PCIe-GPIB Specifications

2026-11-11

Contents

PCIe-GPIB Specifications. 3

PCIe-GPIB Specifications

PCIe-GPIB Specifications

These specifications apply to the PCIe-GPIB.

Revision History

Version	Date changed	Description
379201B-01	December 2025	Intro topic added. Added GPIB connector version number. Clarified PCI Express connector wording.

Looking For Something Else?

For information not found in the specifications for your product, such as operating instructions, browse *Related Information*.

Related information:

- PCIe-GPIB Getting Started
- Software and Driver Downloads
- Dimensional Drawings
- Product Certifications
- Letter of Volatility
- Discussion Forums
- NI Learning Center

PCIe-GPIB Specifications

Definitions

Warranted specifications describe the performance of a model under stated operating conditions and are covered by the model warranty.

Characteristics describe values that are relevant to the use of the model under stated operating conditions but are not covered by the model warranty.

- *Typical* specifications describe the performance met by a majority of models.
- *Nominal* specifications describe an attribute that is based on design, conformance testing, or supplemental testing.

Specifications are *Typical* unless otherwise noted.

PCIe-GPIB Pinout

Use the pinout to connect to terminals on the PCIe-GPIB.

Figure 1. PCIe-GPIB Connector Pinout

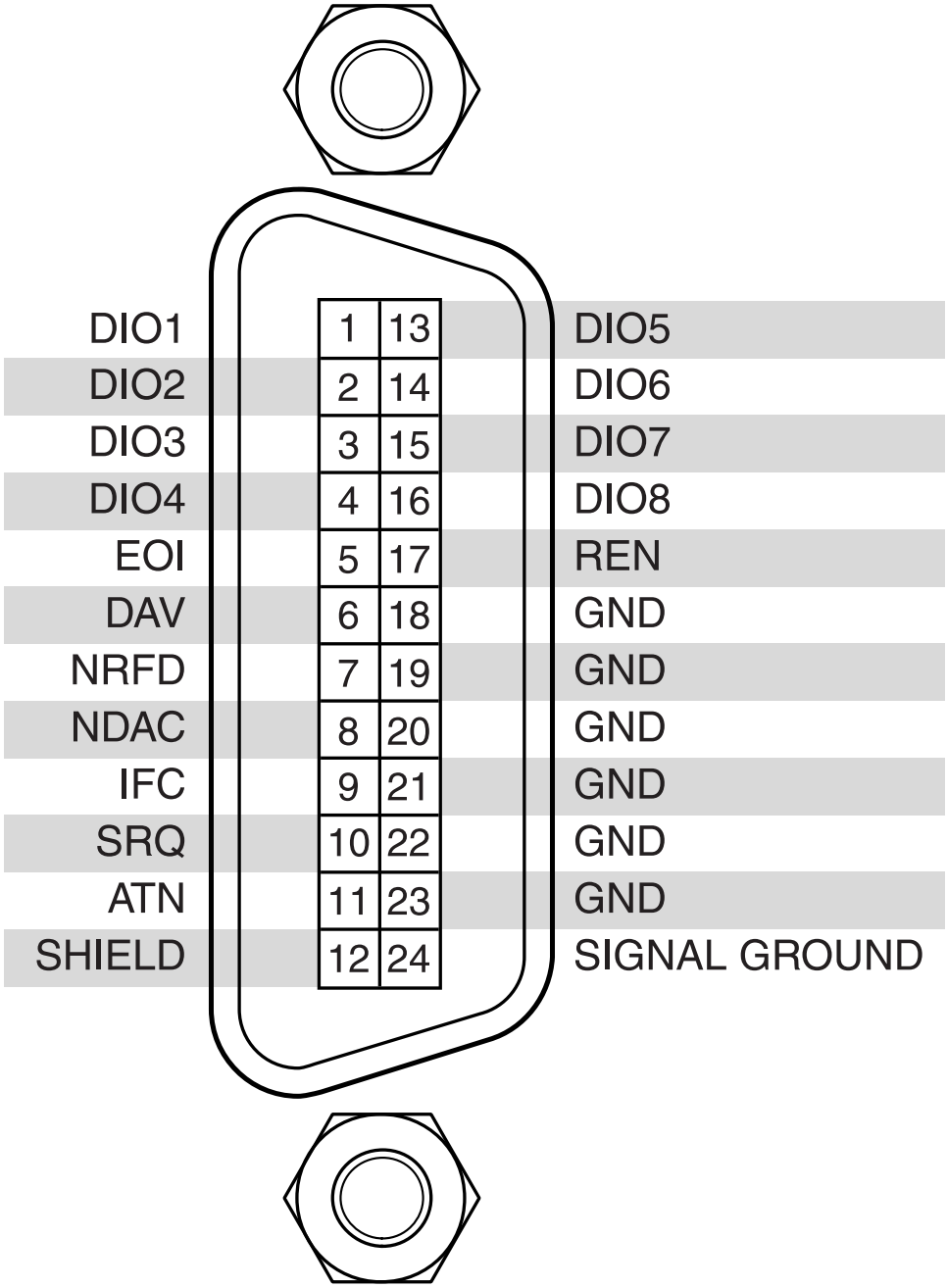


Table 1. Signal Descriptions

Signal	Terminal	Description
DIO1	1	Data Input/Output Bit.
DIO2	2	Data Input/Output Bit.
DIO3	3	Data Input/Output Bit.
DIO4	4	Data Input/Output Bit.

Signal	Terminal	Description
EOI	5	End-Or-Identify.
DAV	6	Data Valid.
NRFD	7	Not Ready For Data.
NDAC	8	Not Data Accepted.
IFC	9	Interface Clear.
SRQ	10	Service Request.
ATN	11	Attention.
SHIELD	12	Shield.
DIO5	13	Data Input/Output Bit.
DIO6	14	Data Input/Output Bit.
DIO7	15	Data Input/Output Bit.
DIO8	16	Data Input/Output Bit.
REN	17	Remote Enable.
GND	18	Ground—Wire twisted with DAV.
GND	19	Ground—Wire twisted with NRFD.
GND	20	Ground—Wire twisted with NDAC.
GND	21	Ground—Wire twisted with IFC.
GND	22	Ground—Wire twisted with SRQ.
GND	23	Ground—Wire twisted with ATN.
SIGNAL GROUND	24	Logic Ground.

Performance

GPIB	
3-wire	up to 1670 kbytes/s

HS488	up to 7980 kbytes/s

Power Requirements



Note A version of the PCIe-GPIB controller (part number 190243*x*-01, manufactured prior to 2008) differs from these specifications in power consumption, physical dimensions, and ambient temperature range. For specific details, refer to *Notice of Board Change—PCIe-GPIB* on ni.com.

PCIe-GPIB (+3.3 V)	320 mA, Typical; 500 mA, Maximum

Physical Characteristics

Dimensions	9.754 cm × 6.888 cm (3.840 in. × 2.712 in.)
Connector	
GPIB	IEEE 488 24-pin connector (Version 1.1)
PCI Express Lanes	x1

Environment

Operating ambient temperature	0 °C to 55 °C (Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2.)
Operating relative humidity	10% to 90%, noncondensing (Tested in accordance with IEC

	60068-2-56.)
Storage ambient temperature	-20 °C to 70 °C (Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2.)
Storage relative humidity	5% to 95%, noncondensing (Tested in accordance with IEC 60068-2-56.)

© 2026 National Instruments Corporation.