



NVIDIA GeForce RTX 3080 12GB vs NVIDIA A40 48GB

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

OVERVIEW

	NVIDIA GeForce RTX 3080 12GB	NVIDIA A40 48GB
FP32 TFLOPS	30.6	37.4
VRAM	12 GB	48 GB
Memory Bandwidth	—	696 GB/s
TDP	350 W	300 W

PERFORMANCE BY PRECISION

Precision	NVIDIA GeForce RTX 3080 12GB peak TFLOPS (dense)	NVIDIA A40 48GB peak TFLOPS (dense)
FP64	0.5	—
FP32	30.6	37.4
TF32	30.6	74.8
BF16	61.3	149.7
FP16	61.3	149.7
FP8	—	—
FP6	—	—
FP4	—	—
INT8	245.2	299.3
INT4	490.3	598.7

SPECIFICATIONS

	NVIDIA GeForce RTX 3080 12GB	NVIDIA A40 48GB
Architecture	Ampere	Ampere
Process Node	8nm	—
Launch Year	2022	2021
Form Factor	PCIe	PCIe
Memory Type	GDDR6X	GDDR6
Interface Width	384-bit	384-bit

	NVIDIA GeForce RTX 3080 12GB	NVIDIA A40 48GB
Interconnect	—	—
TDP	350 W	300 W
FP32 Efficiency	0.09 TFLOPS/W	0.12 TFLOPS/W