

Benchmark Summary

AMD Internal Use Only

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1 output_dir_gemm.1 Specifications

Card0 Info

Bus:	0000:63:00.0
Driver Version:	None
Profile:	5
Start Fan Speed:	0%
Start GTT Memory:	9.8MB / 1007.7GB
Start VIS_VRAM Memory:	6.7MB / 32.0GB
Start VRAM Memory:	6.7MB / 32.0GB
Start dcefclk:	N/A - Level N/A/N/A
Start fclk:	N/A - Level N/A/N/A
Start mclk:	N/A - Level N/A/N/A
Start pcie:	16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk:	N/A - Level N/A/N/A
Start socclk:	N/A - Level N/A/N/A

Card1 Info

Bus:	0000:43:00.0
Driver Version:	None
Profile:	5
Start Fan Speed:	0%
Start GTT Memory:	9.8MB / 1007.7GB
Start VIS_VRAM Memory:	6.7MB / 32.0GB
Start VRAM Memory:	6.7MB / 32.0GB
Start dcefclk:	N/A - Level N/A/N/A
Start fclk:	1402Mhz - Level 0/t
Start mclk:	1200Mhz - Level 0/t
Start pcie:	16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk:	300Mhz - Level 0/t
Start socclk:	1000Mhz - Level 0/t

Card2 Info

Bus:	0000:23:00.0
Driver Version:	None
Profile:	5
Start Fan Speed:	0%
Start GTT Memory:	9.8MB / 1007.7GB
Start VIS_VRAM Memory:	6.7MB / 32.0GB
Start VRAM Memory:	6.7MB / 32.0GB
Start dcefclk:	N/A - Level N/A/N/A
Start fclk:	1402Mhz - Level 0/t
Start mclk:	1200Mhz - Level 0/t
Start pcie:	16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk:	300Mhz - Level 0/t
Start socclk:	1000Mhz - Level 0/t

Card3 Info

Bus: 0000:03:00.0
Driver Version: None
Profile: 5
Start Fan Speed: 0%
Start GTT Memory: 9.8MB / 1007.7GB
Start VIS_VRAM Memory: 6.7MB / 32.0GB
Start VRAM Memory: 6.7MB / 32.0GB
Start dcefclk: N/A - Level N/A/N/A
Start fclk: 1402Mhz - Level 0/t
Start mclk: 1200Mhz - Level 0/t
Start pcie: 16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk: 300Mhz - Level 0/t
Start socclk: 1000Mhz - Level 0/t

Card4 Info

Bus: 0000:E3:00.0
Driver Version: None
Profile: 5
Start Fan Speed: 0%
Start GTT Memory: 9.8MB / 1007.7GB
Start VIS_VRAM Memory: 6.7MB / 32.0GB
Start VRAM Memory: 6.7MB / 32.0GB
Start dcefclk: N/A - Level N/A/N/A
Start fclk: 1402Mhz - Level 0/t
Start mclk: 1200Mhz - Level 0/t
Start pcie: 16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk: 300Mhz - Level 0/t
Start socclk: 1000Mhz - Level 0/t

Card5 Info

Bus: 0000:C3:00.0
Driver Version: None
Profile: 5
Start Fan Speed: 0%
Start GTT Memory: 9.8MB / 1007.7GB
Start VIS_VRAM Memory: 6.7MB / 32.0GB
Start VRAM Memory: 6.7MB / 32.0GB
Start dcefclk: N/A - Level N/A/N/A
Start fclk: 1402Mhz - Level 0/t
Start mclk: 1200Mhz - Level 0/t
Start pcie: 16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk: 300Mhz - Level 0/t
Start socclk: 1000Mhz - Level 0/t

Card6 Info

Bus: 0000:A3:00.0
Driver Version: None
Profile: 5
Start Fan Speed: 0%
Start GTT Memory: 9.8MB / 1007.7GB
Start VIS_VRAM Memory: 6.7MB / 32.0GB
Start VRAM Memory: 6.7MB / 32.0GB
Start dcefclk: N/A - Level N/A/N/A
Start fclk: 1402Mhz - Level 0/t
Start mclk: 1200Mhz - Level 0/t
Start pcie: 16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk: 300Mhz - Level 0/t
Start socclk: 1000Mhz - Level 0/t

