



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

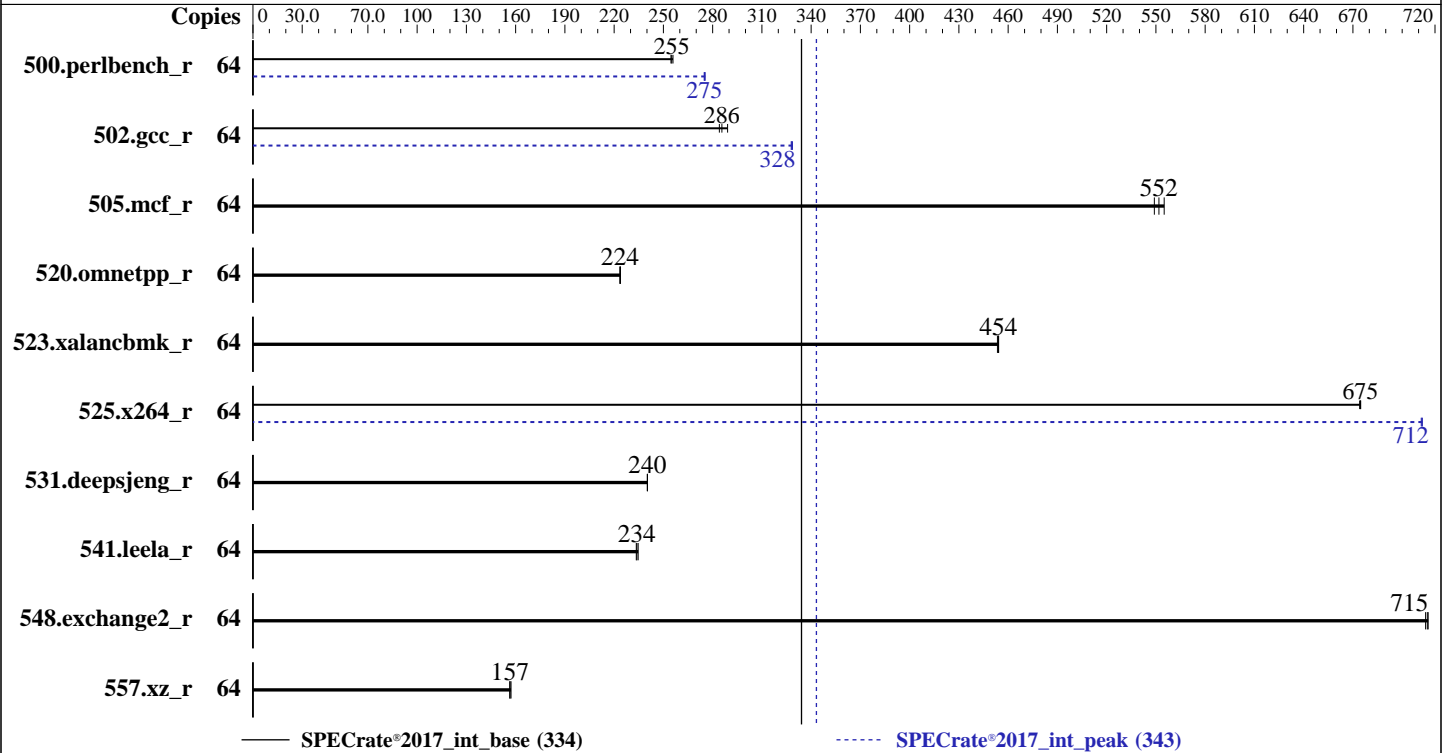
**SPECrate®2017\_int\_base = 334**

**Invento i6000 (Intel Xeon Gold 6526Y)**

**SPECrate®2017\_int\_peak = 343**

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024



## Hardware

CPU Name: Intel Xeon Gold 6526Y  
 Max MHz: 3900  
 Nominal: 2800  
 Enabled: 32 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: 37.5 MB I+D on chip per chip  
 Other: None  
 Memory: 1 TB (16 x 64 GB 2Rx4 PC5-4800B-R, running at 4400)  
 Storage: 960 GB SATA SSD  
 Other: CPU Cooling: Air

