ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Product Service

C E R T I F I C A T E

No. B 077311 0025 Rev. 00

Holder of Certificate: **Texas Instruments Incorporated**
13570 North Central Expressway, MS 3928
Dallas TX 75243
USA

Certification Mark:

Product: Audio/Video, Information and Communication technology equipment
Digital Isolator

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier.
All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 090-1107157-300

Valid until: 2029-02-05

Date, 2024-03-01

(Glenn H. McLaughlin)

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

Product Service

C E R T I F I C A T E

No. B 077311 0025 Rev. 00

Model(s): **ISO1050 Series**

Brand Name: **TI**

Parameters:

Rated Input Voltage: 5000 V_{RMS} or 2500 V_{RMS}
Reinforced isolation at a working voltage of 400 V_{RMS}
Basic isolation at a working voltage of 600V_{RMS}

Models and Accessories:

- The ISO1050 Series are galvanically isolated CAN transceivers.
- The devices have the logic input and output buffers separated by a silicon oxide (SiO2) insulation barrier that provides galvanic isolation of up to 5000 V_{RMS} for ISO1050DW and 2500 V_{RMS} for ISO1050LDW and ISO1050DUB.

These devices may be followed by suffixes such as:

Suffix	Description
DUB	SOP-8 pin package
DW	SOIC-16 pin package
LDW	SOIC-16 pin package
R	Tape & Reel Packing option

Tested according to: EN IEC 62368-1:2020/A11:2020

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ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

C E R T I F I C A T E

No. U10 077311 0024 Rev. 00

Holder of Certificate: **Texas Instruments Incorporated**
13570 North Central Expressway, MS 3928
Dallas TX 75243
USA

Certification Mark:

Product:
Audio/Video, Information and Communication technology equipment
Digital Isolator

Tested according to:
CSA C22.2 No. 62368-1:2019
UL 62368-1:2019

CSA C22.2 No. 60950-1:2007/A2:2014-10
UL 60950-1:2007/R:2019-05

This product was voluntarily tested to the relevant safety requirements referenced on this certificate. It can be marked with the certification mark above. The mark must not be altered in any way. The certificate holder shall not transfer this certificate to third parties. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC 17067. Certification is based on the TÜV SÜD "Testing and Certification Regulations". For Canadian standards TÜV SÜD America Inc. is accredited by the Standards Council of Canada to ISO/IEC 17065.

Test report no.: 090-1107157-300

Date, 2024-03-08

(Glenn H. McLaughlin)

TÜV SÜD America, Inc. • 401 Edgewater Place Suite #500 • Wakefield • MA 01880 • USA

America

C E R T I F I C A T E

No. U10 077311 0024 Rev. 00

Model(s): **ISO1050 Series**

Brand Name(s): **TI**

Parameters:

Rated Input Voltage: 5000 V_{RMS} or 2500 V_{RMS}
Reinforced isolation at a working voltage of 400 V_{RMS}
Basic isolation at a working voltage of 600V_{RMS}

Models and Accessories:

- The ISO1050 Series are galvanically isolated CAN transceivers.
- The devices have the logic input and output buffers separated by a silicon oxide (SiO2) insulation barrier that provides galvanic isolation of up to 5000 V_{RMS} for ISO1050DW and 2500 V_{RMS} for ISO1050LDW and ISO1050DUB.

These devices may be followed by suffixes such as:

Suffix	Description
DUB	SOP-8 pin package
DW	SOIC-16 pin package
LDW	SOIC-16 pin package
R	Tape & Reel Packing option

TÜV SÜD America, Inc. • 401 Edgewater Place Suite #500 • Wakefield • MA 01880 • USA

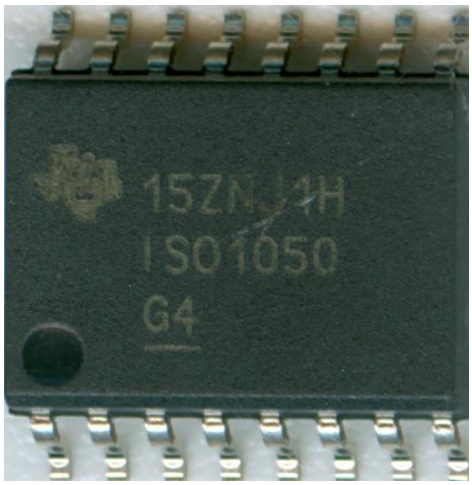
Technical Report No.: 090-1107157-300

Date: 2024-01-08

Client:	Texas Instruments Incorporated **(#077311)** 13570 North Central Expressway, M/S 3928 Dallas, TX 75243 Saleem Marwat (marwat@ti.com)
Manufacturer:	Texas Instruments Incorporated **(#077311)** 13570 North Central Expressway, M/S 3928 Dallas, TX 75243
Factory:	Texas Instruments Taiwan Limited **(#077320)** #142, Sec 1, Hsin-Nan Rd, Chung-Ho, 235 New Taipei, Taiwan R.O.C Hana Semiconductor (Ayutthaya) Co Ltd. **(#077314)** Hi-Tech Ind Estate Auth of Thailand 100 M001, T Baan-Len, A Bang Pa-In KM, 59 Asia Rd, Ayutthaya, 13160, Thailand Texas Instruments Malaysia Sdn Bhd **(#105715)** No. 1, Lorong Engang 33, Ampang /Ulu, Klang Free Trade Zone, Kuala Lumpur, 54200, Kuala Lumpur, WP Kuala Lumpur, 54200, Malaysia
Test object:	Product: Digital Isolator Model: ISO1050 Series
Test specification:	EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013 CAN/CSA C22.2 No. 60950-1/A2:2014, UL 60950-1:2007/R2019-05 EN IEC 62368-1:2020+A11:2020 CAN/CSA C22.2 No. 62368-1:2019, UL 62368-1:2019
Purpose of examination:	Update report and certificates to the latest edition of the standards. No Additional Testing deemed necessary.
Test result:	The test results show that the presented product is in compliance with the above listed test specifications.

