

COMPREHENSIVE SERVICES

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

SELL YOUR SURPLUS

We buy new, used, decommissioned, and surplus parts from every NI series. We work out the best solution to suit your individual needs.

 Sell For Cash  Get Credit  Receive a Trade-In Deal

OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP

We stock **New**, **New Surplus**, **Refurbished**, and **Reconditioned** NI Hardware.



Bridging the gap between the manufacturer and your legacy test system.

 1-800-915-6216

 www.apexwaves.com

 sales@apexwaves.com

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote

 **CLICK HERE**

PXIe-8822

PXle-8822/42/62 Specifications

2023-04-03



Contents

PXIe-8822/42/62 Specifications..... 3

PXIe-8822/42/62 Specifications



Note Specifications are subject to change without notice.



Caution Using the PXIe-8822/42/62 controller in a manner not described in this user manual can impair the protection the controller provides.

Features

Table 1. PXIe-8822/42/62 Features

| Model | PXIe-8822 | PXIe-8842 | PXIe-8862 | PXIe-8862 Removable Drive |
|----------------------------------|--|---|--|------------------------------|
| CPU | Intel® Core™ i3-11100HE | Intel® Core™ i5-11500HE | Intel® Core™ i7-11850HE | |
| Cache | 8 MB Smart Cache | 12 MB Smart Cache | 24 MB Smart Cache | |
| Memory | 8 GB standard (16 GB maximum), single channel DD4-3200 MHz, non-ECC SODIMM | | 2 x 8 GB standard (2 x 16 GB maximum), dual channel DD4-3200 MHz, non-ECC SODIMM | |
| Storage | 512 GB (or greater) M.2, NVMe SSD | | 512 GB (or greater) M.2, NVMe SSD | 960 GB U.2, NVMe SSD |
| Video | 1 DisplayPort 1.4 | 1 DisplayPort 1.4 | 2 DisplayPort 1.4 | |
| Ethernet | 1 i225 port, 1588, 10M/100M/1000M/2.5G Base-T | 2 i225 port, 1588, 10M/100M/1000M/2.5G Base-T | 2 i225 port, 1588, 10M/100M/1000M/2.5G Base-T | |
| PCI Express Link Speed | 2.5 GT/s | 5.0 GT/s | 8.0 GT/s | |
| PXI Express 4 Link Configuration | x4, x4, x4, x4 | | | |
| PXI Express 2 Link Configuration | x8, x8 | | | |

| Model | PXIe-8822 | PXIe-8842 | PXIe-8862 | PXIe-8862 Removable Drive |
|------------------------------|--|-------------|-------------|------------------------------|
| GPIB (IEEE 488 Controller) | N/A | 1 mini-GPIB | 1 mini-GPIB | |
| Serial Port (RS-232) | 1 DB-9 | | | |
| Thunderbolt 4 Ports | N/A | 1 Type-C | 2 Type-C | |
| Hi-Speed USB (2.0) Ports | 2 Type-A | 4 Type-A | 4 Type-A | |
| SuperSpeed USB (3.0) Ports | 2 Type-A | | | |
| PXI Trigger Bus Input/Output | 1 SMB | | | |
| Installed Operating System | Windows 10 IOT, Windows 11 IOT, or Linux RT | | | |
| Trusted Platform Module | Optional TPM 2.0 (Infineon/ST TPM for global market, NationsTech TPM for China market) | | | |

Front Panel Dimensions

The following figures show the front panel layout and dimensions of the PXIe-8822/42/62. Dimensions are in inches (millimeters).