Card7 Info

Bus: 0000:83:00.0
Driver Version: None
Profile: 5
Start Fan Speed: 0%
Start GTT Memory: 9.8MB / 1007.7GB
Start VIS_VRAM Memory: 6.7MB / 32.0GB
Start VRAM Memory: 6.7MB / 32.0GB
Start dcefclk: N/A - Level N/A/N/A
Start fclk: 1402Mhz - Level 0/t
Start mclk: 1200Mhz - Level 0/t
Start pcie: 16.0GT/s x16 - Level 0 (16.0GT/s x16/N/A)
Start sclk: 300Mhz - Level 0/t
Start socclk: 1000Mhz - Level 0/t

Device 0 Info

device: Advanced Micro Devices, Inc. [AMD/ATI]Advanced Micro Devices, Inc. [AMD/ATI]Advanced Micro Devices, Inc. [AMD/ATI]
memory clock: None
performance level:
system clock: None
vbios version: 113-D3420900-038
vram: VRAM Total Memory (B) 3434296115

Host Info

cpu info: AMD EPYC 7742 64-Core Processor
distro: Ubuntu 18.04.5 LTS
hostname: ts2-hq-01.rocm.amd.com
kernel version: 5.4.0-90-generic
ram: 1007GiB
rocm version: 4.5.1.40501-84

