PXIe-8381
Specifications

Contents

PXIe-8381 Specifications

This section lists the system specifications for the PXIe-8381 (153097**x**-01L) only.

> ✏️ **Note** The specific NI assembly number in parentheses follows the model number. Ensure the specifications of interest match the NI assembly number on either the front or back side of the module. **x** denotes all letter revisions of the assembly.

> ✏️ **Note** These specifications are typical at 25 °C, unless otherwise stated.

> ⚠️ **Caution** Specifications are subject to change without notice.

Physical

Dimensions	10.7 × 17.5 cm (4.4 × 6.9 in.)
Maximum cable length	5 m
Slot requirements	One system slot (PXI Express or CompactPCI Express)
Compatibility	Fully compatible with the **PXI Express Hardware Specification**, Revision 2.0, **PICMG CompactPCI Express EXP.0 R2.0 Specification**, and **PCIe External Cable Specification**
Weight	0.19 kg (0.42 lb) typical

Power Requirements

Power Rail	Typical Current	Maximum Current
+3.3 V[1]	750 mA	1.2 A

Power Rail	Typical Current	Maximum Current
+5 V	1 mA	25 mA
+12 V	300 mA	500 mA
+5 V$_{AUX}$	110 mA	300 mA

[1]Not including the power consumed by an active cable. NI copper cables (782317-0**x**) are passive.

Environmental

Maximum altitude	2,000 m (800 mbar) (at 25 °C ambient)
Pollution Degree	2

Indoor use only.

Operating Environment

Ambient temperature range	0 to 55 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2. Meets MIL-PRF-28800F Class 3 low temperature limit and MIL-PRF-28800F Class 2 high temperature limit.)
Relative humidity range	10 to 90%, noncondensing (Tested in accordance with IEC-60068-2-56.)

Storage Environment

Ambient temperature range	-40 to 71 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2. Meets MIL-PRF-28800F Class 3 limits.)
Relative humidity range	5 to 95%, noncondensing (Tested in accordance with IEC-60068-2-56.)

> ✎ **Note** Clean the PXIe-8381 with a soft nonmetallic brush. Make sure that the device is completely dry and free from contaminants before returning it to service.

Shock and Vibration

Operating shock	30 g peak, half-sine, 11 ms pulse (Tested in accordance with IEC-60068-2-27. Meets MIL-PRF-28800F Class 2 limits.)

Random vibration	
Operating	5 Hz to 500 Hz, 0.3 g_{rms}
Nonoperating	5 Hz to 500 Hz, 2.4 g_{rms} (Tested in accordance with IEC-60068-2-64. Nonoperating test profile exceeds the requirements of MIL-PRF-28800F, Class 3.)

Safety

This product is designed to meet the requirements of the following standards of safety for information technology equipment:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA 61010-1

> ✎ **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; Basic immunity
- EN 55011 (CISPR 11): Group 1, Class A emissions

- AS/NZS CISPR 11: Group 1, Class A emissions
- FCC 47 CFR Part 15B: Class A emissions
- 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 generates 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 $C\,\epsilon$

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)

Product Certifications and Declarations

Refer to the product Declaration of Conformity (DoC) for additional regulatory compliance information. To obtain product certifications and the DoC for NI products, visit ni.com/product-certifications, search by model number, and click the appropriate link.

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 **Engineering a Healthy Planet** 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.

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.)

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