xFusion

FusionServer 1288H V6 (Intel Xeon Gold 5320)

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion
Test Date: Jun-2023
Hardware Availability: Apr-2021
Software Availability: Dec-2022

SPECrate®2017_int_base = 385
SPECrate®2017_int_peak = Not Run

<table>
<thead>
<tr>
<th>SPECrate®2017_int_base (385)</th>
</tr>
</thead>
</table>
| 500.perlbench_r 104
| 502.gcc_r 104
| 505.mcf_r 104
| 520.omnetpp_r 104
| 523.xalancbmk_r 104
| 525.x264_r 104
| 531.deepsjeng_r 104
| 541.leela_r 104
| 548.exchange2_r 104
| 557.xz_r 104

<table>
<thead>
<tr>
<th>Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Name: Intel Xeon Gold 5320</td>
</tr>
<tr>
<td>Max MHz: 3400</td>
</tr>
<tr>
<td>Nominal: 2200</td>
</tr>
<tr>
<td>Enabled: 52 cores, 2 chips, 2 threads/core</td>
</tr>
<tr>
<td>Orderable: 1.2 chips</td>
</tr>
<tr>
<td>Cache L1: 32 KB I + 48 KB D on chip per core</td>
</tr>
<tr>
<td>L2: 1.25 MB I+D on chip per core</td>
</tr>
<tr>
<td>L3: 39 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Other: None</td>
</tr>
<tr>
<td>Memory: 512 GB (16 x 32 GB 2Rx4 PC4-3200AA-R, running at 2933)</td>
</tr>
<tr>
<td>Storage: 1 x 1920 GB SATA SSD</td>
</tr>
<tr>
<td>Other: None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS: Red Hat Enterprise Linux release 8.4 (Ootpa) 4.18.0-305.el8.x86_64</td>
</tr>
<tr>
<td>Compiler: C/C++: Version 2023.0 of Intel oneAPI DPC++/C++ Compiler for Linux; Fortran: Version 2023.0 of Intel Fortran Compiler for Linux;</td>
</tr>
<tr>
<td>Parallel: No</td>
</tr>
<tr>
<td>Firmware: Version 1.55 Released May-2023</td>
</tr>
<tr>
<td>File System: xfs</td>
</tr>
<tr>
<td>System State: Run level 3 (multi-user)</td>
</tr>
<tr>
<td>Base Pointers: 64-bit</td>
</tr>
<tr>
<td>Peak Pointers: Not Applicable</td>
</tr>
<tr>
<td>Other: None</td>
</tr>
<tr>
<td>Power Management: BIOS and OS set to prefer performance at the cost of additional power usage</td>
</tr>
</tbody>
</table>
xFusion
FusionServer 1288H V6 (Intel Xeon Gold 5320)

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

SPECrate®2017_int_base = 385
SPECrate®2017_int_peak = Not Run
Test Date: Jun-2023
Hardware Availability: Apr-2021
Software Availability: Dec-2022

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Base: Seconds</th>
<th>Base: Ratio</th>
<th>Peak: Seconds</th>
<th>Peak: Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>500.perlbench_r</td>
<td>104</td>
<td>629</td>
<td>263</td>
<td>628</td>
<td>263</td>
</tr>
<tr>
<td>502.gcc_r</td>
<td>104</td>
<td>486</td>
<td>303</td>
<td>485</td>
<td>303</td>
</tr>
<tr>
<td>505.mcf_r</td>
<td>104</td>
<td>265</td>
<td>633</td>
<td>265</td>
<td>633</td>
</tr>
<tr>
<td>520.omnetpp_r</td>
<td>104</td>
<td>566</td>
<td>241</td>
<td>566</td>
<td>241</td>
</tr>
<tr>
<td>523.xalancbmk_r</td>
<td>104</td>
<td>182</td>
<td>604</td>
<td>181</td>
<td>606</td>
</tr>
<tr>
<td>525.x264_r</td>
<td>104</td>
<td>237</td>
<td>768</td>
<td>237</td>
<td>767</td>
</tr>
<tr>
<td>531.deepsjeng_r</td>
<td>104</td>
<td>424</td>
<td>281</td>
<td>425</td>
<td>281</td>
</tr>
<tr>
<td>541.leela_r</td>
<td>104</td>
<td>635</td>
<td>271</td>
<td>634</td>
<td>272</td>
</tr>
<tr>
<td>548.exchange2_r</td>
<td>104</td>
<td>343</td>
<td>795</td>
<td>340</td>
<td>802</td>
</tr>
<tr>
<td>557.xz_r</td>
<td>104</td>
<td>536</td>
<td>209</td>
<td>537</td>
<td>209</td>
</tr>
</tbody>
</table>

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Compiler Notes

SPEC has ruled that the compiler used for this result was performing a compilation that specifically improves the performance of the 523.xalancbmk_r / 623.xalancbmk_s benchmarks using a priori knowledge of the SPEC code and dataset to perform a transformation that has narrow applicability.

