

# SB122-PH

# AIC



## Features :

- 1U 10-Bay storage server supports PCIe SSD 2.5" FF drives (NVMe) and SATA/SAS/SSD 2.5" drives to provide a highly dense, hybrid storage solution
- Supports two Intel® Xeon® Processors E5-2600 v3 Product Family
- With Intel® C612 Series Chipset to provide 5+ years product life cycle
- Flexible IO usage with Max IO™ to support up to 2 COTS PCIe 3.0 cards
- Onboard Baseboard Management Controller for system management and IPMI control
- Two 10 GbE SFP+ ports
- Front-to-back airflow and hot-swap redundant fans to provide optimal thermal conditions
- Customizable to meet your requirements

## SPECIFICATIONS

|                                                         |                                                                                                                                                                                                                                                                                                                                                   |                                                          |   |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---|
| <b>Dimensions</b><br>(W x D x H)<br>(with chassis ears) | mm : 482.6 x 787.4 x 44.4                                                                                                                                                                                                                                                                                                                         |                                                          |   |
|                                                         | inches : 19 x 31 x 1.75                                                                                                                                                                                                                                                                                                                           |                                                          |   |
| <b>Motherboard</b>                                      | AIC Server Board Phoenix                                                                                                                                                                                                                                                                                                                          |                                                          |   |
| <b>Processor</b>                                        | Processor Support                                                                                                                                                                                                                                                                                                                                 | Two Intel® Xeon® Processors<br>E5-2600 v3 Product Family |   |
|                                                         | QPI Speeds                                                                                                                                                                                                                                                                                                                                        | 9.6 GT/s, 8.0 GT/s, 7.2 GT/s                             |   |
|                                                         | Socket Type                                                                                                                                                                                                                                                                                                                                       | Socket R3 (FCLGA2011-3)                                  |   |
| <b>Chipset Support</b>                                  | Intel® C612 Chipset                                                                                                                                                                                                                                                                                                                               |                                                          |   |
| <b>System Memory</b>                                    | <ul style="list-style-type: none"><li>• 12 DIMM slots across 8 memory channels (4 memory channels per CPU; 2 channels with 2DPC and 2 channels with 1DPC)</li><li>- 384GB DDR4 2133/1866 RDIMM DRx4</li><li>- 96GB DDR4 2133/1866 RDIMM SRx4</li><li>- 768GB DDR4 2133/1866 LRDIMM QRx4</li><li>- 1536GB DDR4 2133/1866 LRDIMM 3DS 8Rx4</li></ul> |                                                          |   |
| <b>Front Panel</b>                                      | <ul style="list-style-type: none"><li>• Power on/off</li><li>• System ID</li><li>• System reset</li><li>• USB 2.0 Type A connector</li></ul>                                                                                                                                                                                                      |                                                          |   |
| <b>LEDs</b>                                             | <ul style="list-style-type: none"><li>• Power</li><li>• System ID</li><li>• Alert</li></ul>                                                                                                                                                                                                                                                       |                                                          |   |
| <b>Drive Bays</b>                                       | External                                                                                                                                                                                                                                                                                                                                          | 2.5" hot swap PCIe SSD                                   | 8 |
|                                                         |                                                                                                                                                                                                                                                                                                                                                   | 2.5" hot swap                                            | 2 |
| <b>Backplanes</b>                                       | <ul style="list-style-type: none"><li>• 4 x 2-port PCIe backplanes with dual SFF-8643 connectors on each</li><li>• 1 x 2-port 6Gb SAS/SATA backplane with dual SATA connectors</li></ul>                                                                                                                                                          |                                                          |   |
| <b>Expansion Slots</b>                                  | PCIe 3.0                                                                                                                                                                                                                                                                                                                                          | 2 x8                                                     |   |

