



Product/Process Change Notice - PCN 16_0208 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: ADuM1300W/ADuM1301W Die Revision, Assembly Site Transfer, Data Sheet and MSL Rating Change

Publication Date: 09-Dec-2016

Effectivity Date: 09-Mar-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.

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 (ADuM1300WTRWZ/ADuM1301WTRWZ).

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.

Data Sheet:

- 1.Increased 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.

Summary of Supporting Information

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

Supporting Documents

Attachment 1: Type: Qualification Results Summary

ADI_PCN_16_0208_Rev_-_ADuM130xW_Automotive_Qualification_Results_Summary.pdf

Attachment 2: Type: Detailed Change Description

ADI_PCN_16_0208_Rev_-_ADuM130xW_Material_Set_Comparison.pdf

For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.

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|------------------|-------------------------|----------------|-----------------------|----------------------|----------------------|
| 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 (16)**

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|-------------------------------|-----------------------------|-----------------------------|-------------------------------|-------------------------------|
| ADUM1300 / ADUM1300WSRWZ | ADUM1300 / ADUM1300WSRWZ-RL | ADUM1300 / ADUM1300WSRWZ55 | ADUM1300 / ADUM1300WSRWZ55-RL | ADUM1300 / ADUM1300WTRWZ |
| ADUM1300 / ADUM1300WTRWZ-RL | ADUM1301 / ADUM1301WSRWZ | ADUM1301 / ADUM1301WSRWZ-RL | ADUM1301 / ADUM1301WSRWZ55 | ADUM1301 / ADUM1301WSRWZ55-RL |
| ADUM1301 / ADUM1301WTRWZ | ADUM1301 / ADUM1301WTRWZ-RL | ADUM1301 / ADUM1301WTRWZ53 | ADUM1301 / ADUM1301WTRWZ53-RL | ADUM1301 / ADUM1301WTRWZ55 |
| ADUM1301 / ADUM1301WTRWZ55-RL | | | | |

Appendix B - Revision History

| Rev | Publish Date | Effectivity Date | Rev Description |
|------------|---------------------|-------------------------|------------------------|
| Rev. - | 09-Dec-2016 | 09-Mar-2017 | Initial Release |

Analog Devices, Inc.

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