In order to encourage optimizations that have wide applicability (see rule 1.4 https://www.spec.org/cpu2017/Docs/runrules.html#rule_1.4), SPEC will no longer publish results using this optimization.

This result is left in the SPEC results database for historical reference.

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/spec2017-icc2023.0/lib/intel64:/spec2017-icc2023.0/lib/ia32:/spec2017-icc2023.0/je5.0.1-32"
MALLOC_CONF = "retain:true"
SPEC CPU®2017 Integer Rate Result

xFusion

FusionServer 1288H V6 (Intel Xeon Gold 5320)

<table>
<thead>
<tr>
<th>SPECrate®2017_int_base =</th>
<th>385</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate®2017_int_peak =</td>
<td>Not Run</td>
</tr>
</tbody>
</table>

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
memory using Red Hat Enterprise Linux 8.4
Transparent Huge Pages enabled by default
Filesystem page cache synced and cleared with:
    sync; echo 3> /proc/sys/vm/drop_caches
runcpu command invoked through numactl i.e.:
    numactl --interleave=all runcpu <etc>
NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown)
is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1)
is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2)
is mitigated in the system as tested and documented.

Platform Notes

BIOS configuration:
Performance Profile Set to Performance
SNC Set to Enabled SNC2 (2-clusters)
Sysinfo program /spec2017-icc2023.0/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c6ae2c92cc097bec197
running on localhost.localdomain Mon Jun 26 14:13:54 2023
SUT (System Under Test) info as seen by some common utilities.

1. uname -a
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 239 (239-45.el8)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/transparent
19. OS release
20. Kernel self-reported vulnerability status, from /sys/devices/system/cpu/vulnerabilities
21. Disk information
22. /sys/devices/virtual/dmi/id
23. dmidecode
24. BIOS

(Continued on next page)
**SPEC CPU®2017 Integer Rate Result**

**xFusion**

FusionServer 1288H V6 (Intel Xeon Gold 5320)

<table>
<thead>
<tr>
<th>SPECrate®2017_int_base</th>
<th>385</th>
</tr>
</thead>
</table>

**SPECrate®2017_int_peak** = Not Run

**CPU2017 License:** 6488  
**Test Sponsor:** xFusion  
**Tested by:** xFusion  
**Test Date:** Jun-2023  
**Hardware Availability:** Apr-2021  
**Software Availability:** Dec-2022

---

**Platform Notes (Continued)**

---

2. `w`

```
14:13:54 up  8:24,  2 users,  load average: 40.32, 85.60, 97.47
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
root     tty1     -                05:50    8:23m  1.47s  0.08s -bash
root     pts/0    70.167.0.2       06:01    4:16m  0.08s  0.08s -bash
```

---

3. **Username**

From environment variable `$USER`: root

---

4. `ulimit -a`

```
core file size          (blocks, -c) 0
data seg size           (kbytes, -d) unlimited
scheduling priority     (-e) 0
file size               (blocks, -f) unlimited
pending signals         (l) 2060535
max locked memory       (kbytes, -l) 64
max memory size         (kbytes, -m) unlimited
open files              (-n) 1024
pipe size              (512 bytes, -p) 8
POSIX message queues    (bytes, -q) 819200
real-time priority      (-r) 0
stack size              (kbytes, -s) unlimited
cpu time                (seconds, -t) unlimited
max user processes      (-u) 2060535
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

---

5. `sysinfo process ancestry`

