



WiRack19 Server

Wiwynn SV302A Series

The AMD-Based High Density
1U2Node Server Powering the
Most Impactful Cloud
Computing



Brilliant Combination of Compute Density and Power Efficiency

Wiwynn SV302A is a 1U2N computing server. One node supports one single AMD EPYC 7003 Series Processor CPU and delivers 64 cores. Therefore, when the 1U2N system is fully configured with each node carrying a 64 core CPU, the total core count is 128, making it the highest core density 1U x86 server. Moreover, comparing with dual socket design, the single socket design genuinely benefits on cooling and power efficiency to reduce TCO.

Universal Enclosure with Modularized Configurations for Various Workloads

Wiwynn incorporates highly modular design with universal enclosure to realize “building block” concept in SV302A. The modules include server node, power supply unit and fan modules, which provide high agility for logistic management to cloud service providers. Wiwynn SV302A offers two configurations for different workloads – are compute intensive and I/O intensive. System operators may agilely configure different nodes with different combinations of processors, memory, NVMe SSDs, PCIe expansions in the same enclosure depending on different applications, such as real-time analytics, AI inference, and even mission critical tasks.

Enhanced Performance and Inference for Computing Intensive Applications

Wiwynn SV302A is designed with AMD EPYC 7003 Series Processors to deliver exceptional performance with 64 cores, up to 32MB L3 cache/core using the new 7nm X86 hybrid die, 128 lanes of PCIe Gen4, and 16 DIMM slots. AMD 3rd gen EPYC processors help customers achieve faster and better time to results, providing up to 25% generational performance gains in mid-tier CPUs. With embedded high internal integer and floating-point capacity, SV302A enables enhanced computing acceleration in the cloud and on-prem.

Front Access Design to Simplify Maintenance

Easy manageability and serviceability are key OPEX factors of cloud service providers. Compared to traditional multi-node servers, the system is front-accessible with tool-less maintenance. Rack cabling and maintenance efforts are reduced to a minimum, enabling our customers to focus more on rack configuration and deployment scalability.

Wiwynn is a fast-growing cloud infrastructure provider that develops high-density computing and storage products, plus rack solutions for leading data centers.



v1.0

Node Specification

Model : Wiwynn SV302A Series

Model Name

SV302A-C

SV302A-I



Form Factor, Processor, Memory and Chipset

Form Factor	1U, Half Width
Processor	AMD EPYC™ 7003 Series Processors
Processor Sockets	One
Security	TPM 2.0
Memory	8 DIMM slots; DDR4 up to 3200MT/s; RDIMM

Storage and I/O

Front I/O	<ul style="list-style-type: none"> • One Debug Port (USB 3.0 Type A CONN) • One USB 3.0 Type A CONN • One GbE RJ45 Port • One OCP NIC Port • Power/Reset button 	
Storage	<ul style="list-style-type: none"> • Four 2.5" U.2 NVMe SSD • Three onboard 2280/21100 M.2 SSD Module slots 	<ul style="list-style-type: none"> • Two 2.5" U.2 NVMe SSD • Three onboard 2280/21100 M.2 SSD Module slots
Expansion Slots	<ul style="list-style-type: none"> • One PCIe 4.0 x16 OCP NIC 3.0 	<ul style="list-style-type: none"> • One PCIe 4.0 x16 FHHL slot • One PCIe 4.0 x16 OCP NIC 3.0
Remote Management	IPMI v2.0 Compliant, iKVM	

Physical Specifications

Dimensions (mm)	224 (W) x 790 (D) x 43.5 (H)
Weight	19.5kg

Chassis Specification

PSU	2 x 800W/1300W (1+1), hot-swappable
Fan	6 dual-rotor hot-plug fans for 2 zones
Dimensions (mm)	448 (W) * 790 (D) * 43.5 (H)



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