FEATURES

- **Shallow-depth PCI Express expansion chassis expands host server I/O capacity**
- **Simplifies host server motherboard I/O card support using a high-speed x16 PCIe link delivering 20Gb/s bandwidth between the host and the expansion chassis**
- **Supports industry standard PICMG 1.3 backplanes including the Trenton BPG7087**
- **BPG7087 backplane option supports nine PCI Express card slots with four card slots configured for x16 PCI Express 2.0/1.1 electrical interfaces**
- **An extensive array of backplane options to support PCIe, PCI-X and PCI I/O cards**
- **Local data storage capability via chassis support for eight hot swap, 2.5" HDDs or Solid State Drives (SSDs)***
- **Made In USA for long-life stability and dependability**

Trenton TTX4100 PCIe Expansion Chassis
Shown with a x16 PCIe target card and backplane
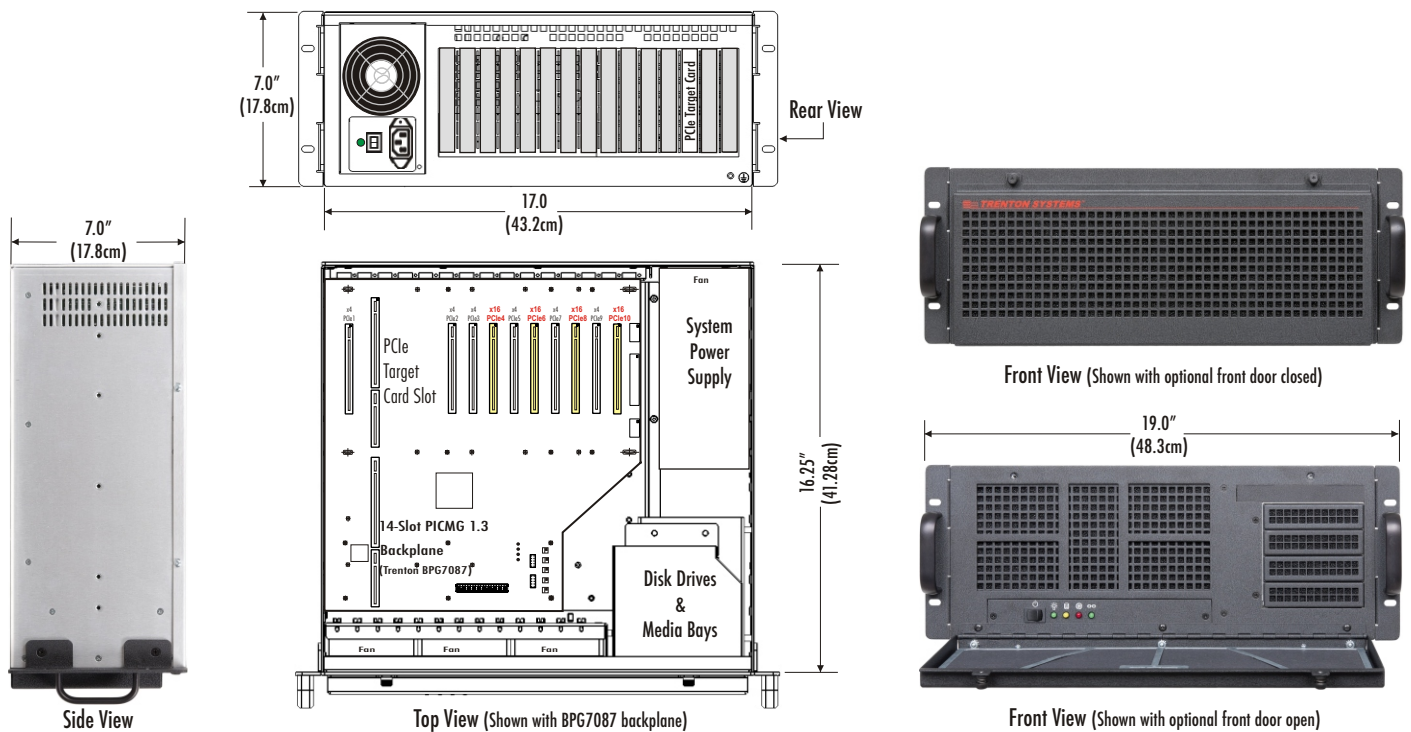
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TTX4100 OVERVIEW:

The shallow-depth dimension of the Trenton TTX4100 PCIe expansion chassis extends the host server's I/O card support capability into the tight spaces typically found in submarines, surface ships, airborne command centers and crowded server rooms. The TTX4100 uses a high-speed, wide bandwidth x16 PCIe 2.0 connection between the Trenton PEU8039 host card in the server and the Trenton PED8044 expansion chassis target card. The target card is installed in the SHB slot of any industry standard 14-slot PICMG 1.3 backplane to enable communications between the host server and the I/O cards installed in the TTX4100 expansion chassis. An example of a 14-slot backplane option for the TTX4100 is the Trenton BPG7087 with its four, x16 PCI Express 2.0 electrical interfaces to the card slots plus five other PCIe x16 mechanical card slots connected with x4 electrical links. See Trenton backplanes for details on the I/O card support capabilities and specification data for Trenton's line of 14-slot backplanes.

