SPECIFICATIONS

NI cRIO-9037

Embedded CompactRIO Controller with Real-Time Processor and Reconfigurable FPGA

This document lists the specifications for the National Instruments cRIO-9037. The following specifications are typical for the -20 °C to 55 °C operating temperature range unless otherwise noted.

Caution Do not operate the cRIO-9037 in a manner not specified in this document. Product misuse can result in a hazard. You can compromise the safety protection built into the product if the product is damaged in any way. If the product is damaged, return it to NI for repair.

Processor

CPU	Intel Atom E3825
Number of cores	2
CPU frequency	1.33 GHz
On-die L2 cache	1 MB (shared)

Operating System

Note For minimum software support information, visit *ni.com/info* and enter the Info Code `swsupport`.

Supported operating system	NI Linux Real-Time (64-bit)

NATIONAL INSTRUMENTS

Software requirements	
Application software	
LabVIEW	LabVIEW 2015 SP1 or later, LabVIEW Real-Time Module 2015 SP1 or later, LabVIEW FPGA Module 2015 SP1 or later[1],
C/C++ Development Tools for NI Linux Real-Time[2]	Eclipse Edition 2014 or later
Driver software	NI CompactRIO Device Drivers August 2016 or later

Network/Ethernet Port

Number of ports	2
Network interface	10Base-T, 100Base-TX, and 1000Base-T Ethernet
Compatibility	IEEE 802.3
Communication rates	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s auto-negotiated
Maximum cabling distance	100 m/segment

Wireless

Radio mode	IEEE 802.11 a/b/g/n
Wireless mode	Off (default), client, access point (AP)
Frequency band	2.4 GHz/5 GHz
Channel width	
2.4 GHz	20 MHz
5 GHz	20 MHz/40 MHz
Channels[3]	
2.4 GHz	1-13
5 GHz	36-165

[1] LabVIEW FPGA Module is not required when using Scan Interface mode. To program the user-accessible FPGA on the cRIO-9037, LabVIEW FPGA Module is required.

[2] C/C++ Development Tools for NI Linux Real-Time is an optional interface for C/C++ programming of the cRIO-9037 processor. Visit *ni.com/info* and enter Info Code `RIOCdev` for more information about the C/C++ Development Tools for NI Linux Real-Time.

[3] The wireless radio may disable radio channels based on the country of operation.

Antenna	
Number of antennas	2
Type	External dual-band RP-SMA male omnidirectional dipole
Gain	
2.4 GHz band	3.0 dBi, maximum
5 GHz band	4.0 dBi, maximum
Security	
Client mode	WPA, WPA2, WPA2-Enterprise
Access point mode	WPA2-Personal
Enterprise security EAP types (client mode only)	EAP-TLS, EAP-TTLS/MS-CHAPv2, PEAPv0/MS-CHAPv2

RS-232 Serial Port

Maximum baud rate	115,200 bps
Data bits	5, 6, 7, 8
Stop bits	1, 2
Parity	Odd, even, mark, space
Flow control	RTS/CTS, XON/XOFF, DTR/DSR
RI wake maximum low level	0.8 V
RI wake minimum high level	2.4 V
RI overvoltage tolerance	±24 V

RS-485/422 (DTE) Serial Port

Maximum baud rate	115,200 bps
Data bits	5, 6, 7, 8
Stop bits	1, 2
Parity	Odd, even, mark, space
Flow control	XON/XOFF

Wire mode	4-wire, 2-wire, 2-wire auto
Isolation voltage	60 VDC continuous, port to earth ground

Note The RS-485 serial port ground and shield are not connected to chassis ground. This isolation is intended to prevent ground loops and does not meet UL ratings for safety isolation.

Cable requirement	Unshielded, 30 m maximum length (limited by EMC/surge)

Note RS-485 is capable of 1.2 km (4,000 ft) length without surge limitation.

USB Ports

Number of ports	
Device ports	1 standard B connector
Host ports	2 standard A connectors

Note The USB device port is intended for use in device configuration, application deployment, debugging, and maintenance.

USB interface	USB 2.0, Hi-Speed
Maximum data rate	480 Mb/s per port
Maximum current (USB host ports)	1 A (aggregate)

Mini DisplayPort

Maximum resolution	2560 × 1600 at 60 Hz

Memory

Nonvolatile[4]	
Solid-state drive	8 GB

Note Visit *ni.com/info* and enter the Info Code `ssdbp` for information about the life span of the nonvolatile memory and about best practices for using nonvolatile memory.

