



# NVIDIA A100 SXM4 40GB vs NVIDIA Jetson Orin NX 8GB

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

## OVERVIEW

|                  | NVIDIA A100 SXM4 40GB | NVIDIA Jetson Orin NX 8GB |
|------------------|-----------------------|---------------------------|
| FP32 TFLOPS      | 19.5                  | 2.4                       |
| Memory           | 40 GB                 | 8 GB                      |
| Memory Bandwidth | 1.6 TB/s              | 102 GB/s                  |
| TDP              | 400 W                 | 40 W                      |

## PERFORMANCE BY PRECISION

| Precision | NVIDIA A100 SXM4 40GB peak TFLOPS (dense) | NVIDIA Jetson Orin NX 8GB peak TFLOPS (dense) |
|-----------|-------------------------------------------|-----------------------------------------------|
| FP64      | 9.7                                       | —                                             |
| FP32      | 19.5                                      | 2.4                                           |
| TF32      | 156.0                                     | —                                             |
| BF16      | 312.0                                     | —                                             |
| FP16      | 312.0                                     | —                                             |
| FP8       | —                                         | —                                             |
| FP6       | —                                         | —                                             |
| FP4       | —                                         | —                                             |
| INT8      | 624.0                                     | 38.5                                          |
| INT4      | 1248.0                                    | —                                             |

## SPECIFICATIONS

|                 | NVIDIA A100 SXM4 40GB | NVIDIA Jetson Orin NX 8GB |
|-----------------|-----------------------|---------------------------|
| Architecture    | Ampere                | Ampere                    |
| Process Node    | 7nm                   | —                         |
| Launch Year     | 2020                  | 2022                      |
| Form Factor     | SXM                   | Module                    |
| Memory Type     | HBM2e                 | LPDDR5                    |
| Interface Width | 4096-bit              | 128-bit                   |

|                 | NVIDIA A100 SXM4 40GB | NVIDIA Jetson Orin NX 8GB |
|-----------------|-----------------------|---------------------------|
| Interconnect    | —                     | —                         |
| TDP             | 400 W                 | 40 W                      |
| FP32 Efficiency | 0.05 TFLOPS/W         | 0.06 TFLOPS/W             |