

NVIDIA Titan RTX 24GB

Turing

PCIe

2018

12nm

OVERVIEW

16.3 FP32 TFLOPS	24 GB VRAM GDDR6	672 GB/s Memory Bandwidth	280 W TDP
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PERFORMANCE METRICS

Precision	Peak (dense)	Bits	Type
FP64	0.5	64	Standard
FP32	16.3	32	Standard
TF32	—	—	Standard
BF16	—	—	Standard
FP16	130.5	16	Standard
FP8	—	—	Standard
FP6	—	—	Standard
FP4	—	—	Standard
INT8	261.0	8	Standard
INT4	522.0	4	Standard

MEMORY SPECIFICATIONS

Capacity	24 GB
Type	GDDR6
Bandwidth	672 GB/s
Interface Width	384-bit

POWER & EFFICIENCY

TDP	280 W
Max Power	280 W
FP32 Efficiency	0.06 TFLOPS/W
FP16 Efficiency	0.47 TFLOPS/W

HARDWARE DETAILS

Vendor: NVIDIA	Architecture: Turing	Process Node: 12nm
Form Factor: PCIe	Launch Year: 2018	Variant: 24GB

COMPUTE ENGINE

CUDA Cores: 4,608	Tensor Cores: 576 (Turing)	SMs: 72
Base Clock: 1.35 GHz	Boost Clock: 1.77 GHz	

INTERCONNECT

GPU-to-GPU: NVLink	Bandwidth: 100 GB/s	Links: 2
PCIe: 3.0 x16		

CHIP DESIGN

Transistors: 18.6 billion	Die Size: 754 mm ²
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ENTERPRISE FEATURES

ECC: No	Sparsity: No
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