SPEC CPU®2017 Integer Rate Result

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Supermicro

SuperServer SYS-121C-TN10R
(X13DDW , Intel Xeon Silver 4509Y)

$SPECrate^®2017\_int\_base =$ 167

$SPECrate^®2017\_int\_peak =$ Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: May-2025
Hardware Availability: Nov-2023
Software Availability: Jun-2024

Copies

Benchmark	Copies	Result
500.perlbench_r	32	121
502.gcc_r	32	148
505.mcf_r	32	286
520.omnetpp_r	32	118
523.xalancbmk_r	32	238
525.x264_r	32	333
531.deepsjeng_r	32	125
541.leela_r	32	116
548.exchange2_r	32	304
557.xz_r	32	78.5

SPECrate®2017_int_base (167)

Hardware

CPU Name: Intel Xeon Silver 4509Y
 Max MHz: 4100
 Nominal: 2600
Enabled: 16 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: 22.5 MB I+D on chip per chip
 Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-5600B-R, running at 4400)
Storage: 1 x 1.8TB NVMe SSD
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP6
 6.4.0-150600.21-default
Compiler: 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 2.4 released Sep-2024
File System: btrfs
System State: Run level 5 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: None
Power Management: BIOS set to prefer performance at the cost of additional power usage.

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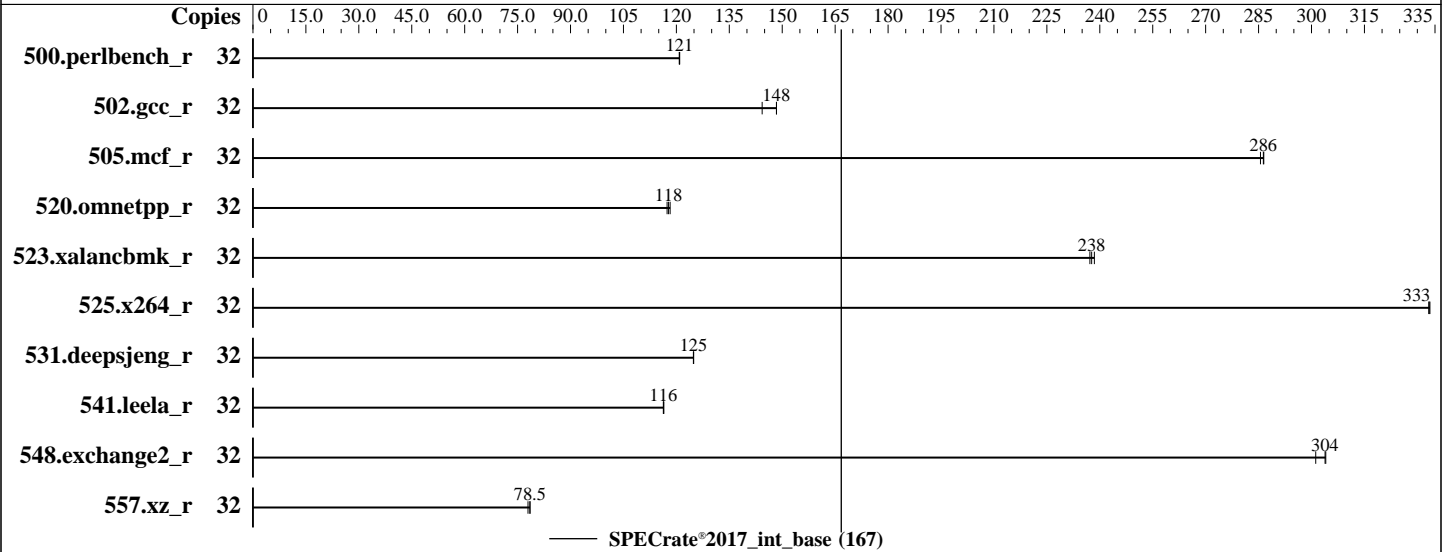
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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	32	421	121	**421**	**121**	422	121							
502.gcc_r	32	**305**	**148**	314	144	305	148							
505.mcf_r	32	181	286	181	286	**181**	**286**							
520.omnetpp_r	32	358	117	**356**	**118**	355	118							
523.xalancbmk_r	32	142	237	142	238	**142**	**238**							
525.x264_r	32	**168**	**333**	168	334	168	333							
531.deepsjeng_r	32	**294**	**125**	294	125	294	125							
541.leela_r	32	455	116	**456**	**116**	456	116							
548.exchange2_r	32	**276**	**304**	276	304	278	301							
557.xz_r	32	440	78.5	**440**	**78.5**	443	77.9							
SPECrate®2017_int_base =		**167**												
SPECrate®2017_int_peak =		**Not Run**												

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)
is mitigated in the system as tested and documented.

