



**Front View**

24 x 3.5" hot swap drive bays

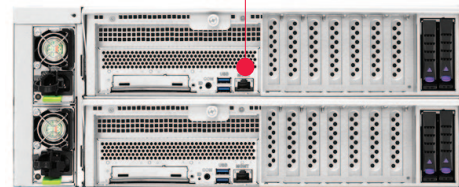


## Features

- 4U 2-Node high-availability storage server supports 24 hot swap 3.5" SAS drive bays
- Fully redundant, fault-tolerant system supporting hot swappable compute nodes and storage drives
- Two compute nodes, Active-Active configuration, each supporting 3rd Gen Intel® Xeon® Scalable Processors (Ice Lake CPU)
- 1GbE, PCIe NTB or SAS link between nodes for communication and fail-over
- Built-in Broadcom 35X48 SAS/SATA expander per node
- Intel® Trusted Platform Module (TPM) header to support Intel® Trusted Execution Technology (TXT)
- 5 x PCIe 4.0 slots + 1 x OCP 3.0

**Rear View**

1 x GbE dedicated IPMI

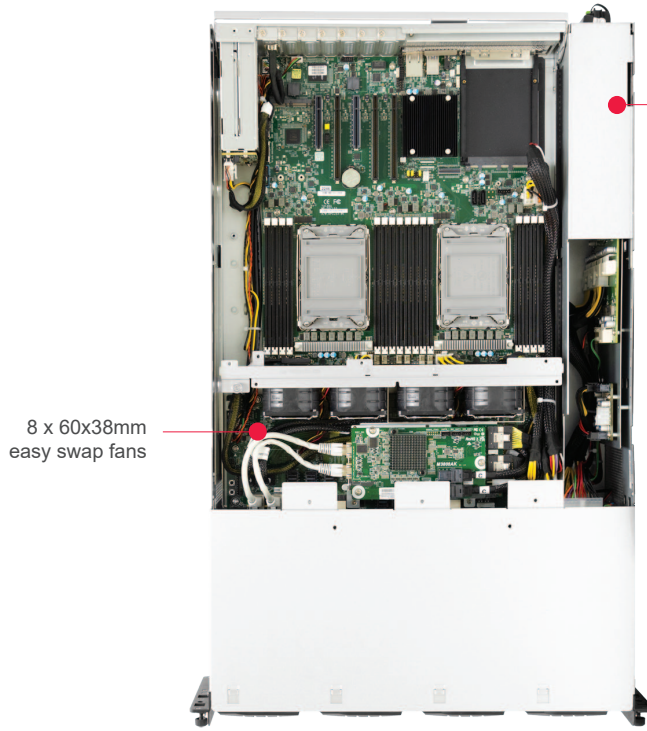


## Specifications

<b>Dimensions</b> (W x D x H)	mm : 438 x 705 x 174.5		
	inches : 17.2 x 27.7 x 6.8		
<b>Motherboard</b> (per node)	AIC Server Board Tucana		
<b>Processor</b> (per node)	Processor Support	3rd Gen Intel® Xeon® Scalable Processors (Ice Lake) <i>*Please contact AIC Technical Support for more info/details about optimized CPUs and specialized system.</i>	
	UPI Speeds	10.4 / 11.2 GT/s	
	Socket Type	Socket P+ (LGA-4189)	
<b>Chipset Support</b> (per node)	Intel® C621A Chipset		
<b>System Memory</b> (per node)	• DDR4 3200/2933MHz RDIMM/LRDIMM • Total 16 memory slots; 8 channel per CPU (1DPC)		
<b>Front Panel</b>	System power on/off, Node power & Warning LEDs		
<b>LEDs</b>	Power, LAN, Drive and Alert		
<b>Drive Bays</b>	External	3.5" hot swap	24
		2.5" hot swap	2 (rear, optional)
	Internal	2.5"	2 x M.2(NGFF)/M-Key/2280
<b>Backplane</b>	1 x 24-port 12Gb SAS backplane		
<b>Expansion Slots</b> (per node)	PCIe 4.0	• 3 x PCIe X16 slots HHHL(LP) + 1 x OCP 3.0 • 2 x PCIe X8 slots HHHL(LP)	
<b>Expansion Board</b>	1 x 48-port 12Gb SAS expander board		

