



Product/Process Change Notice - PCN 14_0258 Rev. D

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: Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

Publication Date: 04-Jan-2016

Effectivity Date: 17-Jan-2016 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Update Attachment 6 to Qualification result summary for 14x14 LQFP Using G631HQ 3230 at AP

Change Attachment 8 Qualification Plan expected completion date to January 2016 for 14x14 LQFP_EP using G631HQ/3230

Description Of Change

ADI is transferring to qualified subcontractor Amkor Philippines for the assembly of 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP products.

ADI will be qualifying Amkor's standard bill of materials(BOM). The mold compound material for 14x14 body packages will change from Sumitomo G700L to Sumitomo G631HQ. The mold gate position will change as a result of the mold compound change. The package outline dimensions and wire sizes of each product will be maintained. Please see attachments.

History of Effectivity Dates:

Rev - : Effectivity date was 1-Apr-2015 with Qualification Plans provided.

Rev A : Effectivity date was 22-Jun-2015 for products covered by Qualification Results Summaries provided:

7x7 10x10 12x12 TQFP_EP Using G700L_3230, 10x10 12x12 TQFP_EP Using G700L_8361J and 14x14 TQFP_EP Using G631HQ_3230.

Rev B : Effectivity date will be 31-Jan-2016 for products covered by remaining Qualification Plans:

14x14 LQFP Using G631HQ_3230

14x14 LQFP_EP Using G631HQ_3230

Effectivity date will be immediate for products covered by Qualification Results Summaries provided:

14x14 LQFP Using G631HQ_3230_QMI536

Rev C : Add AD80100ASVZ-80 and AD6645ASVZ-80 to the affected parts list

Rev D: Effectivity date of 14x14 LQFP_EP Using G631HQ/3230 is January 2016

Reason For Change

ADI is transferring to Amkor Philippines due to the closure of Amkor Korea factory line on February of 2015 for 12x12 TQFP_EP and mid-year 2016 for 7x7, 10x10 TQFP_EP, 14x14 LQFP, 14x14 LQFP_EP, respectively.

ADI's assembly subcontractors manufacture products using Analog Devices specified manufacturing flows, materials, process controls and monitors, ensuring the same level of quality and reliability.

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

The transfer will have no impact on the form, fit, function and reliability of the devices.

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

The parts that will be assembled after the transfer will be identified by assembly lot number and the country of origin.

Summary of Supporting Information

Qualification will be performed per ADI0012, Procedure for Qualification of New or Revised Processes. See attached Qualification Plans.

Supporting Documents

Attachment 1: Type: Detailed Parts List

ADI_PCN_14_0258_Rev_D_LQFP_LQFP_EP_TQFP_EP_PART_LIST.xlsx

Attachment 2: Type: Detailed Change Description

ADI_PCN_14_0258_Rev_D_14x14 Mold Compound and Mold Gate Position Change.pptx

Attachment 3: Type: Qualification Results Summary

ADI_PCN_14_0258_Rev_D_7x7 10x10 12x12 TQFP_EP Using G700L_3230 at AP-Qualification Results Summary.docx

Attachment 4: Type: Qualification Results Summary

ADI_PCN_14_0258_Rev_D_10x10 12x12 TQFP_EP Using G700L_8361J at AP-Qualification Results Summary.docx

Attachment 5: Type: Qualification Results Summary

ADI_PCN_14_0258_Rev_D_14x14 TQFP_EP Using G631HQ_3230 at AP.docx

Attachment 6: Type: Qualification Results Summary

ADI_PCN_14_0258_Rev_D_14x14 LQFP Using G631HQ_3230 at AP.docx

Attachment 7: Type: Qualification Results Summary

ADI_PCN_14_0258_Rev_D_14x14 LQFP Using G631HQ_3230_QM1536 at AP.docx

Attachment 8: Type: Qualification Plan

ADI_PCN_14_0258_Rev_D_14x14 LQFP_EP Using G631HQ_3230 at AP.docx

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 (80)