Volatile	
Processor memory	
Density	2 GB
Type	DDR3L
Maximum theoretical data rate	8.533 GB/s
Data throughput	
Module slots to system memory	20 MB/s, application- and system-dependent

Reconfigurable FPGA

FPGA type	Xilinx Kintex-7 7K160T
Number of flip-flops	202,800
Number of 6-input LUTs	101,400
Number of DSP slices (18 × 25 multipliers)	600
Available block RAM	11,700 kbits
Number of DMA channels	16
Number of logical interrupts	32

Internal Real-Time Clock

Accuracy	200 ppm; 40 ppm at 25 °C

[4] 1 MB is equal to 1 million bytes. 1 GB is equal to 1 billion bytes. The actual formatted capacity might be less.

CMOS Battery

Typical battery life with power applied to power connector	10 years
Typical battery life when stored at temperatures up to 25 °C	7.8 years
Typical battery life when stored at temperatures up to 85 °C	5.4 years

Power Requirements

Note Some C Series modules have additional power requirements. For more information about C Series module power requirements, refer to the C Series module(s) documentation.

Caution You can impair the protection provided by the cRIO-9037 if you use it in a manner not described in this document.

Voltage input range (measured at the cRIO-9037 power connector)	
V1	9 V to 30 V
V2	9 V to 30 V
Maximum power consumption	46 W

Note The maximum power consumption specification is based on a fully populated system running a high-stress application at elevated ambient temperature and with all C Series modules and USB devices consuming the maximum allowed power.

Typical standby power consumption	3.4 W at 24 VDC input
Recommended power supply	100 W, 24 VDC
Typical leakage current from secondary power input (V2) while system is powered from primary power input (V1)	
At 9 V	0.4 mA
At 30 V	1.93 mA

Caution Do not connect V2 to a DC mains supply or to any supply that requires a connecting cable longer than 3 m (10 ft). A DC mains supply is a local DC electricity supply network in the infrastructure of a site or building.

EMC ratings for inputs as described in IEC 61000	
V1	Short lines, long lines, and DC distributed networks
V2	Short lines only
Power input connector	4-position, 3.5 mm pitch, pluggable screw terminal with screw locks, Sauro CTF04BV8-AN000A

Physical Characteristics

If you need to clean the cRIO-9037, wipe it with a dry towel.

Tip For two-dimensional drawings and three-dimensional models of the cRIO-9037, visit *ni.com/dimensions* and search by module number.

Weight (unloaded)	2,260 g (4 lbs, 15 oz)
Dimensions (unloaded)	328.8 mm × 88.1 mm × 118.6 mm (12.94 in. × 3.47 in. × 4.67 in.)
Screw-terminal wiring	
Gauge	0.5 mm^2 to 2.1 mm^2 (20 AWG to 14 AWG) copper conductor wire
Wire strip length	6 mm (0.24 in.) of insulation stripped from the end
Temperature rating	85 °C
Torque for screw terminals	0.20 N · m to 0.25 N · m (1.8 lb · in. to 2.2 lb · in.)
Wires per screw terminal	One wire per screw terminal
Connector securement	
Securement type	Screw flanges provided
Torque for screw flanges	0.20 N · m to 0.25 N · m (1.8 lb · in. to 2.2 lb · in.)

Safety Voltages

Connect only voltages that are below these limits.

V1 terminal to C terminal	30 VDC maximum, Measurement Category I
V2 terminal to C terminal	30 VDC maximum, Measurement Category I
Chassis ground to C terminal	30 VDC maximum, Measurement Category I

Measurement Category I is for measurements performed on circuits not directly connected to the electrical distribution system referred to as *MAINS* voltage. MAINS is a hazardous live electrical supply system that powers equipment. This category is for measurements of voltages from specially protected secondary circuits. Such voltage measurements include signal levels, special equipment, limited-energy parts of equipment, circuits powered by regulated low-voltage sources, and electronics.

Caution Do not connect the cRIO-9037 to signals or use for measurements within Measurement Categories II, III, or IV.

Note Measurement Categories CAT I and CAT O are equivalent. These test and measurement circuits are for other circuits not intended for direct connection to the MAINS building installations of Measurement Categories CAT II, CAT III, or CAT IV.