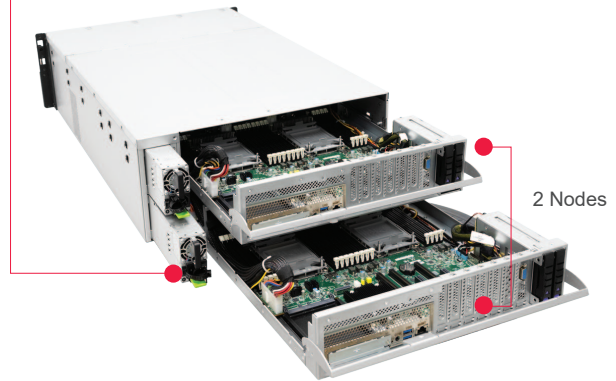
<b>System BIOS</b>	BIOS Type	• AMI UEFI BIOS • SPI (Serial Peripheral Interface) FLASH Interface
	BIOS Features	• ACPI • PXE • AC loss recovery • IPMI KCS interface • SMBIOS • Serial console redirection • SRIOV • TPM • PCIe hotplug
<b>On-board Devices</b>	SATA/SAS	Lewisburg PCH on-chip solution supports 12 x SATA 6.0 Gb/s • 2 x SATA 7-pin • 8 x SATA by Slimline + 2 x SATA by M.2 (supports both SATA/PCIe by PCH HSIO)
	IPMI	Aspeed AST2500 Advanced PCIe Graphics & Remote Management Processor • Baseboard Management Controller • Intelligent Platform Interface 2.0 (IPMI 2.0) • iKVM, Media Redirection, IPMI over LAN, Serial over LAN • SMASH support
	Network Controllers	• Realtek RTL8211E GbE for BMC dedicated management port (NCSI shared NIC - reserved for OCP & I210 by jumper setting) • Intel® I210 GbE for BMC shared NIC management port by onboard connector (NCSI shared NIC - reserved for OCP V3.0)
	Graphics	Aspeed AST2500 Advanced PCIe Graphics & Remote Management Processor • PCIe VGA/2D Controller • 1920x1200@60Hz 32bpp

## Top View



8 x 60x38mm  
easy swap fans

- 1200W 1+1 CRPS RPSU 80+ Platinum
- 1600W 1+1 CRPS RPSU 80+ Platinum



2 Nodes

(Power supply and Server board are included.)

<b>Rear I/O</b> (per node)	LAN	1 x GbE dedicated IPMI
	USB	2 x USB 3.0 double-stack Type-A connectors
	Video Output	1 x external DB-15 VGA port
	Serial Port	1 x external COM port phone jack
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>• 1200W 1+1 CRPS redundant power supply 80+ Platinum (~165W processors) by CPU/NVMe supporting wattage SKU options</li> <li>• 1600W 1+1 CRPS redundant power supply 80+ Platinum/AC TO DC/1U/100-240V</li> </ul>	
<b>System Cooling</b>	8 x 60x38mm easy swap fans	
<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> </ul>	

<b>System Management</b>	<ul style="list-style-type: none"> <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>• Storage temperature : -10°C(14°F) ~ 60°C(140°F)</li> <li>• Operating temperature : 0°C(32°F) ~ 35°C(95°F)</li> <li>• Storage Operating Humidity : 5%~95% non-condensing</li> </ul>	
<b>Gross Weight</b>	(w/ PSU & Rail)	kgs : 47 lbs : 104
<b>Packaging Dimensions</b>	(W x D x H)	mm : 605 x 1030 x 404 inches : 23.8 x 40.6 x 15.9
<b>Mounting</b>	Standard	36" slide rail

