Certificate Number<br/>Report Reference<br/>DateUL-US-L151738-11-40900102-2<br/>E151738-20100904<br/>12-Nov-2021Issued to:ANALOG DEVICES INC<br/>804 WOBURN ST WILMINGTON, MA<br/>United States 01887-3494This is to certify that<br/>representative samples ofFPPT2 - Nonoptical Isolating Devices - Component<br/>See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety:

See the UL Online Certifications Directory at <u>https://iq.ulprospector.com</u> for additional information

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

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Certificate Number Report Reference Date

UL-US-L151738-11-40900102-2 E151738-20100904 12-Nov-2021

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description			
LTM2881*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS485/RS422 umodule transceiver			
LTM2882*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS232 µmodule transceiver			
LTM2883*	Non-optical isolators, isolation voltage 2500Vac,			
LTM2884*	Non-optical isolators, isolation voltage 2500Vac, single protection, isolated USB µmodule transceiver with isolated power			
LTM2886*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS485/RS422 µmodule transceiver			
LTM2887*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS485/RS422 µmodule transceiver			
LTM2889*	Non-optical isolators, isolation voltage 2500Vac, single protection, CAN bus µmodule transceiver			
LTM2892*	Non-optical isolators, isolation voltage 3500vac, single protection, complete galvanic digital µmodule® isolator			

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Certificate Number Report Reference Date

UL-CA-L151738-21-40900102-2 E151738-20100904 12-Nov-2021

Issued to: ANALOG DEVICES INC 804 WOBURN ST WILMINGTON, MA United States 01887-3494

This is to certify that representative samples of FPPT8 - Nonoptical Isolating Devices Certified for Canada - Component

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

### Standard(s) for Safety:

Additional Information:

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Bruce Mahrenholz, Director North American Certification Program

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LTM2881*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS485/RS422 µmodule transceiver			
LTM2882*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS232 µmodule transceiver			
LTM2883*	Non-optical isolators, isolation voltage 2500Vac,			
LTM2884*	Non-optical isolators, isolation voltage 2500Vac, single protection, isolated USB µmodule transceiver with isolated power			
LTM2886*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS485/RS422 µmodule transceiver			
LTM2887*	Non-optical isolators, isolation voltage 2500Vac, single protection, full duplex RS485/RS422 µmodule transceiver			
LTM2889*	Non-optical isolators, isolation voltage 2500Vac, single protection, CAN bus µmodule transceiver			
LTM2892*	Non-optical isolators, isolation voltage 3500vac, single protection, complete galvanic digital µmodule® isolator			

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### September 04, 2010 Revised: March 12, 2024

REPORT

on

COMPONENT - NON-OPTICAL ISOLATING DEVICES

### ANALOG DEVICES INC WILMINGTON MA 01887-3494 US

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DESCRIPTION

PRODUCT COVERED:

\*USR, CNR - Single Protection Non-Optical Isolators, Models LTM2881, LTM2882 LTM2883, LTM2884, LTM2886, LTM2887, LTM2889, and LTM2892 may be followed by wx-yz; where w can by C, I, H or MP (temperature grade), x can be Y(BGA) or V(LGA) (package option); y can be 3 or 5(input voltage), and z can be I or S (part option).

MAXIMUM RATINGS (at nominal operating temperature):

