TRC4013

4U DUAL-COMPUTER SYSTEM - 20" DEPTH

Trenton TRC4013 Dual-Computer System
Factory-configured with long-life single board computers

FEATURES

- Two single board computers and backplanes reduce rack space while delivering system application flexibility and performance
- Two, dual or single-processor SBC options supporting the latest multi-core, Intel® processors with native PCI Express support
- Long-life, single board computers and processors support long-term project schedules and extended system deployments in the field
- Supports plug-in PCI Express and PCI-X option cards
- Up to 4TB of SATA II data storage capacity
- One DVD R/W optical drive and multiple rear I/O interface ports for each computer segment

TRENTON SYSTEMS™
Engineered For Reliability

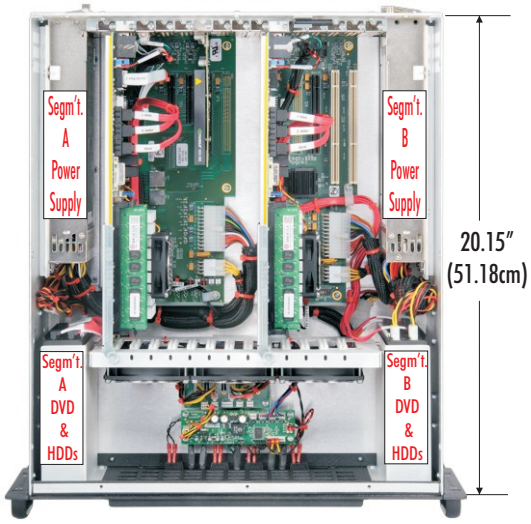
TRC4013 OVERVIEW:

Trenton Systems' TRC4013 is a 4U rackmount computer containing two complete computer systems within one rugged yet lightweight aluminum chassis. This unique system design saves component rack space while maximizing application flexibility. The TRC4013 is designed to support applications that require long-life and trouble-free computer deployments. This rackmount computer enables extended PCI Express and PCI-X option card support, increased application software flexibility and greater system performance in long-life embedded computing applications.

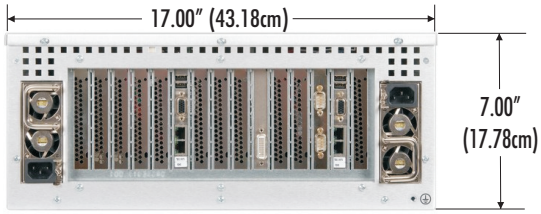
System configuration options include Trenton's dual-processor BXT7059 or single-processor TSB7053 single board computers featuring the latest, long-life and multi-core Intel® processors, and a selection of shoebox form-factor backplanes. These long-life CPUs and SBCs ensure maximum system longevity. The TRC4013 system can support as many as two, 2.5" hard drives mounted in front-access drive carriers and one optical media drive in each SBC/backplane segment. System configuration flexibility is designed into the TRC4013 to support alternate processors, backplanes, data storage and system memory options.

TRC4013 SYSTEM LAYOUT:

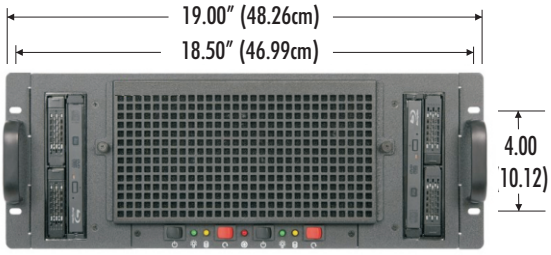
Side View



Top View (without card hold-down bar)



Rear View



Front View

Trenton Two-In-One 4U Rackmount Computer System: TRC4013

SYSTEM MODEL	DESCRIPTION
TRC4013	4U rackmount computer features two, long-life single board computers, front-access drive bays and PCI Express and PCI-X/PCI option card support

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TECHNICAL SPECIFICATIONS:

MODEL NAME	TRC4013
DESCRIPTION	4U, two-in-one rackmount computer with two long-life single board computers and backplanes that support PCI Express and PCI-X option cards
PICMG 1.3 SBC/SHB OPTIONS[2]	Dual-Processor PICMG 1.3 SHBs - Trenton BXT7059, JXT6966, and other industry standard PICMG 1.3 SBC/SHBs Single-Processor PICMG 1.3 SHBs - Trenton TSB7053, BXTS7059, JXTS6966, TQ9, and other standard PICMG 1.3 SBC/SHBs
PICMG 1.3 BACKPLANE OPTIONS[2]	Small Form Factor Options - Trenton BPX3/2, BPG2/2, BPX5, BPG4 plus additional select combinations of Trenton and other industry standard small form factor backplanes available for two-in-one system configurations utilizing two, independent system power supplies
STORAGE DRIVE BAYS	2 - 5.25" drive bays, one per segment can support up to two 2.5" front access drive carriers in each SBC/Backplane segment
MAXIMUM DATA STORAGE CAPACITY	Drive type, individual drive capacity and system configuration dependent, supports up to 2, 2.5", 15mm or 4, 2.5", 9.5mm thick drive carriers Systems configured with 1TB HDDs could provide storage capacity of up to 4TB and about 2TB when using 2.5" SSDs[3]
OPTICAL DRIVE BAYS	2 - Slim-line device bays for optical drive media, one per segment
POWER SUPPLIES	2 - ATX, 400W, 90-264 VAC full range, 1U, rear-mounted and removable with one independent power supply per segment
COOLING	3 - 92mm Fans, 102CFM each with chassis temperature monitoring speed control
FAN SPEED CONTROL	The fan control board simultaneously controls and monitors tach pulses from each system fan. The controller also accepts commands from the SBC via the I2C interface to turn the fans on or off and to provide individual pass/fail fan status. Fan speed can also be based on temperature via the systems' thermal sensor.
INDICATORS	Each segment has front-panel LEDs for HDD activity and Power status with one front-panel LED for system-wide fan speed control status
POWER SUPPLIES	1 - ATX, 400W, 90-264 VAC full range, 1U, rear-mounted and removable per segment
COOLING	3 - 92mm Fans, 102CFM each with chassis temperature monitoring speed control
INDICATORS	Each segment has front-panel LEDs for HDD activity and Power status with one front-panel LED for system-wide fan speed control status
SWITCHES	Each segment has switches for Power On/Off and Segment Reset
CONNECTOR PORTS	Rear: 2 - Ethernet LANs, 2 - USB, 1 - VGA Video port per segment, specific SBC and backplane I/O plug-in card dependent
SEGM'T. A OPTION CARD SLOTS[4]	1 - x16 PCI Express 2.0/1.1 electrical / x16 mech. connector, 1 - x4 PCIe 2.0/1.1 electrical / x8 mech. connector and 1 - x4 PCI Express 2.0/1.1 electrical[#] / x8 mech. connector – [#]The PCIe interface for this slot comes from an optional IOB33 module installed on the TSB7053 SBC
SEGM'T. B OPTION CARD SLOTS[5]	1 - x16 PCI Express 2.0/1.1 electrical / x16 mech. connector and 2 - 64-bit/133MHz PCI-X)
DIMENSIONS	48.26cm / 19.0" (W) x 17.78cm / 7.0" (H) x 51.18cm / 20.15" (D)
CHASSIS NET WEIGHT EXAMPLE	16.7Kg (36.8Lbs.) chassis + 2 - TSB7053 SBCs + 2 - backplanes + 2- 1U ATX power supplies only

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 drawings are shown for illustrative purposes only.*
2. *Additional single board computer & backplane options available upon request.*
3. *Maximum system storage capacity will increase as HDD/SDD storage capacity increases.*
4. *Segment A configuration example using Trenton BPG4 backplane and TSB7053 single board computer.*
5. *Segment B configuration example using Trenton BPG2/2 backplane and TSB7053 single board computer*

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