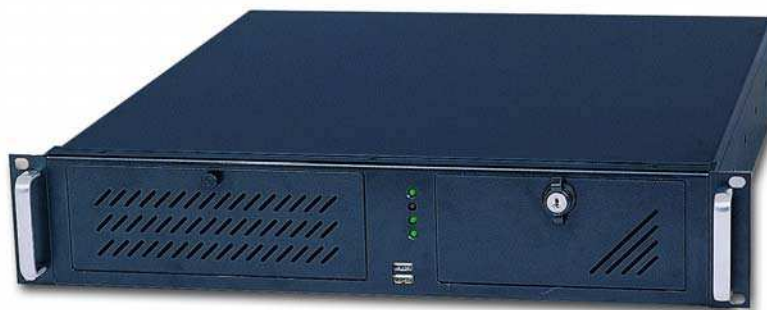


PRC-2204A

The world's first 19" rack-mount
PICMG 1.2 dual Intel® Xeon™
processor based system platform



PRC-2204A is Portwell's first PICMG 1.2 barebone system. With the booming of the Internet business in recent years, there comes a prevailing need for high computing power and expandability within a compact space. PRC-2204A is a rugged 19" 2U rack-mount chassis designed to integrate Intel Xeon processor (ROBO-8820VG2) for space-limited applications. Built upon a PICMG 1.2 embedded PCI-X backplane, it has two independent PCI-X buses to provide high expandability at no sacrifice of speed hold down.

The high computing power is also accompanied by sufficient power source. You could have either single power supply of 400W or redundant PFC power supply of 350W as your choice.

As for the ventilation, PRC-2204A is equipped with three cooling fans, two at the front to draw in cooling air and one at back to accelerate the airflow. The inside tunnel-like cooling design between SBC and PSU helps airflow goes smoothly and keeps the whole system well ventilated. Besides, a Z-shaped support frame is provided to give support to the proprietary cooler for ROBO-8820VG2 to prevent the SBC from bending.

In addition to its industrial functionality, PRC-2204A is designed as a user friendly interface. It has two dual color LED on the front panel, so that the Ethernet activity could be easily observed. A detachable card cage is also provided for ease of installation of SBC and add-on card.

Feature

- Support for dual Intel Xeon processor based ePCI-X SBC (ROBO-8820VG2)
- One NB CD-ROM, one NB FDD and two 3.5" HDD drive bays
- Cooling tunnel design, between SBC and PSU, for expiring heat generated by CPU
- Two 8 cm cooling fans with one replaceable filter at the front and one 4 cm cooling fan at the back
- Four LED indicators for power on/off, hard drive active and Ethernet status
- Detachable card cage design for ease of installation of SBC and add-on card

General

Construction	Heavy-duty steel
Drive Bay	External: NB CD-ROM x1 + NB FDD x1 Internal: 3.5" HDD x2
Cooling Fan	Two 8 cm cooling fans at the front / One 4 cm cooling fan at the back
Indicator	Power on/off x1, HDD x1, Ethernet activity x2
Switch	Power on/off x1, System reset x1
Air Filter	One front replaceable air filter
Speaker	N/A
Connector	Two USB connectors on the front panel Reserve one COM port and PRT port on the rear panel Two USB, one PS/2 keyboard/mouse and one COM ports available thru the PA-I1KUC daughter board on the rear panel
Standard Color	Black
Dimension	481.6(W) x 502.4(D) x 88.4(H) mm; 19"(W) x 19.78"(D) x 3.48"(H)
Weight	With Single PSU: Net: 23kg (50.7 lb); Gross: 26 kg (57.3 lb) With Redundant PSU: Net: 25.5kg (56.2 lb); Gross: 28.5 kg (62.8 lb)
Backplane	PBP-06V564: Vertical 6-slot (5xPCI-X) PICMG 1.2 backplane

Environment

Operating Temperature Range	0 to 40°C
Storage Temperature Range	-40 to 70°C
Relative Humidity	5% to 95%, non-condensing

Power Supply (Single: ORION-B4001 / Redundant: ORION-B3502 optional)

