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test5-vikram-pc-viennacl

AMD Ryzen 9 3900X 12-Core testing with a ASUS PRIME X570-P (1405 BIOS) and MSI AMD Radeon R7 370 / R9 270/370 OEM 2GB on Ubuntu 20.04 via the Phoronix Test Suite.

Test Systems:

vikram-pc-viennacl

Processor: AMD Ryzen 9 3900X 12-Core @ 3.80GHz (12 Cores / 24 Threads), Motherboard: ASUS PRIME X570-P (1405 BIOS), Chipset: AMD Starship/Matisse, Memory: 64GB, Disk: Samsung SSD 970 EVO 500GB + 2000GB Seagate ST2000DM008-2FR1 + 1000GB My Passport 0830, Graphics: MSI AMD Radeon R7 370 / R9 270/370 OEM 2GB (955/1400MHz), Audio: AMD Oland/Hainan/Cape, Monitor: G276HL, Network: Realtek RTL8111/8168/8411

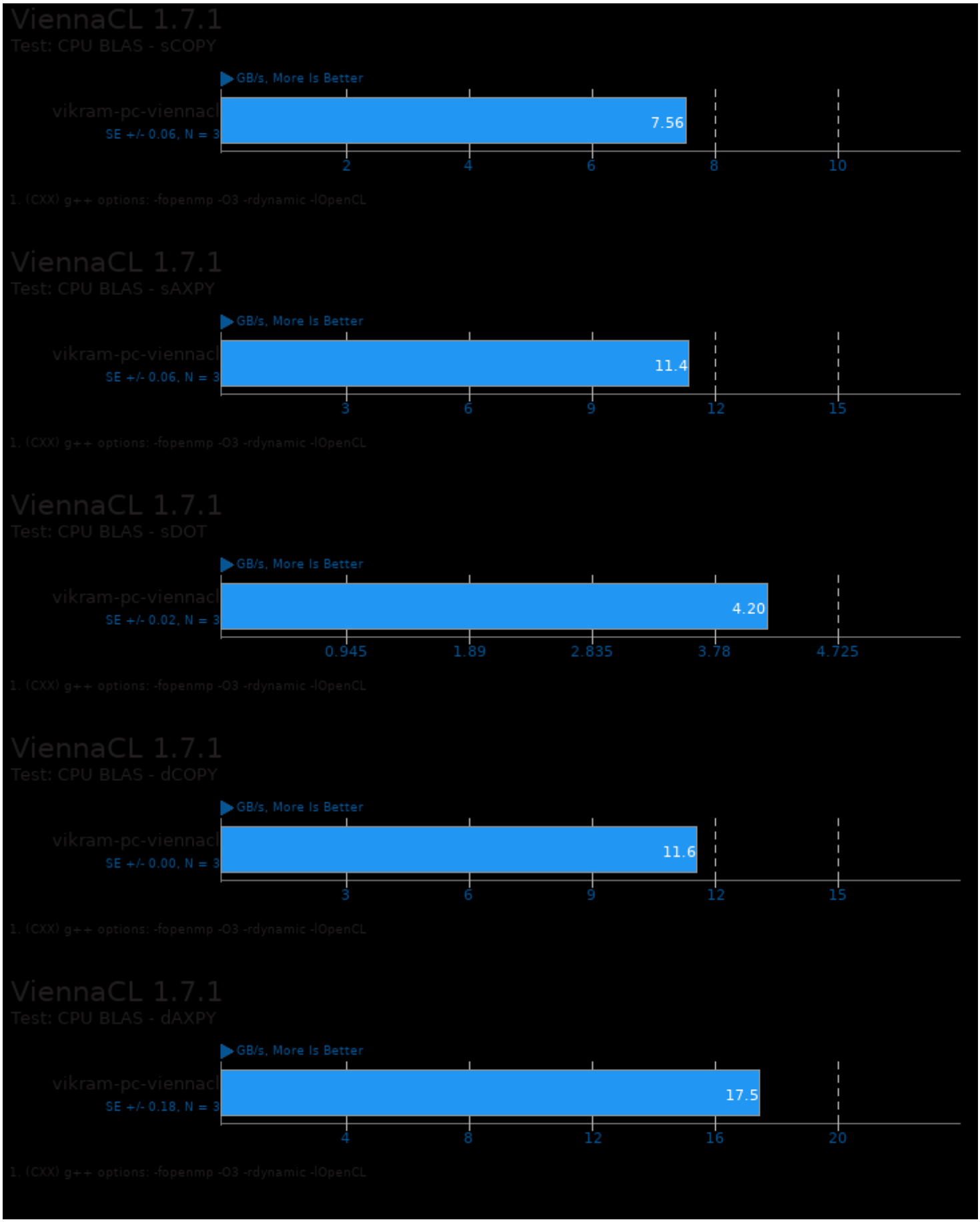
OS: Ubuntu 20.04, Kernel: 5.4.0-84-generic (x86_64), Desktop: GNOME Shell 3.36.9, Display Server: X Server 1.20.11 + Wayland, OpenGL: 4.6 Mesa 21.3.0-devel (git-fe96cea 2021-09-15 focal-oibaf-ppa) (LLVM 12.0.1), Compiler: GCC 9.3.0, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: radeon.si_support=0 radeon.cik_support=0 amdgpu.si_support=1 amdgpu.cik_support=1 amdgpu.dc=1 amdgpu.dpm=1 amdgpu.modeset=1 - Transparent Huge Pages: madvise

