



NVIDIA A100 PCIe 80GB vs NVIDIA A40 48GB

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

OVERVIEW

	NVIDIA A100 PCIe 80GB	NVIDIA A40 48GB
FP32 TFLOPS	19.5	37.4
VRAM	80 GB	48 GB
Memory Bandwidth	1.9 TB/s	696 GB/s
TDP	300 W	300 W

PERFORMANCE BY PRECISION

Precision	NVIDIA A100 PCIe 80GB peak TFLOPS (dense)	NVIDIA A40 48GB peak TFLOPS (dense)
INT8	624.0	299.3
INT4	1248.0	598.7
FP16	312.0	149.7
BF16	312.0	149.7
TF32	156.0	74.8
FP32	19.5	37.4
FP64	9.7	—

SPECIFICATIONS

	NVIDIA A100 PCIe 80GB	NVIDIA A40 48GB
Architecture	Ampere	Ampere
Process Node	—	—
Launch Year	2021	2021
Form Factor	PCIe	PCIe
Memory Type	HBM2e	GDDR6
Interface Width	5120-bit	384-bit
Interconnect	—	—
TDP	300 W	300 W
FP32 Efficiency	0.07 TFLOPS/W	0.12 TFLOPS/W