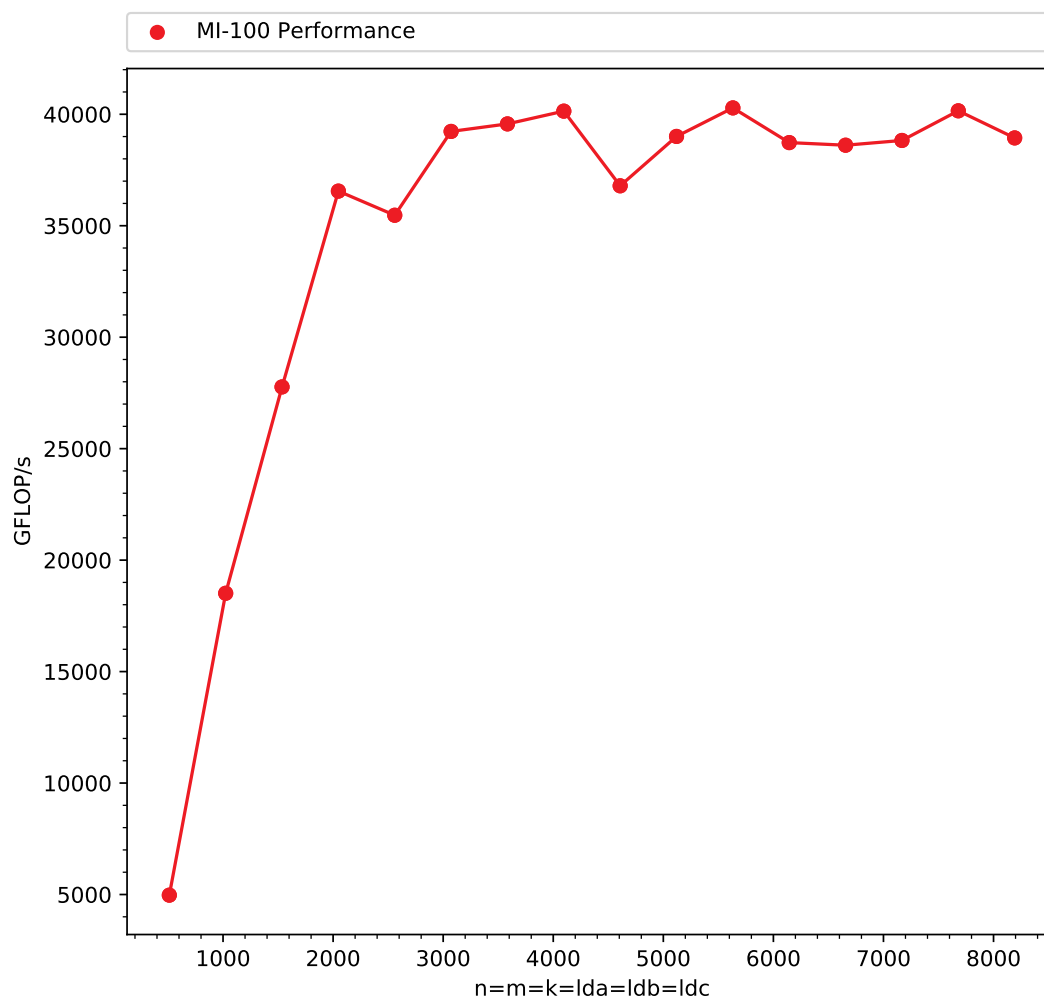


Figure 1: sgemm Performance

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.