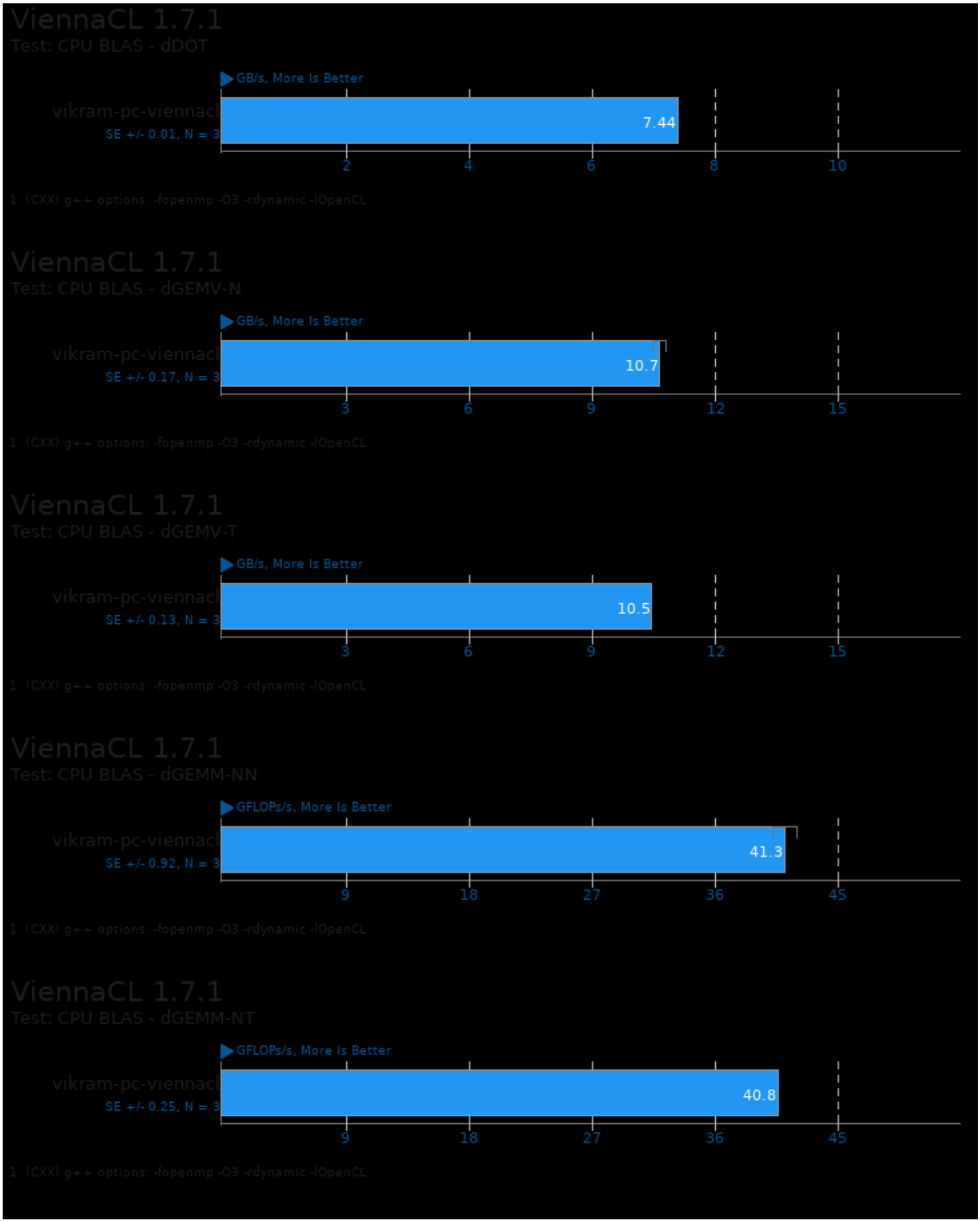
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Environment Notes: WM_LDFLAGS=-m64 WM_CFLAGS="-m64 -fPIC" WM_CXXFLAGS="-m64 -fPIC -std=c++0x"
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/usr,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: acpi-cpufreq ondemand (Boost: Enabled) - CPU Microcode: 0x8701013
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full AMD retpoline IBPB: conditional STIBP: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

