

WARP Mechanics® AP-3113-PA04 SFF Application Platform

Features & Benefits

- 4x 3.5" drive bays in a 1U chassis, 12Gbps SAS capable
- Energy Efficient Xeon E5-2600 v3 Processor
- Up to 90% increase in workload performance
- Support for up to 24 DDR4 DIMMs
- 2x PCIe slots via riser cards
- I/O modules available with 1/10/40GbE or FDR InfiniBand (does not consume PCIe slots)

The power and performance of the Intel® Xeon® processor E5-2600 v3 family reaches peak efficiency with the **WARP Mechanics AP-3113-PA04**, a rack mount Application Platform delivering world-class performance in a package optimized for CPU and RAM density, a full range of PCIe slot options, and a highly-capable internal switched SAS architecture. This workhorse platform is the basis for several WARP Mechanics turnkey storage server appliances.

High memory capacity, networking, storage and I/O flexibility combine with innovative design to provide an exceptional and reliable server for business IT, appliance, data center, cloud and high performance computing applications. The AP-3113-PA04 components are sourced through authorized suppliers to show the transparency and traceability of its supply chain with the Intel® Transparent Supply Chain. This traceability establishes accountability of manufacturing and helps to fight the infiltration of counterfeit components.

The AP-3113-PA04 may contain up to two 18-core processors, yielding 36 cores and 1.5TB of RAM per chassis. In addition to the onboard 1Gb/10GbE ports, the platform supports a wide range of high-speed I/O interfaces. Embedded I/O modules are available with 1/10/40GbE or FDR InfiniBand, freeing up its PCIe slots for other purposes such as additional 1/10/40Gbps Ethernet, 6/12Gbps SAS, or 40/56/100Gbps InfiniBand for high network throughput per node.

The AP-3113-PA04 provides an Integrated Management Module for IPMI 2.0 management with virtual KVM and comes with 4x hot-swap 3.5" drive bays in front via integrated SAS/SATA controller. For larger capacity, combine it with any of the WARP Mechanics storage platforms or appliances such as the ultra-dense WDS-9460 JBODs, which can scale to over nine petabytes connected to any given AP-3000.



Wherever you and your company need 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-3113-PA04

Technical Specifications



Ordering Part Number and Product Name

VDC-031103-PA04 • AP-3113-PA04 Application Platform

Server Board Specification

CPU:

- Dual Intel® Xeon® E5-2600 v3, up to 145W TDP, Socket-R3 LGA2011-3

Memory Spec:

- Up to 1.5TB using 64GB DIMMs, DDR4 RDIMMs/LRDIMMs max 2133MT/s
- 24 DIMMs, 3 DIMMs per channel, 4 channels per processor
- DDR4 Speed: 1600MT/s, 1866MT/s, 2133
- Voltage: 1.2V, DDR4 Standard I/O voltage

PCIe Architecture

Ethernet:

- Dual RJ45, Network Connectors supporting 10GBaseT & 1GBaseT
- Single RJ45, Dedicated 1GbE server management port

I/O Modules:

- One proprietary multi-port IO Module (10Gb SFP+/40Gb QSFP/FDR QSFP)
- One proprietary internal (x8 PCIe) supporting Intel® RAID Module

Riser Card (2x PCIe 3.0): two x16 Electrical, x16 (Mech) for host adapters

Redundant Hot-Swap Components

- Twelve SATA/SAS 3.5" drive modules
- Two rear-mounted 2.5" SATA drives
- Two 1100W power supplies (PSU)

Rackmount Enclosure

Chassis Dimensions:

- 17.25" (439mm) W x 28" (711mm) L x 1.72" (44mm) H
- Un-packaged Net Weight: 12.3 Kgs, 27.1 Lbs.

Packaging Dimensions:

- 22.72" (577mm) W x 38.70" (983mm) L x 10.23" (260mm) H
- Packaged Gross Weight: 21.3 Kgs, 47.0 Lbs.

PSUs per chassis:

- Up to 2, supporting 1+0, 1+1 Redundant Power and 2+0 Combined Power

Power Supply:

- 750W AC 80 PLUS Platinum (optional 750W DC available)

Fans:

- Six managed non-hot-swap system fans

Disk Drive Modules

Four (4) 3.5" front bays:

- Up to 4x 6Gbps SATA drives -or-
- Up to 4x 12Gbps SAS drives with optional SAS controller

Server Management

BMC Management:

- Integrated Baseboard Management Controller, IPMI 2.0 compliant
- Dedicated RJ45 management port
- Remote KVM Management and device mapping via Intel® RMM4-Lite accessory

BIOS Type: UEFI BIOS

Intel® Transparent Supply Chain:

- Includes Statement of Conformance and Platform Certificate
- TPM Version 1.2

Firmware/Software

WARP Mechanics controller firmware supports SES 3.0 for in-band and IPMI 2.0 for out-of-band management. WARPware hosts include tools for managing firmware and advanced features.

Monitoring and Reporting

Monitoring for temperature, advanced power and cooling modules including blower speed control, disk drives and I/O module(s). In-band reporting of all serial number, part number and revisions of each FRU and chassis via IPMI/SES.

Warranty Information

Standard one year; up to three via normal renewable support; extended to five years in special circumstances for large installations. Contact WARP Mechanics sales to discuss special requirements.

Power

Voltage: 90 Hz to 132 V and 180 V to 264 V

Frequency: 47 Hz to 63 Hz

Source Interrupt: No loss of data for power line drop-out of 12 mSec

Surge Non-operating and operating: Unidirectional

Line to earth only:

- AC Leads 2.0 kV
- I/O Leads 1.0 kV
- DC Leads 0.5 kV

Operating Environment

Temperature: +10°C to +35°C, max. change rate <10°C per hour.

Acoustic noise, Sound power: 7.0BA with HDD stress at ambient (23 +/-2°C)

Shock: Half sine, 2g peak, 11 mSec

ESD: +/-12 KV except I/O port +/- 8 KV

System Cooling: 1600 Watt Max – 5459 BTU/hour

Non-Operating Environment

Temperature: -40°C to +70°C

Relative humidity: 90%, non-condensing at 35°C

Vibration: 5 Hz to 500 Hz, 2.20 g RMS random

Shock: 25g, velocity change 205 inches/second (80 lbs. to < 100 lbs.)

Standards Compliance

IEC/EN/UL/CSA 60950-1, 2nd Edition

RoHS and WEEE compliant

EN55022 :2006 + A1 :2007

EN55024-IT product family standard for Immunity

Meet the requirements of IEC62368-1

Manufactured under an ISO 9002 registered quality system

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