Intel Arc A580 8GB vs NVIDIA GeForce RTX 4080 16GB

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

OVERVIEW

	Intel Arc A580 8GB	NVIDIA GeForce RTX 4080 16GB
FP32 TFLOPS	–	**48.7**
Memory	**8 GB**	**16 GB**
Memory Bandwidth	**512 GB/s**	**717 GB/s**
TDP	**185 W**	**320 W**

PERFORMANCE BY PRECISION

Precision	Intel Arc A580 8GB peak TFLOPS (dense)	NVIDIA GeForce RTX 4080 16GB peak TFLOPS (dense)
FP64	–	0.7
FP32	–	48.7
TF32	–	48.7
BF16	–	97.5
FP16	–	97.5
FP8	–	195.0
FP6	–	–
FP4	–	–
INT8	197.0	389.9

SPECIFICATIONS

	Intel Arc A580 8GB	NVIDIA GeForce RTX 4080 16GB
Architecture	Alchemist	Ada Lovelace
Process Node	6nm	4nm
Launch Year	2023	2022
Form Factor	PCIe	PCIe
Memory Type	GDDR6	–
Interface Width	256-bit	–
Interconnect	–	–

	Intel Arc A580 8GB	NVIDIA GeForce RTX 4080 16GB
TDP	185 W	320 W
FP32 Efficiency	–	0.15 TFLOPS/W