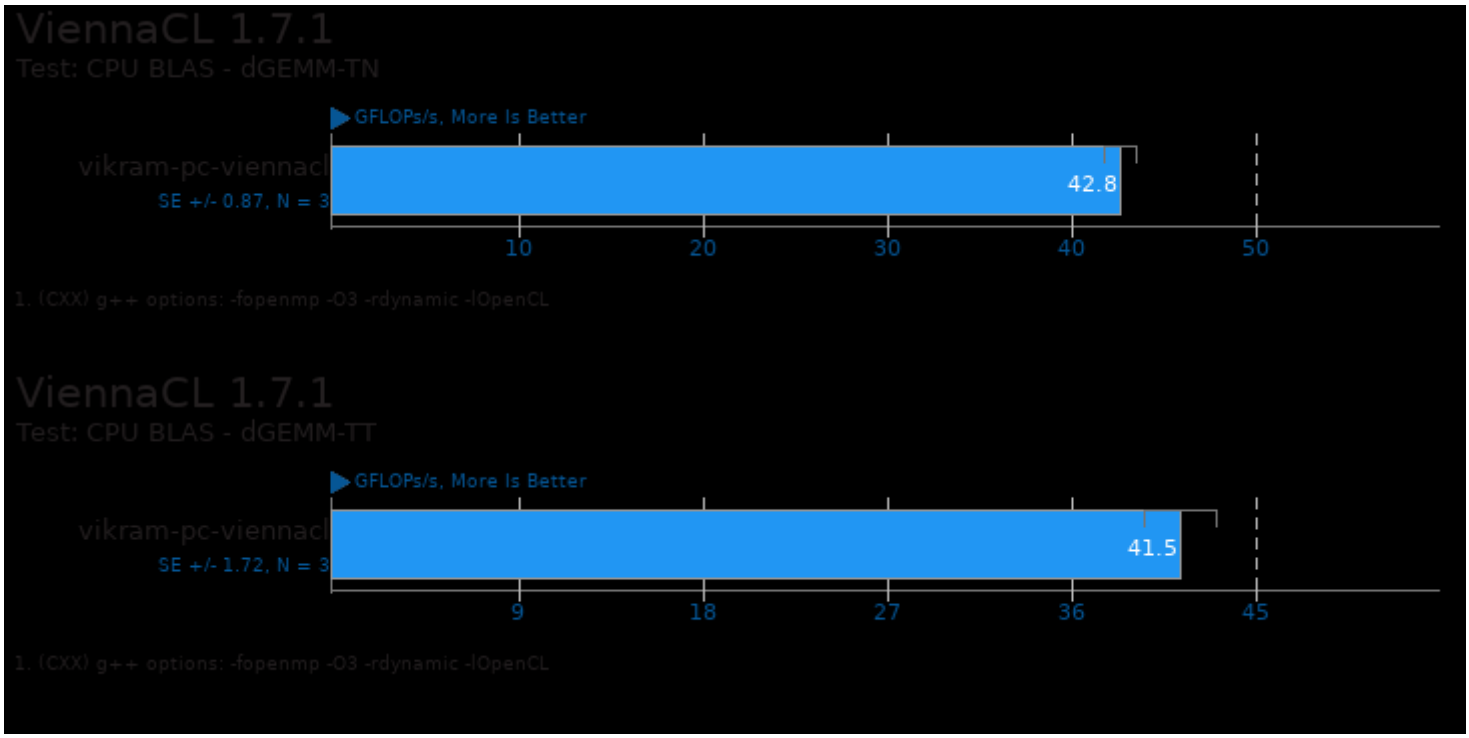
	vikram-pc-viennacl
ViennaCL - CPU BLAS - sCOPY (GB/s)	7.56
Standard Deviation	1.3%
ViennaCL - CPU BLAS - sAXPY (GB/s)	11.4
Standard Deviation	0.9%
ViennaCL - CPU BLAS - sDOT (GB/s)	4.20
Standard Deviation	0.8%
ViennaCL - CPU BLAS - dCOPY (GB/s)	11.6
Standard Deviation	0%
ViennaCL - CPU BLAS - dAXPY (GB/s)	17.5
Standard Deviation	1.7%
ViennaCL - CPU BLAS - dDOT (GB/s)	7.44
Standard Deviation	0.2%
ViennaCL - CPU BLAS - dGEMV-N (GB/s)	10.7
Standard Deviation	2.7%
ViennaCL - CPU BLAS - dGEMV-T (GB/s)	10.5
Standard Deviation	2.2%
ViennaCL - CPU BLAS - dGEMM-NN (GFLOPs/s)	41.3
Standard Deviation	3.9%
ViennaCL - CPU BLAS - dGEMM-NT (GFLOPs/s)	40.8
Standard Deviation	1.1%
ViennaCL - CPU BLAS - dGEMM-TN (GFLOPs/s)	42.8
Standard Deviation	3.5%
ViennaCL - CPU BLAS - dGEMM-TT (GFLOPs/s)	41.5
Standard Deviation	7.2%


