

# Benchmark Summary

## AMD Internal Use Only

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### 1 a100\_output\_dir\_gemm Specifications

#### Card0 Info

Bus: 0000:0C:00.0  
Driver Version: None  
Profile: 7  
Start Fan Speed: 21.96%  
Start GTT Memory: 114.0MB / 62.8GB  
Start VIS\_VRAM Memory: 47.2MB / 256.0MB  
Start VRAM Memory: 685.8MB / 16.0GB  
Start dceclk: 357Mhz - Level 0/7  
Start fclk: 357Mhz - Level 0/7  
Start mclk: 1000Mhz - Level 2/2  
Start pcie: 2.5GT/s x8 - Level 0 (2.5GT/s x8/N/A)  
Start sclk: 808Mhz - Level 1/8  
Start socclk: 971Mhz - Level 7/7

#### Card1 Info

Bus: 0000:0F:00.0  
Driver Version: None  
Profile: 7  
Start Fan Speed: 20.0%  
Start GTT Memory: 24.9MB / 62.8GB  
Start VIS\_VRAM Memory: 10.3MB / 256.0MB  
Start VRAM Memory: 10.3MB / 16.0GB  
Start dceclk: 357Mhz - Level 0/7  
Start fclk: 357Mhz - Level 0/7  
Start mclk: 350Mhz - Level 0/2  
Start pcie: 2.5GT/s x8 - Level 0 (2.5GT/s x8/N/A)  
Start sclk: 808Mhz - Level 1/8  
Start socclk: 309Mhz - Level 0/7

#### Device 0 Info

device: Vega 20 [Radeon VII]Vega 20 [Radeon VII] 0x66af  
memory clock: 1000Mhz  
performance level:  
system clock: 808Mhz  
vbios version: 113-D3600200-106  
vram: VRAM Total Memory (B) 1716309196

#### Host Info

cpu info: AMD Ryzen 9 3900X 12-Core Processor  
distro: Ubuntu 20.04.3 LTS  
hostname: achapman-X570  
kernel version: 5.4.0-92-generic  
ram: 64GiB  
rocm version: 5.0.0.50000-49

