NVIDIA A100 SXM4 40GB vs NVIDIA A16 16GB

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

OVERVIEW

	NVIDIA A100 SXM4 40GB	NVIDIA A16 16GB
FP32 TFLOPS	**19.5**	**4.5**
Memory	**40 GB**	**16 GB**
Memory Bandwidth	**1.6 TB/s**	**200 GB/s**
TDP	**400 W**	**—**

PERFORMANCE BY PRECISION

Precision	NVIDIA A100 SXM4 40GB peak TFLOPS (dense)	NVIDIA A16 16GB peak TFLOPS (dense)
FP64	9.7	—
FP32	19.5	4.5
TF32	156.0	9.0
BF16	312.0	—
FP16	312.0	17.9
FP8	—	—
FP6	—	—
FP4	—	—
INT8	624.0	35.9
INT4	1248.0	—

SPECIFICATIONS

	NVIDIA A100 SXM4 40GB	NVIDIA A16 16GB
Architecture	Ampere	Ampere
Process Node	7nm	—
Launch Year	2020	2021
Form Factor	SXM	PCIe
Memory Type	HBM2e	GDDR6
Interface Width	4096-bit	—

	NVIDIA A100 SXM4 40GB	NVIDIA A16 16GB
Interconnect	–	–
TDP	400 W	–
FP32 Efficiency	0.05 TFLOPS/W	–