## Software

OS: Ubuntu 22.04.5 LTS  
 6.8.0-49-generic  
 Compiler: C/C++: Version 2023.2.3 of Intel oneAPI DPC++/C++ Compiler for Linux;  
 Fortran: Version 2023.2.3 of Intel Fortran Compiler for Linux;  
 Parallel: No  
 Firmware: Version EG0.10.01 released Mar-2024  
 File System: ext4  
 System State: Run level 5 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: 32/64-bit  
 Other: jemalloc memory allocator V5.0.1  
 Power Management: OS set to prefer performance at the expense of additional power usage



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

SPECrate®2017\_int\_base = 334

**Invento i6000 (Intel Xeon Gold 6526Y)**

SPECrate®2017\_int\_peak = 343

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	64	398	256	400	255	<b>399</b>	<b>255</b>	64	371	275	<b>370</b>	<b>275</b>	370	275
502.gcc_r	64	313	289	<b>317</b>	<b>286</b>	319	284	64	276	328	<b>276</b>	<b>328</b>	276	329
505.mcf_r	64	186	555	188	549	<b>187</b>	<b>552</b>	64	186	555	188	549	<b>187</b>	<b>552</b>
520.omnetpp_r	64	<b>375</b>	<b>224</b>	376	224	375	224	64	<b>375</b>	<b>224</b>	376	224	375	224
523.xalancbmk_r	64	<b>149</b>	<b>454</b>	149	454	149	453	64	<b>149</b>	<b>454</b>	149	454	149	453
525.x264_r	64	<b>166</b>	<b>675</b>	166	675	166	674	64	157	712	157	712	<b>157</b>	<b>712</b>
531.deepsjeng_r	64	<b>305</b>	<b>240</b>	305	240	305	240	64	<b>305</b>	<b>240</b>	305	240	305	240
541.leela_r	64	452	235	454	234	<b>453</b>	<b>234</b>	64	452	235	454	234	<b>453</b>	<b>234</b>
548.exchange2_r	64	234	716	<b>234</b>	<b>715</b>	235	714	64	234	716	<b>234</b>	<b>715</b>	235	714
557.xz_r	64	440	157	<b>441</b>	<b>157</b>	442	156	64	440	157	<b>441</b>	<b>157</b>	442	156

SPECrate®2017\_int\_base = **334**

SPECrate®2017\_int\_peak = **343**

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

## 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 =

"/home/speccpu/cpu2017/lib/intel64:/home/speccpu/cpu2017/lib/ia32:/home/speccpu/cpu2017/je5.0.1-32"

MALLOC\_CONF = "retain:true"

## 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>  
jemalloc, a general purpose malloc implementation  
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5  
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

**SPECrate®2017\_int\_base = 334**

**Invento i6000 (Intel Xeon Gold 6526Y)**

**SPECrate®2017\_int\_peak = 343**

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Platform Notes

Sysinfo program /home/speccpu/cpu2017/bin/sysinfo  
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197  
running on intel Mon Dec 2 15:40:33 2024

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 249 (249.11-0ubuntu3.12)
- 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 intel 6.8.0-49-generic #49~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Nov 6 17:42:15 UTC 2 x86_64 x86_64
x86_64 GNU/Linux
```

```
2. w
15:40:33 up 1 min, 2 users, load average: 0.17, 0.09, 0.03
USER      TTY      FROM      LOGIN@   IDLE   JCPU   PCPU WHAT
intel    :1      :1          15:39   ?xdm?   5:11   0.00s /usr/libexec/gdm-x-session --run-script env
GNOME_SHELL_SESSION_MODE=ubuntu /usr/bin/gnome-session --session=ubuntu
intel    pts/1    -          15:40   9.00s   0.92s   0.00s sudo
./reportable-ic2023.2.3-lin-sapphirerapids-rate-smt-on-20231121.sh
```

```
3. Username
From environment variable $USER:  root
From the command 'logname':      intel
```

```
4. ulimit -a
time(seconds)      unlimited
file(blocks)       unlimited
data(kbytes)       unlimited
stack(kbytes)      unlimited
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

