engineering bench evaluations. Electrical and thermal performance of devices using the alternate source component is unchanged. In addition, standard qualification tests were successfully completed, including power cycling, Thermal shock, temperature cycling and high temperature operating life. The summary of qualification results is attached.

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_20_0127_Rev_-_ADI_PCN_Cu wire at On Semi.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

Added Parts On This Revision - Product Family / Model Number (187)

LTM4620 / LTM4620EV#PBF	LTM4620 / LTM4620EV#PBF-ES3	LTM4620 / LTM4620EY#PBF	LTM4620 / LTM4620IV#PBF	LTM4620 / LTM4620IV#PBF-ES3
LTM4620 / LTM4620IY	LTM4620 / LTM4620IY#PBF	LTM4620 / LTM4620MPY	LTM4620 / LTM4620MPY#PBF	LTM4620A / LTM4620AEV#2HKPBF
LTM4620A / LTM4620AEV#PBF	LTM4620A / LTM4620AEV#PBF-ES	LTM4620A / LTM4620AEY#PBF	LTM4620A / LTM4620AIV#PBF	LTM4620A / LTM4620AIY
LTM4620A / LTM4620AIY#PBF	LTM4620A / LTM4620AMPY	LTM4620A / LTM4620AMPY#PBF	LTM4630 / LTM4630EV#2LVPBF	LTM4630 / LTM4630EV#PBF
LTM4630 / LTM4630EV#PBF-ES	LTM4630 / LTM4630EY#PBF	LTM4630 / LTM4630IV#2LVPBF	LTM4630 / LTM4630IV#PBF	LTM4630 / LTM4630IY
LTM4630 / LTM4630IY#2LWPBF	LTM4630 / LTM4630IY#PBF	LTM4630-1 / LTM4630EY-1A#PBF	LTM4630-1 / LTM4630EY-1B#PBF	LTM4630-1 / LTM4630IY-1A
LTM4630-1 / LTM4630IY-1A#PBF	LTM4630-1 / LTM4630IY-1B	LTM4630-1 / LTM4630IY-1B#PBF	LTM4630A / LTM4630AEV#PBF	LTM4630A / LTM4630AEY#PBF
LTM4630A / LTM4630AIV#PBF	LTM4630A / LTM4630AIY#PBF	LTM4631 / LTM4631EV#PBF	LTM4631 / LTM4631EY#PBF	LTM4631 / LTM4631IV#PBF
LTM4631 / LTM4631IY	LTM4631 / LTM4631IY#PBF	LTM4633 / LTM4633EY#PBF	LTM4633 / LTM4633IY	LTM4633 / LTM4633IY#2KDPBF
LTM4633 / LTM4633IY#PBF	LTM4633 / LTM4633MPY	LTM4633 / LTM4633MPY#PBF	LTM4634 / LTM4634EY#PBF	LTM4634 / LTM4634IY
LTM4634 / LTM4634IY#PBF	LTM4637 / LTM4637EV#PBF	LTM4637 / LTM4637EY#PBF	LTM4637 / LTM4637IV#PBF	LTM4637 / LTM4637IY
LTM4637 / LTM4637IY#PBF	LTM4643 / LTM4643EV#PBF	LTM4643 / LTM4643EY#PBF	LTM4643 / LTM4643IV#PBF	LTM4643 / LTM4643IY
LTM4643 / LTM4643IY#PBF	LTM4643 / LTM4643MPV#PBF	LTM4643 / LTM4643MPY	LTM4643 / LTM4643MPY#PBF	LTM4644 / LTM4644EY#2HVPBF
LTM4644 / LTM4644EY#3ODPBF	LTM4644 / LTM4644EY#3ODPBF-ES	LTM4644 / LTM4644EY#PBF	LTM4644 / LTM4644EY#PBF-ES	LTM4644 / LTM4644EY-1#3ODPBF
LTM4644 / LTM4644EY-1#PBF	LTM4644 / LTM4644IY	LTM4644 / LTM4644IY#PBF	LTM4644 / LTM4644IY#PBF-ES	LTM4644 / LTM4644IY-1
LTM4644 / LTM4644IY-1#PBF	LTM4644 / LTM4644MPY	LTM4644 / LTM4644MPY#PBF	LTM4645 / LTM4645EY#PBF	LTM4645 / LTM4645IY
LTM4645 / LTM4645IY#PBF	LTM4646 / LTM4646EY#PBF	LTM4646 / LTM4646IY	LTM4646 / LTM4646IY#3ZZ-ES	LTM4646 / LTM4646IY#PBF
LTM4647 / LTM4647EY#PBF	LTM4647 / LTM4647IY	LTM4647 / LTM4647IY#PBF	LTM4648 / LTM4648EY#PBF	LTM4648 / LTM4648IY
LTM4648 / LTM4648IY#PBF	LTM4649 / LTM4649EY#3MDPBF	LTM4649 / LTM4649EY#PBF	LTM4649 / LTM4649IY	LTM4649 / LTM4649IY#PBF
LTM4650 / LTM4650EY#PBF	LTM4650 / LTM4650EY#PBF-ES	LTM4650 / LTM4650IY	LTM4650 / LTM4650IY#PBF	LTM4650 / LTM4650IY#PBF-ES
