



NVIDIA GeForce GTX 1080 8GB vs NVIDIA P100 PCIe 16GB

Side by side datacenter GPU specifications from the Flopper.io database.

OVERVIEW

	NVIDIA GeForce GTX 1080 8GB	NVIDIA P100 PCIe 16GB
FP32 TFLOPS	8.9	9.3
Memory	8 GB	16 GB
Memory Bandwidth	320 GB/s	732 GB/s
TDP	180 W	250 W

PERFORMANCE BY PRECISION

Precision	NVIDIA GeForce GTX 1080 8GB peak TFLOPS (dense)	NVIDIA P100 PCIe 16GB peak TFLOPS (dense)
FP64	—	4.7
FP32	8.9	9.3
TF32	—	—
BF16	—	—
FP16	—	18.7
FP8	—	—
FP6	—	—
FP4	—	—
INT8	—	—

SPECIFICATIONS

	NVIDIA GeForce GTX 1080 8GB	NVIDIA P100 PCIe 16GB
Architecture	Pascal	Pascal
Process Node	16nm	—
Launch Year	2016	2016
Form Factor	PCIe	PCIe
Memory Type	GDDR5X	HBM2
Interface Width	256-bit	4096-bit
Interconnect	—	—

	NVIDIA GeForce GTX 1080 8GB	NVIDIA P100 PCIe 16GB
TDP	180 W	250 W
FP32 Efficiency	0.05 TFLOPS/W	0.04 TFLOPS/W