



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Supermicro

Storage SuperServer SSG-521E-E1CR24L
(X13SEDW-F, Intel Xeon Gold 6538Y+)

SPECrate®2017_int_base = 313

SPECrate®2017_int_peak = 324

CPU2017 License: 001176

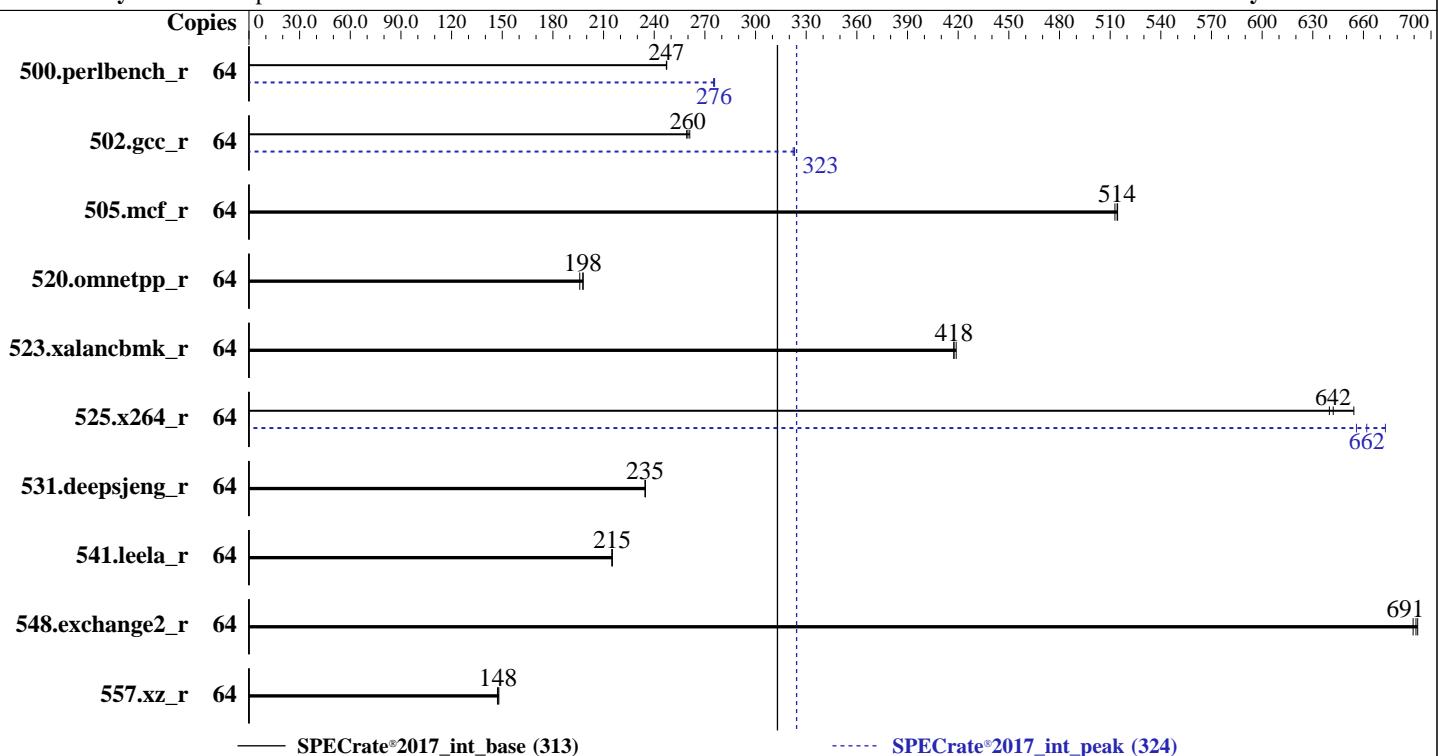
Test Date: May-2025

Test Sponsor: Supermicro

Hardware Availability: Dec-2023

Tested by: Supermicro

Software Availability: Jun-2024



Hardware

CPU Name: Intel Xeon Gold 6538Y+
Max MHz: 4000
Nominal: 2200
Enabled: 32 cores, 1 chip, 2 threads/core
Orderable: 1 chip
Cache L1: 32 KB I + 48 KB D on chip per core
L2: 2 MB I+D on chip per core
L3: 60 MB I+D on chip per chip
Other: None
Memory: 512 GB (8 x 64 GB 2Rx4 PC5-5600B-R, running at 5200)
Storage: 1 x 960 GB SATA SSD
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP6
Compiler: Kernel 6.4.0-150600.21-default
C/C++: Version 2024.1 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2024.1 of Intel Fortran Compiler for Linux;
Parallel: No
Firmware: Version 2.5a released Feb-2025
File System: xfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other: jemalloc memory allocator V5.0.1
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.



