



NVIDIA GeForce RTX 5090 D 32GB

Blackwell PCIe 2025 4nm

OVERVIEW

104.8 FP32 TFLOPS	32 GB VRAM GDDR7	— Memory Bandwidth	575 W TDP
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PERFORMANCE METRICS

Precision	Peak (dense)	2:4 Sparse	Bits	Type
FP64	1.6	N/A	64	Standard
FP32	104.8	N/A	32	Standard
TF32	—	not published	—	Standard
BF16	—	not published	—	Standard
FP16	—	not published	—	Standard
FP8	—	not published	—	Standard
FP6	—	not published	—	Standard
FP4	1187.5	2375.0	4	Standard
INT8	—	not published	—	Standard

MEMORY SPECIFICATIONS

Capacity	32 GB	TDP	575 W
Type	GDDR7	Max Power	575 W
Bandwidth	—	FP32 Efficiency	0.18 TFLOPS/W
Interface Width	512-bit	FP16 Efficiency	—

POWER & EFFICIENCY

HARDWARE DETAILS

Vendor: NVIDIA	Architecture: Blackwell	Process Node: 4nm
Form Factor: PCIe	Launch Year: 2025	Variant: 32GB

COMPUTE ENGINE

CUDA Cores: 21,760	Tensor Cores: 680 (5th Gen)	SMs: 170
Base Clock: 2.01 GHz	Boost Clock: 2.41 GHz	

INTERCONNECT

PCIe: 5.0

CHIP DESIGN

Transistors: 92.2 billion Die Size: 750 mm²

ENTERPRISE FEATURES

Sparsity: Yes