

NVIDIA Titan Xp 12GB

Pascal

PCIe

2017

16nm

OVERVIEW

12.2 FP32 TFLOPS	12 GB VRAM GDDR5X	548 GB/s Memory Bandwidth	250 W TDP
--	---	---	---------------------------------

PERFORMANCE METRICS

Precision	Peak (dense)	Bits	Type
FP64	—	—	Standard
FP32	12.2	32	Standard
TF32	—	—	Standard
BF16	—	—	Standard
FP16	—	—	Standard
FP8	—	—	Standard
FP6	—	—	Standard
FP4	—	—	Standard
INT8	—	—	Standard

MEMORY SPECIFICATIONS

Capacity	12 GB
Type	GDDR5X
Bandwidth	548 GB/s
Interface Width	384-bit

POWER & EFFICIENCY

TDP	250 W
Max Power	250 W
FP32 Efficiency	0.05 TFLOPS/W
FP16 Efficiency	—

HARDWARE DETAILS

Vendor: NVIDIA	Architecture: Pascal	Process Node: 16nm
Form Factor: PCIe	Launch Year: 2017	Variant: 12GB

COMPUTE ENGINE

CUDA Cores: 3,840	SMs: 30	Base Clock: 1.58 GHz
Boost Clock: 1.58 GHz		

INTERCONNECT

PCIe: 3.0 x16

CHIP DESIGN

Transistors: 12.0 billion Die Size: 471 mm²

ENTERPRISE FEATURES

ECC: No Sparsity: No