Figure 1. PXIe-8822 Front Panel Layout and Dimensions

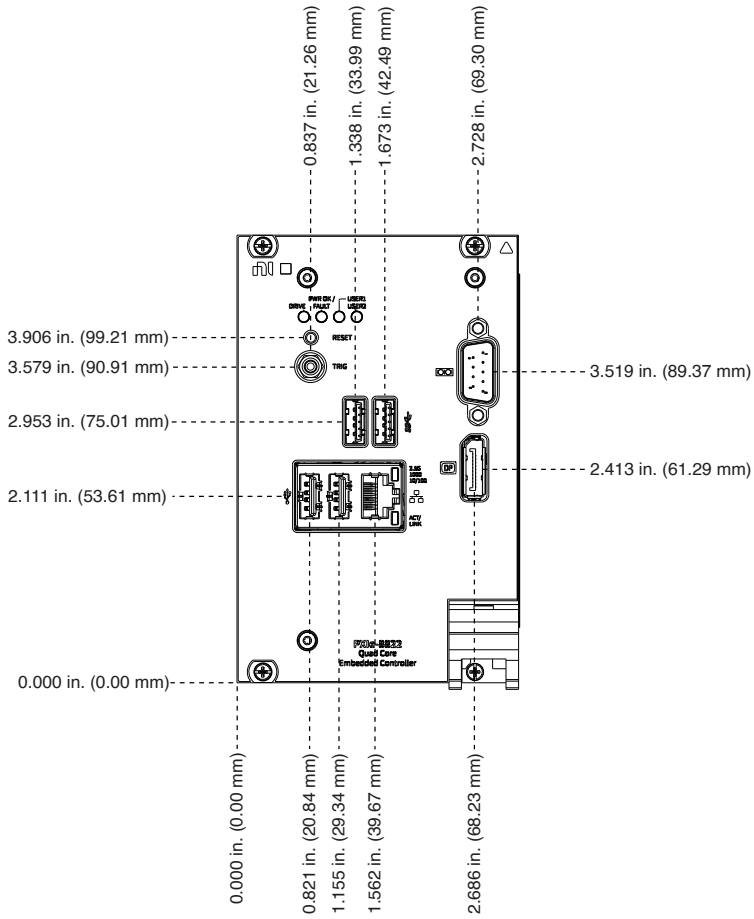


Figure 2. PXIe-8842 Front Panel Layout and Dimensions