AD53509G / AD53509JSWZ	AD53564 / AD53564JSWZ	AD5522 / AD5522JSVDZ	AD5522 / AD5522JSVUZ	AD5522 / AD5522JSVUZ-RL
AD5560 / AD112059Z-2	AD5560 / AD5560JSVUZ	AD5560 / AD5560JSVUZ-REEL	AD6645 / AD6645ASVZ-105	AD6645 / AD6645ASVZ-80
AD6645 / AD80100ASVZ-80	AD7760 / AD7760BSVZ	AD7760 / AD7760BSVZ-REEL	AD8116 / AD8116JSTZ	AD8387 / AD8387JSVZ
AD9271 / AD9271BSVZ-25	AD9271 / AD9271BSVZ-40	AD9271 / AD9271BSVZ-50	AD9271 / AD9271BSVZRL-40	AD9272 / AD9272BSVZ-40
AD9272 / AD9272BSVZ-65	AD9272 / AD9272BSVZ-80	AD9272 / AD9272BSVZRL-40	AD9272 / AD9272BSVZRL-65	AD9272 / AD9272BSVZRL-80
AD9273 / AD9273BSVZ-25	AD9273 / AD9273BSVZ-40	AD9273 / AD9273BSVZ-50	AD9273 / AD9273BSVZRL-25	AD9273 / AD9273BSVZRL-40
AD9273 / AD9273BSVZRL-50	AD9276 / AD9276BSVZ	AD9277 / AD9277BSVZ	AD9389B / AD9389BBSTZ-165	AD9389B / AD9389BBSTZ-80
AD9410 / AD9410BSVZ	AD9430 / AD80107Z	AD9430 / AD80142BSVZ-200	AD9430 / AD80205BSVZ-200	AD9430 / AD80215BSVZ-185
AD9430 / AD9430BSVZ-170	AD9430 / AD9430BSVZ-210	AD9433 / AD9433BSVZ-125	AD9444 / AD9444BSVZ-80	AD9445 / AD9445BSVZ-105
AD9445 / AD9445BSVZ-125	AD9446 / AD9446BSVZ-100	AD9446 / AD9446BSVZ-80	AD9460 / AD9460BSVZ-105	AD9460 / AD9460BSVZ-80
AD9461 / AD9461BSVZ	AD9726 / AD9726BSVZ	AD9726 / AD9726BSVZRL	AD9775 / AD9775BSVZ	AD9775 / AD9775BSVZRL
AD9777 / AD9777BSVZ	AD9777 / AD9777BSVZRL	AD9786 / AD9786BSVZ	AD9786 / AD9786BSVZRL	AD9852 / AD9852ASVZ
AD9854 / AD9854ASVZ	AD9858 / AD9858BSVZ	AD9910 / AD9910BSVZ	AD9910 / AD9910BSVZ-REEL	AD9951 / AD9951YSVZ
AD9951 / AD9951YSVZ-REEL7	AD9952 / AD9952YSVZ	AD9952 / AD9952YSVZ-REEL7	AD9954 / AD9954YSVZ	AD9954 / AD9954YSVZ-REEL7
AD9957 / AD9957BSVZ	AD9957 / AD9957BSVZ-REEL	ADATE302-02 / ADATE302-02BSVZ	ADATE305 / ADATE305BSVZ	ADAU1442 / ADAU1442YSVZ-3A-RL
ADAU1445 / ADAU1445YSVZ-3A	ADAU1445 / ADAU1445YSVZ-3A-RL	ADN4604 / ADN4604ASVZ	ADN4604 / ADN4604ASVZ-RL	GAD53063 / AD53063-03Z

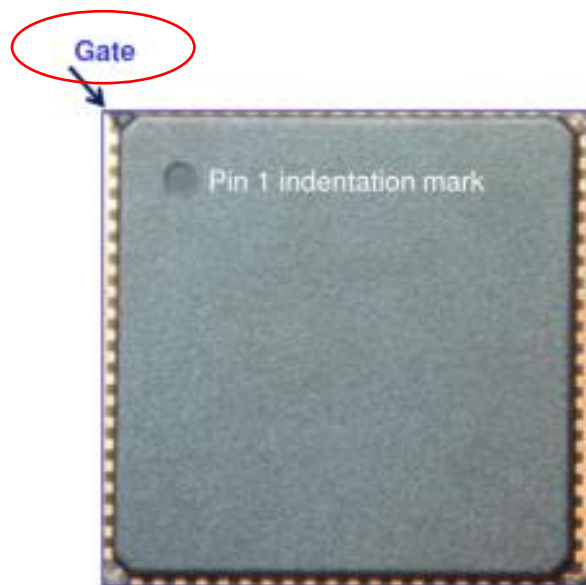
Appendix B - Revision History			
Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	10-Dec-2014	01-Apr-2015	Initial Release
Rev. A	22-Jun-2015	22-Jun-2015	Including qualification result summaries for 7x7 10x10 12x12 TQFP_EP Using G700L_3230, 10x10 12x12 TQFP_EP Using G700L_8361J and 14x14 TQFP_EP Using G631HQ_3230. Remaining Qualification Plans updated to reflect new expected completion dates.
Rev. B	03-Aug-2015	31-Jan-2016	Reason for Change: Revised the estimated AK1 factory line shutdown date for 7x7, 10x10, and 14x14 body packages from Oct. and Nov. of 2015 to mid-year 2016. Update Attachment 7 to Qualification Results Summary for 14x14 LQFP Using G631HQ_3230_QMI536 at AP. Revised attachment 6 and 8: Expected qualification completion date by December 2015.
Rev. C	19-Oct-2015	17-Jan-2016	Add AD80100ASVZ-80 and AD6645ASVZ-80 to the affected parts list
Rev. D	04-Jan-2016	17-Jan-2016	Update Attachment 6 to Qualification result summary for 14x14 LQFP Using G631HQ 3230 at AP Change Attachment 8 Qualification Plan expected completion date to January 2016 for 14x14 LQFP_EP using G631HQ/3230

Analog Devices, Inc.