A local drive controller card may be installed in the expansion chassis backplane to take advantage of the TTX4100's four front access drive bays that support either four 3.5" or up to eight 2.5" removable and hot swap storage drives as well as an optical media bay*. Front panel diagnostic LEDs provided for power, local drive activity, fan status and PCIe host-to-expansion chassis link status.

TTX4100 PCI EXPRESS EXPANSION CHASSIS LAYOUT[1]:

7.0" (17.8cm)

17.0 (43.2cm)

PCIe Target Card

Rear View

7.0" (17.8cm)

Side View

Fan

PCIe Target Card Slot

14-Slot PICMG 1.3 Backplane (Trenton BPG7087)

System Power Supply

Disk Drives & Media Bays

16.25" (41.28cm)

Fan   Fan   Fan

Top View (Shown with BPG7087 backplane)

Front View (Shown with optional front door closed)

19.0" (48.3cm)

Front View (Shown with optional front door open)

TRENTON 4U PCI EXPRESS EXPANSION CHASSIS: TTX4100

SYSTEM MODEL	DESCRIPTION
TTX4100	4U PCI Express expansion chassis with the Trenton PED8044 x16 PCIe 2.0 target card installed and with a wide choice of industry standard PICMG 1.3 14-slot backplane options. The TTX4100 16.25" chassis depth provides four front access 3.5" drive bays and one optical media bay*. *Functionality requires local drive controller card

TECHNICAL SPECIFICATIONS:

MODEL NAME	TTX4100
DESCRIPTION	4U, PCI Express expansion chassis with a x16 PCIe target card installed in a standard PICMG 1.3 14-slot backplane and 16.25" chassis depth design includes four front access 3.5" storage drive bays and one optical media drive bay
CHASSIS STANDARD	EIA RS-310C 19" Rackmount Standard
CONSTRUCTION & COLOR	Lightweight, rugged aluminum, available with or without a front door – Black front
PCI EXPRESS EXPANSION LINK	x16 PCI Express 2.0
PCI EXPRESS TARGET CARD	Trenton PEU8039 x16 PCI Express 2.0 link expansion card (installed)
PICMG 1.3 BACKPLANE OPTIONS	14-slot - Trenton BPG7087, BPC7041, BPC7009, BPX6620, BPG6615, BPX6610, BPX3/8 and other industry standard PICMG 1.3 14-slot backplanes Small Form Factor - Trenton BPX6719, BPG6714, BPX3/2, BPG2/2, BPX5, BPG4 and other industry standard small form factor backplanes
I/O CARDS SUPPORTED	PCI Express, PCI-X and PCI (specific card quantities and interface types supported depends on the backplane option selected
DRIVE BAYS	4 - Front 3.5" drive bays support either four 3.5" or up to eight 2.5" hot swap HDD carriers and 1 - Slim-line device bay for optical drive media[2]
MAXIMUM DATA STORAGE CAPACITY	Drive type and individual drive capacity dependent, 2.5" front access driver carriers support 15mm thick 1TB or greater HDDs, 4TB - 8TB* typical when using 2.5" HDDs, 2.4TB - 6.4TB* when using 2.5" SSDs[2,3]
POWER SUPPLY	Single ATX/EPS P/S up to 1500W, fixed - OR - Mini-redundant ATX P/S up to 500W
INDICATORS	LEDs for HDD activity, power status, PCI Express host-to-expansion chassis link status and fan speed control status
SWITCH	Power On/Off
COOLING	3 - 120mm Fans, 90 CFM each
HOLD DOWN BAR	Flexible hold down bar for the PCIe expansion target and the I/O option cards for added security in high vibration environments
AIR FILTER	Front door option provides tool-less access to the system filter for easy cleaning and maintenance
CHASSIS NET WEIGHT	27.8 Lbs. (12.62 kg.) - Includes chassis + PCIe expansion target card + 14-slot backplane + fixed-mount power supply only
METRIC DIMENSIONS	48.3cm (W) x 17.8cm (H) x 41.3cm (D)
ENGLISH DIMENSIONS	19.0" (W) x 7.0" (H) x 16.25" (D)

Trenton Systems offers complete system integration of a wide variety of standard and customer supplied operating systems and application software packages. Various Microsoft®, Linux and RTOS operating systems can be loaded on to your system by our highly skilled factory technicians. Other system integration services include loading and testing of industry standard or COTS option cards as well as custom designed boards.

Standard industry certifications and approvals for your specific system configuration are also available from Trenton Systems.

Final system weight, environmental specifications and total power consumption estimates are a function of the specific system configuration. Preliminary estimates and final validated values are provided by Trenton for each rackmount computer system we build.

NOTES:
1. The chassis photos are shown for illustrative purposes only.
2. Requires plug-in drive controller card.
3. Maximum capacity increases with larger capacity drive.

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