Environmental

Temperature (IEC 60068-2-1 and IEC 60068-2-2)	
Operating	-20 °C to 55 °C
Storage	-40 °C to 85 °C

Caution Failure to follow the mounting instructions in the user manual can cause temperature derating. Visit *ni.com/info* and enter Info Code `criomounting` for more information about mounting configurations and temperature derating.

Ingress protection	IP20
Operating humidity (IEC 60068-2-56)	10% RH to 90% RH, noncondensing
Storage humidity (IEC 60068-2-56)	5% RH to 95% RH, noncondensing
Pollution Degree (IEC 60664)	2
Maximum altitude	5,000 m

Indoor use only.

Hazardous Locations

U.S. (UL)	Class I, Division 2, Groups A, B, C, D, T4; Class I, Zone 2, AEx nA IIC T4
Canada (C-UL)	Class I, Division 2, Groups A, B, C, D, T4; Class I, Zone 2, Ex nA IIC T4
Europe (ATEX) and International (IECEx)	Ex nA IIC T4 Gc

Shock and Vibration

To meet these specifications, you must mount the cRIO-9037 system directly on a flat, rigid surface as described in the user manual, affix ferrules to the ends of the terminal wires, and use retention accessories for the USB host ports (NI Industrial USB Extender Cable, 152166-xx), USB device port (NI Locking USB Cable, 157788-01), and mini DisplayPort connector (NI Retention Accessory for Mini DisplayPort, 156866-01). All cabling should be strain-relieved near input connectors. Take care to not directionally bias cable connectors within input connectors when applying strain relief.

Operating vibration	
Random (IEC 60068-2-64)	5 g_{rms}, 10 Hz to 500 Hz
Sinusoidal (IEC 60068-2-6)	5 g, 10 Hz to 500 Hz
Operating shock (IEC 60068-2-27)	30 g, 11 ms half sine; 50 g, 3 ms half sine; 18 shocks at 6 orientations

Safety and Hazardous Locations Standards

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA C22.2 No. 61010-1
- EN 60079-0:2012, EN 60079-15:2010
- IEC 60079-0: Ed 6, IEC 60079-15; Ed 4
- UL 60079-0; Ed 6, UL 60079-15; Ed 4
- CSA 60079-0:2011, CSA 60079-15:2012

Note For UL and other safety certifications, refer to the product label or the *Online Product Certification* section.

Electromagnetic Compatibility

This product meets the requirements of the following EMC standards for electrical equipment for measurement, control, and laboratory use:

- EN 61326-1 (IEC 61326-1): Class A emissions; Industrial immunity
- EN 55011 (CISPR 11): Group 1, Class A emissions
- EN 55022 (CISPR 22): Class A emissions
- EN 55024 (CISPR 24): Immunity
- AS/NZS CISPR 11: Group 1, Class A emissions
- AS/NZS CISPR 22: Class A emissions
- FCC 47 CFR Part 15B: Class A emissions
- FCC 47 CFR Part 15C
- ICES-001: Class A emissions

Note In the United States (per FCC 47 CFR), Class A equipment is intended for use in commercial, light-industrial, and heavy-industrial locations. In Europe, Canada, Australia and New Zealand (per CISPR 11) Class A equipment is intended for use only in heavy-industrial locations.

Note Group 1 equipment (per CISPR 11) is any industrial, scientific, or medical equipment that does not intentionally generate radio frequency energy for the treatment of material or inspection/analysis purposes.

Note For EMC declarations and certifications, and additional information, refer to the *Online Product Certification* section.

CE Compliance CE

This product meets the essential requirements of applicable European Directives, as follows:

- 2014/35/EU; Low-Voltage Directive (safety)
- 2014/30/EU; Electromagnetic Compatibility Directive (EMC)
- 2014/34/EU; Potentially Explosive Atmospheres (ATEX)
- 2014/53/EU: Radio Equipment Directive (RED)

Online Product Certification

Refer to the product Declaration of Conformity (DoC) for additional regulatory compliance information. To obtain product certifications and the DoC for this product, visit *ni.com/certification*, search by model number or product line, and click the appropriate link in the Certification column.

Environmental Management

NI is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial to the environment and to NI customers.

For additional environmental information, refer to the *Minimize Our Environmental Impact* web page at *ni.com/environment*. This page contains the environmental regulations and directives with which NI complies, as well as other environmental information not included in this document.

Waste Electrical and Electronic Equipment (WEEE)

EU Customers At the end of the product life cycle, all NI products must be disposed of according to local laws and regulations. For more information about how to recycle NI products in your region, visit *ni.com/environment/weee*.

