



Certificate of Compliance

Certificate: 2162711

Master Contract: 205078 (205078)

Project: 70046639

Date Issued: 2016-10-26

Issued to: Analog Devices Inc.
804 Woburn St
Wilmington, Massachusetts 01887-3462
USA
Attention: Mark Cantrell

The products listed below are eligible to bear the CSA Mark shown with adjacent indicator ▲



Issued by: *Martin Buchanan*
Martin Buchanan, P. Eng.

PRODUCTS

CLASS - C907330 - ELECTRONIC COMPONENTS-Optoisolators

Component Acceptance of Optoisolator Like Magnetic Coupling Devices:

Device	Rating		Standard/Notice and Clauses	Internal		External
	kV	°C		Creepage (mm)	Dist Thru (mm)	Creep/Clear (mm)
(SOIC 16W RW package) ADuM3160BRWZ ADuM3160WBRWZab	2.5	105	CSA CA5A, 14-13 Tbl 35, 6.2.1.1, 6.2.1.1/6.2.10, 6.8.1.1 60950-1-07+A1+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2 IEC 60950-1 2nd Ed., +A1+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2 EN 60950-1:2006+A1+A12+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2	-	-	7.8
(SOIC 16W RW package) ADuM4160BRWZ ADuM4160WBRWZab	5.0	105	CSA CA5A, 14-13 Tbl 35, 6.2.1.1, 6.2.1.1/6.2.10, 6.8.1.1	-	-	7.8



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			60950-1-07+A1+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2 61010-1-12+A1 K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10 60601-1:14 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7 IEC 60950-1 2nd Ed.,+A1+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2 61010-1 3 rd Ed A1 K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10 60601-1 Ed.3+A1 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7 EN 60950-1:2006+A1+A12+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2			
(SOIC 16W RI package) ADuM4160BRIZ ADuM4160WBRIZab	5.0	105	CSA CA5A, 14-13 Tbl 35, 6.2.1.1, 6.2.1.1/6.2.10, 6.8.1.1 60950-1-07+A1+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2 61010-1-12+A1 K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10 60601-1:14 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7 IEC 60950-1 2nd Ed.,+A1+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2 61010-1 3 rd Ed A1 K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10 60601-1 Ed.3+A1 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7 EN 60950-1:2006+A1+A12+A2 2.10.3.3, 2.10.4.2, 2.10.4.3, 2.10.5.4a, 2.10.11, 4.5.2, 5.2	-	-	8.7

where. Z, if used, indicates the lead-free version. Suffix ab is a 2 digit number denoting specific supply voltage combinations. Suffix EP at the end of the base part number indicates lower extended temperature capability to -55C with a NiPdAu lead finish. Further suffix letters or digits differentiate shipping package formats.

Notes:

1. Devices with RW suffix meet basic insulation for 780Vrms for CSA 60950-1-07+A1+A2, IEC 60950-1 2nd Ed.+A1+A2 and EN 60950-1+A1+A12+A2 (pollution degree 2, material group III)

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2. ADuM4160BRWZ and ADuM4160WBRWZab meet reinforced insulation for 390Vrms for CSA 60950-1-07+A1+A2, IEC 60950-1 2nd Ed.+A1+A2 and EN 60950-1+A1+A12+A2 (pollution degree 2, material group III)
3. For CSA 61010-1-12+A1 and IEC 61010-1 3rd Ed. for 600Vrms, overvoltage category III for basic and 300Vrms, overvoltage category III for reinforced insulation, ADuM4160BRWZ and ADuM4160WBRWZab meet clauses K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10. The risk management process is not applicable to these clauses. (pollution degree 2, material group III)
4. For CSA 60601-1:14 and IEC60601-1 Ed.3+A1 for 2 MOPP for 237Vrms, ADuM4160BRWZ and ADuM4160WBRWZab meet clauses 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7. The risk management process is not applicable to these clauses. (pollution degree 2, material group III)
5. ADuM4160BRIZ and ADuM4160WBRIZab meet reinforced requirements for 435Vrms and basic insulation for 870Vrms for CSA 60950-1-07+A1+A2, IEC 60950-1 2nd Ed.+A1+A2 and EN 60950-1+A1+A12+A2 (pollution degree 2, material group III)
5. For CSA 61010-1-12+A1 and IEC 61010-1 3rd Ed. for 600Vrms, overvoltage category IV for basic and 300Vrms, overvoltage category III for reinforced insulation, ADuM4160BRIZ and ADuM4160WBRIZab meet clauses K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10. The risk management process is not applicable to these clauses. (pollution degree 2, material group III)
6. For CSA 60601-1:14 and IEC60601-1 Ed.3+A1 for 2 MOPP for 276Vrms, ADuM4160BRIZ and ADuM4160WBRIZab meet clauses 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7. The risk management process is not applicable to these clauses.
7. Case Material: Multiple mold compounds have been evaluated. All meet at least material group II.
8. Evaluated by thermal cycling and other tests for a temperature rating of 125C.
9. The creepage and clearance has been evaluated for altitudes ≤ 2000m, in pollution degree 2 and overvoltage category II except where specified above. (pollution degree 2, material group III).

These devices are Component Accepted as components for use in other Certified equipment where the suitability of the combination shall be determined by investigation of the final application.

APPLICABLE REQUIREMENTS

Component Acceptance Notice 5A (CA 5A) - Announcement of Extension of the Component Acceptance Service for Optocouplers and Related Devices

CAN/CSA-C22.2 No 14-13 - Industrial Control Equipment

CAN/CSA-C22.2 No 60950-1-07+A1+A2 - Information Technology Equipment - Safety - Part 1: General Requirements (Bi-national Standard, with UL 60950-1)

IEC 60950-1 2nd Ed.+A1+A2 - Information Technology Equipment - Safety - Part 1: General Requirements

EN 60950-1:2006+A1+A12+A2 - Information Technology Equipment - Safety - Part 1: General Requirements

Clauses K.3, K.4, 6.7.1.3, 6.7.2.2.2 A.17, K.6x1.6, K.7x1.6, 10

of

CAN/CSA-C22.2 No. 61010-1-12+A1 2015 - Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements (Tri-national standard, with UL 61010-1 Ed. 3 and ANSI/ISA-61010-1 (82.02.01))

and



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IEC 61010-1:2010 3rd Ed. - Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements

Clauses 8.5.5.1, 8.8.2, 8.8.3x1.6, 8.9.3.2, 8.9.3.4, 8.9.1.15, 8.9.1.7
of

CAN/CSA C22.2 60601-1:14 - Medical Electrical Equipment Part 1: General requirements for basic safety and general performance (Adopted IEC60601-1:2005 Edition 3.0 +Amendment 1, 2012-07, MOD)

and

IEC60601-1:2005 Ed 3.0+A1 - Medical Electrical Equipment Part 1: General requirements for basic safety and general performance



Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
70046639	2016-10-26	Update to 2162711 for alternative mould compound and leadframe based on results for similar devices from other report(s)
2431959	2011-06-14	Repeat of thermal cycling tests of extended length package device for 6400V dielectric test
2367759	2010-11-15	Addition of long creepage package and clauses of 60601 3rd Ed.
2162711	2009-06-17	Original Component Acceptance