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Platform Notes

```
BIOS Settings:
 Power Technology = Custom
 Power Performance Tuning = BIOS Controls EPB
 ENERGY_PERF_BIAS_CFG mode = Performance
 KTI Prefetch = Enable
 SNC = Enable SNC2 (2-clusters)
 DCU Streamer Prefetcher = Disable
 LLC Dead Line Alloc = Disable

 Sysinfo program /home/cpu2017/bin/sysinfo
 Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
 running on localhost Thu May  1 18:38:15 2025

 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 254 (254.10+suse.84.ge8d77af424)
 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 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
   18:38:15 up 3 min,  1 user,  load average: 0.29, 0.11, 0.03
   USER     TTY        FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
   root     :                           18:37    ?xdm?  1:03   0.02s gdm-session-worker [pam/gdm-password]
   root     seat0    login-             18:37    0.00s  0.00s  0.00s /usr/lib/gdm/gdm-x-session
   --register-session --run-script gnome
   root              :1                  18:37    ?xdm?  1:03   0.00s /usr/lib/gdm/gdm-x-session
   --register-session --run-script gnome

 ------------------------------------------------------------
 3. Username
```

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Platform Notes (Continued)

```
  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) 4125213
  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) 4125213
  virtual memory          (kbytes, -v) unlimited
  file locks                      (-x) unlimited


  ------------------------------------------------------------
5. sysinfo process ancestry
 /usr/lib/systemd/systemd --switched-root --system --deserialize=42
 /usr/lib/systemd/systemd --user
 /usr/lib/gnome-terminal-server
 bash
 bash
 runcpu --nobuild --action validate --define default-platform-flags --define numcopies=32 -c
   ic2024.1-lin-core-avx512-rate-20240308.cfg --define smt-on --define cores=16 --define physicalfirst
   --define invoke_with_interleave --define drop_caches --tune base -o all intrate
 runcpu --nobuild --action validate --define default-platform-flags --define numcopies=32 --configfile
   ic2024.1-lin-core-avx512-rate-20240308.cfg --define smt-on --define cores=16 --define physicalfirst
   --define invoke_with_interleave --define drop_caches --tune base --output_format all --nopower --runmode
   rate --tune base --size refrate intrate --nopreenv --note-preenv --logfile
   $SPEC/tmp/CPU2017.018/templogs/preenv.intrate.018.0.log --lognum 018.0 --from_runcpu 2
 specperl $SPEC/bin/sysinfo
 $SPEC = /home/cpu2017


  ------------------------------------------------------------
6. /proc/cpuinfo
   model name       : INTEL(R) XEON(R) SILVER 4509Y
   vendor_id        : GenuineIntel
   cpu family       : 6
   model            : 143
   stepping         : 8
   microcode        : 0x2b000620
   bugs             : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
   cpu cores        : 8
   siblings         : 16
   2 physical ids (chips)
   32 processors (hardware threads)
   physical id 0: core ids 0-7
   physical id 1: core ids 0-7
   physical id 0: apicids 0-15
   physical id 1: apicids 64-79
  Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
  virtualized systems.  Use the above data carefully.


  ------------------------------------------------------------
```

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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):                              32
  On-line CPU(s) list:                 0-31
  Vendor ID:                           GenuineIntel
  BIOS Vendor ID:                      Intel(R) Corporation
  Model name:                          INTEL(R) XEON(R) SILVER 4509Y
  BIOS Model name:                     INTEL(R) XEON(R) SILVER 4509Y  CPU @ 2.6GHz
  BIOS CPU family:                     179
  CPU family:                          6
  Model:                               143
  Thread(s) per core:                  2
  Core(s) per socket:                  8
  Socket(s):                           2
  Stepping:                            8
  CPU(s) scaling MHz:                  43%
  CPU max MHz:                         4100.0000
  CPU min MHz:                         800.0000
  BogoMIPS:                            5200.00
  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 monitor 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_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 hle avx2 smep bmi2 erms invpcid
                                       rtm 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 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:                           768 KiB (16 instances)
  L1i cache:                           512 KiB (16 instances)
  L2 cache:                            32 MiB (16 instances)
  L3 cache:                            45 MiB (2 instances)
  NUMA node(s):                        4
  NUMA node0 CPU(s):                   0-3,16-19
  NUMA node1 CPU(s):                   4-7,20-23
  NUMA node2 CPU(s):                   8-11,24-27
  NUMA node3 CPU(s):                   12-15,28-31
  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
```

(Continued on next page)

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Platform Notes (Continued)

