

NVIDIA GB10 Grace Blackwell vs NVIDIA GeForce RTX 5090 32GB

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

OVERVIEW

	NVIDIA GB10 Grace Blackwell	NVIDIA GeForce RTX 5090 32GB
FP32 TFLOPS	31.0	104.8
VRAM	128 GB	32 GB
Memory Bandwidth	273 GB/s	1.8 TB/s
TDP	180 W	575 W

PERFORMANCE BY PRECISION

Precision	NVIDIA GB10 Grace Blackwell peak TFLOPS (dense)	NVIDIA GeForce RTX 5090 32GB peak TFLOPS (dense)
INT8	—	838.2
FP8	—	838.2
FP4	500.0	1676.0
FP16	—	419.1
BF16	—	419.1
TF32	—	209.5
FP32	31.0	104.8
FP64	—	1.6

SPECIFICATIONS

	NVIDIA GB10 Grace Blackwell	NVIDIA GeForce RTX 5090 32GB
Architecture	Blackwell	Blackwell
Process Node	—	4nm
Launch Year	2025	2025
Form Factor	Integrated	PCIe
Memory Type	LPDDR5X	GDDR7
Interface Width	—	512-bit

	NVIDIA GB10 Grace Blackwell	NVIDIA GeForce RTX 5090 32GB
Interconnect	—	—
TDP	180 W	575 W
FP32 Efficiency	0.17 TFLOPS/W	0.18 TFLOPS/W