LTM4650 / LTM4650MPY	LTM4650 / LTM4650MPY#PBF	LTM4650-1 / LTM4650EY-1A#PBF	LTM4650-1 / LTM4650EY-1B#PBF	LTM4650-1 / LTM4650IY-1A
LTM4650-1 / LTM4650IY-1A#PBF	LTM4650-1 / LTM4650IY-1B	LTM4650-1 / LTM4650IY-1B#PBF	LTM4650A / LTM4650AEV#PBF	LTM4650A / LTM4650AEY#PBF
LTM4650A / LTM4650AIV#PBF	LTM4650A / LTM4650AIY	LTM4650A / LTM4650AIY#PBF	LTM4650A-1 / LTM4650AEY-1#PBF	LTM4650A-1 / LTM4650AIY-1
LTM4650A-1 / LTM4650AIY-1#3NSPBF	LTM4650A-1 / LTM4650AIY-1#3NSPBF-ES	LTM4650A-1 / LTM4650AIY-1#PBF	LTM4651 / LTM4651EY#PBF	LTM4651 / LTM4651IY
LTM4651 / LTM4651IY#PBF	LTM4653 / LTM4653EY#PBF	LTM4653 / LTM4653IY	LTM4653 / LTM4653IY#3NZPBF	LTM4653 / LTM4653IY#PBF
LTM4655 / LTM4655EY#3NHPBF	LTM4655 / LTM4655EY#PBF	LTM4655 / LTM4655EY#PBF-ES	LTM4655 / LTM4655IY	LTM4655 / LTM4655IY#3NHPBF
LTM4655 / LTM4655IY#PBF	LTM4655 / LTM4655IY#PBF-ES	LTM4664 / LTM4664EY#PBF	LTM4664 / LTM4664IY#PBF	LTM4675 / LTM4675EY#3LNPBF
LTM4675 / LTM4675EY#PBF	LTM4675 / LTM4675IY	LTM4675 / LTM4675IY#10H-1PBF	LTM4675 / LTM4675IY#PBF	LTM4675 / LTM4675IY#PBF-ES
LTM4676A / LTM4676AEY#10H6-1PBF	LTM4676A / LTM4676AEY#10H6-1PBF-ES	LTM4676A / LTM4676AEY#10H7-1PBF	LTM4676A / LTM4676AEY#10H7-1PBF-ES	LTM4676A / LTM4676AEY#10H8-1PBF
LTM4676A / LTM4676AEY#10H8-1PBF-ES	LTM4676A / LTM4676AEY#PBF	LTM4676A / LTM4676AEY#QN07-1PBF	LTM4676A / LTM4676AEY#QN07-1PBF-ES	LTM4676A / LTM4676AEY#QN08-1PBF
LTM4676A / LTM4676AEY#QN08-1PBF-ES	LTM4676A / LTM4676AEY#QN09-1PBF	LTM4676A / LTM4676AEY#QN09-1PBF-ES	LTM4676A / LTM4676AIY	LTM4676A / LTM4676AIY#PBF
LTM4677 / LTM4677EY#PBF	LTM4677 / LTM4677EY#PBF-ES	LTM4677 / LTM4677IY	LTM4677 / LTM4677IY#PBF	LTM4677 / LTM4677IY#PBF-ES
LTM4678 / LTM4678EY#3NOPBF	LTM4678 / LTM4678EY#PBF	LTM4678 / LTM4678IY	LTM4678 / LTM4678IY#PBF	LTM4680 / LTM4680EY#3OIPBF
LTM4680 / LTM4680EY#PBF	LTM4680 / LTM4680IY	LTM4680 / LTM4680IY#PBF	LTM4686 / LTM4686EY#PBF	LTM4686 / LTM4686IY#10HC-1PBF
LTM4686 / LTM4686IY#10HD-1PBF	LTM4686 / LTM4686IY#10HE-1PBF	LTM4686 / LTM4686IY#10HF-1PBF	LTM4686 / LTM4686IY#10JE-1PBF-ES	LTM4686 / LTM4686IY#10JF-1PBF-ES
LTM4686 / LTM4686IY#10JG-1PBF-ES	LTM4686 / LTM4686IY#10JH-1PBF-ES	LTM4686 / LTM4686IY#PBF	LTM4700 / LTM4700EY#10AP-1PBF-ES	LTM4700 / LTM4700EY#PBF
LTM4700 / LTM4700EY#PBF-ES	LTM4700 / LTM4700IY	LTM4700 / LTM4700IY#PBF	LTM4700 / LTM4700IY#QN04-01PBF-ES	LTM4700 / LTM4700IY#QN05-01PBF-ES
LTM4700 / LTM4700IY#QN10-1PBF-ES	LTM4700 / LTM4700IY#QN11-1PBF-ES			

Appendix B - Revision History

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	05-Feb-2020	09-May-2020	Initial Release

Analog Devices, Inc.

DocId:8080 Parent DocId:7904 Layout Rev:7

Qualification Results Summary of LTM4686 with Copper Wire

QUALIFICATION STATUS – LTM4686 LGA			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	1*77	Pass
Unbiased HAST (UHAST)*	JEDEC <i>JESD22-A102</i>	1*77	Pass
Thermal Shock (TS)*	JEDEC <i>JESD22-A106</i>	1*77	Pass
Solder Heat Resistance – MSL4 (SHR)*	JEDEC/IPC <i>J-STD-020</i>	1*231	Pass
High Temperature Storage – (HTS)	JEDEC <i>JESD22-A103</i>	1*50	Pass

*Preconditioned per JEDEC/IPC J-STD-020