

NVIDIA A100 SXM4 40GB vs NVIDIA GeForce RTX 3090 24GB

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

OVERVIEW

	NVIDIA A100 SXM4 40GB	NVIDIA GeForce RTX 3090 24GB
FP32 TFLOPS	19.5	35.6
VRAM	40 GB	24 GB
Memory Bandwidth	1.6 TB/s	936 GB/s
TDP	400 W	350 W

PERFORMANCE BY PRECISION

Precision	NVIDIA A100 SXM4 40GB peak TFLOPS (dense)	NVIDIA GeForce RTX 3090 24GB peak TFLOPS (dense)
INT8	624.0	284.0
INT4	1248.0	568.0
FP16	312.0	71.0
BF16	312.0	71.0
TF32	156.0	35.6
FP32	19.5	35.6
FP64	9.7	0.6

SPECIFICATIONS

	NVIDIA A100 SXM4 40GB	NVIDIA GeForce RTX 3090 24GB
Architecture	Ampere	Ampere
Process Node	7nm	8nm
Launch Year	2020	2020
Form Factor	SXM	PCIe
Memory Type	HBM2e	—
Interface Width	4096-bit	—
Interconnect	—	—

	NVIDIA A100 SXM4 40GB	NVIDIA GeForce RTX 3090 24GB
TDP	400 W	350 W
FP32 Efficiency	0.05 TFLOPS/W	0.10 TFLOPS/W