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Results Table

| Benchmark | Base | | | | | | | | Peak | | | | | | | |
|-----------------|--------|------------|------------|------------|------------|------------|------------|--------|------------|------------|------------|------------|------------|------------|---------|-------|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 500.perlbench_r | 64 | 412 | 247 | 412 | 247 | 412 | 247 | 64 | 370 | 275 | 370 | 276 | 369 | 276 | | |
| 502.gcc_r | 64 | 349 | 260 | 350 | 259 | 347 | 261 | 64 | 281 | 323 | 281 | 322 | 280 | 323 | | |
| 505.mcf_r | 64 | 201 | 514 | 202 | 513 | 201 | 514 | 64 | 201 | 514 | 202 | 513 | 201 | 514 | | |
| 520.omnetpp_r | 64 | 425 | 198 | 429 | 196 | 424 | 198 | 64 | 425 | 198 | 429 | 196 | 424 | 198 | | |
| 523.xalancbmk_r | 64 | 161 | 419 | 162 | 417 | 162 | 418 | 64 | 161 | 419 | 162 | 417 | 162 | 418 | | |
| 525.x264_r | 64 | 171 | 654 | 175 | 642 | 175 | 640 | 64 | 171 | 656 | 167 | 673 | 169 | 662 | | |
| 531.deepsjeng_r | 64 | 313 | 235 | 313 | 235 | 313 | 235 | 64 | 313 | 235 | 313 | 235 | 313 | 235 | | |
| 541.leela_r | 64 | 493 | 215 | 493 | 215 | 493 | 215 | 64 | 493 | 215 | 493 | 215 | 493 | 215 | | |
| 548.exchange2_r | 64 | 242 | 692 | 243 | 691 | 243 | 689 | 64 | 242 | 692 | 243 | 691 | 243 | 689 | | |
| 557.xz_r | 64 | 469 | 148 | 470 | 147 | 467 | 148 | 64 | 469 | 148 | 470 | 147 | 467 | 148 | | |

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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/cpu2017/lib/intel64:/home/cpu2017/lib/ia32:/home/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>

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)

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General Notes (Continued)

is mitigated in the system as tested and documented.

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>

Platform Notes

BIOS Configuration:

Workload Profile = HPC
SNC = Enable SNC2 (2-clusters)
LLC Dead Line Alloc = Disable
KTI Prefetch = Enable
Stale AtoS = Disable

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Fri May 9 19:22:32 2025

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

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 4. ulimit -a
 5. sysinfo process ancestry
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 7. lscpu
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 9. /proc/meminfo
 10. who -r
 11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)
 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. Disk information
 21. /sys/devices/virtual/dmi/id
 22. dmidecode
 23. BIOS
-

1. uname -a
Linux localhost 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09)
x86_64 x86_64 x86_64 GNU/Linux

2. w
19:22:32 up 9 min, 1 user, load average: 0.08, 0.04, 0.01
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root ttym1 - 19:18 3.00s 1.27s 0.07s -bash

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Platform Notes (Continued)

3. Username
From environment variable \$USER: root

4. ulimit -a

| | | |
|----------------------|-----------------|-----------|
| core file size | (blocks, -c) | unlimited |
| data seg size | (kbytes, -d) | unlimited |
| scheduling priority | (-e) | 0 |
| file size | (blocks, -f) | unlimited |
| pending signals | (-i) | 2061883 |
| max locked memory | (kbytes, -l) | 8192 |
| 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) | 2061883 |
| virtual memory | (kbytes, -v) | unlimited |
| file locks | (-x) | unlimited |

5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
login -- root
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=64 -c
 ic2024.1-lin-core-avx512-rate-20240308.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
 ic2024.1-lin-core-avx512-rate-20240308.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/CPU2017.001/templogs/preenv.intrate.001.0.log --lognum 001.0 --from_runcpu 2
specperl \$SPEC/bin/sysinfo
\$SPEC = /home/cpu2017

6. /proc/cpuinfo

| | | |
|----------------------------------|---|---|
| model name | : | INTEL(R) XEON(R) GOLD 6538Y+ |
| vendor_id | : | GenuineIntel |
| cpu family | : | 6 |
| model | : | 207 |
| stepping | : | 2 |
| microcode | : | 0x210002a7 |
| bugs | : | spectre_v1 spectre_v2 spec_store_bypass swapgs eibrss bhi |
| cpu cores | : | 32 |
| siblings | : | 64 |
| 1 physical ids (chips) | | |
| 64 processors (hardware threads) | | |
| physical id 0: core ids 0-31 | | |
| physical id 0: apicids 0-63 | | |

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

(Continued on next page)



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Platform Notes (Continued)

