Product/Process Change Notice - PCN 21_0212 Rev. -

Analog Devices, Inc. One Analog Way, Wilmington, MA 01887

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: LTM4623 Notification of Qualification of New Mold Compound and Substrate Change

Publication Date: 04-Oct-2021

Effectivity Date: 06-Jan-2022 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:
Initial Release: LTM4623 Substrate change and mold compound change

Description Of Change:

- A new mold compound has been qualified in LTM4623 which is the next generation mold compound going forward. The new mold compound uses fine filler and facilitates the filling of tighter spaces.
- A new Substrate Design revision and substrate material have been qualified for LTM4623. The new substrate will be in use going forward.

Reason For Change:

- Higher density component assembly in a µModule substrate requires mold filling in tighter spaces between and underneath components. The new mold compound facilitates this task which also improves assembly yield.

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 the 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)*

Production shipment of the product incorporating the new material will begin no sooner than the effective date.

Summary of Supporting Information:

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

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_21_0212_Rev_-_LTM4623_ADPG_G311E PCN Rel Data.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 (5)				
LTM4623 / LTM4623EV#PBF	LTM4623 / LTM4623EY#PBF	LTM4623 / LTM4623IV#PBF	LTM4623 / LTM4623IY	LTM4623 / LTM4623IY#PBF

Appendix B - Revision History			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	04-Oct-2021	06-Jan-2022	Initial Release: LTM4623 Substrate change and mold compound change

LTM4623 G311E Qualification Results Summary

LTM4623

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Thermal Shock (TS)*	JEDEC JESD22-A106	500cyc, -55C/+125C	1 x 200	Pass

* Tests are preceded by MSL 3 Preconditioning: 48h 125C bake, 192h 30C/60% unbiased soak, and 3 reflow passes at 260C peak.

LTM4630A

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Temperature Cycle (TC)*	JEDEC JESD22-A104	1000cyc, -55C/+150C	1 x 77	Pass
Thermal Shock (TS)*	JEDEC JESD22-A106	1000cyc, -65C/+150C	1 x 77	Pass
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC JESD22-A118	96h, 130C/85%RH	1 x 77	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	2000h, 150C	1 x 45	Pass

* Tests are preceded by MSL 3 Preconditioning: 48h 125C bake, 192h 30C/60% unbiased soak, and 3 reflow passes at 245C peak.

LTM4632

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Temperature Cycle (TC)*	JEDEC JESD22-A104	1000cyc, -55C/+125C	1 x 77	Pass
Thermal Shock (TS)*	JEDEC JESD22-A106	1000cyc, -55C/+125C	1 x 77	Pass
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC JESD22-A118	96h, 130C/85%RH	1 x 77	Pass

* Tests are preceded by MSL 4 Preconditioning: 48h 125C bake, 96h 30C/60% unbiased soak, and 3 reflow passes at 260C peak.

LTM4644

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Temperature Cycle (TC)*	JEDEC JESD22-A104	1000cyc, -55C/+125C	1 x 77	Pass
Thermal Shock (TS)*	JEDEC JESD22-A106	1000cyc, -55C/+125C	1 x 77	Pass
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC JESD22-A118	96h, 130C/85%RH	1 x 77	Pass

* Tests are preceded by MSL 3 Preconditioning: 48h 125C bake, 192h 30C/60% unbiased soak, and 3 reflow passes at 245C peak.

LTM4637

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Temperature Cycle (TC)*	JEDEC JESD22-A104	1000cyc, -65C/+150C	1 x 77	Pass
Thermal Shock (TS)*	JEDEC JESD22-A106	1000cyc, -65C/+150C	1 x 77	Pass
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC JESD22-A118	96h, 130C/85%RH	1 x 77	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	2000h, 150C	1 x 45	Pass

* Tests are preceded by MSL 4 Preconditioning: 48h 125C bake, 96h 30C/60% unbiased soak, and 3 reflow passes at 245C peak.

LTM4675

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Temperature Cycle (TC)*	JEDEC JESD22-A104	1000cyc, -65C/+150C	1 x 77	Pass
Thermal Shock (TS)*	JEDEC JESD22-A106	1000cyc, -65C/+150C	1 x 77	Pass
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC JESD22-A118	96h, 130C/85%RH	1 x 77	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	2000h, 150C	1 x 45	Pass

* Tests are preceded by MSL 4 Preconditioning: 48h 125C bake, 96h 30C/60% unbiased soak, and 3 reflow passes at 260C peak.

LTM4676

Test	Specification	Conditions	Sample Size (lots x samples)	Results
Temperature Cycle (TC)*	JEDEC JESD22-A104	1000cyc, -65C/+150C	1 x 77	Pass
Thermal Shock (TS)*	JEDEC JESD22-A106	1000cyc, -65C/+150C	1 x 77	Pass
Unbiased Highly Accelerated Stress Test (UHAST)*	JEDEC JESD22-A118	96h, 130C/85%RH	1 x 77	Pass

* Tests are preceded by MSL 4 Preconditioning: 48h 125C bake, 96h 30C/60% unbiased soak, and 3 reflow passes at 260C peak.