	Curre	ent (mA)	Power (W)		Isolation	Max	Max	Max
Model	Logic	Isolated	Logic	Isolated	Voltage	Operating	Junction	Storage
						(Ambient)	Temp	Temp
T IIIM 2001	420	120	1 2 (20	0 65 (20	2500	105	125	125
LIM2001	430	130	1.3 (20 Mbpg)	0.05 (20 Mbpg)	2500	105	125	125
wx-3			(aquit	(aqui				
LTM2881	370	200	1.7 (20	1 (20	2500	105	125	125
wx-5			Mbps)	Mbps)				
LTM2882	430	130	1.3 (1	0.65 (1	2500	105	125	125
wx-3			Mbps)	Mbps)				
LTM2882	370	200	1.7 (1	1 (1	2500	105	125	125
wx-5			Mbps)	Mbps)				
LTM2883	430	75	1.3 (20	0.65 (20	2500	105	125	125
wx-3z			Mbps)	Mbps)				
LTM2883	370	75	1.7 (20	1 (20	2500	105	125	125
wx-5z			Mbps)	Mbps)				
LTM2884	370	500	4.170	2.500	2500	105	125	125
wx			(12	(12				
			Mbps)	Mbps)				
LTM2886	430	130	1.3 (20	0.65 (20	2500	125	125	125
wx-3z			Mbps)	Mbps)				
LTM2886	370	200	1.7 (20	1 (20	2500	125	125	125
wx-5z			Mbps)	Mbps)				
LTM2887	430	130	1.3 (20	0.65 (20	2500	125	125	125
wx-3z			Mbps)	Mbps)				
LTM2887	370	200	1.7 (20	1 (20	2500	125	125	125
wx-5z			Mbps)	Mbps)				
LTM2889	430	130	1.3 (10	0.65 (10	2500	125	125	125
wx-3			Mbps)	Mbps)				
LTM2889	370	200	1.7 (10	1 (10	2500	125	125	125
<b>wx</b> -5			Mbps)	Mbps)				
LTM2892	4.5	4.5	0.025	0.025	3500	125	125	125
wx-y			(20	(20				
			Mbps)	Mbps)				

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		and Report		New:	2017-02-07

#### GENERAL:

The device LTM2881wx-y is an isolated full-duplex RS485/RS422 µModule transceiver with isolated power. Logic and Isolated side common are separated by galvanic isolation. Internal "chips" are connected to a PCB substrate (leadframe) that is molded into the enclosure.

The device LTM2882wx-y is an isolated full-duplex RS232  $\mu$ Module transceiver with isolated power. Logic and Isolated side common are separated by galvanic isolation. Internal "chips" are connected to a PCB substrate (leadframe) that is molded into the enclosure.

The devices LTM2883wx-yz, LTM2886wx-yz, and LTM2887wx-yz are complete Serial Peripheral Interface Bus (SPI) or Inter-IC Bus (I2C)  $\mu$ Module isolators with isolated power. Logic and Isolated side common are separated by galvanic isolation. Internal "chips" are connected to a PCB substrate (leadframe) that is molded into the enclosure.

The device LTM2889wx-y is an isolated CAN Bus µModule transceiver with isolated power. Logic and Isolated side common are separated by galvanic isolation. Internal "chips" are connected to a PCB substrate (leadframe) that is molded into the enclosure.

The device LTM2884wx is an Isolated USB Transceiver with Isolated Power. Logic and Isolated side common are separated by galvanic isolation. Internal "chips" are connected to a PCB substrate (leadframe) that is molded into the enclosure.

The device LTM2892wx-y is a Serial Peripheral Interface Bus (SPI) or Inter-IC Bus (I2C) µModule® isolator. Logic and Isolated side common are separated by galvanic isolation. Internal "chips" are connected to a PCB substrate (leadframe) that is molded into the enclosure.

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		and Report		Revised:	2024-03-12

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

\*USR indicates this product was investigated under the UL Standard for Safety for Optical Isolators, UL 1577, Fifth **Edition**, **revised July 6**, **2023**.

CNR indicates this product was investigated under the Canadian Certification Notice, CSA Component Acceptance Service No. 5A dated January 23, 1998.

Conditions of Acceptability - Each device shall be reviewed with respect to the following conditions of acceptability:

- 1. The capability of the device to control a load has not been investigated.
- 2. These devices should be installed in a suitable end product enclosure.
- 3. The maximum operating (ambient) temperature, as noted in the ratings table, shall not be exceeded.
- 4. For single protection devices, the insulation to the case has not been evaluated. For double protection devices, the insulation to the case has been evaluated to the isolation voltage specified in the ratings table.
- 5. In addition to meeting single protection requirements, double protection optical isolators have also been investigated for use in up to 250 V, 50/60 Hz circuits in audio, video, and similar equipment in applications in which breakdown of the optical isolator may result in a risk of fire, electrical shock, or injury to persons.