7. lscpu

```
From lscpu from util-linux 2.39.3:
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): 64
On-line CPU(s) list: 0-63
Vendor ID: GenuineIntel
BIOS Vendor ID: Intel(R) Corporation
Model name: INTEL(R) XEON(R) GOLD 6538Y+
BIOS Model name: INTEL(R) XEON(R) GOLD 6538Y+ CPU @ 2.2GHz
BIOS CPU family: 179
CPU family: 6
Model: 207
Thread(s) per core: 2
Core(s) per socket: 32
Socket(s): 1
Stepping: 2
BogoMIPS: 4400.00
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 aperf mperf tsc_known_freq pn
pclmulqdq dtes64 monitor 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 cat_12 cdp_13 intel_ppin cdp_12
ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow flexpriority ept
vpid ept_ad fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid
rtm cqmt rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt
clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec
xgetbv1 xsaves cqmt_llc cqmt_occup_llc cqmt_mbm_total cqmt_mbm_local
split_lock_detect user_shstx avx_vnni avx512_bf16 wbnoinvd dtherm ida
arat pln pts hfi vnmi 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_fp16
amx_tile amx_int8 flush_l1d 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: 60 MiB (1 instance)
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 L1tf: 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/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling;
```

(Continued on next page)



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Platform Notes (Continued)

PBRSB-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 | 60M | 60M | 15 | Unified | 3 | 65536 | 1 | 64 |

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: 257518 MB
node 0 free: 255960 MB
node 1 cpus: 16-31,48-63
node 1 size: 257979 MB
node 1 free: 256749 MB
node distances:
node 0 1
0: 10 12
1: 12 10

9. /proc/meminfo

MemTotal: 527869840 kB

10. who -r
run-level 3 May 9 19:13

11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)

Default Target Status
multi-user running

12. Services, from systemctl list-unit-files

| STATE | UNIT FILES |
|-----------------|--|
| enabled | YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance issue-generator kbdsettings klog lvm2-monitor nsqd postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore tuned wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny |
| enabled-runtime | systemd-remount-fs |
| disabled | autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell etables exchange-bmc-os-info firewalld fsidd gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievd issue-add-ssh-keys kexec-load lunmask man-db-create multipathd nfs nfs-blkmap rpcbind rpmconfigcheck rsyncd serial-getty@ smartd_generate_opts snmpd snmptrapd systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd udisks2 vncserver@ |
| indirect | systemd-userdbd wickedd |

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

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
root=UUID=ea6c06ff-ea6f-4077-b3b2-cfc850922841

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Platform Notes (Continued)

```
splash=silent
mitigations=auto
quiet
security=apparmor
nomodeset
```

```
-----  
14. cpupower frequency-info  
analyzing CPU 42:  
  Unable to determine current policy  
  boost state support:  
    Supported: yes  
    Active: yes
```

```
-----  
15. tuned-adm active  
Current active profile: throughput-performance
```

```
-----  
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                  10  
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_shared     256  
max_ptes_swap       64  
pages_to_scan        4096  
scan_sleep_millisecs 10000
```

```
-----  
19. OS release  
From /etc/*-release /etc/*-version
```

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Platform Notes (Continued)

os-release SUSE Linux Enterprise Server 15 SP6

20. Disk information

SPEC is set to: /home/cpu2017

| Filesystem | Type | Size | Used | Avail | Use% | Mounted on |
|------------|------|------|------|-------|------|------------|
| /dev/sda2 | xfs | 892G | 27G | 865G | 3% | / |

21. /sys/devices/virtual/dmi/id

| | |
|-----------------|------------------|
| Vendor: | Supermicro |
| Product: | SSG-521E-E1CR24L |
| Product Family: | Family |
| Serial: | A899258X4A11256 |

22. dmidecode

Additional information from dmidecode 3.4 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:

8x Samsung M321R8GA0PB0-CWMXH 64 GB 2 rank 5600, configured at 5200

23. BIOS

(This section combines info from /sys/devices and dmidecode.)

| | |
|----------------|---|
| BIOS Vendor: | American Megatrends International, LLC. |
| BIOS Version: | 2.5a |
| BIOS Date: | 02/13/2025 |
| 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 2024.1.0 Build 20240308
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=====

=====

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)

=====

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=====

=====

C | 502.gcc_r(peak)

=====

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=====

=====

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

=====

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Compiler Version Notes (Continued)

| 557.xz_r(base, peak)

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=====
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 2024.1.0 Build 20240308
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=====
Fortran | 548.exchange2_r(base, peak)

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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



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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/opt/intel/oneapi/compiler/2024.1/lib -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/opt/intel/oneapi/compiler/2024.1/lib -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/opt/intel/oneapi/compiler/2024.1/lib -lqkmalloc
```

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

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Supermicro

Storage SuperServer SSG-521E-E1CR24L
(X13SEDW-F, Intel Xeon Gold 6538Y+)

SPECrate®2017_int_base = 313

SPECrate®2017_int_peak = 324

CPU2017 License: 001176

Test Sponsor: Supermicro

Tested by: Supermicro

Test Date: May-2025

Hardware Availability: Dec-2023

Software Availability: Jun-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/opt/intel/oneapi/compiler/2024.1/lib -lqkmalloc

502.gcc_r: -m32 -L/opt/intel/oneapi/compiler/2024.1/lib32 -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 -xCORE-AVX512 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fno-alias
-L/opt/intel/oneapi/compiler/2024.1/lib -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
```

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

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.html>

<http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-EMR-revF.html>



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

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-EMR-revF.xml>

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