Product/Process Change Notice - PCN 16_0209 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: ADuM1400W/ADuM1401W/ADuM1402W Die Revision, Assembly Site Transfer, Test Platform Migration, Data Sheet and MSL Rating Change

Publication Date: 30-Nov-2016

Effectivity Date: 28-Feb-2017 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Initial Release

Description Of Change

Die:
1. Increased pulse width of disable signal for refresh block. Increased separation between falling edge of disable signal for refresh block and first refresh high pulse. Increased separation between consecutive pulses on rising edge and refresh high pulses.
2. Reduced internal propagation delay time of receiver circuitry.
3. Additional layer of polyimide passivation on top of the non-coil die.

Assembly Site:
1. ADI has qualified and will be utilizing assembly subcontractor ASE Chungli,Taiwan for 16L SOIC_W Isolator products. ADI has qualified ASE Chungli's standard bill of materials in the SOIC_W package.

Test Platform:
1. The high voltage test platform used to verify the insulation performance of the ADuM1400W/ADuM1401W/ADUM1402W products during production will be migrated from the Harris-Tuvey 9464 to the Mess-& Prüfsysteme GmbH (MPS) PD test system.
2. The test platform used to verify the CMOS circuitry performance of the ADuM1400W/ADuM1401W/ADUM1402W products will be migrated from the CTS5040 to the Teradyne Microflex.

Data Sheet:
1. Increased maximum propagation delay from 32nS to 34nS at 5V, 125C operating conditions (Table 4 in data sheet) for T grade models (ADuM1400WTRWZ/ADuM1401WTRWZ/ADuM1402WTRWZ).

Moisture Sensitivity Level (MSL):
1. Change of Moisture Sensitivity Level rating from MSL1 to MSL3. Dry pack procedures required as per J-STD-033.

Reason For Change

Die:
1. Increase manufacturability to ensure continuity of supply.
2. Minimize total device propagation delay change from original version of the product.
3. Polyimide offers the following advantages: improved ESD robustness, enhanced protection against die scratches, package stresses, surface ESD/EOS events and radiation.

Assembly Site:
1. To align with ADI's isolator manufacturing strategy. The use of ADI qualified ASE Chungli as an 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.

Test Platform:
1. To maintain future continuity of supply and gain the ability to datalog high voltage production test measurements. ADI is currently relying on an aging high voltage test platform (Harris-Tuvey 9464) for the ADuM140xW products.
2. To ensure continuity of supply and support ADI's manufacturing strategy to move away from the aging CTS5040 test platform.

Data Sheet:
1. Increase internal timing delay of signal path slightly increased overall device propagation delay.

Moisture Sensitivity Level (MSL):
1. To align with other automotive iCoupler products.

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

No change to fit, form, or reliability.
The test sequence, methodology and coverage remain unchanged on the new platforms.

Summary of Supporting Information

Qualification has been performed per AEC-Q100, Stress Test Qualification for Integrated Circuits. See attached Qualification Results Summary. Test correlation and validation has been performed, see attached Test Correlation reports. Data Sheet changes will be reflected in Rev L.

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_16_0209_Rev_-_ADuM140xW_Automotive_Qualification_Results_Summary.pdf

Attachment 2: Type: Detailed Change Description

ADI_PCN_16_0209_Rev_-_ADuM140xW_SOIC_W_Material_Set_Change_at_ASE_CHUNGLI.pdf

Attachment 3: Type: Test Correlation Report

ADI_PCN_16_0209_Rev_-_ADUM140xW_HV_Test_Correlation_Report.pdf

Attachment 4: Type: Test Correlation Report

ADI_PCN_16_0209_Rev_-_ADuM140xW_CTS_to_uFlex_Test_Correlation_Report.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 (34)				
ADUM1400 / ADUM1400WSRWZ	ADUM1400 / ADUM1400WSRWZ-RL	ADUM1400 / ADUM1400WSRWZ55	ADUM1400 / ADUM1400WSRWZ55-RL	ADUM1400 / ADUM1400WTRWZ
ADUM1400 / ADUM1400WTRWZ-RL	ADUM1401 / ADUM1401WSRWZ	ADUM1401 / ADUM1401WSRWZ-RL	ADUM1401 / ADUM1401WSRWZ53	ADUM1401 / ADUM1401WSRWZ53-RL
ADUM1401 / ADUM1401WSRWZ55	ADUM1401 / ADUM1401WSRWZ55-RL	ADUM1401 / ADUM1401WTRWZ	ADUM1401 / ADUM1401WTRWZ-RL	ADUM1401 / ADUM1401WTRWZ35
ADUM1401 / ADUM1401WTRWZ35-RL	ADUM1401 / ADUM1401WTRWZ53	ADUM1401 / ADUM1401WTRWZ53-RL	ADUM1401 / ADUM1401WTRWZ55	ADUM1401 / ADUM1401WTRWZ55-RL
ADUM1402 / ADUM1402WSRWZ	ADUM1402 / ADUM1402WSRWZ-RL	ADUM1402 / ADUM1402WSRWZ53	ADUM1402 / ADUM1402WSRWZ53-RL	ADUM1402 / ADUM1402WSRWZ55
ADUM1402 / ADUM1402WSRWZ55-RL	ADUM1402 / ADUM1402WTRWZ	ADUM1402 / ADUM1402WTRWZ-RL	ADUM1402 / ADUM1402WTRWZ35	ADUM1402 / ADUM1402WTRWZ35-RL
ADUM1402 / ADUM1402WTRWZ53	ADUM1402 / ADUM1402WTRWZ53-RL	ADUM1402 / ADUM1402WTRWZ55	ADUM1402 / ADUM1402WTRWZ55-RL	

Appendix B - Revision History			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	30-Nov-2016	28-Feb-2017	Initial Release

Analog Devices, Inc. DocId:3848 Parent DocId:3847 Layout Rev:7