



Product/Process Change Notice - PCN 13_0241 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 Material Report). Any issues with this PCN or requirements to qualify the change (additional data or samples) must be sent to ADI within 30 days of publication date. ADI contact information is listed below.

PCN Title: Qualification of ASE Chungli as an Alternate Assembly Site for Select 16L, 20L and 24L TSSOP Packages

Publication Date: 23-Jul-2014

Effectivity Date: 21-Oct-2014 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Initial Release

Description Of Change

ADI has qualified and will be utilizing Assembly subcontractor ASE Chungli, Taiwan for TSSOP products in 16L, 20L and 24L package lead counts. ADI has qualified ASE Chungli's standard bill of materials in the TSSOP package. See attached for BOM.

Reason For Change

The use of ADI qualified ASE Chungli as an additional assembly site for this package will ensure continued source of product supply. ADI's assembly subcontractors manufacture our products using Analog Devices specified manufacturing flows, process controls and monitors. This assures that our customers receive the same level of quality and reliability on products they receive from qualified ADI manufacturing locations.

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

There is no change in device functionality, fit, form and reliability. Only the country of origin will be changed on the package as marked on the bottom side of the package with the mold tool mark or laser marked. Material used for the qualification are ADI previously qualified material set.

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

Devices assembled in ASE Chungli will have a tool mark or laser marking at the backside for the country of origin; in this case TAIWAN.

Summary of Supporting Information

Qualification has been performed per ADI0012, Procedure for Qualification of New or Revised Processes. See attached Qualification Report Summary.

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_13_0241_Rev_-_Qualification Results Summary 20L_24L TSSOP ASE CHUNGLI.pdf

Attachment 2: Type: Detailed Change Description

Attachment 3: Type: Qualification Results Summary

ADI_PCN_13_0241_Rev_-_Qualification Results Summary of 16L TSSOP at ASE Chungli.pdf

For questions on this PCN, send email to the regional contacts below or contact your local ADI sales representative			
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 (106)

