NVIDIA Titan V 12GB

Volta | PCIe | 2017 | 12nm

OVERVIEW

14.9	12 GB	653 GB/s	250 W
FP32 TFLOPS	VRAM HBM2	Memory Bandwidth	TDP

PERFORMANCE METRICS

Precision	Peak (dense)	Bits	Type
FP64	7.5	64	Standard
FP32	14.9	32	Standard
TF32	–	—	Standard
BF16	–	—	Standard
FP16	110.0	16	Standard
FP8	–	—	Standard
FP6	–	—	Standard
FP4	–	—	Standard
INT8	–	—	Standard

MEMORY SPECIFICATIONS

Capacity	12 GB
Type	HBM2
Bandwidth	653 GB/s
Interface Width	3072-bit

POWER & EFFICIENCY

TDP	250 W
Max Power	250 W
FP32 Efficiency	0.06 TFLOPS/W
FP16 Efficiency	0.44 TFLOPS/W

HARDWARE DETAILS

Vendor: NVIDIA
Architecture: Volta
Process Node: 12nm
Form Factor: PCIe
Launch Year: 2017
Variant: 12GB

COMPUTE ENGINE

CUDA Cores: 5,120
Tensor Cores: 640 (1st Gen)
SMs: 80
Base Clock: 1.20 GHz
Boost Clock: 1.46 GHz

INTERCONNECT

PCIe: 3.0 x16

CHIP DESIGN

Transistors: 21.1 billion

Die Size: 815 mm^2

ENTERPRISE FEATURES

ECC: No

Sparsity: No