```
/usr/lib/systemd/systemd --switched-root --system --deserialize 18
login -- root
-bash
-runcpu --define default-platform-flags --copies 104 -c ic2023.0-lin-core-avx512-rate-20221201.cfg --define smt-on --define cores=52 --define physicalfirst --define invoke_with_interleave --define drop_caches --tune base --iterations 3 -o all intrate
runcpu --define default-platform-flags --copies 104 --configfile ic2023.0-lin-core-avx512-rate-20221201.cfg --define smt-on --define cores=52 --define physicalfirst --define invoke_with_interleave --define drop_caches --tune base --iterations 3 --output_format all --nopower --runmode rate --tune base --size refrate intrate --nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.044/templogs/preenv.intrate.044.0.log --lognum 044.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /spec2017-icc2023.0
```

---

6. `/proc/cpuinfo`

```
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>model name</td>
<td>Intel(R) Xeon(R) Gold 5320</td>
</tr>
<tr>
<td>vendor_id</td>
<td>GenuineIntel</td>
</tr>
<tr>
<td>cpu family</td>
<td>6</td>
</tr>
<tr>
<td>model</td>
<td>106</td>
</tr>
<tr>
<td>stepping</td>
<td>6</td>
</tr>
<tr>
<td>microcode</td>
<td>0x80000363</td>
</tr>
<tr>
<td>bugs</td>
<td>spectre_v1 spectre_v2 spec_store_bypass swaps</td>
</tr>
<tr>
<td>cpu cores</td>
<td>26</td>
</tr>
<tr>
<td>siblings</td>
<td>52</td>
</tr>
</tbody>
</table>
```

(Continued on next page)
### Platform Notes (Continued)

2 physical ids (chips)
104 processors (hardware threads)

- physical id 0: core ids 0-25
- physical id 0: apic ids 0-51
- physical id 1: apic ids 64-115

Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for virtualized systems. Use the above data carefully.

---

7. lscpu

From `lscpu` from `util-linux 2.32.1`:

- **Architecture:** x86_64
- **CPU op-mode(s):** 32-bit, 64-bit
- **Byte Order:** Little Endian
- **CPU(s):** 104
- **On-line CPU(s) list:** 0-103
- **Thread(s) per core:** 2
- **Core(s) per socket:** 26
- **Socket(s):** 2
- **NUMA node(s):** 4
- **Vendor ID:** GenuineIntel
- **BIOS Vendor ID:** Intel(R) Corporation
- **CPU family:** 6
- **Model:** 106
- **Model name:** Intel(R) Xeon(R) Gold 5320 CPU @ 2.20GHz
- **BIOS Model name:** Intel(R) Xeon(R) Gold 5320 CPU @ 2.20GHz
- **Stepping:** 6
- **CPU MHz:** 2800.000
- **BogoMIPS:** 4400.00
- **Virtualization:** VT-x
- **L1d cache:** 48K
- **L1i cache:** 32K
- **L2 cache:** 1280K
- **L3 cache:** 39936K
- **NUMA node0 CPU(s):** 0-12,52-64
- **NUMA node1 CPU(s):** 13-25,65-77
- **NUMA node2 CPU(s):** 26-38,78-90
- **NUMA node3 CPU(s):** 39-51,91-103

Flags:

- `fpu vme de pse tsc msr pae mce cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pse syscall nx pdpe1gb rdtscp lm constant_tsc art arch_capabilities`
SPEC CPU®2017 Integer Rate Result

xFusion
FusionServer 1288H V6 (Intel Xeon Gold 5320)

SPECrate®2017_int_base = 385
SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion
Test Date: Jun-2023
Hardware Availability: Apr-2021
Software Availability: Dec-2022

Platform Notes (Continued)

node 0 free: 122729 MB
node 1 cpus: 13-25,65-77
node 1 size: 129018 MB
node 1 free: 123872 MB
node 2 cpus: 26-38,78-90
node 2 size: 129018 MB
node 2 free: 123585 MB
node 3 cpus: 39-51,91-103
node 3 size: 129015 MB
node 3 free: 123725 MB
node distances:
node 0 1 2 3
0: 10 11 20 20
1: 11 10 20 20
2: 20 20 10 11
3: 20 20 11 10

9. /proc/meminfo
MemTotal: 527534652 kB

10. who -r
run-level 3 Jun 26 05:50

11. Systemd service manager version: systemd 239 (239-45.el8)
   Default Target Status
   multi-user running

12. Services, from systemctl list-unit-files
    STATE UNIT FILES
    enabled NetworkManager NetworkManager-dispatcher NetworkManager-wait-online atd auditd autovt@ chrony
crond firewalld getty@ import-state irqbalance iscsi iscsi-onboot kdump libstoragemgmt