Battery Replacement and Disposal

Battery Directive This device contains a long-life coin cell battery. If you need to replace it, use the Return Material Authorization (RMA) process or contact an authorized National Instruments service representative. For more information about compliance with the EU Battery Directive 2006/66/EC about Batteries and Accumulators and Waste Batteries and Accumulators, visit *ni.com/environment/batterydirective*.

电子信息产品污染控制管理办法（中国 RoHS）

中国客户 National Instruments 符合中国电子信息产品中限制使用某些有害物质指令(RoHS)。关于 National Instruments 中国 RoHS 合规性信息，请登录 `ni.com/environment/rohs_china`。(For information about China RoHS compliance, go to `ni.com/environment/rohs_china`.)

Regulatory Information

United States

FCC Radiation Exposure Statement

Caution The radiated output power of this device is below the FCC radio frequency exposure limits. Nevertheless, this device should be used in such a manner that the potential for human contact during normal operation is minimized. This device has been evaluated for and shown compliant with the FCC RF Exposure limits under mobile exposure conditions (antennas are greater than 20 cm from a persons body). This device has also been evaluated for and shown compliant with the FCC RF exposure limits under portable exposure conditions (antennas are within 20 cm of a persons body) when installed in certain specific configurations. Details of the authorized configurations can be found at *https://fjallfoss.fcc.gov/oetcf/eas/reports/GenericSearch.cfm* by entering the FCC ID number on the device.

Interference Statement

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturers instruction manual, may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note The FCC regulations provide that changes or modifications not expressly approved by NI could void your authority to operate this equipment.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna of the equipment experiencing the interference.
- Increase the distance between the wireless adapter and the equipment experiencing the interference.
- Connect the equipment to an outlet on a circuit different from which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canada

Industry Canada (IC) Notices

Class B digital circuitry of this device complies with Canadian ICES-003.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, the radio transmitter(s) in this device may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Radio Frequency (RF) Exposure Information

The radiated output power of this device is below the Industry Canada (IC) radio frequency exposure limits. This device has been evaluated for and shown compliant with the IC Radio Frequency (RF) Exposure limits. The device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been certified for use in Canada. Status of the listing in the Industry Canada's REL (Radio Equipment List) can be found at the following web address: *http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng*

Additional Canadian information on RF exposure also can be found at the following web address: *http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html*

avis d'Industry Canada (IC)

La circuiterie numérique de Classe B de cet appareil est conforme à la norme canadienne ICES-003.

Cet appareil est conforme aux normes d'exemption de licence RSS d'Industry Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Conformément aux réglementations d'Industry Canada, les émetteurs radio de cet appareil ne peuvent fonctionner qu'à l'aide d'une antenne dont le type et le gain maximal (ou minimal) pour ces émetteurs - transmetteurs sont approuvés par Industry Canada. Pour réduire le risque d'interférence éventuelle pour les autres utilisateurs, le type et le gain de l'antenne doivent être choisis de manière à ce que la puissance isotrope rayonnée équivalente (p.i.r.e.) minimale nécessaire à une bonne communication soit fournie.

Informations sur l'exposition à la fréquence radio (FR)

La puissance rayonnée de sortie de cet appareil est inférieure aux limites d'exposition à la fréquence radio d'Industry Canada (IC). Cet appareil a été évalué et jugé conforme aux limites d'exposition à la fréquence radio (FR) d'IC. Cet appareil devrait être utilisé de manière à ce que le risque de contact humain au cours d'un fonctionnement normal soit réduit.

Cet appareil est homologué pour l'utilisation au Canada. Pour consulter l'entrée correspondant à l'appareil dans la liste d'équipement radio (REL - Radio Equipment List) d'Industry Canada, rendez-vous sur : *http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng*

Pour des informations canadiennes supplémentaires sur l'exposition FR, rendez-vous sur : *http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html*

Japan

This equipment contains specified radio equipment that has been certified to the Technical Regulation Conformity Certification under the Radio Law.

Taiwan R.O.C.