## Ordering Information

SKU Number	Description
XP1-A401TU01	4U 24-bay high availability storage server, 24x 12G SATA/SAS hot-swap 3.5/2.5" bay, 2x canister, 1200W 1+1 Platinum redundant power supply, 8x 6038 fan, 36" slide rail, w/o bezel; Per canister node: Tucana motherboard, Intel® Lewisburg, DDR4 RDIMM x16, Intel® PCH C621A, 1x GbE dedicate IPMI, 3x PCIe x16 Gen4 (HHHL), 2x PCIe x8 Gen4 (HHHL), 1x OCP 3.0 x16 Gen4, 2x M.2 PCIe/SATA, EATX, 2x CPU heatsink, 2x 2.5" hot-swap SATA
XP1-A401TU02	4U 24-bay high availability storage server, 24x 12G SATA/SAS hot-swap 3.5/2.5" bay, 2x canister, 1200W 1+1 Platinum redundant power supply, 8x 6038 fan, 36" slide rail, w/o bezel; Per canister node: Tucana motherboard, Intel® Lewisburg, DDR4 RDIMM x16, Intel® PCH C621A, 1x GbE dedicate IPMI, 3x PCIe x16 Gen4 (HHHL), 2x PCIe x8 Gen4 (HHHL), 1x OCP 3.0 x16 Gen4, 2x M.2 PCIe/SATA, EATX, 2x CPU heatsink, 2x 2.5" hot-swap PCIe Gen4 NVMe
XP1-A401TU03	4U 24-bay high availability storage server, 24x 12G SATA/SAS hot-swap 3.5/2.5" bay, 2x canister, 1200W 1+1 Platinum redundant power supply, 8x 6038 fan, 36" slide rail, w/o bezel; Per canister node: Tucana motherboard, Intel® Lewisburg, DDR4 RDIMM x16, Intel® PCH C621A, 1x GbE dedicate IPMI, 3x PCIe x16 Gen4 (HHHL), 2x PCIe x8 Gen4 (HHHL), 1x OCP 3.0 x16 Gen4, 2x M.2 PCIe/SATA, EATX, 2x CPU heatsink, 2x 8644 mini-SAS HD external ports
XP1-A401TU04	4U 24-bay high availability storage server, 24x 12G SATA/SAS hot-swap 3.5/2.5" bay, 2x canister, 1600W 1+1 Platinum redundant power supply, 8x 6038 fan, 36" slide rail, w/o bezel; Per canister node: Tucana motherboard, Intel® Lewisburg, DDR4 RDIMM x16, Intel® PCH C621A, 1x GbE dedicate IPMI, 3x PCIe x16 Gen4 (HHHL), 2x PCIe x8 Gen4 (HHHL), 1x OCP 3.0 x16 Gen4, 2x M.2 PCIe/SATA, EATX, 2x CPU heatsink, 2x 2.5" hot-swap SATA
XP1-A401TU05	4U 24-bay high availability storage server, 24x 12G SATA/SAS hot-swap 3.5/2.5" bay, 2x canister, 1600W 1+1 Platinum redundant power supply, 8x 6038 fan, 36" slide rail, w/o bezel; Per canister node: Tucana motherboard, Intel® Lewisburg, DDR4 RDIMM x16, Intel® PCH C621A, 1x GbE dedicate IPMI, 3x PCIe x16 Gen4 (HHHL), 2x PCIe x8 Gen4 (HHHL), 1x OCP 3.0 x16 Gen4, 2x M.2 PCIe/SATA, EATX, 2x CPU heatsink, 2x 2.5" hot-swap PCIe Gen4 NVMe
XP1-A401TU06	4U 24-bay high availability storage server, 24x 12G SATA/SAS hot-swap 3.5/2.5" bay, 2x canister, 1600W 1+1 Platinum redundant power supply, 8x 6038 fan, 36" slide rail, w/o bezel; Per canister node: Tucana motherboard, Intel® Lewisburg, DDR4 RDIMM x16, Intel® PCH C621A, 1x GbE dedicate IPMI, 3x PCIe x16 Gen4 (HHHL), 2x PCIe x8 Gen4 (HHHL), 1x OCP 3.0 x16 Gen4, 2x M.2 PCIe/SATA, EATX, 2x CPU heatsink, 2x 8644 mini-SASHD external ports