PXI-8432/4 and PXI-8433/4 Hardware Specifications

This document lists the specifications for the PXI-8432/4 and PXI-8433/4 boards.

Environment

Maximum altitude .... 2,000 m (at 25 °C ambient temperature)

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.)

    Relative humidity range.................. 10% to 90%, noncondensing (Tested in accordance with IEC-60068-2-56.)

Storage environment

    Ambient temperature range .... –40 to 70 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2.)

    Relative humidity range.................. 5% to 95%, noncondensing (Tested in accordance with IEC-60068-2-56.)

Shock and vibration

    Operational shock .... 30 g peak, half-sin, 11 ms pulse (Tested in accordance with IEC-60068-2-27. Test profile developed in accordance with MIL-PRF-28800F.)

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Random vibration

    Operating ....5 to 500 Hz, 0.3 g_{rms}

    Nonoperating ....5 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.)

Other Specifications

Dimensions ....16.0 × 10.0 cm (6.3 × 3.9 in.), 3U

IO connector ....10-position modular (RJ-50) x4

Weight

    PXI-8432/4 ....147 g

    PXI-8433/4 ....147 g

Power requirement (from PCI bus)

    PXI-8432/4

        +5 VDC ....925 mA typical
        2 A maximum

    PXI-8433/4

        +5 VDC ....950 mA typical
        2 A maximum

Maximum serial transfer rate[1]

    RS-485...3,000,000 bps

    RS-232...1,000,000 bps

Maximum cable length

    RS-485[2] ....30 m (limited by EMC/surge)

    RS-232...2,500 pF equivalent
    (TIA-EIA-232-F 2.1.4)

Data line ESD protection (human body model)

    RS-485...± 15 kV

    RS-232...± 15 kV

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[1] Actual speed may vary considerably from speed shown due to system and instrumentation capabilities.

[2] RS-485 is capable of 1.2 km (4,000 ft) without surge limitation.

Safety

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

- IEC 60950-1, EN 60950-1
- UL 60950-1
- CAN/CSA-C22.2 No. 60950-1

Note For UL and other safety certifications, refer to the product label or visit ni.com/certification, search by model number or product line, and click the appropriate link in the Certification column.

Electromagnetic Compatibility

Emissions .... EN 55011 Class A at 10 m
FCC Part 15A above 1 GHz

Immunity .... EN 61326:1997 + A2:2001, Table 1

CE, C-Tick, and FCC Part 15 (Class A) Compliant.

Note For EMC compliance, operate this device with shielded cabling.

CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

Low-Voltage Directive (safety) 73/23/EEC

Electromagnetic Compatibility
Directive (EMC) 89/336/EEC

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.