

WARP Mechanics® AP-2110 Dense Compute Application Platform

Features & Benefits

- Up to 24 cores of high-speed Intel processors (2x 12-core CPUs)
- Up to 512GB DDR4 RAM (8x ECC LRDIMM slots)
- 1x PCI-E 3.0 x8 Full-height Half-length slot
- Network options:
 - 2x 1Gbps Ethernet
 - 8x 12Gbps SAS
 - 2x 10Gbps Ethernet
 - 2x 40Gbps Ethernet
 - 2x 40/56 Gbps FDR IB
- 4x 3.5"/2.5" drive slots

For application platforms, density means getting a high ratio of CPU and RAM per RU. The **WARP Mechanics AP-2110** delivers world-class performance and energy efficiency in a package optimized for CPU and RAM density without compromise. This application platform is available as a standalone system or as an integrated component for several WARP Mechanics turnkey server appliances.

Each AP-2110 is a full-featured application-processing platform. It is possible to configure platforms in an HA relationship to form redundant application controllers, or as independent nodes in scalable server arrays. Dense, fast, and reliable, the AP-2110 platform is well-suited for large scale-out systems in which any application module in the cluster could take over for any other.

The AP-2110 may contain up to two high-power 12-core Intel® processors, yielding 24 cores and 512GB of RAM per chassis. The platform also provides options for a wide range of high-speed I/O interfaces beyond the two built-in Gigabit Ethernet ports. Depending on the application, the AP typically ships with 2x 10Gbps interfaces per node. For extreme performance to up-level hosts and down-level clients, interface options include 40Gbps Ethernet, 6/12Gbps SAS, and 40/56Gbps FDR InfiniBand.

The AP-2110 provides onboard IPMI 2.0 management plus an integrated KVM with dedicated LAN connectivity. Each application platform comes with four hot-swap 3.5"/2.5" drive modules on the front, which may be used for application or user data, depending on the nature of the application. For larger configurations, the AP-2110 can be combined with any of the WARP Mechanics storage platforms or appliances such as the ultra-dense WDS-8460 JBODs, which can scale to over two petabytes connected to any given AP-2110.



Wherever your business needs to go, the WARP Mechanics portfolio can get you there, faster and more cost-efficiently than any other products in their class.

WARP Mechanics® AP-2110

Dense Compute Application Platform

Technical Specifications



Ordering Part Number and Product Description

vDC-021100 • Dense Compute Application Platform (WARP AP-2110)

Major Features

- Single high-capacity application processing platform
- Up to 18 Cores and 512GB ECC LRDIMM per AP using 32GB LRDIMM
- 12x 3.5" (front) + 2x 2.5" (rear) integrated HDD modules per chassis
- High-efficiency power supply
- Out of band management, remote power control & UID function

Processor Support

Intel® Xeon® Processor E5-2600v3 (Haswell) Up to 135W

Memory

2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
Up to 512GB DDR3 ECC LRDIMM, 256GB DDR3 Registered ECC RDIMM

System Management

IPMI 2.0 with virtual media over LAN and KVM-over-IP support
On selected appliances, WARPware CLI management interface

Redundant Hot-Swap Components

- 2x Power supply / fan FRUs
- 4x disk drive modules

Rackmount Enclosure

1U packaging designed for standard 19" racks. Sliding rail kit for serviceability.
Dimensions (HWD): 1.7" (43mm) x 17.2" (437mm) x 19.8" (503mm)
Gross weight: 38 lbs (17.24kg)

Adapter Slots

1x PCI-E 3.0 x8 Full-height Half-length slot

Built-in IO ports

- 2x RJ45 1Gb Ethernet LAN ports
- 1x RJ45 Dedicated IPMI LAN port
- 2x USB 3.0 ports
- 2x USB 2.0 ports
- 1 VGA port
- 1 RS232 Fast UART 16550 port

Firmware/Software

Includes tools for managing firmware and advanced features. Other software options are appliance-specific.

Disk Drive Modules

4x Hot-swap 3.5"/2.5" SAS/SATA HDDs and/or SSDs per chassis.

Scalable to 1000s of drives when combined with WARP mechanics external storage enclosures.

I/O and Network Controller Options

Depending on the applications loaded, any given module may be configured with a selection of the following options:

- Up to 6x 1Gbps Ethernet
- Up to 2x 10Gbps Ethernet
- Up to 2x 40Gbps Ethernet
- Up to 8x 12Gbps SAS HBA or RAID
- Up to 2x 40Gbps or 56Gbps InfiniBand

BIOS Type

128Mb SPI Flash EEPROM with AMI BIOS

BIOS Features

- Plug and Play (PnP)
- APM 1.2
- PCI 2.3
- ACPI 3.0 / 4.0
- USB Keyboard support
- SMBIOS 2.7.1
- UEFI 2.3.1

Environmental Information

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)

AC Power

400W (1+1) Redundant SuperCompact Short-depth AC-DC Gold-level power supply with PMBus and I2C; 100-240 V, 50-60 Hz, 6-3 Amp

Standards Compliance and Certifications

UL, RoHS

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