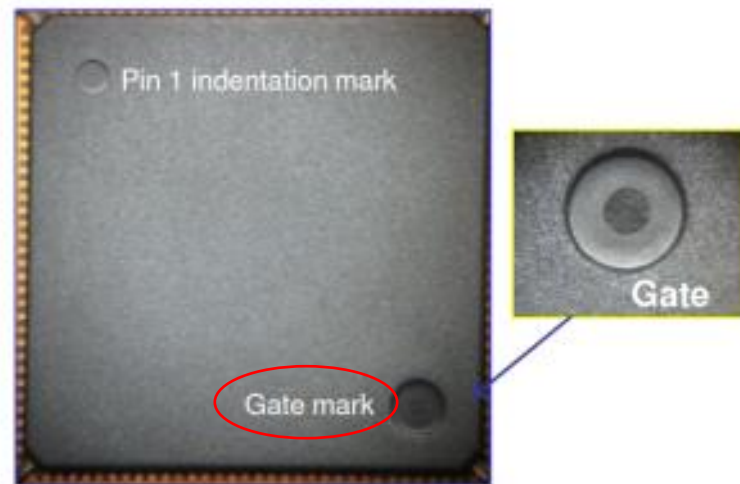
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14x14 Mold Compound & Mold Gate Position Change

Change Item	AK1	AP1	Reason for Change
14BD Mold Compound	Sumitomo G700L	Sumitomo G631HQ	AP1 standard
14x14 Mold Gate Position	Package corner	Package top side, opposite corner of Pin 1 mark	AP1 standard



AK1 Example



AP1 Example

FG Model	PkgType	BodySize	PkgLeadCount	WIRE DIA. (BEFORE)	WIRE DIA. (AFTER)	EPOXY (BEFORE)	EPOXY (AFTER)	MOLD (BEFORE)	MOLD (AFTER)	MOLD GATE POSITION (BEFORE)	MOLD GATE POSITION (AFTER)
AD9389BBSTZ-165	LQFP	14X14X1.4	80	1	1	Top die: QMI-536Bottom die: 3230	Top die: QMI-536Bottom die: 3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9389BBSTZ-80	LQFP	14X14X1.4	80	1	1	Top die: QMI-536Bottom die: 3230	Top die: QMI-536Bottom die: 3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD8116JSTZ	LQFP	14X14X1.4	128	1.2	1.2	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD53509JSWZ	LQFP_EP	14X14X1.4	52	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD53063-03Z	LQFP_EP	14X14X1.4	80	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD53564JSWZ	LQFP_EP	14X14X1.4	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9951YSVZ	TQFP_EP	7X7X1.0	48	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9951YSVZ-REEL7	TQFP_EP	7X7X1.0	48	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9952YSVZ	TQFP_EP	7X7X1.0	48	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9952YSVZ-REEL7	TQFP_EP	7X7X1.0	48	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9954YSVZ	TQFP_EP	7X7X1.0	48	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9954YSVZ-REEL7	TQFP_EP	7X7X1.0	48	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD6645ASVZ-105	TQFP_EP	10X10X1.0	52	1.2	1.2	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9433BSVZ-125	TQFP_EP	10X10X1.0	52	1.2	1.2	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD1172059Z-2	TQFP_EP	10X10X1.0	64	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD5560JSVUZ	TQFP_EP	10X10X1.0	64	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD5560JSVUZ-REEL	TQFP_EP	10X10X1.0	64	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD7760BSVZ	TQFP_EP	10X10X1.0	64	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD7760BSVZ-REEL	TQFP_EP	10X10X1.0	64	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD80100ASVZ-80	TQFP_EP	10X10X1.0	52	1.2	1.2	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD8645ASVZ-80	TQFP_EP	10X10X1.0	52	1.2	1.2	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD5522JSVDZ	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD5522JSVUZ	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD5522JSVUZ-RL	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD8387JSVZ	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9726BSVZ	TQFP_EP	12X12X1.0	80	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD9726BSVZRL	TQFP_EP	12X12X1.0	80	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD9775BSVZ	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9775BSVZRL	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9777BSVZ	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9777BSVZRL	TQFP_EP	12X12X1.0	80	1	1	3230	3230	G700L	G700L	Pkg corner	Pkg corner
AD9786BSVZ	TQFP_EP	12X12X1.0	80	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD9786BSVZRL	TQFP_EP	12X12X1.0	80	1	1	8361J	8361J	G700L	G700L	Pkg corner	Pkg corner
AD9410BSVZ	TQFP_EP	14X14X1.0	80	1.2	1.2	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9852ASVZ	TQFP_EP	14X14X1.0	80	1.2	1.2	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9854ASVZ	TQFP_EP	14X14X1.0	80	1.2	1.2	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD80107Z	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD80142BSVZ-200	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD80205BSVZ-200	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD80215BSVZ-185	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9271BSVZ-25	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9271BSVZ-40	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9271BSVZ-50	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark

AD9910BSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9910BSVZ-REEL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9957BSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
AD9957BSVZ-REEL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADATE302-02BSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADATE305BSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADAU1442YSVZ-3A-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADAU1445YSVZ-3A	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADAU1445YSVZ-3A-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADN4604ASVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark
ADN4604ASVZ-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg corner	Package top side, opposite corner of Pin 1 mark