**SPECrate®2017\_int\_base = 334**

**Invento i6000 (Intel Xeon Gold 6526Y)**

**SPECrate®2017\_int\_peak = 343**

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Platform Notes (Continued)

```

coredump(blocks)      0
memory(kbytes)       unlimited
locked memory(kbytes) 132061264
process              4126610
nofiles              1024
vmemory(kbytes)     unlimited
locks                unlimited
rtprio               0

```

```

-----
5. sysinfo process ancestry
/sbin/init splash
/lib/systemd/systemd --user
/usr/libexec/gnome-terminal-server
bash
sudo ./reportable-ic2023.2.3-lin-sapphirerapids-rate-smt-on-20231121.sh
sudo ./reportable-ic2023.2.3-lin-sapphirerapids-rate-smt-on-20231121.sh
sh ./reportable-ic2023.2.3-lin-sapphirerapids-rate-smt-on-20231121.sh
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=64 -c
  ic2023.2.3-lin-sapphirerapids-rate-20231121.cfg --define smt-on --define cores=32 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base,peak -o all intrate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=64 --configfile
  ic2023.2.3-lin-sapphirerapids-rate-20231121.cfg --define smt-on --define cores=32 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base,peak --output_format all --nopower
  --runmode rate --tune base:peak --size refrate intrate --nopreenv --note-preenv --logfile
  $SPEC/tmp/CPU2017.024/templogs/preenv.intrate.024.0.log --lognum 024.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/speccpu/cpu2017

```

```

-----
6. /proc/cpuinfo
model name      : INTEL(R) XEON(R) GOLD 6526Y
vendor_id      : GenuineIntel
cpu family     : 6
model          : 207
stepping       : 2
microcode      : 0x21000230
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
cpu cores     : 16
siblings       : 32
2 physical ids (chips)
64 processors (hardware threads)
physical id 0: core ids 0-15
physical id 1: core ids 0-15
physical id 0: apicids 0-31
physical id 1: apicids 128-159
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 2.37.2:
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:         52 bits physical, 57 bits virtual
Byte Order:            Little Endian
CPU(s):                64
On-line CPU(s) list:   0-63
Vendor ID:             GenuineIntel

```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

**SPECrate®2017\_int\_base = 334**

**Invento i6000 (Intel Xeon Gold 6526Y)**

**SPECrate®2017\_int\_peak = 343**

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Platform Notes (Continued)

```

Model name:                INTEL(R) XEON(R) GOLD 6526Y
CPU family:                 6
Model:                      207
Thread(s) per core:        2
Core(s) per socket:        16
Socket(s):                  2
Stepping:                   2
CPU max MHz:                3900.0000
CPU min MHz:                800.0000
BogoMIPS:                   5600.00
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 aperfmperf 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 fl6c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb
                             cat_l3 cat_l2 cdp_l3 intel_ppin cdp_l2 ssbd mba ibrs ibpb stibp
                             ibrs_enhanced tpr_shadow 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
                             user_shstk avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts hfi
                             vnni 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 ibt amx_bf16 avx512_fpl6 amx_tile
                             amx_int8 flush_lld arch_capabilities

Virtualization:            VT-x
L1d cache:                 1.5 MiB (32 instances)
L1i cache:                 1 MiB (32 instances)
L2 cache:                  64 MiB (32 instances)
L3 cache:                  75 MiB (2 instances)
NUMA node(s):              2
NUMA node0 CPU(s):         0-15,32-47
NUMA node1 CPU(s):         16-31,48-63
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit:  Not affected
Vulnerability Lltf:        Not affected
Vulnerability Mds:          Not affected
Vulnerability Meltdown:     Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed:     Not affected
Vulnerability Spec rstack overflow: 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 / Automatic IBRS; IBPB conditional; RSB filling;
                             PBRSE-eIBRS SW sequence; BHI BHI_DIS_S

Vulnerability Srbds:        Not affected
Vulnerability Tsx async abort: Not affected

```

```

From lscpu --cache:
NAME ONE-SIZE ALL-SIZE WAYS TYPE          LEVEL SETS PHY-LINE COHERENCY-SIZE
L1d   48K      1.5M   12 Data          1     64      1             64
L1i   32K      1M     8 Instruction     1     64      1             64
L2    2M       64M   16 Unified        2    2048     1             64
L3   37.5M    75M   15 Unified        3  40960     1             64