```
  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;
                                     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     768K   12 Data           1    64      1            64
    L1i      32K     512K    8 Instruction    1    64      1            64
    L2        2M      32M   16 Unified        2  2048      1            64
    L3     22.5M      45M   15 Unified        3 24576      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: 0-3,16-19
  node 0 size: 257611 MB
  node 0 free: 256542 MB
  node 1 cpus: 4-7,20-23
  node 1 size: 258045 MB
  node 1 free: 257061 MB
  node 2 cpus: 8-11,24-27
  node 2 size: 258007 MB
  node 2 free: 257388 MB
  node 3 cpus: 12-15,28-31
  node 3 size: 257668 MB
  node 3 free: 256800 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:      1056084608 kB

-----------------------------------------------------------------
10. who -r
  run-level 5 May 1 18:35

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

(Continued on next page)

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Platform Notes (Continued)

```
  enabled            YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd bluetooth cron
                     display-manager firewalld getty@ irqbalance issue-generator kbdsettings kdump kdump-early
                     kdump-notify klog lvm2-monitor nscd nvmefc-boot-connections nvmf-autoconnect postfix
                     purge-kernels rollback rsyslog sep5 smartd sshd systemd-pstore wicked wickedd-auto4
                     wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
  enabled-runtime    systemd-remount-fs
  disabled           accounts-daemon autofs autoyast-initscripts blk-availability bluetooth-mesh boot-sysctl
                     ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell ebtables
                     exchange-bmc-os-info fsidd gpm grub2-once haveged ipmi ipmievd issue-add-ssh-keys
                     kexec-load lunmask man-db-create multipathd nfs nfs-blkmap nmb ostree-remount rpcbind
                     rpmconfigcheck rsyncd rtkit-daemon serial-getty@ smartd_generate_opts smb snmpd snmptrapd
                     speech-dispatcherd systemd-boot-check-no-failures systemd-confext
                     systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd udisks2
                     update-system-flatpaks upower vncserver@
  indirect           systemd-userdbd wickedd


  ----------------------------------------------------------
  14. Linux kernel boot-time arguments, from /proc/cmdline
    BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
    root=UUID=844840e7-ded5-4714-8032-7e92a13da2bd
    splash=silent
    mitigations=auto
    quiet
    security=apparmor
    crashkernel=365M,high
    crashkernel=72M,low


  ----------------------------------------------------------
  15. cpupower frequency-info
    analyzing CPU 4:
      current policy: frequency should be within 800 MHz and 4.10 GHz.
                      The governor "powersave" 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


  ----------------------------------------------------------
```

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Platform Notes (Continued)

```
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
   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/nvme0n1p2 btrfs  1.8T  221G  1.6T  13% /home

   ----------------------------------------------------------------
21. /sys/devices/virtual/dmi/id
    Vendor:         Supermicro
    Product:        Super Server
    Product Family: Family
    Serial:         0123456789

   ----------------------------------------------------------------
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:
     16x Samsung M321R8GA0PB0-CWMKH 64 GB 2 rank 5600, configured at 4400


   ----------------------------------------------------------------
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor:       American Megatrends International, LLC.
   BIOS Version:      2.4
   BIOS Date:         09/23/2024
   BIOS Revision:     5.32
```

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 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
```

(Continued on next page)

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Compiler Version Notes (Continued)

```
--------------------------------------------------------------------------------

==============================================================================
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 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------


==============================================================================
Fortran | 548.exchange2_r(base)
------------------------------------------------------------------------------
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 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 -xCORE-AVX512 -O3 -ffast-math`
`-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4`

(Continued on next page)

Standard Performance Evaluation Corporation (info@spec.org)   https://www.spec.org/

Supermicro

SuperServer SYS-121C-TN10R
(X13DDW , Intel Xeon Silver 4509Y)

SPECrate®2017_int_base =   167

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: May-2025
Hardware Availability: Nov-2023
Software Availability: Jun-2024

Base Optimization Flags (Continued)

C benchmarks (continued):
```
-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
```

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-SPR-revG.html
http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-SPR-revG.xml
http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.xml

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

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