1. Description of the test object

1.1 Picture(s)



1.2 Function

Manufacturer's specification for intended use:

The ISO1050 is a galvanically isolated CAN transceiver. The device has the logic input and output buffers separated by a silicon oxide (SiO2) insulation barrier that provides galvanic isolation of up to 5000 V_{RMS} for ISO1050DW and 2500 V_{RMS} for ISO1050LDW and ISO1050DUB. These devices may be followed by suffixes such as:
DUB – SOP-8 pin package
DW – SOIC-16 pin package
LDW – SOIC-16 pin package
R – Tape & Reel Packing option

These are component level devices intended for building-in. They are not directly connected to mains. The entire package is molded over. This molding does not provide internal distance through insulation so TÜV SÜD America has performed 30 day thermal cycling as required by the applicable standard. The reinforced isolation voltage is 5000V_{RMS} based on a working voltage of 400V_{RMS} (with a DW suffix) or 2500V_{RMS} based on a working voltage of 400V_{RMS} (with a LDW or DUB suffix). The basic isolation voltage is 5000V_{RMS} based on a working voltage of 600V_{RMS} (with a DW suffix) or 2500V_{RMS} based on a working voltage of 600V_{RMS} (with a LDW or DUB suffix). These isolation barrier specifications have been verified by TÜV SÜD America.

Manufacturer's specification for intended use:
According to the User Guide

1.3 Consideration of the foreseeable use

☐ Not applicable
☒ Covered through the applied standard
☐ Covered by the following comment*
☐ Covered by attached risk analysis

1.4 Technical Data

5000V_{RMS} Reinforced Isolation at a working voltage of 400V_{RMS},

5000V_{RMS} Basic Isolation at a working voltage of 600V_{RMS};

or

2500V_{RMS} Reinforced Isolation at a working voltage of 400$_{RMS}$,

2500V_{RMS} Basic Isolation at a working voltage of 600V_{RMS}

2. Order

2.1 Date of Purchase Order, Customer's Reference

TUV SUD America Project #72193619 (line #2 on quote)
Quote# 5791914 Rev-09/08/2023,
PO# 4515823866 dated 09-21-2023

2.2 Test Sample(s)

- Reception date(s): N/A – Standard update, no testing deemed necessary
- Location(s) of reception: N/A – Standard update, no testing deemed necessary
- Condition of test sample(s): N/A – Standard update, no testing deemed necessary

2.3 Testing

- Testing date(s): N/A – Standard update, no testing deemed necessary
- Location(s) of testing: N/A – Standard update, no testing deemed necessary

2.4 Points of Non-Compliance or Exceptions of the Test Procedure

- None

3. Test Results

- “Decision rule according to IEC Guide 115:2023, clause 4.3.3 was applied.”

3.1 Positive Test Results

Test specification(s)	Report no. / Rev. No.	Date	Remark
Electrical safety:	090-1107157-300	2024-01-08	Pass

3.2 Points of Non-Compliance according to the test specification

- None

4. Test History

090-1107157-000
090-1107157-100
090-1107157-200

5. Remarks

5.1 General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

5.2 Factory surveillance cycle

Your production facility is currently on the following surveillance cycle.

☐ Annual (12 month)

☒ Bi-Annual (6 month)

☐ Quarterly (3 month)

☐

5.3 Additional information for routine tests to be performed by the factory(ies)

Routine tests for electrical appliances / equipment:

Routine test requirements for production are described in EN 62911:2018

☒ Required

☐ Not Required — Reason for non-requirement:

☐ Class III product

☐ Other:

Test Details:	Test Points:	Test Values / Limit(s):
☒ Dielectric Strength	BI: Input to output	2500 V_{RMS} Basic isolation at a working voltage of 600V_{RMS}
	RI: Input to output	5000 V_{RMS} Reinforced isolation at a working voltage of 400 V_{RMS}
☐ Ground Continuity	AC-Inlet – Chassis and/or	A ; t ≥ 1 s ; R < 0.1 Ohm (Ω)
☐ Insulation Resistance	BI: L/N – Chassis	Vdc R > 2 MOhm (MΩ)
	RI: L/N – Secondary	Vdc

6. Documentation

File	File name	Date
Data form (CDF):	090-1107157-300 CDF	2024-01-08
Photo documentation:	090-1107157-300 Photo documentation	2024-01-08
User manual:		
Installation manual:		

7. Summary

"The test specification(s) is (are) met"

TÜV SÜD America, Inc.

Tested by:

William Stinson
Project Handler

Approved by:

Charles R. Walker
Reviewer