DATASHEET

OCtoPus 2 AM5-S

OCP OR V3 HIGH DENSITY COMPUTE, LOW POWER, MAXIMUM VALUE

Optimized for Cloud, Hosting and Scale-Out Applications





No contractual

Key Features

- **21-inch 2 OpenU ORV3 Compatible**
- **EPYC™ 4005/4004 & Ryzen™ 9000/7000 Series processors**
- **4x DDR5 @ 4800MHz Up to 192GB per node**
- **Up to x16 for GPU / ASIC / FPGA per node**
- **Air cooling**

High-Density Compute, Built for Modern Infrastructure

The OCtoPus 2 AM5 delivers strong compute performance while keeping processor power consumption remarkably low. Supporting AMD Ryzen™ 7000/9000 and AMD EPYC™ 4004/4005 processors with a TDP of up to only 170W, it provides an efficient alternative to traditional high-power server platforms. Combined with two independent nodes in just 2U, it enables organizations to increase compute density while controlling rack power consumption, cooling requirements and operating costs..

Outstanding Price-to-Performance Ratio

Built around the cost-efficient AMD AM5 ecosystem, the OCtoPus 2 AM5 offers an excellent price-to-performance ratio for workloads that do not require large dual-socket server architectures. High-frequency processors, DDR5 memory and PCIe Gen5 connectivity provide modern server performance without the cost and power overhead of larger enterprise CPU platforms. This makes it particularly attractive for cloud providers, hosting companies and organizations looking to maximize computing capacity within a controlled infrastructure budget.

Designed for Cloud, Hosting and Scale-Out Workloads

The combination of high CPU frequency, low power consumption and competitive platform cost makes the OCtoPus 2 AM5 especially suited to cloud computing, virtualization, web hosting, content delivery, edge computing and scale-out applications. 10GbE and 25GbE networking options provide the bandwidth required for modern distributed environments. Its efficient architecture allows service providers to optimize both CAPEX and OPEX, while maintaining the performance required for demanding production workloads.

OCP Efficiency, Made in France

Designed for OCP Open Rack V3 48V DC infrastructure, the OCtoPus 2 AM5 benefits from an architecture optimized for efficient, scalable data center deployments. Its low-power compute approach complements the streamlined power distribution philosophy of OCP infrastructure, helping improve overall rack-level efficiency. Manufactured in Alsace, France, the platform combines European industrial expertise, local production and a more resilient supply chain with an attractive balance of performance, energy efficiency and cost.

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SPECIFICIATIONS

system	**Model**	OCtoPus 2 AM5
	Form factor	21-inch 2 OpenU
	Dimension	809.25 x 537 x 93.5mm (D x W x H)
	Cooling technology	Air cooling
Storage	**per node**	See SKU table
Motherboard	**CPU per node**	Socket AM5[JC1.1][LN1.2] (LGA 1718) AMD Ryzen™² 7000/9000 series Processors, AMD EPYC™ 4004/4005 Series Processors Single processor, TDP up to 170W
	Chipset	AMD B650E
	Expansion slots	See SKUs table
	TPM per node	1x TPM header with SPI interface for TPM 2.0 module (optional)
	BMC	Aspeed® AST2600
Memory	**Total slots per node**	4x (2-channel per CPU, 4 DIMM per CPU)
	Total Capacity per node	UDIMM modules up to 48GB supported
	Memory type and speed	AMD EPYC™ 4005 / Ryzen™ 9000: UDIMM: Up to 5600 MT/s (1DPC), 3600 MT/s (2DPC) AMD EPYC™ 4004 / Ryzen™ 7000: UDIMM: Up to 5200 MT/s (1DPC), 3600 MT/s (2DPC)
Network	**Onboard**	1x Realtek RTL8211F for dedicated management GLAN 2 x 10GbE LAN (1 x Intel® X710-AT2) or 2x 25GbE LAN (1x Broadcom® BCM57502) - Support NCSI function
I/O	**Front**	2 x USB 3.2 Gen1 ports (Type-A) 1 x VGA port 1 x COM port 2 x SFP28 ports 2 x RJ45 ports 1 x MLAN port
	Switch / LED	1x Power button with LED 1x ID button with LED 1x Status LED 1x System reset button
Management solution	**Software**	IPMI/Redfish
	Remote management	BMC Remote control based on Aspeed® AST2600 remote management controller. (Power Control Configuration, Chassis Identify, Boot Option, iKVM, BMC Account Configuration)
Power supply	**Type**	OCP technology ORV3 48V DC
Operating environement	**Operating temperature**	15°C to 35°C (59°F ~ 95°F)
	Non-operating temperature	-40°C ~ 60°C (40° ~ 140°F)
	Operating Relative Humidity	Up to 90%
	Non-Operative relative humidity	95%, non-condensing at 35° C
Warranty	**2CRSi** hardware warranty includes a one year, parts and labour with return to 2CRSi selling entity. Customers may purchase an extended warranty of up to 3 years on parts and labour with different support levels. Please contact 2CRSi at support@2crsi.com or reach your sales point of contact for complete warranty details including limitations and transferability. 2crsi.com/global-location	

2CRSi, Specifications are subject to change. Please verify with your sales representative for latest revision.

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SKUs list

SKU	Storage	Expension slots	Network
SKU 1: NOD-OC2-200-AM5-R3101	1x M.2 (2242/2280), NVMe Gen5 x4 link, PCIe from CPU 1x 2.5” NVMe Gen 4 x4 link from FCH (internal) 4 x 3.5” SATA 6Gbps HDDs (internal)	1x PCIe Gen5 x16 link from CPU, LP, HH-HL, front access	2 x 10GbE LAN (1 x Intel® X710-AT2)
SKU 2: NOD-OC2-200-AM5-R3102	1x M.2 (2242/2280), NVMe Gen5 x4 link, PCIe from CPU 1x 2.5” NVMe Gen 4 x4 link from FCH (internal) 2x E1.S NVMe Gen5 x4 (Front access, hot swappable) 3x 3.5” SATA 6Gbps HDDs (internal)	1x PCIe Gen5 x8 link from CPU, LP, HH-HL, front access	2x 25GbE LAN (1x Broadcom® BCM57502)
SKU 3: NOD-OC2-201-AM5-R3103	1x M.2 (2242/2280), NVMe Gen5 x4 link, PCIe from CPU 1x 2.5” NVMe Gen4 x4 link from FCH (internal) 3x 3.5” SATA 6Gbps HDDs (internal)	1x PCIe Gen5 x16 link from CPU, DW FH-FL for GPUs/Asic/FPGA, up to 300W, internal	2 x 10GbE LAN (1 x Intel® X710-AT2)
SKU 4: NOD-OC2-201-AM5-R3104	1x M.2 (2242/2280), NVMe Gen5 x4 link, PCIe from CPU 2x 2.5” NVMe Gen5 x4 link 3x 3.5” SATA 6Gbps HDDs (internal)	1x PCIe Gen5 x16 link from CPU, DW FH-FL for GPUs/Asic/FPGA, up to 300W, internal	2x 25GbE LAN (1x Broadcom® BCM57502)
SKU 5: NOD-OC2-201-AM5-R3105	1x M.2 (2242/2280), NVMe Gen5 x4 link, PCIe from CPU 2x 2.5” NVMe Gen5 x4 (internal) 4x 3.5” SATA 6Gbps HDDs (internal) 2x E1.S NVMe Gen5 x4 (Front access, hot swappable)	1x PCIe Gen5 x4 link from FCH, HH-HL, front access	2x 25GbE LAN (1x Broadcom® BCM57502)