



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

**xFusion**

**SPECrate®2017\_int\_base = 181**

**SPECrate®2017\_int\_peak = Not Run**

**CPU2017 License:** 6488

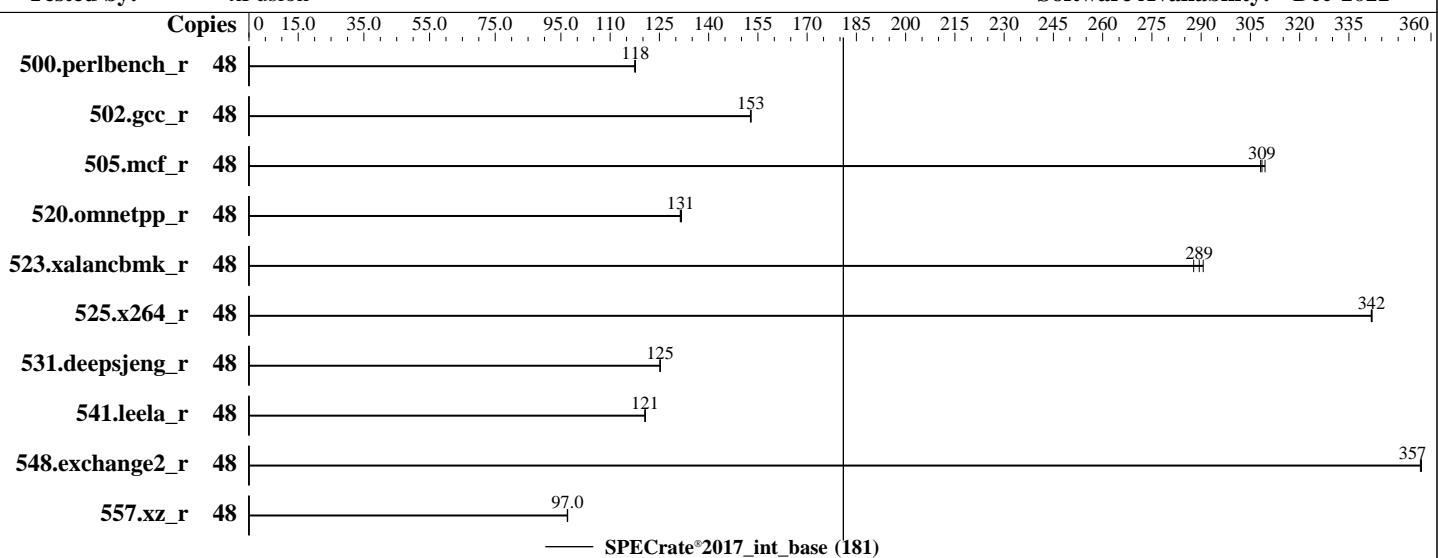
**Test Sponsor:** xFusion

**Tested by:** xFusion

**Test Date:** Jun-2023

**Hardware Availability:** Apr-2021

**Software Availability:** Dec-2022



## Hardware

CPU Name: Intel Xeon Silver 4310  
 Max MHz: 3300  
 Nominal: 2100  
 Enabled: 24 cores, 2 chips, 2 threads/core  
 Orderable: 1,2 chips  
 Cache L1: 32 KB I + 48 KB D on chip per core  
 L2: 1.25 MB I+D on chip per core  
 L3: 18 MB I+D on chip per chip  
 Other: None  
 Memory: 512 GB (16 x 32 GB 2Rx4 PC4-3200AA-R, running at 2666)  
 Storage: 1 x 1920 GB SATA SSD  
 Other: None

## Software

OS: Red Hat Enterprise Linux release 8.4 (Ootpa) 4.18.0-305.el8.x86\_64  
 Compiler: C/C++: Version 2023.0 of Intel oneAPI DPC++/C++ Compiler for Linux;  
 Fortran: Version 2023.0 of Intel Fortran Compiler for Linux;  
 Parallel: No  
 Firmware: Version 1.55 Released May-2023  
 File System: xfs  
 System State: Run level 3 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: Not Applicable  
 Other: None  
 Power Management: BIOS and OS set to prefer performance at the cost of additional power usage