loadmodules lvm2-monitor mcmdlog mdmonitor microcode multipathd nis-domainname
nvme-connections rhcmcertd rsyslog selinux-autorelabel-mark systemd sshd sssd syslog
sssd systemd-timedatex tuned udisks2 vdo
disabled arp-ethers blk-availability chrony-wait console-getty cpupower debug-shell ebtables iprdump
iprinit iprupdate ipsec iscsi iscsiuioc kpatch kvm_stat ledmon nftables nvme-autoconnect oddjobd
psacct rdisc rhcm rhsm-facts serial-getty@ sshd-keygen@ systemd-resolved tcsd
   generated SystemTap compile-server gcc-toolset-10-stap-server gcc-toolset-10-systemtap
gcc-toolset-9-stap-server gcc-toolset-9-systemtap scripts startup
   indirect sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh systemd-ssd
   masked systemd-timedated

13. Linux kernel boot-time arguments, from /proc/cmdline
    BOOT_IMAGE=(hd0,gpt3)/boot/vmlinuz-4.18.0-305.el8.x86_64
    root=UUID=711de346-1631-4b60-a626-37488271d625
    ro
crashkernel=auto
    resume=UUID=d6a3ac10-1e1a-4e42-a80b-54c427bcad19
    rhgb
    quiet

14. cpupower frequency-info
   analyzing CPU 0:
   Unable to determine current policy

(Continued on next page)
**SPEC CPU®2017 Integer Rate Result**

xFusion

FusionServer 1288H V6 (Intel Xeon Gold 5320)

<table>
<thead>
<tr>
<th>CPU2017 License: 6488</th>
<th>Test Date: Jun-2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: xFusion</td>
<td>Hardware Availability: Apr-2021</td>
</tr>
<tr>
<td>Tested by: xFusion</td>
<td>Software Availability: Dec-2022</td>
</tr>
</tbody>
</table>

**SPECrate®2017_int_base = 385**

**SPECrate®2017_int_peak = Not Run**

---

**Platform Notes (Continued)**

boost state support:
- Supported: yes
- Active: yes

---

15. tuned-adm active
   No current active profile.

---

16. sysctl
   - kernel.numa_balancing: 1
   - kernel.randomize_va_space: 2
   - vm.compaction_proactiveness: 0
   - vm.dirty_background_bytes: 0
   - vm.dirty_background_ratio: 10
   - vm.dirty_bytes: 0
   - vm.dirty_expire_centisecs: 3000
   - vm.dirty_ratio: 20
   - vm.dirty_writeback_centisecs: 500
   - vm.dirtytime_expire_seconds: 43200
   - vm.min_unmapped_ratio: 1
   - vm.nr_hugepages: 0
   - vm.nr_hugepages_mempolicy: 0
   - vm.nr_overcommit_hugepages: 0
   - vm.swappiness: 60
   - vm.watermark_boost_factor: 15000
   - vm.watermark_scale_factor: 10
   - vm.zone_reclaim_mode: 0

---

17. /sys/kernel/mm/transparent_hugepage
   - defrag: always defer defer+madvise [madvise] never
   - enabled: [always] madvise never
   - hpage_pmd_size: 2097152
   - shmem_enabled: always within_size advise [never] deny force

---

18. /sys/kernel/mm/transparent_hugepage/khugepaged
   - alloc_sleep_millisecs: 60000
   - defrag: 1
   - max_ptes_none: 511
   - max_ptes_swap: 64
   - pages_to_scan: 4096
   - scan_sleep_millisecs: 10000

---

19. OS release
   - From /etc/*-release /etc/*-version
   - os-release: Red Hat Enterprise Linux 8.4 (Ootpa)
   - redhat-release: Red Hat Enterprise Linux release 8.4 (Ootpa)
   - system-release: Red Hat Enterprise Linux release 8.4 (Ootpa)

---

20. Kernel self-reported vulnerability status, from /sys/devices/system/cpu/vulnerabilities
   - itlb_multihit: Not affected
   - l1tf: Not affected
   - mds: Not affected
   - meltdown: Not affected
   - spec_store_bypass: Mitigation: Speculative Store Bypass disabled via prctl and seccomp

(Continued on next page)
Platform Notes (Continued)

- spectre_v1: Mitigation: usercopy/swapgs barriers and __user pointer sanitization
- spectre_v2: Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling
- srbds: Not affected
- tsx_async_abort: Not affected

For more information, see the Linux documentation on hardware vulnerabilities, for example

21. Disk information
SPEC is set to: /spec2017-icc2023.0

Filesystem     Type  Size  Used Avail Use% Mounted on
