

NVIDIA GeForce RTX 3070 Ti 8GB

Ampere

PCIe

2021

8nm

OVERVIEW

21.8 FP32 TFLOPS	8 GB VRAM GDDR6X	— Memory Bandwidth	290 W TDP
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PERFORMANCE METRICS

Precision	Peak (dense)	2:4 Sparse	Bits	Type
FP64	0.3	N/A	64	Standard
FP32	21.8	N/A	32	Standard
TF32	21.8	43.5	32	Standard
BF16	43.5	87.0	16	Standard
FP16	43.5	87.0	16	Standard
FP8	—	not published	—	Standard
FP6	—	not published	—	Standard
FP4	—	not published	—	Standard
INT8	174.0	348.0	8	Standard
INT4	348.0	696.0	4	Standard

MEMORY SPECIFICATIONS

Capacity	8 GB
Type	GDDR6X
Bandwidth	—
Interface Width	256-bit

POWER & EFFICIENCY

TDP	290 W
Max Power	290 W
FP32 Efficiency	0.07 TFLOPS/W
FP16 Efficiency	0.15 TFLOPS/W

HARDWARE DETAILS

Vendor: NVIDIA	Architecture: Ampere	Process Node: 8nm
Form Factor: PCIe	Launch Year: 2021	Variant: 8GB

COMPUTE ENGINE

CUDA Cores: 6,144	Tensor Cores: 192 (3rd Gen)	SMs: 48
Base Clock: 1.58 GHz	Boost Clock: 1.77 GHz	

INTERCONNECT

PCIe: 4.0 x16

CHIP DESIGN

Transistors: 17.4 billion Die Size: 393 mm²

ENTERPRISE FEATURES

ECC: No Sparsity: Yes