|                                  |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                              |
|----------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <b>Riser Cards</b><br>(included) | PSG-RC-AR1U-20-XXX<br>(PSG Code: PE1U03) |                                                                                                                                                                                                                                                                                                                                                                                                                     | 1U PCIe Gold-finger to 1 x PCIe x16 + 2 x PCIe x8 (External) |
|                                  | PSG-RC-TO1U-28-110<br>(PSG Code: PEMS02) |                                                                                                                                                                                                                                                                                                                                                                                                                     | PCIe to SFF8643 for front PCIe SSD backplane connection      |
| <b>System BIOS</b>               | BIOS Type                                | • Insyde UEFI BIOS<br>• SPI (Serial Peripheral Interface) FLASH Interface                                                                                                                                                                                                                                                                                                                                           |                                                              |
|                                  | BIOS Features                            | <ul style="list-style-type: none"> <li>• ACPI</li> <li>• PXE</li> <li>• WOL</li> <li>• AC loss recovery</li> <li>• IPMI 2.0 KCS interface</li> <li>• SMBIOS</li> <li>• Serial console redirection</li> </ul> <ul style="list-style-type: none"> <li>• BIOS Boot Specification</li> <li>• BIOS Recovery Mode</li> <li>• SRIOV</li> <li>• PCIe Hotplug</li> <li>• iSCSI</li> <li>• TPM</li> <li>• PCIe NTB</li> </ul> |                                                              |
|                                  | SATA                                     | Built-in SATA RAID controller on Intel® C612 Chipset with software RAID support                                                                                                                                                                                                                                                                                                                                     |                                                              |
| <b>On-board Devices</b>          | IPMI                                     | Aspeed AST2400 Advanced PCIe Graphics & Remote Management Processor<br>• Baseboard Management Controller<br>• Intelligent Platform Interface 2.0 (IPMI 2.0)<br>• iKVM, Media Redirection, IPMI over LAN, Serial over LAN<br>• SMASH Support                                                                                                                                                                         |                                                              |
|                                  | Network Controllers                      | • Intel® 82599ES 10 GbE Controller, dual port, SFP+, PCIe v2.0 (5.0GT/s)<br>• Intel® Ethernet Controller I210-AT, single port GbE controller, PCIe v2.1, 2.5 GT/s, x1<br>• Intel® Ethernet Network Connection I217-LM, single port GbE, 1 Gbps                                                                                                                                                                      |                                                              |
|                                  | Graphics                                 | Aspeed AST2400 Advanced PCIe Graphics & Remote Management Processor<br>• PCIe VGA/2D Controller<br>• 1920x1200@60Hz 32bpp                                                                                                                                                                                                                                                                                           |                                                              |

## • TOP VIEW •

AC 650W 1+1 redundant power supply 80+



\* Power supply and Server board are included.

## • REAR VIEW •

2 x 10 GbE SFP+



## • FRONT VIEW •

8 x 2.5" hot swap PCIe SSD bays



2 x 2.5" SATA hot swap drive bays

|                          |                                                                                                                                                                                                                                                                                                                                                                                 |                             |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>Rear I/O</b>          | LAN                                                                                                                                                                                                                                                                                                                                                                             | 2 x 10 GbE SFP+<br>2 x RJ45 |
|                          | USB                                                                                                                                                                                                                                                                                                                                                                             | 2 x USB 3.0 Type A          |
|                          | VGA                                                                                                                                                                                                                                                                                                                                                                             | 1 x DB-15                   |
|                          | Serial Port                                                                                                                                                                                                                                                                                                                                                                     | 1 x DB-9                    |
| <b>Power Supply</b>      | AC 650W 1+1 redundant high-efficiency power supply 80+<br>• 90-264VAC, 47-63 Hz                                                                                                                                                                                                                                                                                                 |                             |
| <b>System Cooling</b>    | 6 x 40x56mm 21500/18000 rpm hot swap fan modules                                                                                                                                                                                                                                                                                                                                |                             |
| <b>System Management</b> | <ul style="list-style-type: none"> <li>• IPMI 2.0</li> <li>• KVM over IP</li> <li>• Media redirection</li> <li>• Temperature, fan, voltage, PSU sensor monitor</li> <li>• System temperature</li> <li>• System ID / System fail indicator</li> <li>• Remote power on/off/reset</li> <li>• SEL message alarm through mail</li> <li>• SNMP support</li> <li>• Intel NM</li> </ul> |                             |

|                                     |                                                                                                                                                                                                                                                                |                             |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>Environmental Specifications</b> | <ul style="list-style-type: none"> <li>• Operating temperature : 0° - 35°C</li> <li>• Operating altitude condition : 0 ~ 10K feet</li> <li>• Storage temperature : -20° ~ 60°C</li> <li>• System relative humidity : 5% - 95% (38°C) non-condensing</li> </ul> |                             |
| <b>Gross Weight</b>                 | (w/ PSU & Rail)                                                                                                                                                                                                                                                | kgs : 24                    |
|                                     |                                                                                                                                                                                                                                                                | lbs : 53                    |
| <b>Packaging Dimensions</b>         | (W x D x H)                                                                                                                                                                                                                                                    | mm : 590 x 1130 x 273       |
|                                     |                                                                                                                                                                                                                                                                | inches : 23.2 x 44.5 x 10.7 |
| <b>Mounting</b>                     | Standard                                                                                                                                                                                                                                                       | 28" tool-less slide rail    |