



NVIDIA GeForce RTX 5090 D V2 24GB

Blackwell

PCIe

2025

4nm

OVERVIEW

104.8 FP32 TFLOPS	24 GB VRAM GDDR7	1.3 TB/s Memory Bandwidth	575 W TDP
----------------------	---------------------	------------------------------	--------------

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	24 GB
Type	GDDR7
Bandwidth	1.3 TB/s
Interface Width	384-bit

POWER & EFFICIENCY

TDP	575 W
Max Power	575 W
FP32 Efficiency	0.18 TFLOPS/W
FP16 Efficiency	—

HARDWARE DETAILS

Vendor: NVIDIA	Architecture: Blackwell	Process Node: 4nm
Form Factor: PCIe	Launch Year: 2025	Variant: 24GB

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