



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 6488

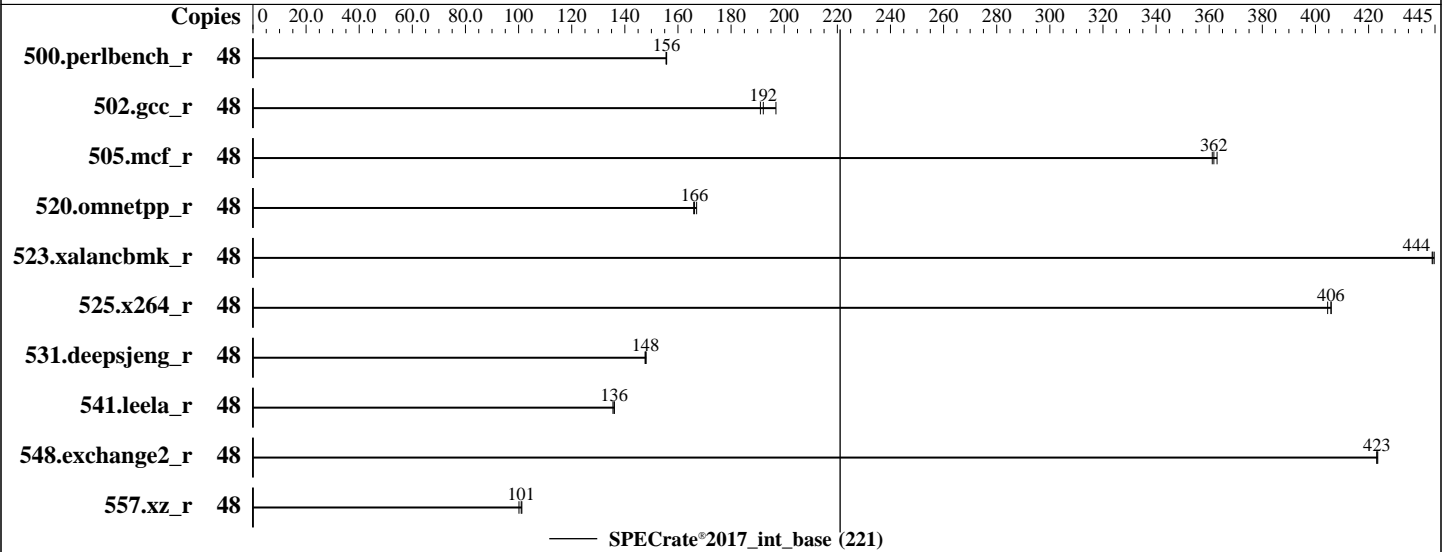
Test Sponsor: xFusion

Tested by: xFusion

Test Date: Jun-2023

Hardware Availability: Jan-2023

Software Availability: Dec-2022



### Hardware

CPU Name: Intel Xeon Silver 4410Y  
 Max MHz: 3900  
 Nominal: 2000  
 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: 2 MB I+D on chip per core  
 L3: 30 MB I+D on chip per chip  
 Other: None  
 Memory: 512 GB (16 x 32 GB 2Rx8 PC5-4800B-R, running at 4000)  
 Storage: 1 x 1920 GB SATA SSD  
 Other: None

### Software

OS: Red Hat Enterprise Linux release 9.0 (Plow)  
 5.14.0-70.13.1.el9\_0.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 2.00.55 Released Mar-2023  
 File System: xfs  
 System State: Run level 5 (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 = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

Test Date: Jun-2023  
Hardware Availability: Jan-2023  
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><u>491</u></b>	<b><u>156</u></b>	491	156	491	156							
502.gcc_r	48	356	191	345	197	<b><u>354</u></b>	<b><u>192</u></b>							
505.mcf_r	48	215	361	214	363	<b><u>214</u></b>	<b><u>362</u></b>							
520.omnetpp_r	48	377	167	<b><u>379</u></b>	<b><u>166</u></b>	380	166							
523.xalancbmk_r	48	<b><u>114</u></b>	<b><u>444</u></b>	114	444	114	445							
525.x264_r	48	207	406	208	405	<b><u>207</u></b>	<b><u>406</u></b>							
531.deepsjeng_r	48	<b><u>372</u></b>	<b><u>148</u></b>	372	148	373	148							
541.leela_r	48	587	136	<b><u>584</u></b>	<b><u>136</u></b>	584	136							
548.exchange2_r	48	297	423	<b><u>297</u></b>	<b><u>423</u></b>	297	423							
557.xz_r	48	512	101	<b><u>513</u></b>	<b><u>101</u></b>	518	100							

SPECrate®2017\_int\_base = 221

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

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

**CPU2017 License:** 6488

**Test Sponsor:** xFusion

**Tested by:** xFusion

**Test Date:** Jun-2023

**Hardware Availability:** Jan-2023

**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

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 Enable SNC2 (2-clusters)

