**Trenton THS5087**
Shown with a HEP8225 HDEC Series
System Host Board
and HDB8229 Backplane

## FEATURES

- Large format backplane design enables system flexibility
- Up to fourteen PCI Express 3.0 slots
- HDEC Series architecture provides 80 lanes of PCIe 3.0
- Four 2.5" Solid State or Hard Disk Drives
- Intel® Xeon® processors for reliable, high-performance computing
- Lightweight, rugged aluminum chassis design
- N+1 power supplies for mission-critical performance
- Highly configurable and scalable
- Designed, built and supported in the USA

**TRENTON SYSTEMS®**
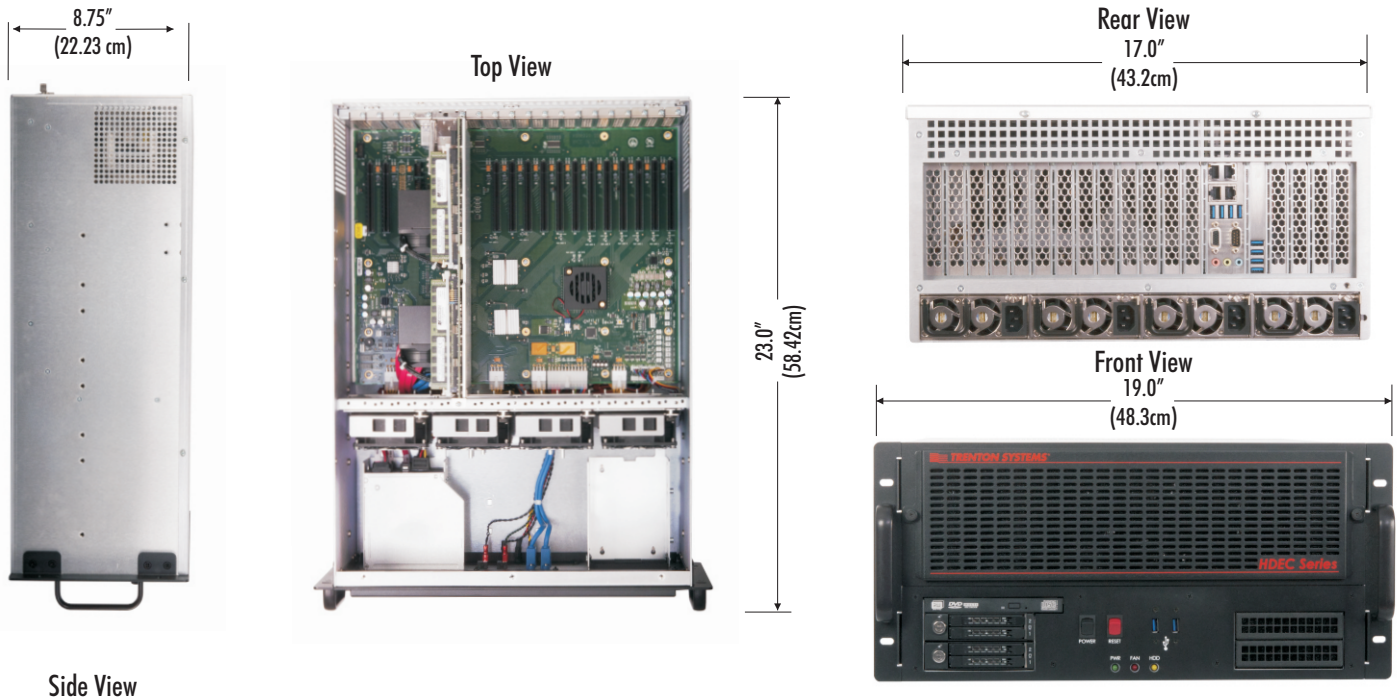Engineered For Reliability

### THS5807 OVERVIEW:

The THS5087 excels in the bandwidth-intensive compute loads often found in the industrial control and automation and remote sensing industries. A HDEC Series System Host Board, such as the HEP8225 with Intel Haswell-EP processors, provides proven processing performance and the flexibility of eighty (80) lanes of PCIe 3.0 delivered to the backplane. Multiple backplane options are available to suit a variety of deployment scenarios and N+1 power supplies minimize MTTR. Four 3.5" disc drive bays and provisions for a slimline optical disc provide storage configurability.

The THS5087 rackmount computer is built on a standard 19" rackmount form factor for easy component rack installation supported by a rugged aluminum chassis design with a 23"/58.42 cm depth dimension. Like all of our rugged rackmount computers, the THS5087 is designed, integrated and supported by Trenton Systems in the United States for higher ROI and extended system life. As always, our exclusive 5-year factory warranty on system host boards and backplanes comes standard with the Trenton THS5087 HDEC Series 5U rackmount computer.