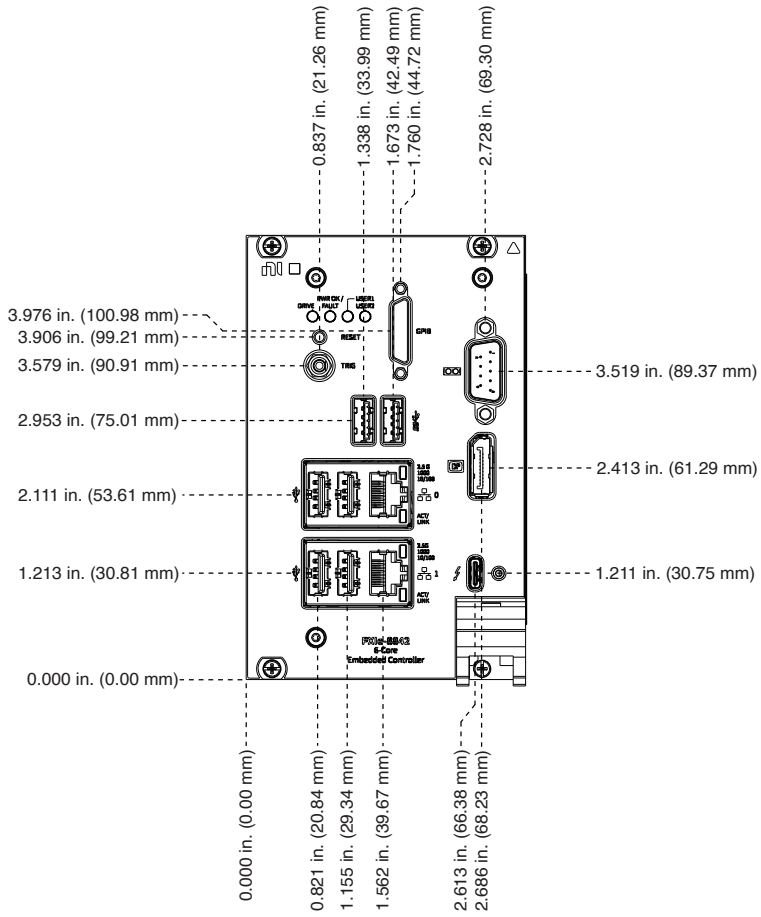


Figure 3. PXIe-8862 Front Panel Layout and Dimensions

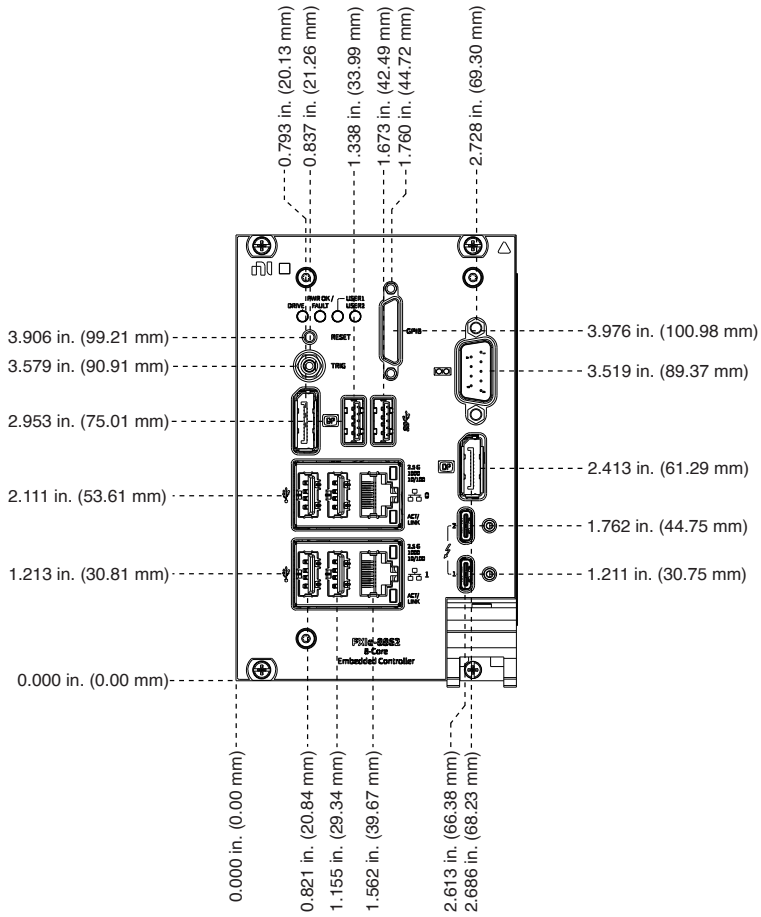
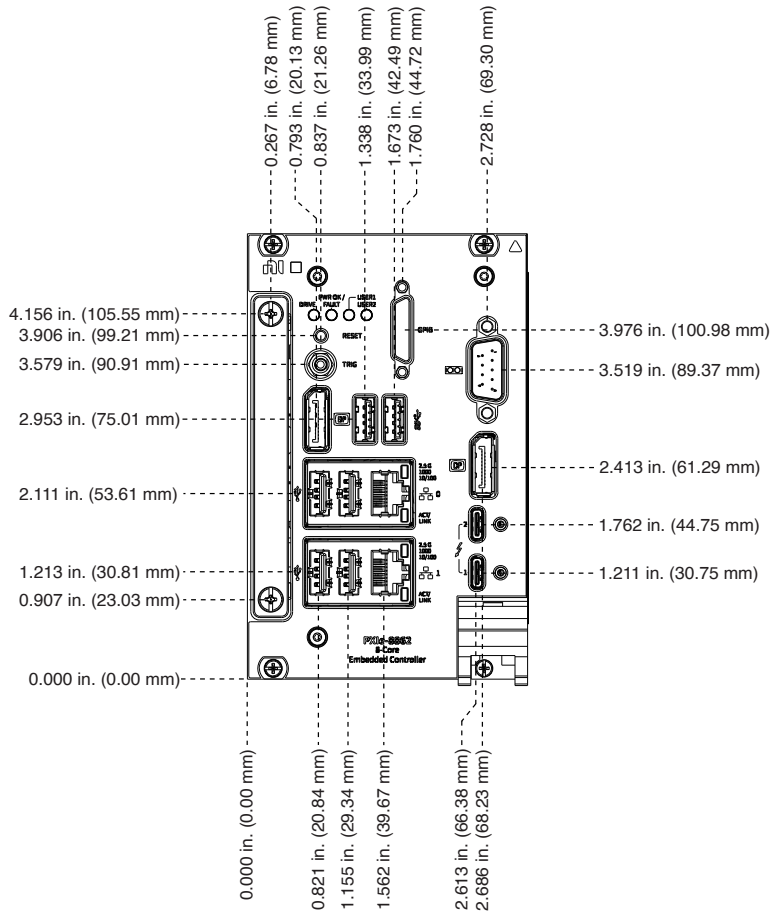


