

NVIDIA GeForce RTX 3080 12GB vs NVIDIA GeForce RTX 3090 24GB

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

OVERVIEW

	NVIDIA GeForce RTX 3080 12GB	NVIDIA GeForce RTX 3090 24GB
FP32 TFLOPS	30.6	35.6
VRAM	12 GB	24 GB
Memory Bandwidth	—	936 GB/s
TDP	350 W	350 W

PERFORMANCE BY PRECISION

Precision	NVIDIA GeForce RTX 3080 12GB peak TFLOPS (dense)	NVIDIA GeForce RTX 3090 24GB peak TFLOPS (dense)
FP64	0.5	0.6
FP32	30.6	35.6
TF32	30.6	35.6
BF16	61.3	71.0
FP16	61.3	71.0
FP8	—	—
FP6	—	—
FP4	—	—
INT8	245.2	284.0
INT4	490.3	568.0

SPECIFICATIONS

	NVIDIA GeForce RTX 3080 12GB	NVIDIA GeForce RTX 3090 24GB
Architecture	Ampere	Ampere
Process Node	8nm	8nm
Launch Year	2022	2020
Form Factor	PCIe	PCIe
Memory Type	GDDR6X	—

	NVIDIA GeForce RTX 3080 12GB	NVIDIA GeForce RTX 3090 24GB
Interface Width	384-bit	—
Interconnect	—	—
TDP	350 W	350 W
FP32 Efficiency	0.09 TFLOPS/W	0.10 TFLOPS/W