

AMD Instinct MI300X 192GB vs NVIDIA H100 SXM5 80GB

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

OVERVIEW

	AMD Instinct MI300X 192GB	NVIDIA H100 SXM5 80GB
FP32 TFLOPS	163.4	67.0
VRAM	192 GB	80 GB
Memory Bandwidth	5.3 TB/s	3.4 TB/s
TDP	750 W	700 W

PERFORMANCE BY PRECISION

Precision	AMD Instinct MI300X 192GB peak TFLOPS (dense)	NVIDIA H100 SXM5 80GB peak TFLOPS (dense)
INT8	2614.9	1979.0
FP8	2614.9	1979.0
FP16	1307.4	990.0
BF16	1307.4	990.0
TF32	653.7	494.0
FP32	163.4	67.0
FP64_TC Tensor Core	—	67.0
FP64	81.7	34.0

SPECIFICATIONS

	AMD Instinct MI300X 192GB	NVIDIA H100 SXM5 80GB
Architecture	CDNA 3	Hopper
Process Node	5nm FinFET	4nm
Launch Year	2023	2022
Form Factor	OAM	SXM
Memory Type	—	—
Interface Width	—	—

	AMD Instinct MI300X 192GB	NVIDIA H100 SXM5 80GB
Interconnect	—	—
TDP	750 W	700 W
FP32 Efficiency	0.22 TFLOPS/W	0.10 TFLOPS/W