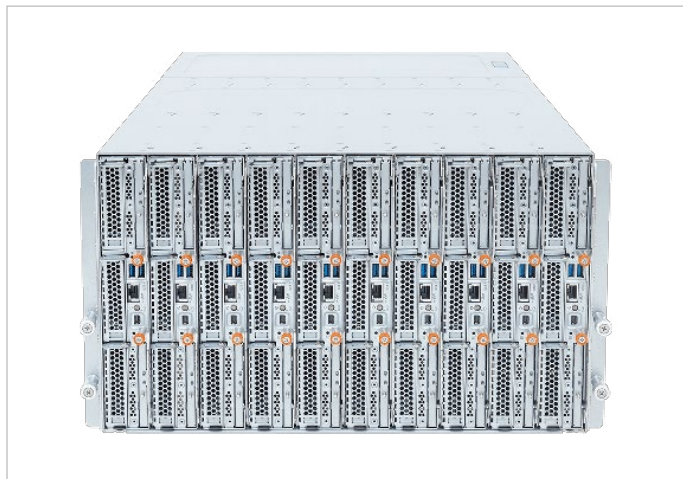


CLOE 10 SP5-D

HIGH-DENSITY DLC BLADE PLATFORM

Powered by AMD EPYC™ 9004/9005 Series processors



Key Features



19-inch 6U 10 Nodes



Dual AMD EPYC™ 9005/9004 Series Processors



24x DDR5@ 6400MHz per node



3x LP PCIe5 x16 slot per node



2x E3.S NVMe slot per node



Direct Liquid Cooling

High-density compute platform

The Cloe 10 SP5-D DLC packs 10 fully independent, liquid-cooled compute nodes into a single 6U chassis: 20 processors, 240 DIMM slots, and 20 E3.S Gen5 NVMe bays, all front-accessible for easy servicing. Power and cooling are managed centrally, with 6+6 redundant power supplies and a fully integrated DLC manifold keeping every node stable under sustained load.

Designed for hyperscale and cloud-native infrastructure, HPC clusters requiring maximum node density per rack, hybrid and private cloud deployments, high-throughput networking and data analytics, and operators looking to reduce PUE without major facility changes.

Integrated-manifold full-system DLC

The Cloe 10 SP5-D is a full-system direct liquid cooling solution built around a single integrated manifold, achieving up to 92% Heat Capture Ratio (HCR). Every heat-generating component: CPUs, memory, storage, and PCIe cards; has a dedicated cold plate feeding into the same coolant loop, reducing fan dependency and air-conditioning demand to improve Power Usage Effectiveness (PUE).

Liquid-cooled components run well below CPU TDP, keeping nodes stable and performance consistently high even under sustained load. The manifold design also simplifies servicing: every node is front-accessible without disturbing the cooling loop.

AMD EPYC® Processors

AMD EPYC™ 9005 series processors bring the mature SP5 platform to its most refined form, built on a 3nm process with “Zen 5” and “Zen 5c” cores for up to 192 cores per CPU and increased compute density.

A larger L3 cache of up to 512MB reduces latency for data-intensive workloads, while 12 memory channels support up to 9TB of DDR5 in a 2-DIMM-per-channel configuration.

Up to 160 PCIe lanes per socket deliver extensive I/O connectivity in dual-socket designs, and CXL 2.0 support enables disaggregated compute architectures for greater memory and resource flexibility.

PRODUCT PAGE

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Cloe 10 SP5-D DLC

SPECIFICATIONS

System	SKU	BRB-CE10-602-SP5D-S2101
	Model	Cloe 10 SP5-D DLC
	Form factor	19-inch 6U
	Dimension	447 mm x 900 mm x 262.3 (W x D x H) 17.6" x 35.4" x 10.33" (W x D x H)
Storage	Internal type	None
	External type	Per node: 2x Hot-swap E3.S Gen5 NVMe (PCIe5.0 x4) drive bay [from CPU_0]
	RAID controller	N/A
Motherboard	CPU	Supports AMD EPYC™ 9005/9004 Series Processors. Per node: Dual Socket SP5. Max TDP up to 500W.
	Chipset	System on Chip
	Expansion slots	Per node: 2 x LP PCIe 5.0 x16 [from CPU_0] 1 x LP PCIe 5.0 x16 [from CPU_1]
	TPM	TPM header with SPI interface (optional TPM2.0 kit available)
	BMC	ASPEED AST2600
Memory	Total slots	Per node: 24x DIMM slot (12 channels per CPU)
	Capacity	Per node: Up to 3TB RDIMM: Max 128GB module
	Memory type	RDIMM: 6400MT/s (9005-series), 4800MT/s (9004-series)
Network	Onboard	Per node: 1x 1GbE Management Port dedicated to the IPMI
I/O	Front	Per node: 1x RJ45 MLAN port 2x USB 3.2 Gen1 1x Mini-DP 1x Power button LED / UID button / System status LED
	Rear	2x RJ45 MLAN port dedicated to the CMC 1 x CMC status LED
Management solution	Software	WebGUI, IPMI 2.0 and RESTful APIs (Redfish)
	Out of band remote management	iKVM module
Power supply	Type	6+6 3200 W 80 PLUS Titanium redundant power supplies
	Power rating	Per node: ~1.7 kW at 100% Load
Cooling	Chassis	4 Fans 80x80x80mm
	Node	Direct-to-chip cooling (Integrated-manifold full-system DLC)
Operating environment	Operating temperature	10°C ~ 35°C (50°F ~ 95°F)
	Non-operating temperature	-40°C ~ 60°C (40° ~ 140°F)
	Operative relative humidity	8% to 80% (non-condensing)
	Non-operating relative Humidity	20% ~ 90% (non-condensing)
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	

Cloe 10 SP5-D DLC

BLOCK DIAGRAM (BLADE)

