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e-solution  
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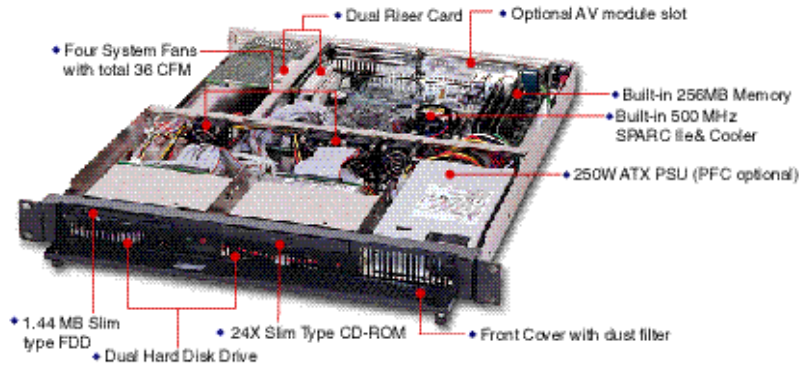
SOLA-1224

Flexible

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# SOLA-1224

## Super Slim 19" 1U Industrial Rack-mount e-Server



With the advent of the 64-bit UltraSPARC™ IIe processor at 500 MHz, demanding network applications requiring the high computing, scalable and reliable hardware platform can be satisfied to meet customers' expectations for high performance and high availability. Here comes the ultra slim 1U system - SOLA-1224 for today's intensive data throughput and high performance computing requirements.

When you demand a configured server that is custom-made to your specific needs, or when a general server box is not an optimal solution, SOLA-1224 is your best alternative.

SOLA-1224 provides full functionality in a compact form factor, including dual Ethernet ports and two 33MHz/32-bit PCI slots with riser cards to provide system with full connectivity and expansion.

It is ideal for OEMs to develop server solutions for the ever-growing requirements in today's advanced network markets such as Telecom and Internet service providers, as well as solutions for the network embedded compute engine markets. It also delivers the performance, flexibility and value required by emerging applications such as general-purpose servers, configured servers, thin servers, embedded control applications like printing, imaging, and server appliances.

What's more, service providers can use this high performance and reliable computing power platform to build up Web-access server appliance, or even single function server including Voice-over-IP (VOIP) or encryption & decryption server for Virtual Private Network (VPN).

Such a low physical profile capability, lean and mean, but fully featured and cost saving entry level platform, coupled with its high performance, renders the platform well-matched to server as the compute engine in devices dedicated to network applications. SOLA-1224, with functional density and flexibility, provides users with options to integrate from low-end to high-end solutions.

SOLA-1224 is housed with super slim but robust PRC-1224 1U chassis, which provides two PCI riser cards for expansion. For storage, CD-ROM, FDD and two HDD, which can be used to perform disk mirror function to prevent data from damage, are delicately integrated in this compact 1U chassis. Highly concerned ventilation is taken into consideration by using four 4cm fans.

### Target applications:

Thin Servers; Server appliances; Configured Servers; Networked-Connected Kiosks; Medical Imaging; Printer Controller; Interactive Voice Response; ATM; Banking Terminal Controller; Soft Switch controller; Firewall; VPN

### Target users:

- ◆ Reliable, competitively priced M/B solutions
- ◆ To build configured, customized server solutions by adding their own values
- ◆ To leverage Sun's performance and design
- ◆ To embed out board technology, high performance, and network connectivity that is required by embedded systems applications

## Ordering Guide

### SOLA-1224-1000

- ◆ AX-1105-500 M/B (Processor built-in)
- ◆ 256MB SDRAM
- ◆ 24X slim type CD-ROM
- ◆ 1.44MB slim type FDD
- ◆ 250W ATX PSU

### SOLA-1224-1001

- ◆ AX-1105-500 M/B (Processor built-in)
- ◆ 256MB SDRAM
- ◆ 24X slim type CD-ROM
- ◆ 1.44MB slim type FDD
- ◆ 250W ATX PSU with active PFC