```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

**SPECrate®2017\_int\_base = 334**

**Invento i6000 (Intel Xeon Gold 6526Y)**

**SPECrate®2017\_int\_peak = 343**

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Platform Notes (Continued)

8. numactl --hardware

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

```
available: 2 nodes (0-1)
node 0 cpus: 0-15,32-47
node 0 size: 515648 MB
node 0 free: 513745 MB
node 1 cpus: 16-31,48-63
node 1 size: 516080 MB
node 1 free: 514115 MB
node distances:
node 0 1
0: 10 21
1: 21 10
```

9. /proc/meminfo

```
MemTotal: 1056490136 kB
```

10. who -r

```
run-level 5 Dec 2 15:40
```

11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.12)

```
Default Target Status
graphical degraded
```

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

```
UNIT                                LOAD    ACTIVE SUB    DESCRIPTION
* NetworkManager-wait-online.service loaded failed failed Network Manager Wait Online
```

13. Services, from systemctl list-unit-files

```
STATE UNIT FILES
enabled ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online
accounts-daemon anacron anydesk apparmor avahi-daemon bluetooth console-setup cron cups
cups-browsed dmesg e2scrub_reap getty@ gpu-manager grub-common grub-initrd-fallback
irqbalance kerneloops keyboard-setup networkd-dispatcher openvpn power-profiles-daemon
rsyslog secureboot-db setvtrgb snapd ssh switcheroo-control systemd-oomd systemd-pstore
systemd-resolved systemd-timesyncd teamviewerd thermald ua-reboot-cmds ubuntu-advantage
udisks2 ufw unattended-upgrades wpa_supplicant
enabled-runtime netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled acpid brltty console-getty debug-shell nftables openvpn-client@ openvpn-server@ openvpn@
rsync rtkit-daemon serial-getty@ speech-dispatcherd systemd-boot-check-no-failures
systemd-network-generator systemd-networkd systemd-networkd-wait-online systemd-sysext
systemd-time-wait-sync tlp upower wpa_supplicant-nl80211@ wpa_supplicant-wired@
wpa_supplicant@
generated apport cpufrequtils loadcpufreq speech-dispatcher
indirect saned@ spice-vdagentd uuidd
masked alsa-utils cryptdisks cryptdisks-early hwclock pulseaudio-enable-autospawn rc rcS saned
screen-cleanup sudo systemd-rfkill x11-common
```

14. Linux kernel boot-time arguments, from /proc/cmdline

```
BOOT_IMAGE=/boot/vmlinuz-6.8.0-49-generic
root=UUID=073562bb-1438-42b9-adfa-6a6f7f3d3559
ro
quiet
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

SPECrate®2017\_int\_base = 334

**Invento i6000 (Intel Xeon Gold 6526Y)**

SPECrate®2017\_int\_peak = 343

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Platform Notes (Continued)

```
splash
vt.handoff=7
```

```
-----
15. cpupower frequency-info
analyzing CPU 47:
  current policy: frequency should be within 800 MHz and 3.90 GHz.
                   The governor "performance" may decide which speed to use
                   within this range.
  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
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 Ubuntu 22.04.5 LTS
```

```
-----
20. Disk information
SPEC is set to: /home/speccpu/cpu2017
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

SPECrate®2017\_int\_base = 334

**Invento i6000 (Intel Xeon Gold 6526Y)**

SPECrate®2017\_int\_peak = 343

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Platform Notes (Continued)

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda2	ext4	879G	684G	151G	82%	/

```

-----
21. /sys/devices/virtual/dmi/id
Vendor:      Fusionstor
Product:     Invento_i6000
Product Family: SG_Intel_EagleStream
Serial:      HQ3110001BDA03CD0002
-----

```

```

-----
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 NO DIMM NO DIMM
  16x Samsung M321R8GA0BB0-CQKZJ 64 GB 2 rank 4800, configured at 4400
-----

```

```

-----
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:      American Megatrends International, LLC.
BIOS Version:     EG0.10.01
BIOS Date:        03/22/2024
BIOS Revision:    5.32
-----

