



NVIDIA GeForce RTX 2080 8GB

Turing PCIe 2018 12nm

OVERVIEW

10.6 FP32 TFLOPS	8 GB VRAM GDDR6	448 GB/s Memory Bandwidth	225 W TDP
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PERFORMANCE METRICS

Precision	Peak (dense)	Bits	Type
FP64	0.3	64	Standard
FP32	10.6	32	Standard
TF32	—	—	Standard
BF16	—	—	Standard
FP16	42.4	16	Standard
FP8	—	—	Standard
FP6	—	—	Standard
FP4	—	—	Standard
INT8	169.6	8	Standard
INT4	339.1	4	Standard

MEMORY SPECIFICATIONS

Capacity	8 GB
Type	GDDR6
Bandwidth	448 GB/s
Interface Width	256-bit

POWER & EFFICIENCY

TDP	225 W
Max Power	225 W
FP32 Efficiency	0.05 TFLOPS/W
FP16 Efficiency	0.19 TFLOPS/W

HARDWARE DETAILS

Vendor: NVIDIA	Architecture: Turing	Process Node: 12nm
Form Factor: PCIe	Launch Year: 2018	Variant: 8GB

COMPUTE ENGINE

CUDA Cores: 2,944	Tensor Cores: 368 (Turing)	SMs: 46
Base Clock: 1.51 GHz	Boost Clock: 1.80 GHz	

INTERCONNECT

GPU-to-GPU: NVLink	Bandwidth: 50 GB/s	Links: 1
PCIe: 3.0 x16		

CHIP DESIGN

Transistors: 13.6 billion	Die Size: 545 mm ²
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ENTERPRISE FEATURES

ECC: No	Sparsity: No
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