



NVIDIA A800 SXM4 vs NVIDIA A100 SXM4 40GB

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

OVERVIEW

	NVIDIA A800 SXM4	NVIDIA A100 SXM4 40GB
FP32 TFLOPS	19.5	19.5
Memory	80 GB	40 GB
Memory Bandwidth	2.0 TB/s	1.6 TB/s
TDP	400 W	400 W

PERFORMANCE BY PRECISION

Precision	NVIDIA A800 SXM4 peak TFLOPS (dense)	NVIDIA A100 SXM4 40GB peak TFLOPS (dense)
FP64	9.7	9.7
FP32	19.5	19.5
TF32	156.0	156.0
BF16	312.0	312.0
FP16	312.0	312.0
FP8	—	—
FP6	—	—
FP4	—	—
INT8	624.0	624.0
INT4	1248.0	1248.0

SPECIFICATIONS

	NVIDIA A800 SXM4	NVIDIA A100 SXM4 40GB
Architecture	Ampere	Ampere
Process Node	7nm	7nm
Launch Year	2022	2020
Form Factor	SXM	SXM
Memory Type	HBM2e	HBM2e
Interface Width	—	4096-bit

	NVIDIA A800 SXM4	NVIDIA A100 SXM4 40GB
Interconnect	NVLink	—
TDP	400 W	400 W
FP32 Efficiency	0.05 TFLOPS/W	0.05 TFLOPS/W