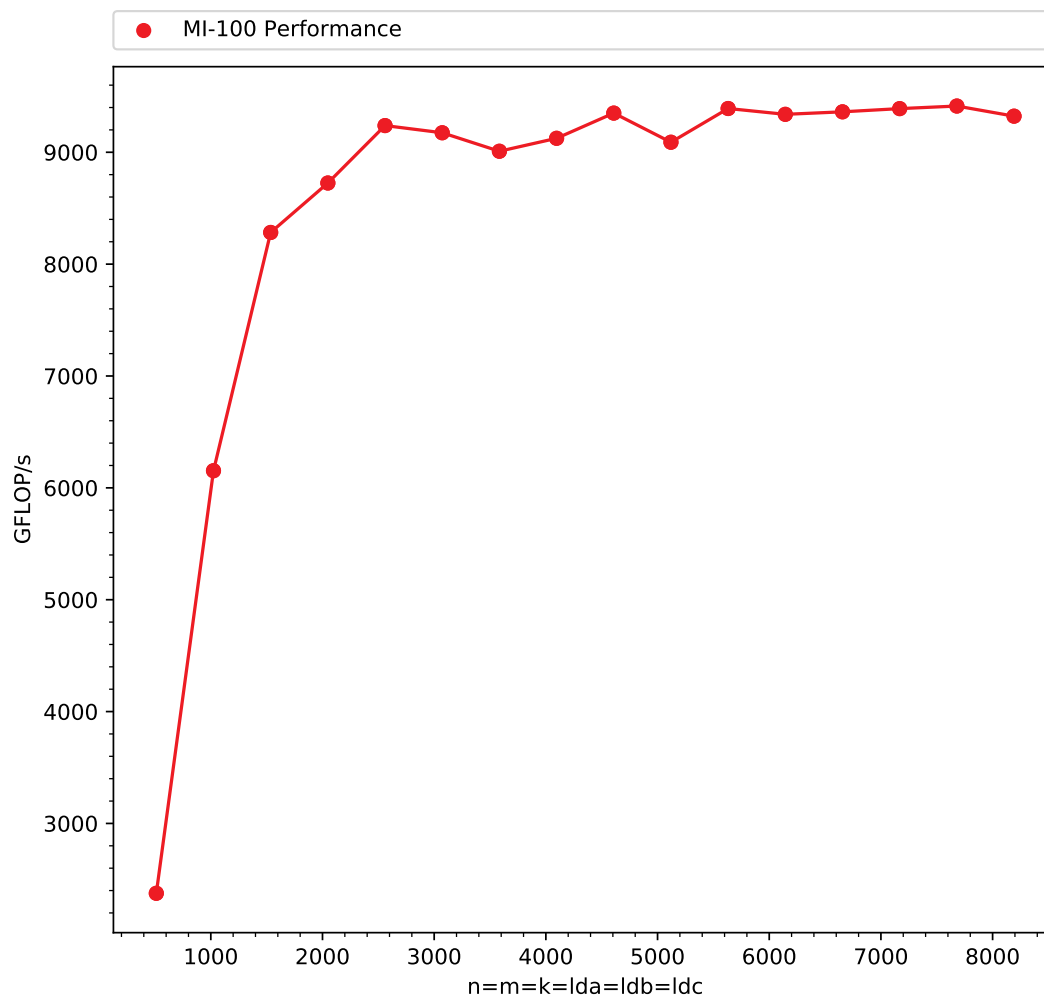


Figure 2: dgemm Performance

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.

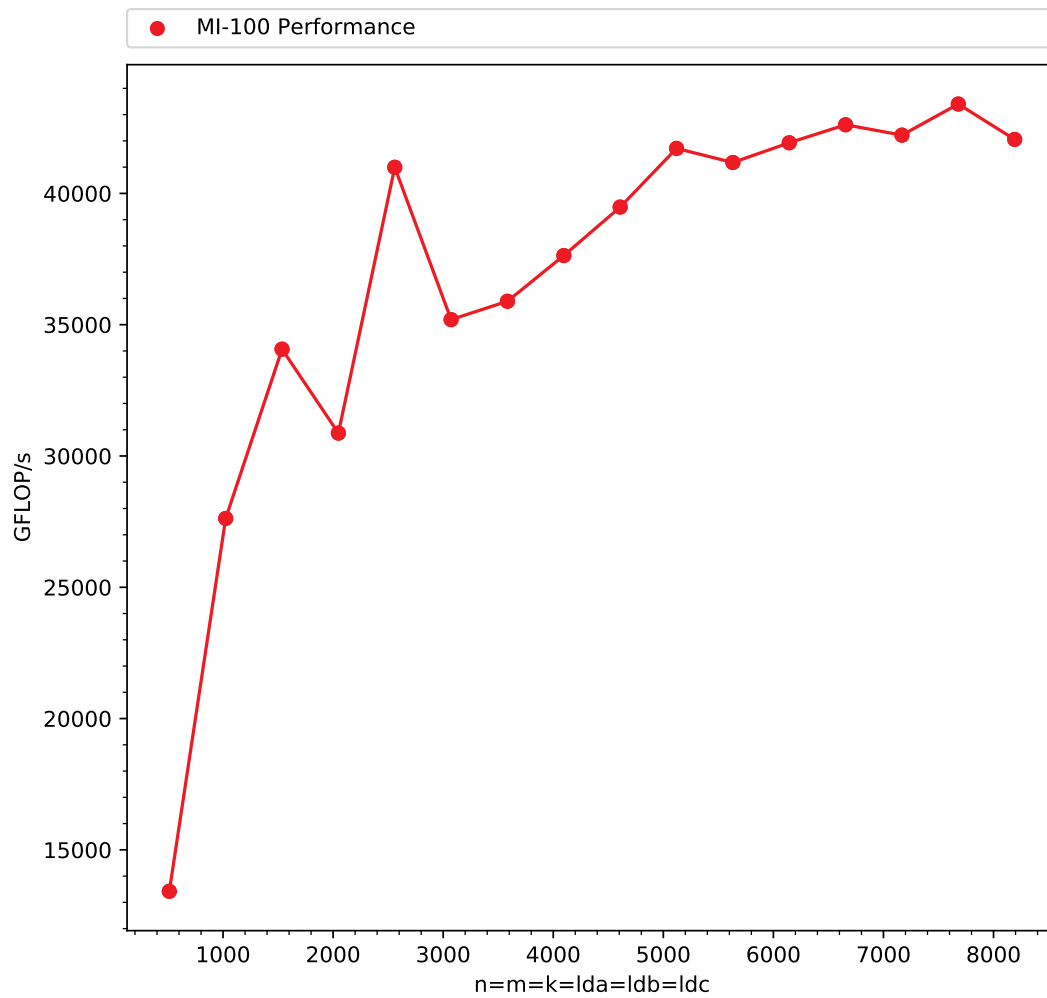


Figure 3: cgemm Performance

For all runs, “--batch_count -1 -f gemm -r f32_c --incx 0 --incy 0 --alpha 1 --beta 1 -i 1 --transposeA N --transposeB T --device 0” is held constant.