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

**xFusion**

**SPECrate®2017\_int\_base = 181**

**SPECrate®2017\_int\_peak = Not Run**

CPU2017 License: 6488

Test Date: Jun-2023

Test Sponsor: xFusion

Hardware Availability: Apr-2021

Tested by: xFusion

Software Availability: Dec-2022

## Results Table

| Benchmark       | Base   |            |            |            |             |            |            | Peak   |         |       |         |       |         |       |
|-----------------|--------|------------|------------|------------|-------------|------------|------------|--------|---------|-------|---------|-------|---------|-------|
|                 | Copies | Seconds    | Ratio      | Seconds    | Ratio       | Seconds    | Ratio      | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 500.perlbench_r | 48     | <b>649</b> | <b>118</b> | 649        | 118         | 650        | 117        |        |         |       |         |       |         |       |
| 502.gcc_r       | 48     | 445        | 153        | 445        | 153         | <b>445</b> | <b>153</b> |        |         |       |         |       |         |       |
| 505.mcf_r       | 48     | 251        | 309        | <b>251</b> | <b>309</b>  | 252        | 308        |        |         |       |         |       |         |       |
| 520.omnetpp_r   | 48     | 479        | 131        | 478        | 132         | <b>479</b> | <b>131</b> |        |         |       |         |       |         |       |
| 523.xalancbmk_r | 48     | <b>175</b> | <b>289</b> | 176        | 288         | 174        | 291        |        |         |       |         |       |         |       |
| 525.x264_r      | 48     | <b>246</b> | <b>342</b> | 246        | 342         | 246        | 342        |        |         |       |         |       |         |       |
| 531.deepsjeng_r | 48     | <b>439</b> | <b>125</b> | 439        | 125         | 439        | 125        |        |         |       |         |       |         |       |
| 541.leela_r     | 48     | 658        | 121        | <b>659</b> | <b>121</b>  | 659        | 121        |        |         |       |         |       |         |       |
| 548.exchange2_r | 48     | <b>352</b> | <b>357</b> | 352        | 357         | 352        | 357        |        |         |       |         |       |         |       |
| 557.xz_r        | 48     | 534        | 97.1       | <b>534</b> | <b>97.0</b> | 535        | 97.0       |        |         |       |         |       |         |       |

**SPECrate®2017\_int\_base = 181**

**SPECrate®2017\_int\_peak = Not Run**

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](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

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

FusionServer 1288H V6 (Intel Xeon Silver 4310)

CPU2017 License: 6488

Test Sponsor: xFusion

Tested by: xFusion

SPECrate®2017\_int\_base = 181

SPECrate®2017\_int\_peak = Not Run

Test Date: Jun-2023

Hardware Availability: Apr-2021

Software Availability: Dec-2022

## 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

Prior to runcpu invocation

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 fe91c89b7ed5c36ae2c92cc097bec197 running on localhost.localdomain Wed Jun 21 20:47:05 2023

SUT (System Under Test) info as seen by some common utilities.

-----  
Table of contents  
-----

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/khugepaged
  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
- 

-----  
1. uname -a  
Linux localhost.localdomain 4.18.0-305.el8.x86\_64 #1 SMP Thu Apr 29 08:54:30 EDT 2021 x86\_64 x86\_64 x86\_64

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

SPECrate®2017\_int\_base = 181

FusionServer 1288H V6 (Intel Xeon Silver 4310)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 6488

Test Date: Jun-2023

Test Sponsor: xFusion

Hardware Availability: Apr-2021

Tested by: xFusion

Software Availability: Dec-2022

## Platform Notes (Continued)

GNU/Linux

```
2. w
20:47:05 up 6:46, 1 user, load average: 19.10, 39.68, 44.93
USER      TTY      FROM          LOGIN@    IDLE     JCPU      PCPU WHAT
root      tty1      -           14:06     6:39m   1.53s   0.06s -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          (-i) 2060583
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) 2060583
virtual memory            (kbytes, -v) unlimited
file locks               (-x) unlimited

5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize 17
login -- root
-bash
-bash
runcpu --define default-platform-flags --copies 48 -c ic2023.0-lin-core-avx512-rate-20221201.cfg --define
  smt-on --define cores=24 --define physicalfirst --define invoke_with_interleave --define drop_caches
  --tune base --iterations 3 -o all intrate
runcpu --define default-platform-flags --copies 48 --configfile ic2023.0-lin-core-avx512-rate-20221201.cfg
  --define smt-on --define cores=24 --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/CPU2017.036/templogs/preenv.intrate.036.0.log
  --lognum 036.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /spec2017-icc2023.0

6. /proc/cpuinfo
model name      : Intel(R) Xeon(R) Silver 4310 CPU @ 2.10GHz
vendor_id       : GenuineIntel
cpu family      : 6
model          : 106
stepping        : 6
microcode       : 0xd000363
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs
cpu cores       : 12
siblings         : 24
2 physical ids (chips)
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

FusionServer 1288H V6 (Intel Xeon Silver 4310)

SPECrate®2017\_int\_base = 181

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)

