



NVIDIA A100 PCIe 40GB vs NVIDIA A800 PCIe 80GB

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

OVERVIEW

	NVIDIA A100 PCIe 40GB	NVIDIA A800 PCIe 80GB
FP32 TFLOPS	19.5	19.5
Memory	40 GB	80 GB
Memory Bandwidth	1.6 TB/s	1.9 TB/s
TDP	250 W	300 W

PERFORMANCE BY PRECISION

Precision	NVIDIA A100 PCIe 40GB peak TFLOPS (dense)	NVIDIA A800 PCIe 80GB 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 A100 PCIe 40GB	NVIDIA A800 PCIe 80GB
Architecture	Ampere	Ampere
Process Node	7nm	7nm
Launch Year	2020	2022
Form Factor	PCIe	PCIe
Memory Type	—	HBM2e
Interface Width	—	—

	NVIDIA A100 PCIe 40GB	NVIDIA A800 PCIe 80GB
Interconnect	—	—
TDP	250 W	300 W
FP32 Efficiency	0.08 TFLOPS/W	0.07 TFLOPS/W