



AMD Instinct MI300X 192GB vs NVIDIA H100 PCIe 80GB

Side by side datacenter GPU specifications from the Flopper.io database.

OVERVIEW

	AMD Instinct MI300X 192GB	NVIDIA H100 PCIe 80GB
FP32 TFLOPS	163.4	51.0
VRAM	192 GB	80 GB
Memory Bandwidth	5.3 TB/s	2.0 TB/s
TDP	750 W	350 W

PERFORMANCE BY PRECISION

Precision	AMD Instinct MI300X 192GB peak TFLOPS (dense)	NVIDIA H100 PCIe 80GB peak TFLOPS (dense)
FP64	81.7	26.0
FP32	163.4	51.0
TF32	653.7	378.0
BF16	1307.4	756.5
FP16	1307.4	756.5
FP8	2614.9	1513.0
FP6	—	—
FP4	—	—
INT8	2614.9	1513.0

SPECIFICATIONS

	AMD Instinct MI300X 192GB	NVIDIA H100 PCIe 80GB
Architecture	CDNA 3	Hopper
Process Node	5nm FinFET	4nm
Launch Year	2023	2022
Form Factor	OAM	PCIe
Memory Type	—	—
Interface Width	—	—
Interconnect	—	—

	AMD Instinct MI300X 192GB	NVIDIA H100 PCIe 80GB
TDP	750 W	350 W
FP32 Efficiency	0.22 TFLOPS/W	0.15 TFLOPS/W