



# AMD Radeon RX 6950 XT 16GB vs NVIDIA GeForce RTX 2080 Super 8GB

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

## OVERVIEW

|                  | AMD Radeon RX 6950 XT 16GB | NVIDIA GeForce RTX 2080 Super 8GB |
|------------------|----------------------------|-----------------------------------|
| FP32 TFLOPS      | 23.6                       | 11.2                              |
| Memory           | 16 GB                      | 8 GB                              |
| Memory Bandwidth | 576 GB/s                   | 496 GB/s                          |
| TDP              | 335 W                      | 250 W                             |

## PERFORMANCE BY PRECISION

| Precision | AMD Radeon RX 6950 XT 16GB peak TFLOPS (dense) | NVIDIA GeForce RTX 2080 Super 8GB peak TFLOPS (dense) |
|-----------|------------------------------------------------|-------------------------------------------------------|
| FP64      | —                                              | 0.3                                                   |
| FP32      | 23.6                                           | 11.2                                                  |
| TF32      | —                                              | —                                                     |
| BF16      | —                                              | —                                                     |
| FP16      | 47.3                                           | 44.6                                                  |
| FP8       | —                                              | —                                                     |
| FP6       | —                                              | —                                                     |
| FP4       | —                                              | —                                                     |
| INT8      | —                                              | 178.4                                                 |
| INT4      | —                                              | 356.8                                                 |

## SPECIFICATIONS

|              | AMD Radeon RX 6950 XT 16GB | NVIDIA GeForce RTX 2080 Super 8GB |
|--------------|----------------------------|-----------------------------------|
| Architecture | RDNA 2                     | Turing                            |
| Process Node | 7nm                        | 12nm                              |
| Launch Year  | 2022                       | 2019                              |
| Form Factor  | PCIe                       | PCIe                              |

|                 | AMD Radeon RX 6950 XT 16GB | NVIDIA GeForce RTX 2080 Super 8GB |
|-----------------|----------------------------|-----------------------------------|
| Memory Type     | GDDR6                      | GDDR6                             |
| Interface Width | 256-bit                    | 256-bit                           |
| Interconnect    | —                          | NVLink                            |
| TDP             | 335 W                      | 250 W                             |
| FP32 Efficiency | 0.07 TFLOPS/W              | 0.04 TFLOPS/W                     |