



## Product/Process Change Notice - PCN 17\_0003 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:** ADuM1280W/ADuM1281W/ADuM1285W/ADuM1286W Die Revision, Data Sheet Change, Test Platform Migration, and Assembly Site Transfer

**Publication Date:** 31-Jan-2017

**Effectivity Date:** 01-May-2017 *(the earliest date that a customer could expect to receive changed material)*

### Revision Description:

Initial Release

### Description Of Change

#### Die Revision:

- 1) Additional layer of polyimide passivation over non-coil die.
- 2) Increased look-ahead delay in coil driver circuitry.

#### Data Sheet Change:

- 1) Increased maximum propagation delay specification on C grade models(ADuM128xWCRZ). Specific changes outlined in attachment below.
- 2) Increased minimum operating voltage from 3.0V to 3.135V. Changed 3.3V Power Supply tolerance from +10%/-10% to +10%/-5%.

#### Test Platform Migration:

- 1) The high voltage test platform used to verify the insulation performance of the ADuM1280W/ADuM1281W/ADuM1285W/ADuM1286W products during production will be migrated from the Harris-Tuvey 9464 to the Mess-& Prüfsysteme GmbH (MPS) PD test system.

#### Assembly Site Transfer:

- 1) ADI has qualified and will be utilizing assembly subcontractor ASE Chungli, Taiwan for 8L SOIC\_N Isolator products. ADI has qualified ASE Chungli's standard bill of materials in the SOIC\_N package. See Bill of Materials change description attached below.

### Reason For Change

#### Die Revision:

- 1) Polyimide offers the following advantages: improved ESD robustness, enhanced protection against die scratches, package stresses, surface ESD/EOS events and radiation.
- 2) Increase manufacturability to ensure continuity of supply.

#### Data Sheet Change:

- 1) Increase in look-ahead delay increased overall propagation delay through signal path.
- 2) Increase manufacturability to ensure continuity of supply.

#### Test Platform Migration:

- 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 ADuM128xW products.

#### Assembly Site Transfer:

- 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.

### 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. Test correlation and validation has been performed, see attached Test Correlation report. Data Sheet changes will be reflected in Rev D. See attached data sheet specification comparison for propagation delay revision details.

### Supporting Documents

**Attachment 1: Type:** Datasheet Specification Comparison

ADI\_PCN\_17\_0003\_Rev\_-\_ADuM128xW\_Propagation\_Delay\_Comparison.pdf

**Attachment 2: Type:** Qualification Results Summary

ADI\_PCN\_17\_0003\_Rev\_-\_ADuM128xW\_Qualification\_Results\_Summary.pdf

**Attachment 3: Type:** Test Correlation Report

ADI\_PCN\_17\_0003\_Rev\_-\_ADuM128xW\_Test\_Correlation\_Report.pdf

**Attachment 4: Type:** Detailed Change Description

ADI\_PCN\_17\_0003\_Rev\_-\_ADuM128xW\_SOIC\_N\_Package\_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.**

**Americas:** PCN\_Americas@analog.com

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**Rest of Asia:** PCN\_ROA@analog.com

| Appendix A - Affected ADI Models                                  |                             |                             |                             |                             |
|-------------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Added Parts On This Revision - Product Family / Model Number (24) |                             |                             |                             |                             |
| ADUM1280 / ADUM1280WARZ                                           | ADUM1280 / ADUM1280WARZ-RL7 | ADUM1280 / ADUM1280WBRZ     | ADUM1280 / ADUM1280WBRZ-RL7 | ADUM1280 / ADUM1280WCRZ     |
| ADUM1280 / ADUM1280WCRZ-RL7                                       | ADUM1281 / ADUM1281WARZ     | ADUM1281 / ADUM1281WARZ-RL7 | ADUM1281 / ADUM1281WBRZ     | ADUM1281 / ADUM1281WBRZ-RL7 |
| ADUM1281 / ADUM1281WCRZ                                           | ADUM1281 / ADUM1281WCRZ-RL7 | ADUM1285 / ADUM1285WARZ     | ADUM1285 / ADUM1285WARZ-RL7 | ADUM1285 / ADUM1285WBRZ     |
| ADUM1285 / ADUM1285WBRZ-RL7                                       | ADUM1285 / ADUM1285WCRZ     | ADUM1285 / ADUM1285WCRZ-RL7 | ADUM1286 / ADUM1286WARZ     | ADUM1286 / ADUM1286WARZ-RL7 |
| ADUM1286 / ADUM1286WBRZ                                           | ADUM1286 / ADUM1286WBRZ-RL7 | ADUM1286 / ADUM1286WCRZ     | ADUM1286 / ADUM1286WCRZ-RL7 |                             |

| Appendix B - Revision History |              |                  |                 |
|-------------------------------|--------------|------------------|-----------------|
| Rev                           | Publish Date | Effectivity Date | Rev Description |
| Rev. -                        | 31-Jan-2017  | 01-May-2017      | Initial Release |
|                               |              |                  |                 |

Analog Devices, Inc.

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