PRYSM®

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R-2U-V01

SERVER DATA SHEET

COMPUTING PERFORMANCE WITH HIGH MODULARITY

Enrich your business with high performance and high modularity servers

Through innovative hardware design, software commonality and continued focus on system updates, **PRYSM** Servers offers improved performance and pay-as-you-grow flexibility along with new features that help reduce the complexity involved in managing data for small, mid-sized and large enterprise businesses. These servers are designed to a **PRYSM** - developed Behavioral Specification that defines consistent hardware layout and user interaction across all server models in this and future generations with cost optimized solution. These powerful systems are designed to meet the requirements of value segment in **Small and Medium** Enterprise, Business Intelligence IT, Data Analytics Storage, AI and Cloud.

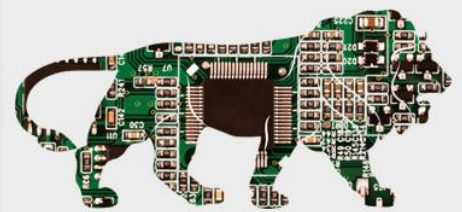## Compute Performance - With Maximum Scalability, Operational & Networking Efficiency

Expand your possibilities with 2U systems based on the **PRYSM R-2U-V01,** the server product from **PRYSM** family. This server family features power- efficient spread-core design, massive 24 DIMM DDR5 memory—up to 12TB, PCIe Gen 5 lanes for the I/O and compute capacity needed to easily handle the intense needs of data analytics or enterprise applications.
Designed to support the performance and features of **AMD EPYC Zen5** Processors, family up to 500W.

*In a rack-optimized 2U form factor, the **PRYSM** delivers an excellent balance of outstanding performance, availability and flexibility for growing network infrastructure and high computing workload applications*

PRYSM R-2U-V01 IS AN EXCELLENT CHOICE FOR

- *Server with real time compute requirement*
- *For hot and warm tier data and dense NVMe storage*
- *Public and hybrid*

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Technical Specifications

FEATURES	PARAMETER	DESCRIPTION
Processor	Supported CPU Series	Supports up to 2 processors of AMD EPYC 9XX5 series (Zen5)
		Min 8 Core – Max 192 Core per Processor (Boost clock Up to 5GHz)
	Thermal Design Power (TDP) wattage	Up to 500W TDP, L3 CACHE - 512MB
Chipset	AMD	AMD EPYC™ TURIN
Front hard drive	Storage	Up to 24x 2.5" Solid State drives-SATA III & PCIe Based (U.2 & U.3)
		(SATA Per port max 7.68TB @ 6Gb/s)
		(NVMe per port max 30.72TB) ,(M.2 per port 1.92TB)
		Config:1) 16 SATA+8 NVMe
		Config:2) 24 NVMe
		Config:3) 24 SATA with RAID Card
		Config:4) 14 NVMe+8 SATA
		2SLOTS of x1 PCIe Gen3 M.2, 22x42/60/80/110 formfactor
		1 SLOT of x4 PCIe Gen3 M.2, 22x42/60/80/110 formfactor
		(Boot Drive)
Dimensions	W x H x D (mm)/Weight	450 x 88 x 780 / 35KG
BMC chip	ASIC	AST2600
Memory	Max DIMM slots	1 DIMMs/CH, 12 CH/CPU, Total 24 DIMMs
	DIMM type	DDR5 RDIMMs or LRDIMMs
	Memory Capacity	16/32/64/128/256/512 GB up to total 12TB capacity
	Memory Speed	Support up to 6400MHz
	Memory Voltage	1.1V
Internal/External port & PCIe	Front I/O	Front Port: 2 USB 3.2 Gen1
	Rear I/O	Rear Port: 2 USB 3.2 Gen1, 1G RJ45 System management port.
	Internal I/O	Internal Ports: 1 USB 3.2 Gen1, 1 Micro-USB Type-B port
	PCIe	PCIe expansion slots: • 2 PCIe Gen5.0 full-height full Length (Double width) slots • 1 PCIe Gen5.0 full-height Half Length (Single Width) slot • OCP slot: 1 PCIe 3.0 x16, Mezzanine slot
Networking	Ethernet	1G*1 management network port On-board 1G*1 onboard LOM
	OCP 3.0	1/10/25/40/100G network port with OCP 3.0 add-on card
DC_SCM	Rear I/O	• RJ45 1G 1 Port *1, Mini Display port, Micro USB Type-C, UID button with integrated LED.
	ROT Module	• I2C/I3C/GPIO connectivity to 'host Node CPUs' and BMC/CMC • Runtime SPI and I2C/SMBus monitoring and filtering
	Storage	• M.2 2230 M-Key • 1Micro-SD storage device, connected to BMC/CMC

External Cards	GPU	Up to 3x double width 350W GPU and Up to 8x single width 75W GPU
	RAID	Hardware RAID flash cache; HBAs
	NIC	X4, X8 and X16 FHHL and HHHL NIC support,
		Rj45 - 1G & 10G – Maximum 4 port support
		SFP+ - 10Gb/s Per Port , QSFP56 - 200Gb/s Per Port
Drive Control	Backplane	• U.2/U.3 Based connector for drive insertion
		• Hot swappable
		• LED management using UBM controller
Power Supply	Redundancy	1+1
	Input Range	Full range AC (100 - 240 VAC)
	Output Watts	2700W/3200W
	Efficiency	Titanium
Chassis	Form Factor	2U Rack Mountable
BIOS/BMC	BRAND	AMI/ OpenBmc
OS	OS Supported	Microsoft Windows Server, Red Hat Enterprise Linux,
		SUSE Linux Enterprise Server, CentOS, Ubuntu
Security	TPM 2.0	TPM/TCM (optional), Locked upper cover of chassis
	ROT (Root of Trust)	NIST SP 800-193 (For platform firmware resilience (PFR))
Intelligent temp. control	Temperature control	FPGA Based PWM fan control
System Cooling	FAN	6 hot swap system 60x60mm fans,66W
Operating Environment	Operating Temp	5ºC - 35ºC (indoor)
	Non-Operating Temp	-40ºC - 70ºC
Humidity	Operating relative humidity	20% - 80%
	Non-operating relative humidity	10% - 95%
ROHS COMPLAINT	RoHS 6/6 Complaint	Yes

PRYSM®
Technology for all

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