ViennaCL 1.7.1
Test: CPU BLAS - sCOPY
GB/s, More Is Better
vikram-pc-viennacl
SE +/- 0.06, N = 3
7.56
2
4
6
8
10
1. (CXX) g++ options: -fopenmp -O3 -rdynamic -lOpenCL
ViennaCL 1.7.1
Test: CPU BLAS - sAXPY
GB/s, More Is Better
vikram-pc-viennacl
SE +/- 0.06, N = 3
11.4
3
6
9
12
15
1. (CXX) g++ options: -fopenmp -O3 -rdynamic -lOpenCL
ViennaCL 1.7.1
Test: CPU BLAS - sDOT
GB/s, More Is Better
vikram-pc-viennacl
SE +/- 0.02, N = 3
4.20
0.945
1.89
2.835
3.78
4.725
1. (CXX) g++ options: -fopenmp -O3 -rdynamic -lOpenCL
ViennaCL 1.7.1
Test: CPU BLAS - dCOPY
GB/s, More Is Better
vikram-pc-viennacl
SE +/- 0.00, N = 3
11.6
3
6
9
12
15
1. (CXX) g++ options: -fopenmp -O3 -rdynamic -lOpenCL
ViennaCL 1.7.1
Test: CPU BLAS - dAXPY
GB/s, More Is Better
vikram-pc-viennacl
SE +/- 0.18, N = 3
17.5
4
8
12
16
20
1. (CXX) g++ options: -fopenmp -O3 -rdynamic -lOpenCL

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This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 21:27.