### THS5807 CHASSIS LAYOUT CONFIGURATION:

8.75"
(22.23 cm)

Top View

Rear View
17.0"
(43.2cm)



23.0"
(58.42cm)

Front View
19.0"
(48.3cm)

Side View

### TRENTON RACKMOUNT COMPUTER: THS5807

| MODEL | DESCRIPTION |
|---|---|
| THS5807 | This rackmount computer features fourteen (14) PCIe 3.0 interfaces for increased system flexibility. The HDEC Series architecture provides a full eighty (80) lanes of PCIe 3.0 to the backplane. It is ideal for deployments requiring large numbers of option cards such as remote sensing and industrial control/automation. |

**TECHNICAL SPECIFICATIONS:**

| | |
|---|---|
| **MODEL NAME and DESCRIPTION** | THS5087- 5U, 23" deep, rackmount computer with a HDEC Series Backplane and System Host Board, N+1 power supplies |
| **BASE CONFIGURATION** | The base configuration of the THS5087 rackmount computer provides the fastest product delivery possible at the lowest possible price point. The base configuration consists of the following sub-components.<br>① Processor Board Type: HDEC Series System Host Board<br>② Base Processors: Intel Xeon E5-2620 v3<br>③ Base Processor Specs.: 2.4GHz, six-core with Intel Hyper-Threading, 15MB Cache, 85W TDP<br>④ Option Card Slots: 14, PCI Express 3.0 slots<br>⑤ System Memory: 8GB installed (2, DDR4-2133 DIMMs), expandable up to 512GB<br>⑥ Storage: 1, 500GB 2.5" SATA III HDD, front removable, installed<br>⑦ Optical Media: None, optional DVD-RW available<br>⑧ O/S: None, optional Windows Server Standard 2012 64bit available<br>⑨ Power Supply: 4 - 550W each, N+1 |
| **FRONT PANEL I/O** | 2 - USB 3.0 Ports, LEDs for HDD activity, power and fan status, plus power on/off and system reset switches |
| **REAR PANEL I/O** | ❶ 4, USB 3.0 Ports    ❹ 1, VGA Port    ❼ 1, Audio Out (3.5mm jack)<br>❷ 4, USB 2.0 Ports    ❺ 2, Gigabit Ethernet Ports    ❽ 1, Line In (3.5mm jack)<br>❸ 1, COMM Port (RS232/422/485)    ❻ 2, 10Gigabit Ethernet LAN    ❾ 1, Microphone In (3.5mm jack) |
| **I/O CARD SLOT CONFIGURATION** | Support for up to fourteen, full height, PCI Express 3.0/2.1/1.1 plug-in option cards: 4 - PCIe x16, and 10 - PCIe x8 |
| **PROCESSOR OPTIONS** | The HEP8225 SHB's Intel® C612 Platform Controller Hub supports the additional long-life processor options listed below:<br>• Intel® Xeon® E5-2695 v3: 2.3GHz, 14-core with Intel® Hyper-Threading, 35MB Cache, 120W TDP<br>• Intel® Xeon® E5-2680 v3: 2.5GHz, 12-core with Intel® Hyper-Threading, 30MB Cache, 120W TDP<br>• Intel® Xeon® E5-2658 v3: 2.2GHz, 12-core with Intel® Hyper-Threading, 30MB Cache, 105W TDP<br>• Intel® Xeon® E5-2640 v3: 2.6GHz, 8-core with Intel® Hyper-Threading, 20MB Cache, 90W TDP<br>• Intel® Xeon® E5-2609 v3: 1.8GHz, 6-core without Intel® Hyper-Threading, 15MB Cache, 85W TDP<br>• Intel® Xeon® E5-2648L v3: 1.8GHz, 12-core with Intel® Hyper-Threading, 30MB Cache, 75W TDP<br>• Intel® Xeon® E5-2628L v3: 2.0GHz, 10-core with Intel® Hyper-Threading, 25MB Cache, 75W TDP<br>• Intel® Xeon® E5-2618L v3: 2.3GHz, 8-core with Intel® Hyper-Threading, 20MB Cache, 75W TDP<br>• Intel® Xeon® E5-2608L v3: 2.0GHz, 6-core with Intel® Hyper-Threading, 15MB Cache, 52W TDP<br><br>intel IoT Solutions Alliance |
| **DRIVE BAYS** | 4 - 3.5" drive bays supporting 4 2.5" storage drives in base configuration. Alternative configurations are available.<br>1- Slim-line optical media drive bay is available for all configurations. |
| **COOLING** | 4 - 92mm Fans (front-mounted), 175.03 CFM each, 2 - 60mm Fans (heatsink-mounted), 40.5 CFM each, with on-board PWM fan speed control |
| **AIR FILTER** | Front access system filter for cleaning and maintenance |
| **POWER SUPPLY OPTIONS** | N+1 redundant 550W, base configuration, additional workstation power supply options available |
| **MECHANCIALS** | • 5U, 23" aluminum rackmount chassis: 19.0"/48.3cm (W) x 8.75"/22.23cm (H) x 23"/58.42cm (D)<br>• Chassis Standard: EIA RS-310C<br>• Chassis weight: 51lbs./23.13kg. includes chassis, dual-processor HDEC Series System Host Board and power supply only<br>• Final system weight is a function of a your specific THS5087 rackmount computer configuration |

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.

*NOTE: The chassis photos on page one are shown for illustrative purposes only.*

**TRENTON SYSTEMS®**
**Engineered For Reliability**

8415087 11105 1.0