Report

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Evaluation

OpenMp

Unit: Mflops	T = 1	T = 2	T = 4	T =8
OpenMp	471.966	945.156	1876.28	3773.57

OpenCilk

Unit: Mflops	T = 1	T = 2	T = 4	T =8
OpenCilk	1439.08	2772.35	5232.23	9330.3

CUDA

285631 **Mflops**

Configuration

OpenMp and OpenCilk

```
Architecture:            x86_64
  CPU op-mode(s):        32-bit, 64-bit
  Address sizes:         46 bits physical, 48 bits virtual
  Byte Order:            Little Endian
CPU(s):                  64
  On-line CPU(s) list:   0-63
Vendor ID:               GenuineIntel
  Model name:            Intel(R) Xeon(R) Gold 5218 CPU @ 2.30GHz
    CPU family:          6
    Model:               85
    Thread(s) per core:  2
    Core(s) per socket:  16
    Socket(s):           2
    Stepping:            7
    CPU(s) scaling MHz:  27%
    CPU max MHz:         3900.0000
    CPU min MHz:         1000.0000
    BogoMIPS:            4600.00
    Flags:               fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge
mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
pdpe1gb rdtscp lm constan
                         t_tsc art arch_perfmon pebs bts rep_good nopl
xtopology nonstop_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds_cpl vmx
smx est tm2 ssse3 sdbg fma cx16
```

```
                         xtpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch
cpuid_fault epb cat_l3 cdp_l3 i
                         nvpcid_single intel_ppin ssbd mba ibrs ibpb stibp
ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust
bmi1 avx2 smep bmi2 erms in
                         vpcid cqm mpx rdt_a avx512f avx512dq rdseed adx smap
clflushopt clwb intel_pt avx512cd avx512bw avx512vl xsaveopt xsavec xgetbv1
xsaves cqm_llc cqm_occup_ll
                         c cqm_mbm_total cqm_mbm_local dtherm ida arat pln pts
pku ospke avx512_vnni md_clear flush_l1d arch_capabilities
Virtualization features:
  Virtualization:        VT-x
Caches (sum of all):
  L1d:                   1 MiB (32 instances)
  L1i:                   1 MiB (32 instances)
  L2:                    32 MiB (32 instances)
  L3:                    44 MiB (2 instances)
NUMA:
  NUMA node(s):          2
  NUMA node0 CPU(s):
0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,
56,58,60,62
  NUMA node1 CPU(s):
1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35,37,39,41,43,45,47,49,51,53,55,
57,59,61,63
Vulnerabilities:
  Itlb multihit:         KVM: Mitigation: VMX disabled
  L1tf:                  Not affected
  Mds:                   Not affected
  Meltdown:              Not affected
  Mmio stale data:       Mitigation; Clear CPU buffers; SMT vulnerable
  Retbleed:              Mitigation; Enhanced IBRS
  Spec store bypass:     Mitigation; Speculative Store Bypass disabled via
prctl
  Spectre v1:            Mitigation; usercopy/swapgs barriers and __user
pointer sanitization
  Spectre v2:            Mitigation; Enhanced IBRS, IBPB conditional, RSB
filling, PBRSB-eIBRS SW sequence
  Srbds:                 Not affected
  Tsx async abort:       Mitigation; TSX disabled
```

CUDA

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+-----------------------------------------------------------------------------
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| NVIDIA-SMI 530.30.02              Driver Version: 530.30.02    CUDA Version:
12.1     |
|-----------------------------------------+----------------------+-------------
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| GPU  Name                  Persistence-M| Bus-Id        Disp.A | Volatile
Uncorr. ECC |
```

```
| Fan  Temp  Perf            Pwr:Usage/Cap|         Memory-Usage | GPU-Util
Compute M. |
|                                         |                      |
  MIG M. |
|=========================================+======================+=============
=========|
|   0  NVIDIA GeForce GTX 1080         On | 00000000:01:00.0 Off |
     N/A |
| 30%   40C    P8               13W / 180W|      1MiB /  8192MiB |      0%
Default |
|                                         |                      |
     N/A |
+-----------------------------------------+----------------------+-------------
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+-----------------------------------------------------------------------------
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| Processes:
         |
|  GPU   GI   CI        PID   Type   Process name
GPU Memory |
|        ID   ID
Usage      |
|=============================================================================
=========|
|  No running processes found
        |
+-----------------------------------------------------------------------------
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```