```

## Compiler Version Notes

```

=====
C      | 502.gcc_r(peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
-----

```

```

=====
C      | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
      | 557.xz_r(base, peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
-----

```

```

=====
C      | 502.gcc_r(peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
-----

```

```

=====
C      | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
      | 557.xz_r(base, peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
-----

```

(Continued on next page)





# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

SPECrate®2017\_int\_base = 334

**Invento i6000 (Intel Xeon Gold 6526Y)**

SPECrate®2017\_int\_peak = 343

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Compiler Version Notes (Continued)

=====  
C++ | 520.omnetpp\_r(base, peak) 523.xalancbmk\_r(base, peak) 531.deepsjeng\_r(base, peak)  
| 541.leela\_r(base, peak)  
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x  
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.  
=====

=====  
Fortran | 548.exchange2\_r(base, peak)  
=====

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x  
Copyright (C) 1985-2023 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 -xsaphirerapids -O3 -ffast-math

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

**SPECrate®2017\_int\_base = 334**

**Invento i6000 (Intel Xeon Gold 6526Y)**

**SPECrate®2017\_int\_peak = 343**

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Base Optimization Flags (Continued)

C benchmarks (continued):

```
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin  
-lqkmallocc
```

C++ benchmarks:

```
-w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin  
-lqkmallocc
```

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/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin  
-lqkmallocc
```

## Peak Compiler Invocation

C benchmarks:

```
icx
```

C++ benchmarks:

```
icpx
```

Fortran benchmarks:

```
ifx
```

## Peak Portability Flags

```
500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64  
502.gcc_r: -D_FILE_OFFSET_BITS=64  
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
```



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

SPECrate®2017\_int\_base = 334

**Invento i6000 (Intel Xeon Gold 6526Y)**

SPECrate®2017\_int\_peak = 343

**CPU2017 License:** 6221  
**Test Sponsor:** Meganet  
**Tested by:** Fusionstor system

**Test Date:** Dec-2024  
**Hardware Availability:** Feb-2024  
**Software Availability:** Nov-2024

## Peak Optimization Flags

C benchmarks:

```
500.perlbench_r: -w -std=c11 -m64 -Wl,-z,muldefs  
-fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)  
-flto -Ofast -xCORE-AVX512 -ffast-math -mfpmath=sse  
-funroll-loops -qopt-mem-layout-trans=4  
-fno-strict-overflow  
-L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin  
-lqkmalloc
```

```
502.gcc_r: -m32  
-L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/ia32_lin  
-std=gnu89 -Wl,-z,muldefs -fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)  
-flto -Ofast -xCORE-AVX512 -ffast-math -mfpmath=sse  
-funroll-loops -qopt-mem-layout-trans=4  
-L/usr/local/jemalloc32-5.0.1/lib -ljemalloc
```

505.mcf\_r: basepeak = yes

```
525.x264_r: -w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -Ofast  
-ffast-math -flto -mfpmath=sse -funroll-loops  
-qopt-mem-layout-trans=4 -fno-alias  
-L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin  
-lqkmalloc
```

557.xz\_r: basepeak = yes

C++ benchmarks:

520.omnetpp\_r: basepeak = yes

523.xalancbmk\_r: basepeak = yes

531.deepsjeng\_r: basepeak = yes

541.leela\_r: basepeak = yes

Fortran benchmarks:

548.exchange2\_r: basepeak = yes



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

**Fusionstor**  
(Test Sponsor: Meganet)

SPECrate®2017\_int\_base = 334

**Invento i6000 (Intel Xeon Gold 6526Y)**

SPECrate®2017\_int\_peak = 343

**CPU2017 License:** 6221

**Test Sponsor:** Meganet

**Tested by:** Fusionstor system

**Test Date:** Dec-2024

**Hardware Availability:** Feb-2024

**Software Availability:** Nov-2024

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.html>

<http://www.spec.org/cpu2017/flags/Fusionstor-Platform-Flags-Intel-ICX-rev6.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/Fusionstor-Platform-Flags-Intel-ICX-rev6.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 2024-12-02 05:10:33-0500.

Report generated on 2025-01-15 12:29:38 by CPU2017 PDF formatter v6716.

Originally published on 2025-01-14.