Figure 4. PXIe-8862 with Removable Drive Front Panel Layout and Dimensions



Electrical



Notice These specifications do not include any attached devices.

PXIe-8822

| Voltage (V) | Current (Amps) Typical | Current (Amps) Maximum |
|-------------|------------------------|------------------------|
| +3.3 V | 1.2 A | 2.6 A |
| +5 V | 0.5 A | 2.5 A |
| +12 V | 4.5 A | 7 A |
| +5 Vaux | 0.3 A | 0.6 A |

PXIe-8842

| Voltage (V) | Current (Amps) Typical | Current (Amps) Maximum |
|-------------|------------------------|------------------------|
| +3.3 V | 1.2 A | 2.6 A |
| +5 V | 0.9 A | 3 A |
| +12 V | 5.1 A | 7.1 A |
| +5 Vaux | 0.4 A | 0.7 A |

PXIe-8862

| Voltage (V) | Current (Amps) Typical | Current (Amps) Maximum |
|-------------|------------------------|------------------------|
| +3.3 V | 1.4 A | 3.3 A |
| +5 V | 1.2 A | 3 A |
| +12 V | 7.1 A | 8.5 A |
| +5 Vaux | 0.4 A | 0.9 A |

PXIe-8862 with removable drive

| Voltage (V) | Current (Amps) Typical | Current (Amps) Maximum |
|-------------|------------------------|------------------------|
| +3.3 V | 0.7 A | 1.7 A |
| +5 V | 1.2 A | 3 A |
| +12 V | 7.7 A | 8.5 A |
| +5 Vaux | 0.4 A | 0.9 A |



Notice Power delivered to external loads through USB and Thunderbolt 4 ports should be included in system power budgets that include this controller module and peripheral modules.

Physical

| | |
|------------------|---------------------------------|
| Board dimensions | Four-wide 3U PXI Express module |
|------------------|---------------------------------|

| | |
|--------------------------------|--|
| Slot requirements | One system slot plus three controller expansion slots |
| Compatibility | Fully compatible with PXI Express Specification 1.0 |
| Weight | |
| PXIe-8822 | 728 g (1.60 lb) typical |
| PXIe-8842 | 753 g (1.66 lb) typical |
| PXIe-8862 | 783 g (1.73 lb) typical |
| PXIe-8862 with removable drive | 906 g (2.00 lb) typical |

Environmental

| | |
|------------------|--|
| Maximum altitude | 4,600 m (570 mbar) (at 25°C ambient) with chassis fans on high |
| Pollution Degree | 2 |

Indoor use only.

Operating Environment



Caution The operating temperature must not be exceeded, even when used in a chassis with a higher temperature range.

| | |
|---------------------------|---------------|
| Ambient temperature range | 0 °C to 55 °C |
|---------------------------|---------------|

| | |
|-------------------------|---------------------------|
| Relative humidity range | 10% to 90%, noncondensing |
|-------------------------|---------------------------|

Storage Environment

| | |
|--|--------------------------|
| Ambient temperature range ^[1] | -40 °C to 71 °C |
| Relative humidity range | 5% to 95%, noncondensing |

Shock and Vibration

| | |
|---------------------------|--|
| Operating shock | 30 g peak, half-sine, 11 ms pulse |
| Random vibration | |
| Operating | 5 Hz to 500 Hz, 0.3 g _{rms} (with solid-state hard drive) |
| Nonoperating ¹ | 5 Hz to 500 Hz, 2.4 g _{rms} |

¹ CPU performance may decrease for some workloads if a unit is stored at the extreme ambient temperature range and then subjected to max nonoperating random vibration limits.