

**TRENTON
SYSTEMS**
Rugged Computers

SEP8253
Single Board
Computer

XEON® SCALABLE PERFORMANCE SILVER AND GOLD

HDEC Series Architecture delivers 88 lanes of PCIe to a compatible Backplane

Ruggedized, designed and made in USA x86 single board computer for demanding applications

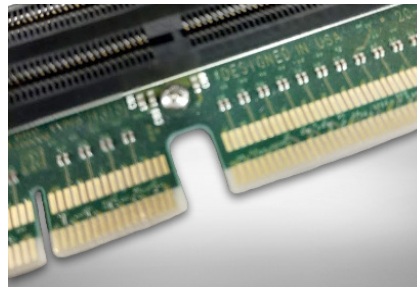
Up to 44 cores/88 threads and 8 ECC RDIMMs with up to 3TB of DDR4-2933 standard memory with Optane™ DC Persistent Memory support! The SEP8253 is designed to tackle the toughest industrial and embedded computing challenges.

PRODUCT DETAILS



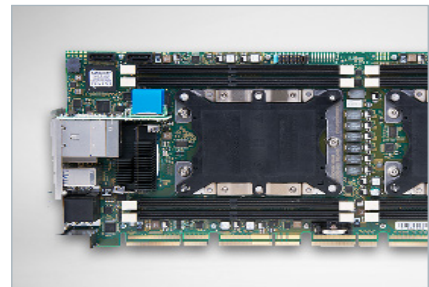
Xeon® Cascade Lake CPUs

Dual CPUs deliver high performance and 11+ years of availability for embedded applications.



88 Lanes of PCIe Gen 3

Pair with a compatible HDEC Series Backplane to integrate large numbers of COTS PCIe cards.



IPMI / Out-of-Band

Trenton Smart System Management provides industry standard IPMI 2.0 support for monitoring and control.



www.trentonsystems.com

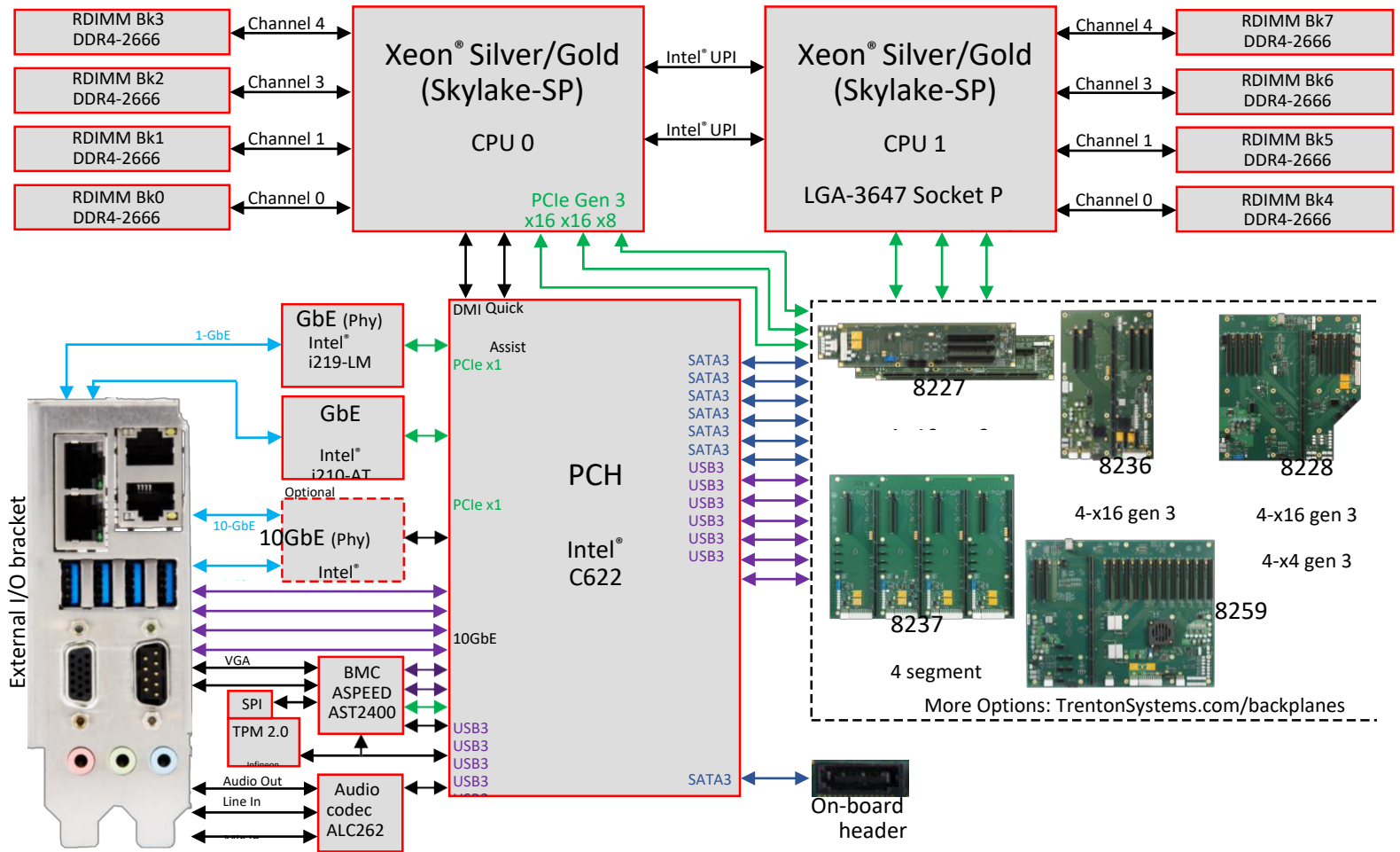
Visit our website for more info.