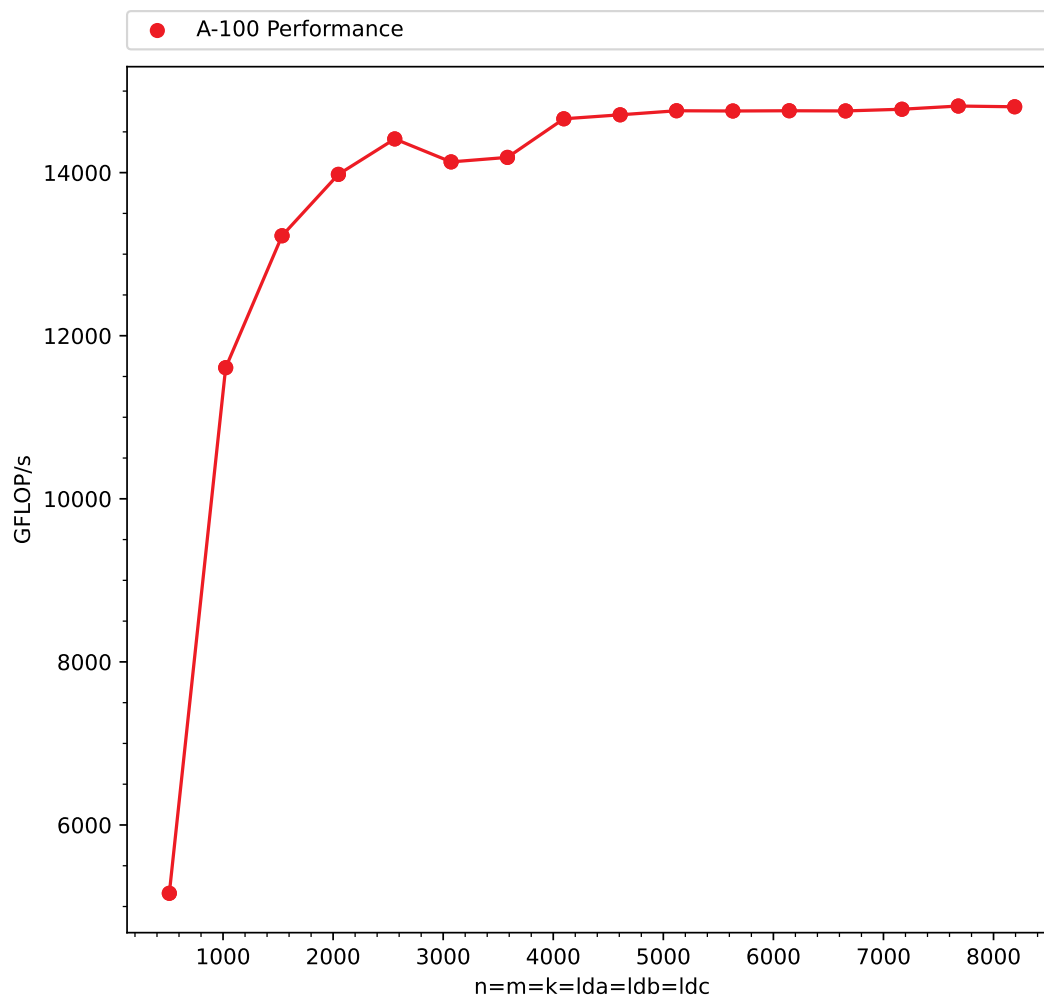


Figure 1: sgemm Performance

For all runs, “--batch\_count -1 -f gemm -r f32\_r --incx 0 --incy 0 --alpha 1 --beta 1 -i 1 --transposeA N --transposeB T --device 0” is held constant.

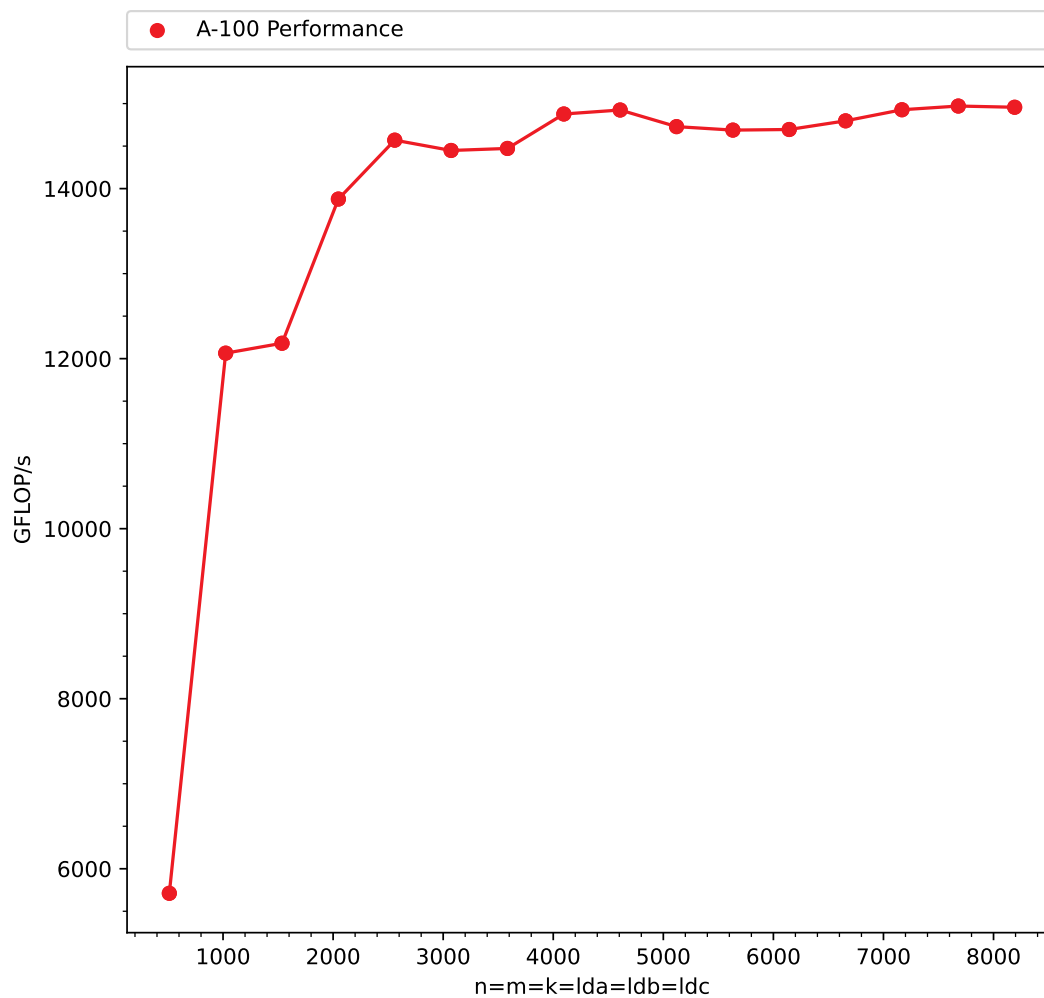


Figure 2: dgemm Performance

For all runs, “--batch\_count -1 -f gemm -r f64\_r --incx 0 --incy 0 --alpha 1 --beta 1 -i 1 --transposeA N --transposeB T --device 0” is held constant.