



## Product/Process Change Notice - PCN 20\_0144 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:** ADuM4135 Die Revision and Data Sheet Change

**Publication Date:** 27-Feb-2020

**Effectivity Date:** 31-May-2020 *(the earliest date that a customer could expect to receive changed material)*

### Revision Description:

Initial Release.

### Description Of Change:

Die Revision:

- 1) All layer change and removal of RDL layer.
- 2) UMLs raised by 0.2V and 0.25V.
- 3) Additional internal filter for Desaturation detection circuitry.
- 4) Additional layer of polyimide passivation over non-coil die.

Data Sheet Change:

- 1) Increase to product UMLs and minimum Supply specifications. See attachment 1 for details.
- 2) Increased Desaturation related specification limits. See attachment 1 for details.
- 3) Addition of Desat Soft Sdn delay time and Desat RDS<sub>on</sub> specs. See attachment 1 for more details.
- 4) Increase of Max prop delay from 66ns to 70ns and prop delay skew from 15ns to 17.5ns.
- 5) Increase in maximum IDD1 from 2.17mA to 2.5mA & IDD2 from 4.37mA & 4.95mA.

### Reason For Change:

Die Revision:

- 1) Enabled removal of RDL from product.
- 2) Improve/ensure product operation at low power supply.
- 3) Raise Desat detection circuitry robustness.
- 4) Polyimide offers the following advantages: enhanced protection against die scratches, package stresses, surface ESD/EOS events.

Data Sheet Change:

- 1) Ensure product performance & robustness at low supply's.
- 2) Improve Desat detection circuitry robustness.
- 3) Provide additional performance information for customer clarity on Desat.
- 4) & 5) Ensure part performance guarantee of the part.

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

Improved robustness; no change to fit, form or reliability.

### Summary of Supporting Information:

Qualification has been performed per Industry Standard Test Methods. See attached Qualification Results Summary. Data Sheet changes will be reflected in Rev D. See attached data sheet specification comparison for revision details.

### Supporting Documents

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

ADI\_PCN\_20\_0144\_Rev\_-\_ADuM4135\_Data Sheet Specification\_Changes\_Comparison.pdf

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

ADI\_PCN\_20\_0144\_Rev\_-\_Qualification Results Summary for ADuM4135 Die Revision.pdf

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

**Americas:**

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**Japan:**

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|-------------------------------------------------------------------------|----------------------------|--|--|--|
| <b>Appendix A - Affected ADI Models</b>                                 |                            |  |  |  |
| <b>Added Parts On This Revision - Product Family / Model Number (2)</b> |                            |  |  |  |
| ADUM4135 / ADUM4135BRWZ                                                 | ADUM4135 / ADUM4135BRWZ-RL |  |  |  |

| Appendix B - Revision History |              |                  |                  |
|-------------------------------|--------------|------------------|------------------|
| Rev                           | Publish Date | Effectivity Date | Rev Description  |
| Rev. -                        | 27-Feb-2020  | 31-May-2020      | Initial Release. |
|                               |              |                  |                  |

Analog Devices, Inc.

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