AD5203 / AD5203ARUZ10-REEL	AD5203 / AD5203ARUZ100	AD5203 / AD5203ARUZ100-REEL	AD5415 / AD5415YRUZ	AD5415 / AD5415YRUZ-REEL
AD5415 / AD5415YRUZ-REEL7	AD5428 / AD5428YRUZ	AD5428 / AD5428YRUZ-REEL	AD5428 / AD5428YRUZ-REEL7	AD5433 / AD5433YRUZ
AD5433 / AD5433YRUZ-REEL	AD5433 / AD5433YRUZ-REEL7	AD5440 / AD5440YRUZ	AD5440 / AD5440YRUZ-REEL	AD5440 / AD5440YRUZ-REEL7
AD5445 / AD5445YRUZ	AD5445 / AD5445YRUZ-REEL	AD5445 / AD5445YRUZ-REEL7	AD5447 / AD5447YRUZ	AD5447 / AD5447YRUZ-REEL
AD5447 / AD5447YRUZ-REEL7	AD5817 / AD5817DBRUZ-U4	AD5930 / AD5930YRUZ	AD5930 / AD5930YRUZ-REEL7	AD7091R-4 / AD7091R-4BRUZ
AD7091R-4 / AD7091R-4BRUZ-RL7	AD7091R-5 / AD7091R-5BRUZ	AD7091R-5 / AD7091R-5BRUZ-RL7	AD7091R-5 / AD7091R-5XRUZ-U2	AD7091R-8 / AD7091R-8BRUZ
AD7091R-8 / AD7091R-8BRUZ-RL7	AD7175-2 / AD7175-2BRUZ	AD7175-2 / AD7175-2BRUZ-RL	AD7175-2 / AD7175-2BRUZ-RL7	AD7176-2 / AD7176-2BRUZ
AD7176-2 / AD7176-2BRUZ-RL	AD7327 / AD7327BRUZ	AD7327 / AD7327BRUZ-REEL	AD7327 / AD7327BRUZ-REEL7	AD7328 / AD7328BRUZ
AD7328 / AD7328BRUZ-REEL	AD7328 / AD7328BRUZ-REEL7	AD7329 / AD7329BRUZ	AD7329 / AD7329BRUZ-REEL	AD7329 / AD7329BRUZ-REEL7
AD7331L / AD7331LARUZ	AD7331L / AD7331LARUZ-RL	AD7331L / AD7331LARUZ-RL7	AD7794 / AD7794BRUZ	AD7794 / AD7794BRUZ-REEL
AD7794 / AD7794CRUZ	AD7794 / AD7794CRUZ-REEL	AD7795 / AD70002Z-0RL	AD7795 / AD7795BRUZ	AD7795 / AD7795BRUZ-REEL
AD7801 / AD7801BRUZ	AD7801 / AD7801BRUZ-REEL	AD7801 / AD7801BRUZ-REEL7	AD7866 / AD7866ARUZ	AD7866 / AD7866ARUZ-REEL
AD7866 / AD7866ARUZ-REEL7	AD7866 / AD7866BRUZ	AD7866 / AD7866BRUZ-REEL	AD7866 / AD7866BRUZ-REEL7	AD7997 / AD7997BRUZ-0
AD7997 / AD7997BRUZ-0REEL	AD7997 / AD7997BRUZ-1	AD7997 / AD7997BRUZ-1REEL	AD7998 / AD7998BRUZ-0	AD7998 / AD7998BRUZ-0REEL
AD7998 / AD7998BRUZ-1	AD7998 / AD7998BRUZ-1REEL	AD8802 / AD8802ARUZ	AD8802 / AD8802ARUZ-REEL	AD9834 / AD9834BRUZ
AD9834 / AD9834BRUZ-REEL	AD9834 / AD9834BRUZ-REEL7	AD9834 / AD9834CRUZ	AD9834 / AD9834CRUZ-REEL7	ADA4420-6 / ADA4420-6ARUZ
ADA4420-6 / ADA4420-6ARUZ-R7	ADA4420-6 / ADA4420-6ARUZ-RL	ADD8506 / ADD8506WRUZ	ADD8506 / ADD8506WRUZ-REEL7	ADF7012 / ADF7012BRUZ
ADF7012 / ADF7012BRUZ-RL	ADF7012 / ADF7012BRUZ-RL7	ADF7901 / ADF7901BRUZ	ADF7901 / ADF7901BRUZ-RL	ADF7901 / ADF7901BRUZ-RL7
ADG1434 / ADG1434YRUZ	ADG1434 / ADG1434YRUZ-REEL	ADG1434 / ADG1434YRUZ-REEL7	ADG3123 / ADG3123BRUZ	ADG3123 / ADG3123BRUZ-REEL7
ADG3300 / ADG3300BRUZ	ADG3300 / ADG3300BRUZ-REEL7	ADG3308 / ADG3308BRUZ	ADG3308 / ADG3308BRUZ-REEL	ADG3308 / ADG3308BRUZ-REEL7
ADG5234 / ADG5234BRUZ	ADG5234 / ADG5234BRUZ-RL7	ADG5434 / ADG5434BRUZ	ADG5434 / ADG5434BRUZ-REEL7	ADM207E / ADM207EARUZ
ADM207E / ADM207EARUZ-REEL7				

Appendix B - Revision History			
Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	23-Jul-2014	21-Oct-2014	Initial Release

Material Set Change:

Package Material Set		Carsem	ASE Chungli
TSSOP 16L, 20L, 24L	Die Attach	Ablestik 84-1 LMISR4	Hitachi EN4900
	Mold Compound	Sumitomo 6600H	Hitachi CEL9240HF10AK
	Wire	0.8mil, 1.0mil and 1.2/1.3 mil Gold wire	0.8mil, 1mil and 1.2/1.3mil Gold Wire

Reliability Qualification Results of TSSOP package at ASE Chungli (AET)

QUALIFICATION RESULTS			
Test	Conditions	Sample Size	RESULT
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3 x 77	PASS
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 77	PASS
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3 x 77	PASS
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3 x 11	PASS
High Temperature Storage (HTS)	JEDEC <i>JESD22-A103</i>	1 x 77	PASS
Field Induced Charged Device Model (FICDM)	JEDEC <i>JESD22-C101</i>	3/Voltage	PASS ±1000V

*Preconditioned per JEDEC/IPC J-STD-020

QUALIFICATION RESULTS			
Test	Conditions	Sample Size	RESULT
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3 x 77	PASS
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 77	PASS
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3 x 77	PASS
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3 x 11	PASS
High Temperature Storage (HTS)	JEDEC <i>JESD22-A103</i>	1 x 77	PASS
Field Induced Charged Device Model (FICDM)	JEDEC <i>JESD22-C101</i>	3/Voltage	PASS ±1250V

*Preconditioned per JEDEC/IPC J-STD-020