Maximum Output	Single: 400W PFC / Redundant: 350W PFC
Output Voltage & Current	Single: +5V@33A, +12V@25A, -5V@0.8A, -12V@1.0A, +3.3V@28A, +5Vsb@2.0A Redundant: +5V@35A, +12V@22A, -5V@0.5A, -12V@0.8A, +3.3V@20A, +5Vsb@2.0A
Input Voltage	Single: 90V ~ 264V AC full range / Redundant: 90V ~ 264V AC full range
Input Frequency	47 ~ 63 Hz
Input Current	Single: 7A@115V AC, 3.5A@230V Redundant: 8A max. @90V AC, 5A max. @260V AC
Efficiency	Single: > 70% / Redundant: > 63%
MTBF Reliability	Single: 87,961 hrs / Redundant: 75,145 hrs
Certification	UL, cUL, TUV, CE, FCC

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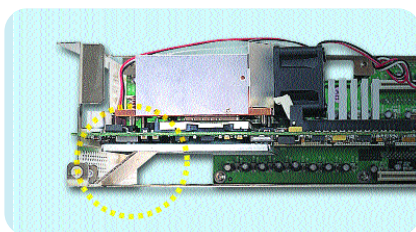
Feature	Benefits
<input type="checkbox"/> PICMG 1.2 compliant	<input type="checkbox"/> Support for ePCI-X SBC
<input type="checkbox"/> Cooling tunnel design between SBC and PSU	<input type="checkbox"/> Better ventilation to enhance system reliability
<input type="checkbox"/> Replaceable air filter	<input type="checkbox"/> For easy cleaning & exchange
<input type="checkbox"/> Two LED indicators for Ethernet on the front panel	<input type="checkbox"/> Ethernet status is easy to be perceived from the front
<input type="checkbox"/> Two independent PCI-X buses	<input type="checkbox"/> For high expandability at no sacrifice of speed hold down

What's New



Lockable door for security

Switches are inside the front door of PRC-2204A for better security.



Support frame for cooler

One Z-shaped support frame for holding the cooler to prevent the SBC from bending.



Cooling tunnel

Two intake cooling fans at the front and one exhaust cooling fan between the SBC and PSU to provide smooth airflow



Card cage

A detachable card cage is equipped for ease of installation.

Ordering Guide

PRC-2204A-6V564-4001

19" 2U rack-mount chassis with vertical 6-slot (5xPCI-X) PICMG 1.2 backplane and 400W PFC ATX power supply

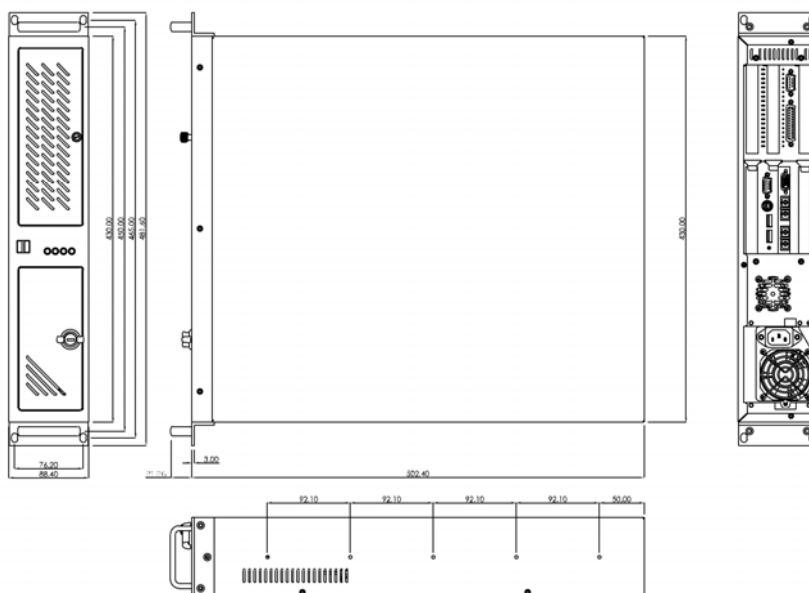
PRC-2204A-6V564-3502

19" 2U rack-mount chassis with vertical 6-slot (5xPCI-X) PICMG 1.2 backplane and 350W redundant PFC ATX power supply



▲ PRC-2204A rear view

Engineering Drawing



Unit: mm