Features	Benefits
• 1U Compactness	• Highest density system
• 500MHz UltraSPARC IIe with on-chip L2 Cache	• High performance to deliver substantial data throughput at a low cost
• Standard ATX form factor (12" x 9.6")	• Form-fit-function to reduce time-to-market, helping shorten integration tasks and decrease system costs for OEMs
• Up to 2GB Memory	• With a large memory capacity to increase performance by running large application in memory
• Dual Ethernet	• Enable fast and reliable network connectivity and allow redundant network connections for highly available server communications
• Two PCI Slots	• Expandability by using two riser cards to fit into a 1U form factor
• EIDE Controller	• Support up to four ATA66 EIDE drives
• Dual USB	• Allow for expanded connectivity for greater flexibility in building systems
• 2x Serial + 1x Parallel	• Support a wide range of peripheral devices
• PS/2 Connection	• Free up USB ports for other functions
• Advanced System Monitoring	• Reliability highly assured
• Optional Audio/Video Module	• Enable interactive applications to come alive
• 4x 4cm ball-bearing fans with total 36CFM	• Better ventilation to secure system reliability
• Customized 250W PSU (optional PFC version)	• Provide sufficient power source to the system
• Meet EIA RS-310C standard	• Easy to fit in different 19" rack-mount cabinet

## Specifications

### Processor Architecture

- **Processor**  
UltraSPARC™IIe; VIS instruction set, binary
- **Performance**  
500MHz
- **Cache**  
256KB internal L2 cache, 4-way set associative
- **Package**  
Standard 370-pin PGA

### Memory Architecture

- **Memory type**  
Standard 168-pin SDRAM DIMM (PC 133)
- **ECC**  
Single-bit correction Double-bit detection
- **Memory speed**  
100 MHz; Registered DIMM in buffered mode
- **Min./Max.**  
128MB/2GB
- **Built-in**  
256MB x 1

### PCI Expansion Slots

- **Type**  
Three 32-bit, 33 MHz PCI expansion slots

### Capacity

Three PCI slots on-board;  
Two PCI slots available w/ riser cards in 1U

### On Board I/O

- **Ethernet ports**  
Two 10/100-BaseT Fast Ethernet w/ RJ45
- **Serial ports**  
Two serial ports w/ external DB9; 16550 compatible asynchronous
- **Parallel port**  
One parallel port w/ 2 x 13 internal header; IEEE 1284 bi-directional
- **USB ports**  
Two USB ports w/ external USB connector
- **PS/2 ports**  
Two PS/2 ports w/ two internal headers for K/B and Mouse

### Peripherals

- **Disk interface**  
ATA66 EIDE controller w/ two internal headers; Support up to 4xEIDE drives; Max. speed at 66 MB/sec
- **Flash module**  
AX User Flash, 4MB and 8MB
- **Floppy disk interface**  
ALI South Bridge 34-pin on surface, 3.5", 1.44 MB

### Main Board dimension

- **Form Factor**  
Standard ATX
- **Size**  
12" x 9.6"

### Software Support (Not Built-In)

- **Solaris**  
Solaris 8 operating environment or latest
- **SunVTS™**  
SunVTS 4.2 software or latest

### Chassis Mechanical

- **1U Chassis**  
19"(W) x 24"(D) x 1.75"(H)
- **Power Supply**  
250W ATX (Optional PFC version)

### Available Options

- **Audio/Video Module**  
ATI RageXL graphics accelerator, 8MB SGRAM, PCI bus interface for the video chip, Stereo audio line in/out, two headers for micro & headphone, 16-bit EBus-based audio, four external audio jacks
- **Dimension (width x length)**  
3.25" x 4.25"



#### Smart Dual PCI Riser Cards

SOLA-1224 adopts our innovative concept to provide one more PCI riser card than any other 1U solution for flexible expansion. The dual riser cards are supported by more rugged, powerful and specially designed holder.



#### 250W ATX Power Supply

SOLA-1224 is empowered with compact and rugged ATX PSU with 250W to supply sufficient power for the system at full load. PSU with active PFC is also available for European market.



#### 4 drive bays for CD-ROM/FDD/HDD

SOLA-1224 is equipped with one notebook type CD-ROM and FDD for system installation. Meanwhile, two more 3.5" HDD can be applied for the system to perform mirror disk function and prevent your data from damage.



#### Four fans for better ventilation

SOLA-1224 is built with four 4cm ball-bearing fans to provide better ventilation for the system. We choose the right location to allocate the fans for expiring the heat.

## Advanced Platform Provider

State-of-the-art technological development together with a wealth of experience enables us to lead the field in computer development. Our rack mount server systems reflect these qualities. With advanced system design and multi-functional integration our e-server sets new standards in reliability and application.

Experience has shown that reliability and service are of vital importance in networking service applications. We are therefore committed to offering the most steadfast Internet system products to meet the ever-changing industrial standard of today and in the future.

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