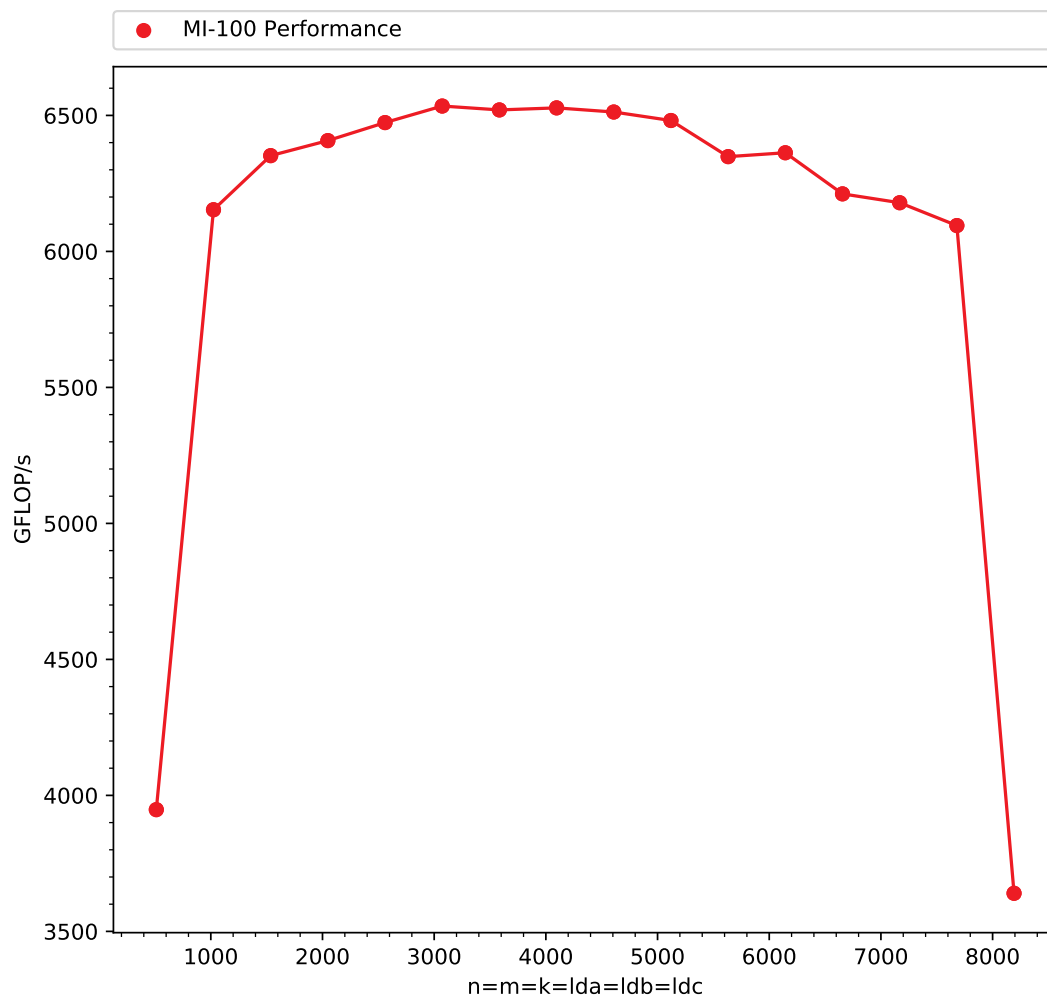


Figure 4: zgemv Performance

For all runs, “--batch_count -1 -f gemm -r f64_c --incx 0 --incy 0 --alpha 1 --beta 1 -i 1 --transposeA N --transposeB T --device 0” is held constant.