



Product/Process Change Notice - PCN 20_0148 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: HMC788A-EP Die Revision

Publication Date: 29-Apr-2020

Effectivity Date: 01-Aug-2020 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Correction to Qualification Results Summary changing HBM ESD rating from 750V to 250V.

Changing the "Reason for Change".

Description Of Change:

Die Changes:

1. Elimination of vias by changing Metal 3 interconnect to Metal 2 on the original MMIC layout.
2. Increase some metal widths to meet current handling requirements.

Reason For Change:

Metal layer update for layout optimization.

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

No change to fit, form, function & reliability.

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_20_0148_Rev_A_Qual Results for HMC788A EP Die Revision P1.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 (2)				
HMC788A / HMC788ACPSZ-EP-PT	HMC788A / HMC788ACPSZ-EP-R7			

Appendix B - Revision History			
Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	18-Mar-2020	20-Jun-2020	Initial Release.
Rev. A	29-Apr-2020	01-Aug-2020	Correction to Qualification Results Summary changing HBM ESD rating from 750V to 250V. Changing the "Reason for Change".

Analog Devices, Inc.

DocId:8164 Parent DocId:None Layout Rev:7

HMC788A-EP Die Revision

HMC788A EP Qualification Results Summary

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Low Temperature Storage (LTS)	JEDEC <i>JESD22-A119</i>	1x77	Pass
Temperature Cycle (TC)*, 1000 cycles	JEDEC <i>JESD22-A104</i>	3x100	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	1x77	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3x100	Pass
Electrostatic Discharge <i>Human Body Model</i>	ESDA/JEDEC <i>JS-001</i>	3/voltage	Pass <u>±</u>250V
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	3/voltage	Pass <u>±</u>1000V

* These samples were subjected to preconditioning (per J-STD-020 Level 3) prior to the start of the stress test.

Level 3 preconditioning consists of the following: Bake: 24 hrs @ 125°C, Unbiased Soak: 192 hrs @ 30°C, 60%RH, Reflow: 3 passes through an oven with a peak temperature of 260°C.