

NVIDIA GeForce RTX 3080 10GB

Ampere PCIe 2020 8nm

OVERVIEW

29.8

FP32 TFLOPS

10 GB

VRAM GDDR6X

760 GB/s

Memory Bandwidth

320 W

TDP

PERFORMANCE METRICS

| Precision | Peak TFLOPS | Bits | Type |
|-----------|-------------|------|----------|
| INT8 | 59.5 | 8 | Standard |
| FP16 | 29.8 | 16 | Standard |
| BF16 | 29.8 | 16 | Standard |
| TF32 | 29.8 | 32 | Standard |
| FP32 | 29.8 | 32 | Standard |
| FP64 | 0.5 | 64 | Standard |

MEMORY SPECIFICATIONS

| | |
|-----------------|----------|
| Capacity | 10 GB |
| Type | GDDR6X |
| Bandwidth | 760 GB/s |
| Interface Width | 320-bit |

POWER & EFFICIENCY

| | |
|-----------------|---------------|
| TDP | 320 W |
| Est. Max Power | 368 W |
| FP32 Efficiency | 0.09 TFLOPS/W |
| FP16 Efficiency | 0.09 TFLOPS/W |

HARDWARE DETAILS

| | | |
|-------------------|----------------------|-------------------|
| Vendor: NVIDIA | Architecture: Ampere | Process Node: 8nm |
| Form Factor: PCIe | Launch Year: 2020 | Variant: 10GB |

COMPUTE ENGINE

| | | |
|----------------------|-----------------------------|---------|
| CUDA Cores: 8,704 | Tensor Cores: 272 (3rd Gen) | SMs: 68 |
| Base Clock: 1.44 GHz | Boost Clock: 1.71 GHz | |

CHIP DESIGN

| | |
|---------------------------|-------------------------------|
| Transistors: 28.3 billion | Die Size: 628 mm ² |
|---------------------------|-------------------------------|