台灣 : 國家通訊傳播委員會

低功率電波輻性電機管理辦法

第十二條經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

在 5.25G ~5.35G 頻帶內操作之無線資訊傳輸設備僅適於室內使用

EU Regulatory Statements

cs Česky [Czech]	National Instruments tímto prohlašuje, že tento cRIO-9037 je ve shodě se základními požiadavkami a dalšími příslušnými ustanoveními směrnice 2014/53/ES.
da Dansk [Danish]	Undertegnede National Instruments erklærer herved, at følgende udstyr cRIO-9037 overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EF.
de Deutsch [German]	Hiermit erklärt National Instruments, dass sich das Gerät cRIO-9037 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EG befindet.

et Eesti [Estonian]	Käesolevaga kinnitabNational Instruments seadme cRIO-9037 vastavust direktiivi 2014/53/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, National Instruments, declares that this cRIO-9037 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC.
es Español [Spanish]	Por medio de la presente National Instruments declara que el cRIO-9037 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2014/53/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ National Instruments ΔΗΛΩΝΕΙ ΟΤΙ cRIO-9037 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/ΕΚ.
fr Français [French]	Par la présente National Instruments déclare que l'appareil cRIO-9037 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/CE.
it Italiano [Italian]	Con la presente National Instruments dichiara che questo cRIO-9037 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/CE.
lv Latviski [Latvian]	Ar šo National Instruments deklarē, ka cRIO-9037 atbilst Direktīvas 2014/53/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem
lt Lietuvių [Lithuanian]	Šiuo National Instruments deklaruoja, kad šis cRIO-9037 atitinka esminius reikalavimus ir kitas 2014/53/EB Direktyvos nuostatas.
nl Nederlands [Dutch]	Hierbij verklaart National Instruments dat het toestel cRIO-9037 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EG.
mt Malti [Maltese]	Hawnhekk, National Instruments, jiddikjara li dan cRIO-9037 jikkonforma mal-htigijiet essenzjali u ma provvedimenti ohrajn relevanti li hemm fid-Dirrettiva 2014/53/EC.
hu Magyar [Hungarian]	Alulírott, National Instruments nyilatkozom, hogy a cRIO-9037 megfelel a vonatkozó alapvetõ követelményeknek és az 2014/53/EC irányelv egyéb elõírásainak.

pl Polski [Polish]	Niniejszym National Instruments. oświadcza, że cRIO-9037 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 2014/53/EC.
pt Português [Portuguese]	National Instruments declara que este cRIO-9037 está conforme com os requisitos essenciais e outras disposições da Directiva 2014/53/CE.
sl Slovensko [Slovenian]	National Instruments izjavlja, da je ta cRIO-9037 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 2014/53/ES.
sk Slovensky [Slovak]	National Instruments týmto vyhlasuje, že cRIO-9037 spĺňa základné požiadavkami a všetky príslušné ustanovenia Smernice 2014/53/ES.
fi Suomi [Finnish]	National Instruments vakuuttaa täten että cRIO-9037 tyyppinen laite on direktiivin 2014/53/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen
sv Svenska [Swedish]	Härmed intygar National Instruments att denna cRIO-9037 står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EG.
Íslenska [Icelandic]	Hér með lýsir National Instruments yfir því að cRIO-9037 er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 2014/53/EC.
no Norsk [Norwegian]	National Instruments erklærer herved at utstyret cRIO-9037 er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 2014/53/EF.

Note Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, visit *ni.com/certification*, search by model number or product line, and click the appropriate link in the Certification column.

Worldwide Support and Services

The NI website is your complete resource for technical support. At *ni.com/support*, you have access to everything from troubleshooting and application development self-help resources to email and phone assistance from NI Application Engineers.

Visit *ni.com/services* for NI Factory Installation Services, repairs, extended warranty, and other services.

Visit *ni.com/register* to register your NI product. Product registration facilitates technical support and ensures that you receive important information updates from NI.

A Declaration of Conformity (DoC) is our claim of compliance with the Council of the European Communities using the manufacturer's declaration of conformity. This system affords the user protection for electromagnetic compatibility (EMC) and product safety. You can obtain the DoC for your product by visiting *ni.com/certification*. If your product supports calibration, you can obtain the calibration certificate for your product at *ni.com/calibration*.

NI corporate headquarters is located at 11500 North Mopac Expressway, Austin, Texas, 78759-3504. NI also has offices located around the world. For telephone support in the United States, create your service request at *ni.com/support* or dial 1 866 ASK MYNI (275 6964). For telephone support outside the United States, visit the *Worldwide Offices* section of *ni.com/niglobal* to access the branch office websites, which provide up-to-date contact information, support phone numbers, email addresses, and current events.

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