



Description

This commercial-off-the-shelf (COTS) HPC platform offers flexible configuration options to meet demanding computing requirements and is available integrated, tested, and configuration controlled under Elma's ISO-9001:2008 and AS-9100C operating processes and procedures.

(Tower orientation shown at left. Same unit also comes with rack-mount hardware which is typically installed prior to shipment by Elma)

Features

- Processor, devices, and I/O
 - CPU: Xeon® E5-2600V4/3 processors, Dual Socket R3 (LGA 2011)
 - Memory: 16x288-pin DDR4 DIMM slots, up to 2TB of ECC 3DS LRDIMM or 1TB RDIMM
 - Cores/Cache: Up to 22 Cores, up to 55MB Cache
 - System Bus: QPI up to 9.6GT/s
 - Chipset: Intel® C612 chipset
 - SATA: SATA 3 (6Gbps), RAID 0, 1, 5, 10
 - IPMI: v2.0 support; IPMI 2.0 with virtual media over LAN and KVM over LAN support; ASPEED AST2400 BMC
 - Network Controllers: Intel® i350 Dual Port Gigabit Ethernet; supports 10/100/1000Bt; Realtek RTL8211E for IPMI
 - Graphics: ASPEED AST2400 BMC
 - SATA: 10*SATA 3 (6Gbps) ports
 - LAN: 2*RJ45 Gigabit LAN, 1*RJ45 dedicated IPMI LAN port all integral to motherboard/chassis
 - USB: 5*USB3.0 ports (2 rear, 2 via header, 1 Type A), 4*USB2.0 ports (2 rear, 2 via headers)
 - Audio: HD Audio
 - Video: 1*VGA port
 - Serial Ports: 2*COM ports (1 rear, 1 header)
 - Thunderbolt: Thunderbolt AOC Header
 - PCI-Express: 7slots total: 4*PCIe 3.0 x16 double width; 2*PCIe 3.0 x8 (in x16 slot) support Thunderbolt 2.0 ACO, 1*PCIe 2.0 x4 (in x8 slot)
 - BIOS: 128Mb SPI Flash EEPROM with AMI® BIOS
 - BIOS Features: PnP, APM 1.2, DMI 2.2, ACPI 1.0/2.0, USB Keyboard support, SMBIOS 2.3, UEFI
 - Drive Bays: 8*3.5-inch hot-swap SATA/SAS drive bays
 - Peripheral Bays: 3x5.25-inch drive ays in storage module, rotates 90-degrees for rack-mount, 1*3.5-inch fixed drive bay
 - GPU Support: K1/K2/K10/K40/K80/M40/M60/Xeon Phi

Applications and Related Products

These HPCs are used where popular Commercial-Off-The-Shelf (COTS) computing platforms are suitable for the application and the program requires delivery of consistent products driven by documented processes, procedures, and configuration managed integration and test practices.



- Industrial and Rugged equipment racks
- Transit cases
- Internal and external cable assemblies
- Ethernet switches and routers
- Integrated equipment racks with servers, Ethernet switches and routers, data storage, cables, displays, keyboards, KVMs, UPS, etc.

Configurable High Performance Computers

Rack-mount, 4U tall, Dual Xeon E5-2600 CPUs

Features

- Chassis
 - 4Ux19-inch rack-mount
 - Color: Black
 - Height: 7-inches, Width: 19-inches (rack-mount flanges), Depth: 26.5-inches
 - Cooling: 4*92x38mm 4-pin PWM middle cooling fans, 2*80x38mm 4-pin PWM rear exhaust fans
 - Heatsink: 2 active heatsink with optimal fan speed control
 - Power supplies: 2000W redundant power supplies with PMBus
 - Power Input: 1000-watts @100-127VAC, 12A max, 50-60Hz
2000-watts @200-240VAC, 11.8A max, 50-60Hz
 - Power Output: 1000-watts: +12VDC@83.3A, +12Vsb@1A
2000-watts: +12VDC@166.7A, +5Vsb@1A
 - RoHS compliant
 - Operating temperature: +10°C to +35°C (+50°F to +95°F)
 - Non-operating temperature: -40°C to +70°C (-40°F to +158°F)
 - Operating relative humidity: 8% to 90% non-condensing
 - Non-operating relative humidity: 5% to 95% non-condensing

Examples of configurations options:

- Contact Elma regarding configuration options available for the base platform specified above:
 - nVidia-based GPU boards
 - FPGA and I/O boards
 - Additional Ethernet ports (gigabit, 10 gigabit, copper, fiber, etc)
 - Precision clock sources and timing boards
 - Operating systems and system software installation
 - Hard and solid state disk drives
 - DVD/ BluRay, and other peripherals
 - Peripherals such as Keyboard, Mouse, Display, KVM, Transit cases, etc.
- The Elma process:.
 - Configuration Management
 - Documented Test Plans
 - Optional burn-in, run-in, performance load testing
 - Inspection and test report can be provided by serial number for each system
 - Traceability
 - ISO-9001, AS9100

Order Information

Model Number: SPCZZZZ4NIXONLN-xxxx

"xxxx" is used to identify specific build configurations

configuration controlled part number, bills of materials, and other documentation assigned and created for each unique version

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