

THS5091 HDEC Series Rackmount Computer Shown with a four-segment backplane and four SHBs

FEATURES

- Rackmount computer with independent 4-in-1 high density embedded computing (HDEC) platforms/system segments in a rugged chassis
- Supports a four-segment HDEC Series® backplane such as the HDB8237
- The HDB8237 is a switchless backplane that supports four independent HDEC Series system host board slots and one x16 PCI Express 3.0 card slot¹
- Features four long-life HDEC Series system host boards each with two Intel[®] Xeon[®]
 E5-2600 v3 series processors delivering 80 native PCIe 3.0 links per system segment
- Provides multiple, built-in Ethernet network interfaces including 10GbE and 1GbE
- Enables secure network-centric data storage
- Stable 4-in-1 system platform supports long project cycles and field deployments
- Five-year host board and backplane warranty
- Made in U.S.A.



THS5091 OVERVIEW:

The Trenton THS5091 is an HDEC Series 5U rackmount computer that features four HEP8225 HDEC Series system host boards and four-segment HDB8237 backplane. Each backplane/SHB combination or segment, operates independently in order to provide total software application isolation in enhanced data security applications. There are no local data storage drives or optical medial devices in the THS5091 in order to support secure, network-centric data storage and application software management. This 19" industrial rackmount computer features a rugged, lightweight, aluminum chassis design with a shallow chassis depth, and the four-in-one system configuration maximizes component rack space utilization. Each system segment has an independent and rear-removable ATX/EPS power supply.

The THS5091 features four-segment backplane and up to four system host boards to deliver the ultimate system solution for secure software applications that are common in government and defense applications. The high density system configuration flexibility and rugged computer design enables deployment across a wide spectrum of industries that demand longevity and robust computing performance. Like all of our rugged customer-driven computing solutions, the THS5091 is designed, integrated and supported by Trenton Systems in the United States. Our exclusive 5-year factory warranty on the system host boards and four-segment backplane comes standard with the Trenton THS5091 HDEC Series 5U rackmount computer.

THS5091 LAYOUT² - FOUR HDEC Series SYSTEM HOST BOARDS and a FOUR-SEGMENT BACKPLANE:



SYSTEM MODEL DESCRIPTION

THS5091

HDEC Series 5U rackmount computer with four independent computing segments comprised of a four-segment HDB8237 backplane and an HEP8225 system host board, with no local drives for secure network-centric data gathering, and a rear-access, easy swap segment power supply.

TECHNICAL SPECIFICATIONS:

HDECSeries®

MODEL NAME	THS5091
DESCRIPTION	5U, HDEC Series 4-in1 rackmount computer chassis supports four independent HDEC Series SHBs and four-segment HDEC Series backplane
CHASSIS STANDARD	EIA RS-310C 19" Rackmount Standard
CONSTRUCTION & COLOR	Lightweight, rugged aluminum — Black front
HDEC Series SYSTEM HOST BOARD	4 - HEP8225 Dual Processor SHBs with two Intel [®] Xeon [®] E5-2600 v3 Processors (Haswell-EP), USB 3.0, USB 2.0, SATA, Ethernet, Serial, Video and Audio Interfaces
SYSTEM HOST BOARD I/O DETAILS	The HEP8225 SHB supports the following: 2 - 10GbE and 2 - GbE Ethernet interfaces, 6 - USB 3.0 and 4 - USB 2.0 interfaces, 2 - SATA/600 on-board ports, 6 - SATA/600 backplane interfaces, 1 - RS232/422/485 port, 1 - VGA Video port, Audio Out/Line In/ Mic, Fan Speed Control lines, and System Diagnostics
HDEC Series BACKPLANE OPTIONS	1 - Four-Segment backplane - Trenton HDB8237, or other standard HDEC Series four-segment backplanes
PCI EXPRESS PLUG-IN CARD SLOTS	HDB8237: One (1) card slot ¹ per segment, each PCIe card slot has a x16 electrical interface and a standard x16 PCIe mechanical connector
HDEC Series BACKPLANE I/O	HDB8237: Each backplane segment supports PS2 + system power connectors, 4 - SATA/600, 2 - USB 3.0, System Fan, ACPI soft power, SHB Present, and Clear CMOS connectors and interface headers
DRIVE BAYS	None.
DATA STORAGE CAPACITY	No local data storage. Supports secure, network-centric data gathering applications.
POWER SUPPLY	Each THS5091 segment supports one rear-mounted and removable, ATX/EPS, 800W nominal
COOLING	4 — Hot Swap 92mm ball bearing fans, 102CFM each
INDICATORS	Each segment has LEDs for Power Status and one system-wide LED for cooling fan status
SWITCHES	Each segment has a Power On/Off, and System Reset switch
HOLD DOWN BAR	Flexible hold down bar for each segment's SHB and the PCI Express plug-in option cards for added security in high vibration environments
AIR FILTER	Front tool-less access to the system filter for easy cleaning and maintenance
CHASSIS NET WEIGHT	61.0 Lbs. (27.7 Kg.) – includes chassis + 4, dual-processor HDEC Series SHBs + 1, four-segment backplane + 4, rear-access power supplies
METRIC DIMENSIONS	48.3cm (W) x 22.2cm (H) x 48.8cm (D) (with 19" rackmount handles installed)
ENGLISH DIMENSIONS	19.0" (W) x 8.75" (H) x 19.2" (D) (with 19" rackmount handles installed)
	NOTES.

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. Industry certifications and approvals for specific system configurations are also available.

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.

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NOTES:

A segment's PCIe card slot may not be available with high performance processor options.
 The chassis photos are shown on page one are for illustrative purposes only.
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