



# AMD Instinct MI300X 192GB vs AMD Instinct MI300A 128GB

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

## OVERVIEW

|                  | AMD Instinct MI300X 192GB | AMD Instinct MI300A 128GB |
|------------------|---------------------------|---------------------------|
| FP32 TFLOPS      | 163.4                     | 122.6                     |
| VRAM             | 192 GB                    | 128 GB                    |
| Memory Bandwidth | 5.3 TB/s                  | 5.3 TB/s                  |
| TDP              | 750 W                     | 760 W                     |

## PERFORMANCE BY PRECISION

| Precision | AMD Instinct MI300X 192GB peak TFLOPS (dense) | AMD Instinct MI300A 128GB peak TFLOPS (dense) |
|-----------|-----------------------------------------------|-----------------------------------------------|
| INT8      | 2614.9                                        | 1961.2                                        |
| FP8       | 2614.9                                        | 1961.2                                        |
| FP16      | 1307.4                                        | 980.6                                         |
| BF16      | 1307.4                                        | 980.6                                         |
| TF32      | 653.7                                         | 490.3                                         |
| FP32      | 163.4                                         | 122.6                                         |
| FP64      | 81.7                                          | 61.3                                          |

## SPECIFICATIONS

|                 | AMD Instinct MI300X 192GB | AMD Instinct MI300A 128GB |
|-----------------|---------------------------|---------------------------|
| Architecture    | CDNA 3                    | CDNA 3                    |
| Process Node    | 5nm FinFET                | 5nm FinFET                |
| Launch Year     | 2023                      | 2023                      |
| Form Factor     | OAM                       | APU SH5 socket            |
| Memory Type     | —                         | —                         |
| Interface Width | —                         | —                         |
| Interconnect    | —                         | —                         |
| TDP             | 750 W                     | 760 W                     |

|                 | AMD Instinct MI300X 192GB | AMD Instinct MI300A 128GB |
|-----------------|---------------------------|---------------------------|
| FP32 Efficiency | 0.22 TFLOPS/W             | 0.16 TFLOPS/W             |