

# Compute Series X7000 - AMD



## Professional Liquid Cooled Workstations

EK Fluid Works Compute Series workstations are designed for **researchers and deep learning developers** who demand the computing power typically reserved for rack-mount servers, but prefer a desk-side solution.

### Optimized for:

- Data Science
- Machine Learning & Deep Learning
- Scientific Computing

### Quick Specs:

- 2<sup>nd</sup> Gen AMD EPYC CPUs
- 1x to 7x GPUs
- 128 GB to 512 GB ECC Memory
- 2 x 1600W PSUs



## Innovation Sets Us Apart



**UNRIVALED THERMAL PERFORMANCE**  
Liquid Cooling Unleashes Performance and Longevity



**UNMATCHED FLEXIBILITY**  
User Serviceable and Upgradeable



**UNBEATABLE ACOUSTIC PERFORMANCE**  
Extreme Performance Without Noise Pollution



**UNDENIABLY BETTER ROI**  
Better than Air Cooled – Better than other Liquid Cooled

## Why Liquid Cooling?

### UNPARALLELED COOLING PERFORMANCE

Water is more effective at removing heat, resulting in lower sustained operating temperatures.

### QUIET OPERATION

Larger fans move more air at lower speeds and are almost imperceptible under normal operation.

### GREATER PERFORMANCE OUTPUT

Eliminating thermal throttling removes bottlenecks and increases performance output.

### INCREASED COMPUTE DENSITY

Liquid cooled GPUs occupy less space, allowing 2x – 3x compute power in the same cubic footprint.

### LONGER LIFESPAN

Liquid cooling eliminates thermal fatigue, allowing components to stay cooler and last longer.

Motherboard	ASRock Rack ROMED8-2T			
	Chipset	Rome 7002		
	Socket	LGA 4094		
	PCIe Lanes per GPU	16		
	Multi-Threading	Yes		
CPUs	AMD EPYC	7502P	7642	7702P
	Frequency (GHz) Base / Boost	2.5 / 3.35	2.3 / 3.5	2.0 / 3.35
	Cores / Threads	32 / 64	48 / 96	64 / 128
	Cooling	Liquid		
Memory	128GB (4 x 32GB ECC), 256GB (8 x 32GB ECC), 512GB (8 x 64GB ECC)			
	DIMM Sockets	8 x DDR4		
	Speed	2666 / 2933 MHz		
	Error Correcting	ECC		
Expansion Slots	7 x PCIe 4.0 x16			
GPUs	NVIDIA RTX A6000, Quadro RTX 8000, Quadro GV100, Tesla V100, A100			
	Max GPUs	7		
	Cooling	Liquid		
Storage	3x NVMe M.2 SSD / 8x SATA SSD or 6x SATA SSD + 1x ODD (w/ 7 GPUs: 2x NVMe M.2 SSD / 4x SATA SSD or 2x SATA SSD + 1x ODD)			
	Boot Drive	1 x NVMe M.2 SSD PCIe 4.0 x4 (500GB, 1TB, 2TB)		
	Add'l NVMe Storage (1 - 6 GPUs)	2 x NVMe M.2 SSD PCIe 4.0 x4 (500GB, 1TB, 2TB)		
	Add'l NVMe Storage (7 GPUs)	1 x NVMe M.2 SSD PCIe 4.0 x4 (500GB, 1TB, 2TB)		
	Add'l SATA Storage (1 - 6 GPUs)	8 x SATA III 2.5" SSD (1, 2, 4 or 8TB)	6 x SATA III 2.5" SSD (1, 2, 4 or 8TB)	
	Add'l SATA Storage (7 GPUs)	4 x SATA III 2.5" SSD (1, 2, 4 or 8TB)	2 x SATA III 2.5" SSD (1, 2, 4 or 8TB)	
	Optical Drive (ODD)	N/A	1 x DVD±RW or DVD±RW/Blu-ray	
Power Supply	2 x 1600 Watt Platinum			
I/O Ports	Front I/O			
	Audio			
	4 x USB (Type-A)			
	Rear I/O			
	1 x USB 3.2 Gen 2 (Type-C)			
	2 x USB 3.2 Gen 1			
	2 x 10GbE LAN			
	1 x IPMI LAN			
Cooling	CPU & GPU: EK custom liquid cooling, Case: Forced air			
	2 x pumps			
	2 x reservoirs			
	2 x 120mm x 480mm radiators			
	8 x 120mm fans			
	Quick Disconnect Couplings (QDC)			
	xenowulf Smart Pump/Fan Controller			
Case	EK-C232 Design			
	Dimensions: W x H x D (in)	15.6 x 23.5 x 25		
	Dimensions: W x H x D (cm)	39.6 x 59.2 x 63.5		
Warranty	Standard 1 year from ship date			