VANGUARD® 3U
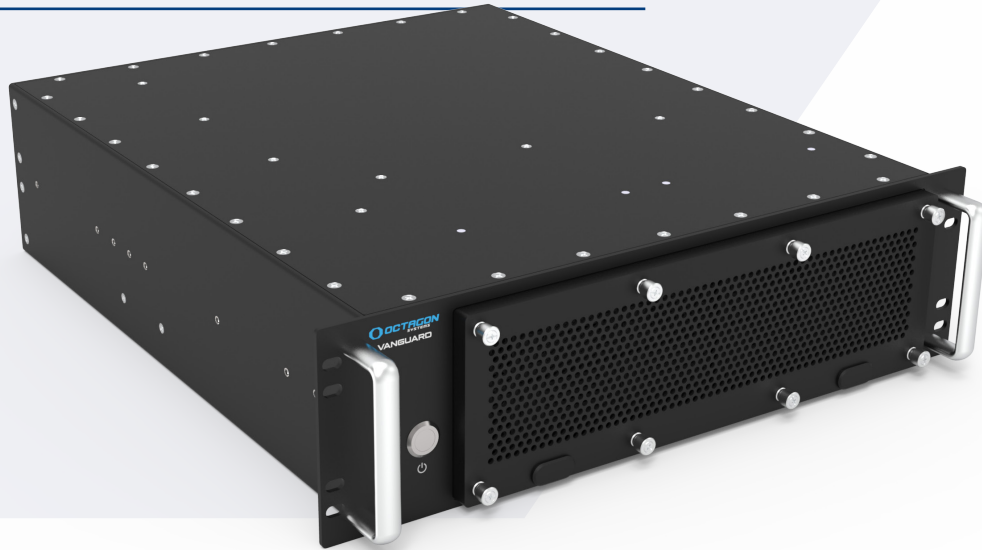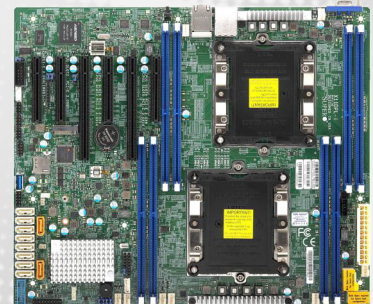

PRODUCT HIGHLIGHTS

- ⊕ Latest generation of Intel® Scalable Xeon© processors

- ⊕ Fully featured, dual socketed, shock isolated system board with 6-slots of PCIe expansion with robust card retention

- ⊕ Hot-Swap storage bays with up to thirty (30) 2.5" hot-swappable devices, with slim optical drive support, all front panel accessible

- ⊕ High performance R/W optimization with data security (Quick Erase/Security Erase/ Destroy/Write Protect) SSD Options

- ⊕ Hot-swap, dual-redundant 650W wide-range AC input power supplies

- ⊕ Three (3) removable, high-reliability, high velocity fans with optional air filters for dust ingress protection

- ⊕ Short depth (20-inch), 19" rackmount with rugged sliders

- ⊕ Customizable EMI-shielded Rear IO Panels

- ⊕ Innovative EMC shielding for standard I/O cabling

- ⊕ MIL-STD-810G, MIL-STD-167, MIL-STD-461F qualifications

- ⊕ Made in Canada & USA

FEATURES

OPERATING SYSTEM	Windows 10 Pro, Windows 10 Enterprise LTSB, Windows Server 2016 or Linux
PROCESSOR	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support up to 140W, 2 UPI > 10.4 GT/s
CHIPSET	Intel® C621 Chipset
MEMORY	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots RDIMM: 64GB, LRDIMM: 128GB 3DS LRDIMM: 128GB, 256GB
STORAGE	SATA 3.0 - Ten (8 SATA + 2 SATA DOM) SATA ports (I-SATA0~7 & S-SATA0/1) RAID Support via PCH - RAID 0, 1, 5, 10 128GB SSD, M.2 (2280) Interface, SATA3.0, 6.0Gb/s
BASE BOARD MANAGEMENT CONTROLLER	ASPEED AST2500 BMC supports IPMI 2.0 One (1) dedicated IPMI LAN VGA Graphics controller via AST2500 BMC
ETHERNET LAN	Dual LAN Lewisburg Marvell 88E1512 PHY
SSD DEVICES	MIL-STD-810-F/G 2.5" SATA SSD 3MR2-P SATA III MLC Flash w/ 3,000 P/E Cycle Limit Capacities from 8GB~2TB rated at sequential R/W of 520/450 MB/sec Data security (Quick Erase/ Security Erase/ Destroy/ Write Protect) High random R/W performance SMART disk health monitoring Intelligent error recovery system Enhanced power cycling management iCell technology for data protection
EXPANSION SLOTS	Two (2) PCI-Express 3.0 x16 slots supported by CPU1 and CPU2 Three (3) PCI-Express 3.0 x8 slots supported by CPU1 One (1) PCI-Express 3.0 x4 in x8 slot supported by CPU1 M.2 Interface: 1 SATA/PCI-E 3.0 x4 M.2 Form Factor: 2260, 2280, M-Key

BIOS AND SOFTWARE	AMI UEFI, Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
PERIPHERAL DEVICES	Four (4) USB 2.0 ports on the rear I/O panel
TRUSTED PLATFORM MODULE	TPM 2.0 also supports Intel® vPro Technology and Intel® Trusted Execution Technology (Intel® TXT)
POWER	100-250VAC 650W Dual Redundant Hot-Swappable, US Standard EIA Plug MIL-STD-1399-300B, DOD-STD-1399-700-1
MECHANICAL	Outer Chassis: Machined aluminum alloy #6061 T6 overlapping panel extrusions for superior EMC and zero torsional flex Inner Chassis: 5052 H32/H34 Dimensions: 2U x 19" W x 20" D Weight: Payload dependent
ENVIRONMENTAL	Operating Temp: 0-50°C; Storage Temp: -40-70°C Humidity: Up to 95% Non-Condensing Vibration: MIL-STD-167-1A & random vibration per MIL-STD-810G Shock: Operating while exposed to 20g shocks per MIL-STD-810G EMI/EMC: Tested per MIL-STD-461F
QUALIFICATIONS	MIL-STD-1399, MIL-STD-810G, MIL-STD-461F MIL-STD-167
OPTIONAL 3RD PARTY PCIE CARDS	High Performance 3rd Party Graphics Reflective Memory Fiber / Copper Media 1GbE & 10GbE Ports MIL-STD-1553, ARINC 429 Ports

ORDERING INFORMATION

Contact us at **855.365.2188** or visit **jsquared.com/general-inquiries** to begin the ordering process.

VAN - 3 - 22 - X - 03 - R - XXX

- VANGUARD® Server
- Type (2U, 3U, etc.)
- Server Depth (in inches)
- Processor X-IntelXeon
- Processor Generation
- I/O Direction R: Rear I/O
- Reserved for Configuration

Designed, Tested & Built
OCTAGON TOUGH®

Rev 2.1

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