



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Dell Inc.

SPECSpeed®2017\_int\_base = 14.7

PowerEdge R770 (Intel Xeon 6527P)

SPECSpeed®2017\_int\_peak = 14.9

CPU2017 License: 6573

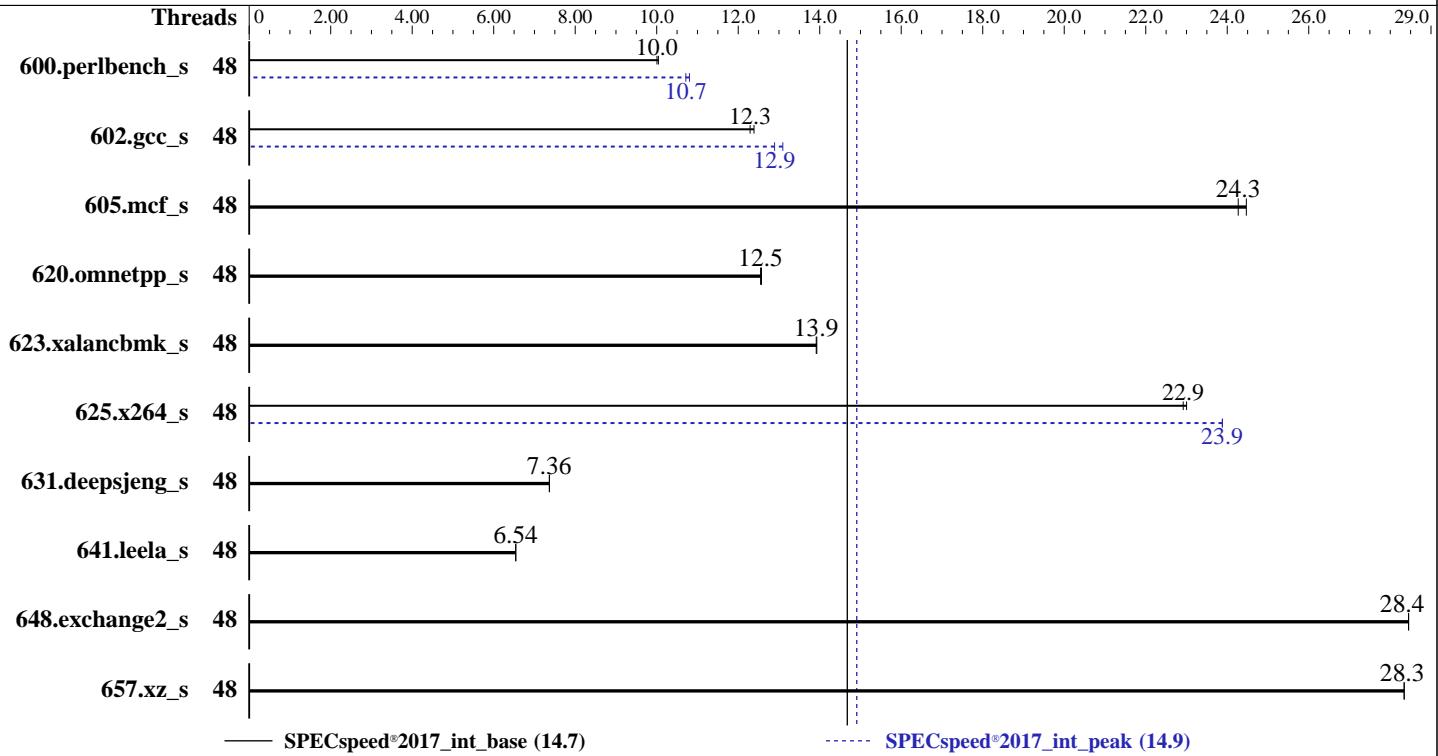
Test Date: Jun-2025

Test Sponsor: Dell Inc.

Hardware Availability: Apr-2025

Tested by: Dell Inc.