Sysinfo program /spec2017-icc2023.0/bin/sysinfo  
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197  
running on localhost.localdomain Fri Jun 16 15:37:09 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 250 (250-6.el9\_0)
12. Failed units, from systemctl list-units --state=failed
13. Services, from systemctl list-unit-files
14. Linux kernel boot-time arguments, from /proc/cmdline
15. cpupower frequency-info
16. sysctl
17. /sys/kernel/mm/transparent\_hugepage
18. /sys/kernel/mm/transparent\_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. BIOS

```

1. uname -a
Linux localhost.localdomain 5.14.0-70.13.1.el9_0.x86_64 #1 SMP PREEMPT Thu Apr 14 12:42:38 EDT 2022 x86_64
x86_64 x86_64 GNU/Linux

```

```

2. w
15:37:09 up 1:08, 2 users, load average: 0.00, 0.00, 0.00
USER      TTY      LOGIN@  IDLE   JCPU   PCPU   WHAT
root     pts/0    14:32   13.00s  0.09s  0.09s  -bash

```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

**Test Date:** Jun-2023  
**Hardware Availability:** Jan-2023  
**Software Availability:** Dec-2022

### Platform Notes (Continued)

```
root      tty2      14:49    11.00s   1.35s   0.09s  -bash
```

-----  
3. Username

From environment variable \$USER: root

-----  
4. ulimit -a

```
real-time non-blocking time (microseconds, -R) unlimited
core file size              (blocks, -c) 0
data seg size               (kbytes, -d) unlimited
scheduling priority         (-e) 0
file size                   (blocks, -f) unlimited
pending signals             (-i) 2060169
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) 2060169
virtual memory              (kbytes, -v) unlimited
file locks                  (-x) unlimited
```

-----  
5. sysinfo process ancestry

```
/usr/lib/systemd/systemd rhgb --switched-root --system --deserialize 31
login -- root
-bash
-bash
runcpu --define default-platform-flags --copies 48 -c ic2023.0-lin-sapphirerapids-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-sapphirerapids-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/CPU2017.022/templots/preenv.intrate.022.0.log --lognum 022.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /spec2017-icc2023.0
```

-----  
6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) Silver 4410Y
vendor_id      : GenuineIntel
cpu family     : 6
model          : 143
stepping       : 7
microcode      : 0x2b000111
bugs           : spectre_v1 spectre_v2 spec_store_bypass swaps
cpu cores      : 12
siblings       : 24
2 physical ids (chips)
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 128-151
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

**Test Date:** Jun-2023  
**Hardware Availability:** Jan-2023  
**Software Availability:** Dec-2022

### Platform Notes (Continued)

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 2.37.4:

```

Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:          46 bits physical, 57 bits virtual
Byte Order:             Little Endian
CPU(s):                 48
On-line CPU(s) list:   0-47
Vendor ID:              GenuineIntel
BIOS Vendor ID:        Intel(R) Corporation
Model name:             Intel(R) Xeon(R) Silver 4410Y
BIOS Model name:       Intel(R) Xeon(R) Silver 4410Y
CPU family:             6
Model:                  143
Thread(s) per core:    2
Core(s) per socket:    12
Socket(s):              2
Stepping:               7
BogoMIPS:               4000.00
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 constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology
                        nonstop_tsc cpuid aperfperf tsc_known_freq pni pclmulqdq dtes64 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_13 cat_12 cdp_13 invpcid_single
                        intel_ppin cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi
                        flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms
                        invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt
                        clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1
                        xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local split_lock_detect
                        avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts avx512vbmi umip pku
                        ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg
                        tme avx512_vpopcntdq la57 rdpid bus_lock_detect cldemote movdiri movdir64b
                        enqcmd fsrm md_clear serialize tsxldtrk pconfig arch_lbr avx512_fp16
                        amx_tile flush_lld arch_capabilities

Virtualization:        VT-x
L1d cache:             1.1 MiB (24 instances)
L1i cache:             768 KiB (24 instances)
L2 cache:              48 MiB (24 instances)
L3 cache:              60 MiB (2 instances)
NUMA node(s):         4
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
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf:    Not affected
Vulnerability Mds:     Not affected
Vulnerability Meltdown: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced IBRS, IBPB conditional, RSB filling
Vulnerability Srbds:   Not affected
Vulnerability Tsx async abort: Not affected

```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

**Test Date:** Jun-2023  
**Hardware Availability:** Jan-2023  
**Software Availability:** Dec-2022

### Platform Notes (Continued)

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	1.1M	12	Data	1	64	1	64
L1i	32K	768K	8	Instruction	1	64	1	64
L2	2M	48M	16	Unified	2	2048	1	64
L3	30M	60M	15	Unified	3	32768	1	64

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: 128083 MB
node 0 free: 127377 MB
node 1 cpus: 6-11,30-35
node 1 size: 129021 MB
node 1 free: 127902 MB
node 2 cpus: 12-17,36-41
node 2 size: 129021 MB
node 2 free: 128406 MB
node 3 cpus: 18-23,42-47
node 3 size: 128974 MB
node 3 free: 128165 MB
node distances:
node  0  1  2  3
  0: 10 12 21 21
  1: 12 10 21 21
  2: 21 21 10 12
  3: 21 21 12 10

```

9. /proc/meminfo

MemTotal: 527462256 kB

10. who -r

run-level 5 Jun 16 14:29

11. Systemd service manager version: systemd 250 (250-6.el9\_0)