Phone: (770) 287-3100

Email: sales@trentonsystems.com

SEP8253 HDEC SERIES SBC

BLOCK DIAGRAM



www.trentonsystems.com
Visit our website for more info.

Phone: (770) 287-3100
Email: sales@trentonsystems.com

SEP8253 HDEC SERIES SBC

TECH SPECS

Model Number

SEP8253

Board Type

HDEC Series SHB driving 88 lanes of PCIe Gen3 via card edge fingers to a compatible backplane.

Environmental

Temperature: -10° C to 50° C (operating)* and -30° C to 70° (storage) *processor dependent

Humidity: 5% to 90% non-condensing

Environmental ratings assume 350LFM of airflow across the board. Additional cooling solutions may be available. Contact Trenton for more information.

Processors

The SEP8253 supports Intel® Xeon® Scalable Performance Silver and Gold processors (LGA-3647 "Socket P") up to 125w TDP each. Additional Cascade Lake-SP/Skylake-SP processors may be supported, depending on application. Contact Trenton for more information.

Memory

8x 288-pin RDIMM slots supporting DDR4-2400/2666/2933 ECC up to 1.5TB standard memory and 4.5TB of Intel® Optane™ DC memory per CPU

*Speed and capacity processor dependent. Registered DIMMs are required for use on the SEP8253.

Chipset

Intel C622 Platform Controller Hub (Lewisberg LBG-2)

Management and Security

ASPEED AST2400 BMC supporting IPMI 2.0, TPM 2.0 support via Infineon SLB9665

I/O

Rear Bracket: 2x 10GbE (RJ45 via Intel x557) 2x 1GbE (RJ45 via Intel i210-AT and i219-LM) 4x USB 3.0, Line Out, Line In, Mic In (3.5mm), RS232/422/485 (DB9), VGA video (DB15, up to 1920x1200)

Routed to Backplane: 6x SATA600, 6x USB 3.0

Onboard: 1x SATA600

Dimensions

13.345 (33.9cm)" (L) 5.570 (14.6cm) W

Both standard and low profile cooling solutions are available. Contact Trenton for more information.

A low profile cooling solution usually results in a 25-30% reduction in a systems maximum operating temperature rating.



www.trentonsystems.com

Visit our website for more info.

Phone: (770) 287-3100

Email: sales@trentonsystems.com

SEP8253 SINGLE BOARD COMPUTER



www.trentonsystems.com
Visit our website for more info.

Phone: (770) 287-3100
Email: sales@trentonsystems.com