



NVIDIA A100 SXM4 80GB vs NVIDIA A40 48GB

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

OVERVIEW

	NVIDIA A100 SXM4 80GB	NVIDIA A40 48GB
FP32 TFLOPS	19.5	37.4
VRAM	80 GB	48 GB
Memory Bandwidth	2.0 TB/s	696 GB/s
TDP	400 W	300 W

PERFORMANCE BY PRECISION

Precision	NVIDIA A100 SXM4 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 SXM4 80GB	NVIDIA A40 48GB
Architecture	Ampere	Ampere
Process Node	7nm	—
Launch Year	2020	2021
Form Factor	SXM	PCIe
Memory Type	—	GDDR6
Interface Width	—	384-bit
Interconnect	—	—
TDP	400 W	300 W
FP32 Efficiency	0.05 TFLOPS/W	0.12 TFLOPS/W

