



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX CSA 20.0012U** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2020-06-23

Applicant: **Texas Instruments, Inc**
12500 TI Blvd
MS 8701
Dallas
Texas 75243
United States of America

Ex Component: ISO7021 and ISO7021F Dual Channel Digital Isolators

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Ex ia**

Marking: Ex ia IIC Ga
-55°C ≤ Tamb ≤ +85°C

Approved for issue on behalf of the IECEx
Certification Body:

Dorin Stochitoiu

Position:

Technical Advisor

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada





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Certificate No.: **IECEX CSA 20.0012U** Page 2 of 3

Date of issue: 2020-06-23 Issue No: 0

Manufacturer: **Texas Instruments, Inc**
12500 TI Blvd
MS 8701
Dallas
Texas 75243
United States of America

Additional manufacturing locations:

Texas Instruments Taiwan Limited (Site 1)	Texas Instruments Taiwan Limited (Site 2)
142, Sec. 1 Hsin Nan rd	Chung Ho, 2F
Chung Ho District	868-6, Chung Cheng Rd
New Taipei City	New Taipei City
Taiwan	Taiwan
China	China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[CA/CSA/ExTR20.0013/00](#)

Quality Assessment Report:

[GB/SIR/QAR19.0007/00](#)



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Ex Component(s) covered by this certificate is described below:

The ISO7021* is a dual channel digital isolator. This assembly is intended to be used as an isolating component between separate intrinsically safe circuits. The two channel isolator comes in a SOIC-8 package with one forward-direction channel and one reverse direction channel. The device has default output high and low options. If the input power or signal is lost, default output is high for the ISO7021 device without the suffix F and low for the ISO7041F device with the F suffix.

SCHEDULE OF LIMITATIONS:

1. The components being certified comply with IEC 60079-0, Edition 7 and IEC 60079-11, Edition 6. When one of these components is used in an equipment, the component is to be soldered on a PCB inside a suitable enclosure and re-evaluated as an equipment. The operating temperature ranges of these components are -55°C to +85°C. The creepage and clearance distances across the isolating component have been evaluated but the distance to other circuitry remains the responsibility of the user of the final equipment.
2. The assembly is an isolating component between separate intrinsically safe circuits. The assembly must be connected to suitably certified intrinsically safe circuits considering the following entity parameters:

Package Type	Tamb	Component Temperature	Entity Parameters	Ui	Ii	Pi	Li	Ci
SOIC-8	-55°C ≤ Ta ≤ +85°C	183°C @ +85°C	Side 1	50V	300mA	1.0W	0uH	4pF
			Side 2	50V	300mA	1.0W	0uH	4pF



IECEX Test Report Summary

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ExTR Ref. No.: **CA/CSA/ExTR20.0013/00** Page 1 of 1

ExTR Free Ref. No.: **CA/CSA/2020/TR220991-80036329** Status: **Issued**

List of Standards Covered: **IEC 60079-0:2017 Edition:7.0, IEC 60079-11:2011 Edition:6.0** Date of issue: **2020-06-23**

Issuing ExTL: **CSA Group - Toronto - CSA Group - Toronto**

Endorsing ExCB: **CSA - CSA Group**

Manufacturer: **Texas Instruments, Inc**
12500 TI Blvd
MS 8701
Dallas
Texas 75243

Location of Manufacturer: **United States of America**

Ex Protection: **Ex ia**

Ratings: **-55°C ≤ Tamb ≤ +85°C**
Entity Parameters
Side 1: Ui = 50V, Ii = 300mA, Pi = 1.0W, Li = 0, Ci = 4pF
Side 2: Ui = 50V, Ii = 300mA, Pi = 1.0W, Li = 0, Ci = 4pF

Equipment: **Dual Channel Digital Isolators**

Model Reference: **ISO7021 and ISO7021F**

Related IECEx Certificates:
[IECEX CSA 20.0012U Issue 0](#)

Comments:

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