```

Default Target Status
graphical      degraded

```

12. Failed units, from systemctl list-units --state=failed

```

UNIT          LOAD    ACTIVE SUB    DESCRIPTION
* sep5.service loaded failed failed systemd script to load sep5 driver at boot time

```

13. Services, from systemctl list-unit-files

```

STATE          UNIT FILES
enabled        ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online
accounts-daemon atd auditd avahi-daemon bluetooth chronyd crond cups dbus-broker gdm
getty@ insights-client-boot irqbalance iscsi iscsi-onboot kdump libstoragemgmt
low-memory-monitor lvm2-monitor mcelog mdmonitor microcode multipathd nis-domainname
nvmeefc-boot-connections ostree-remount power-profiles-daemon qemu-guest-agent rhsmcertd
rsyslog rtkit-daemon selinux-autorelabel-mark sep5 smartd sshd sssd switcheroo-control
sysstat systemd-network-generator udisks2 upower vgauthd vmtoolsd
enabled-runtime systemd-remount-fs

```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

**Test Date:** Jun-2023  
**Hardware Availability:** Jan-2023  
**Software Availability:** Dec-2022

### Platform Notes (Continued)

```

disabled      arp-ethers blk-availability brltty canberra-system-bootup canberra-system-shutdown
               canberra-system-shutdown-reboot chrony-wait cni-dhcp console-getty cpupower cups-browsed
               dbus-daemon debug-shell dnsmasq firewallld iprdump iprinit iprupdate iscsid iscsiui kpatch
               kvm_stat ledmon man-db-restart-cache-update nftables nvme-autoconnect podman
               podman-auto-update podman-restart psacct ras-mc-ctl rasdaemon rdisc rhcd rhsm rhsm-facts
               rpmdm-rebuild serial-getty@ speech-dispatcherd sshd-keygen@ systemd-boot-check-no-failures
               systemd-pstore systemd-sysext wpa_supplicant
indirect      spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo

```

```

-----
14. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=(hd0,gpt3)/boot/vmlinuz-5.14.0-70.13.1.el9_0.x86_64
root=UUID=cc4bab05-907e-44ef-b818-2b2874390234
ro
crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M
resume=UUID=5ba347ca-8beb-4f6e-9c11-de63dc4ddf5f
rhgb
quiet

```

```

-----
15. cpupower frequency-info
analyzing CPU 0:
  Unable to determine current policy
  boost state support:
    Supported: yes
    Active: yes

```

```

-----
16. sysctl
kernel.numa_balancing          1
kernel.randomize_va_space      2
vm.compaction_proactiveness     20
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+madvice [madvice] never
enabled         [always] madvice 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

```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## xFusion

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

**Test Date:** Jun-2023  
**Hardware Availability:** Jan-2023  
**Software Availability:** Dec-2022

### Platform Notes (Continued)

max_ptes_none	511
max_ptes_shared	256
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 9.0 (Plow)  
 redhat-release Red Hat Enterprise Linux release 9.0 (Plow)  
 system-release Red Hat Enterprise Linux release 9.0 (Plow)

-----

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

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda3	xf	420G	45G	376G	11%	/

-----

21. /sys/devices/virtual/dmi/id  
 Vendor: XFUSION  
 Product: 1288H V7  
 Product Family: Eagle Stream  
 Serial: serial

-----

22. dmidecode  
 Additional information from dmidecode 3.3 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 M321R4GA3BB6-CQKDG 32 GB 2 rank 4800, configured at 4000

-----

23. BIOS  
 (This section combines info from /sys/devices and dmidecode.)  
 BIOS Vendor: XFUSION  
 BIOS Version: 2.00.55  
 BIOS Date: 03/07/2023  
 BIOS Revision: 0.55

### 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.

(Continued on next page)





# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

**xFusion**

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

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

**Test Date:** Jun-2023  
**Hardware Availability:** Jan-2023  
**Software Availability:** Dec-2022

## Compiler Version Notes (Continued)

=====  
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.  
=====

## 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 -xsapphirerapids -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 -xsapphirerapids -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

**xFusion**

SPECrate®2017\_int\_base = 221

FusionServer 1288H V7 (Intel Xeon Silver 4410Y)

SPECrate®2017\_int\_peak = Not Run

**CPU2017 License:** 6488

**Test Date:** Jun-2023

**Test Sponsor:** xFusion

**Hardware Availability:** Jan-2023

**Tested by:** xFusion

**Software Availability:** Dec-2022

## Base Optimization Flags (Continued)

C++ benchmarks (continued):

```
-L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin
-lqkmalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -xsapphirerapids -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
```

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-SPR-V1.1-revC.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-SPR-V1.1-revC.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 2023-06-16 15:37:09-0400.

Report generated on 2024-01-29 17:55:50 by CPU2017 PDF formatter v6716.

Originally published on 2023-07-19.