```
48 processors (hardware threads)
physical id 0: core ids 0-11
physical id 1: core ids 0-11
physical id 0: apicids 0-23
physical id 1: apicids 64-87
```

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):                48
On-line CPU(s) list:   0-47
Thread(s) per core:    2
Core(s) per socket:    12
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) Silver 4310 CPU @ 2.10GHz
BIOS Model name:       Intel(R) Xeon(R) Silver 4310 CPU @ 2.10GHz
Stepping:               6
CPU MHz:                2700.000
BogoMIPS:               4200.00
Virtualization:        VT-x
L1d cache:              48K
L1i cache:              32K
L2 cache:                1280K
L3 cache:                18432K
NUMA node0 CPU(s):     0-5,24-29
NUMA node1 CPU(s):     6-11,30-35
NUMA node2 CPU(s):     12-17,36-41
NUMA node3 CPU(s):     18-23,42-47
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 constant_tsc art
arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmpfperf pn
pcimulqdq dtes64 ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xptr 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_13 invpcid_single ssbd mba ibrs ibpb stibp
ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmil
hle avx2 smep bmi2 erms invpcid cqmq rdt_a avx512f avx512dq rdseed adx smap avx512ifma
clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1
xsaves cqmq_llc cqmq_occup_llc cqmq_mbm_total cqmq_mbm_local split_lock_detect wbnoinvd
dtherm ida arat pln pts hwp_epp avx512vbmi umip pkru ospke avx512_vbmi2 gfni vaes
vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpopcntdq la57 rdpid fsrm md_clear
pconfig flush_lld arch_capabilities
```

-----  
8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

available: 4 nodes (0-3)

node 0 cpus: 0-5,24-29

node 0 size: 128158 MB

node 0 free: 124616 MB

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

SPECrate®2017\_int\_base = 181

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 6488

Test Date: Jun-2023

Test Sponsor: xFusion

Hardware Availability: Apr-2021

Tested by: xFusion

Software Availability: Dec-2022

## Platform Notes (Continued)

```
node 1 cpus: 6-11,30-35
node 1 size: 129021 MB
node 1 free: 125640 MB
node 2 cpus: 12-17,36-41
node 2 size: 128984 MB
node 2 free: 125687 MB
node 3 cpus: 18-23,42-47
node 3 size: 129018 MB
node 3 free: 125542 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:      527546772 kB
```

---

```
10. who -r
run-level 3 Jun 21 14:00
```

---

```
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 mcelog mdmonitor microcode multipathd nis-domainname
            nvmefc-boot-connections rhsmcertd rsyslog selinux-autorelabel-mark smartd sshd sssd syslog
            sysstat timedatectl tuned udisks2 vdo
disabled   arp-ethers blk-availability chrony-wait console-getty cpupower debug-shell ebttables iprdump
            iprinit iprupdate ipsec iscsid iscsiuio kpatch kvm_stat ledmon nftables nvme-autoconnect oddjobd
            psacct rdisc rhcd rhsm rhsm-facts serial-getty@ sshd-keygen@ systemd-resolved tcscd
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 sssd-sudo
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-a626-37488271d525
ro
crashkernel=auto
resume=UUID=d6a3ac10-1ea1-4e42-a80b-54c427bcad19
rhgb
quiet
```

---

```
14. cpupower frequency-info
analyzing CPU 0:
  Unable to determine current policy
  boost state support:
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

SPECrate®2017\_int\_base = 181

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 6488

Test Date: Jun-2023

Test Sponsor: xFusion

Hardware Availability: Apr-2021

Tested by: xFusion

Software Availability: Dec-2022

## Platform Notes (Continued)

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.extfrag_threshold         | 500   |
| 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                       |
| hugepage_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  |
| speculative_v1    | Mitigation: usercopy/swapgs barriers and __user pointer sanitization |

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

SPECrate®2017\_int\_base = 181

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 6488

Test Date: Jun-2023

Test Sponsor: xFusion

Hardware Availability: Apr-2021

Tested by: xFusion

Software Availability: Dec-2022

## Platform Notes (Continued)

```
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
https://www.kernel.org/doc/html/latest/admin-guide/hw-vuln/index.html
```

-----  
21. Disk information

SPEC is set to: /spec2017-icc2023.0  
Filesystem Type Size Used Avail Use% Mounted on  
/dev/sda3 xfs 420G 53G 368G 13% /

-----  
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 2666
```

-----  
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

```
=====
```

```
C      | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base) 525.x264_r(base) 557.xz_r(base)
```

```
-----  
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.
```

```
=====
```

```
C++    | 520.omnetpp_r(base) 523.xalancbmk_r(base) 531.deepsjeng_r(base) 541.leela_r(base)
```

```
-----  
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.
```

```
=====
```

```
Fortran | 548.exchange2_r(base)
```

```
-----  
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.
```



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

FusionServer 1288H V6 (Intel Xeon Silver 4310)

SPECrate®2017\_int\_base = 181

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

## Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

## Base Portability 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  
-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



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

SPECrate®2017\_int\_base = 181

SPECrate®2017\_int\_peak = Not Run

**CPU2017 License:** 6488

**Test Date:** Jun-2023

**Test Sponsor:** xFusion

**Hardware Availability:** Apr-2021

**Tested by:** xFusion

**Software Availability:** Dec-2022

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](mailto:info@spec.org).

Tested with SPEC CPU®2017 v1.1.9 on 2023-06-21 20:47:04-0400.

Report generated on 2024-01-29 17:56:10 by CPU2017 PDF formatter v6716.

Originally published on 2023-07-19.