/dev/sda3      xfs   420G   47G  374G  12% /

22. /sys/devices/virtual/dmi/id
Vendor:         XFUSION
Product:        1288H V6
Product Family: Whitley
Serial:         Serial

23. dmidecode
Additional information from dmidecode 3.2 follows. WARNING: Use caution when you interpret this section.
The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately
determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the
"DMTF SMBIOS" standard.
Memory:
16x Samsung M393A4K40DB3-CWE 32 GB 2 rank 3200, configured at 2933

24. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:       XFUSION
BIOS Version:      1.55
BIOS Date:         05/09/2023
BIOS Revision:     1.55

Compiler Version Notes

<table>
<thead>
<tr>
<th>C</th>
<th>500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base) 525.x264_r(base) 557.xz_r(base)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201 Copyright (C) 1985-2022 Intel Corporation. All rights reserved.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C++</th>
<th>520.omnetpp_r(base) 523.xalancbmk_r(base) 531.deepsjeng_r(base) 541.leela_r(base)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201 Copyright (C) 1985-2022 Intel Corporation. All rights reserved.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fortran</th>
<th>548.exchange2_r(base)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201 Copyright (C) 1985-2022 Intel Corporation. All rights reserved.</td>
<td></td>
</tr>
</tbody>
</table>
## SPEC CPU®2017 Integer Rate Result

### Compiler Version Notes (Continued)

#### Base Compiler Invocation

C benchmarks:
- icx

C++ benchmarks:
- icpx

Fortran benchmarks:
- ifx

#### Base Portatility Flags

- 500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
- 502.gcc_r: -DSPEC_LP64
- 505.mcf_r: -DSPEC_LP64
- 520.omnetpp_r: -DSPEC_LP64
- 523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX
- 525.x264_r: -DSPEC_LP64
- 531.deepsjeng_r: -DSPEC_LP64
- 541.leela_r: -DSPEC_LP64
- 548.exchange2_r: -DSPEC_LP64
- 557.xz_r: -DSPEC_LP64

#### Base Optimization Flags

C benchmarks:
- `-w` `-std=c11` `-m64` `-Wl,-z,muldefs` `-xCORE-AVX512` `-O3` `-ffast-math`
- `-flto` `-mfpmath=sse` `-funroll-loops` `-qopt-mem-layout-trans=4`
- `-L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin`
- `-lqkmalloc`

C++ benchmarks:
- `-w` `-std=c++14` `-m64` `-Wl,-z,muldefs` `-xCORE-AVX512` `-O3` `-ffast-math`
- `-flto` `-mfpmath=sse` `-funroll-loops` `-qopt-mem-layout-trans=4`
- `-L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin`
- `-lqkmalloc`

Fortran benchmarks:
- `-w` `-m64` `-Wl,-z,muldefs` `-xCORE-AVX512` `-O3` `-ffast-math` `-flto`
SPEC CPU®2017 Integer Rate Result

xFusion
FusionServer 1288H V6 (Intel Xeon Gold 5320)

SPECRate®2017_int_base = 385

SPECRate®2017_int_peak = Not Run

<table>
<thead>
<tr>
<th>CPU2017 License: 6488</th>
<th>Test Date:</th>
<th>Jun-2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: xFusion</td>
<td>Hardware Availability: Apr-2021</td>
<td></td>
</tr>
<tr>
<td>Tested by: xFusion</td>
<td>Software Availability: Dec-2022</td>
<td></td>
</tr>
</tbody>
</table>

Base Optimization Flags (Continued)

Fortran benchmarks (continued):
- mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
- nostandard-realloc-lhs -align array32byte -auto
- L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin
- lqkmalloc

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/Intel-ic2023-official-linux64.html
http://www.spec.org/cpu2017/flags/xFusion-Platform-Settings-ICX-V1.2.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Intel-ic2023-official-linux64.xml
http://www.spec.org/cpu2017/flags/xFusion-Platform-Settings-ICX-V1.2.xml

SPEC CPU and SPECRate are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

Tested with SPEC CPU®2017 v1.1.9 on 2023-06-26 14:13:54-0400.
Originally published on 2023-07-19.