Software Availability: Jun-2024



Hardware		Software	
CPU Name:	Intel Xeon 6527P	OS:	SUSE Linux Enterprise Server 15 SP6
Max MHz:	4200	Compiler:	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;
Nominal:	3000	Parallel:	Yes
Enabled:	48 cores, 2 chips	Firmware:	Version 1.3.2 released May-2025
Orderable:	1,2 chips	File System:	tmpfs
Cache L1:	64 KB I + 48 KB D on chip per core	System State:	Run level 3 (multi-user)
L2:	2 MB I+D on chip per core	Base Pointers:	64-bit
L3:	144 MB I+D on chip per chip	Peak Pointers:	64-bit
Other:	None	Other:	jemalloc memory allocator V5.0.1
Memory:	1 TB (16 x 64 GB 2Rx4 PC5-6400B-R)	Power Management:	BIOS set to prefer performance at the cost of additional power usage.
Storage:	50 GB on tmpfs		
Other:	CPU Cooling: Air		



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## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s	48	177	10.0	<u>177</u>	<u>10.0</u>			48	164	10.8	<u>166</u>	<u>10.7</u>		
602.gcc_s	48	321	12.4	<u>324</u>	<u>12.3</u>			48	<u>309</u>	<u>12.9</u>	304	13.1		
605.mcf_s	48	193	24.5	<u>195</u>	<u>24.3</u>			48	193	24.5	<u>195</u>	<u>24.3</u>		
620.omnetpp_s	48	130	12.6	<u>130</u>	<u>12.5</u>			48	130	12.6	<u>130</u>	<u>12.5</u>		
623.xalancbmk_s	48	102	13.9	<u>102</u>	<u>13.9</u>			48	102	13.9	<u>102</u>	<u>13.9</u>		
625.x264_s	48	<b>77.0</b>	<b>22.9</b>	76.7	23.0			48	<b>73.9</b>	<b>23.9</b>	73.9	23.9		
631.deepsjeng_s	48	<b>195</b>	<b>7.36</b>	194	7.37			48	<b>195</b>	<b>7.36</b>	194	7.37		
641.leela_s	48	261	6.54	<b>261</b>	<b>6.54</b>			48	261	6.54	<b>261</b>	<b>6.54</b>		
648.exchange2_s	48	103	28.5	<u>103</u>	<u>28.4</u>			48	103	28.5	<u>103</u>	<u>28.4</u>		
657.xz_s	48	<b>218</b>	<b>28.3</b>	218	28.3			48	<b>218</b>	<b>28.3</b>	218	28.3		
SPECspeed®2017_int_base = <b>14.7</b>														
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Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

## 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:

```
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH =
    "/mnt/ramdisk/cpu2017-1.1.9-ic2024.1/lib/intel64:/mnt/ramdisk/cpu2017-1.1.9-ic2024.1/je5.0.1-64"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"
```

## General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using Redhat Enterprise Linux 8.0

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
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>

Benchmark run from a 50 GB ramdisk created with the cmd: "mount -t tmpfs -o size=50G tmpfs /mnt/ramdisk"

## Platform Notes

BIOS Settings:

```
Logical Processor : Disabled
Adjacent Cache Line Prefetch : Disabled
```

(Continued on next page)



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## Platform Notes (Continued)

```
MADT Core Enumeration : Linear
    LLC Prefetch : Enabled
    Optimizer Mode : Enabled

    System Profile : Custom
    CPU Power Management : Maximum Performance
        C1E : Disabled
        C-States : Disabled
    Latency Optimized Mode : Enabled
    Energy Efficient Policy : Performance
    CPU Interconnect Bus -
        Link Power Management : Disabled
PCI ASPM L1 Link Power Management : Disabled
    Correctable Memory ECC SMI : Disabled
        DIMM Self Healing -
            on Uncorrectable Memory Error : Disabled
```

```
Sysinfo program /mnt/ramdisk/cpu2017-1.1.9-ic2024.1/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on 5B2KQ54-R770 Thu Jun 12 22:28:12 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. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. sysctl
16. /sys/kernel/mm/transparent\_hugepage
17. /sys/kernel/mm/transparent\_hugepage/khugepaged
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

-----

-----  
1. uname -a  
Linux 5B2KQ54-R770 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  
22:28:12 up 8 min, 1 user, load average: 0.08, 0.06, 0.02  
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT  
root ttyl - 22:25 17.00s 0.79s 0.00s /bin/bash

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## Platform Notes (Continued)

```
/home/DellFiles/bin/Intel/dell-run-speccpu.sh speed --define DL-VERS=6.3 --output_format html,pdf,txt
```

```
-----  
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) 4126853  
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) 4126853  
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  
/bin/bash /home/DellFiles/bin/DELL_speed.sh  
/bin/bash /home/DellFiles/bin/dell-run-main.sh speed  
/bin/bash /home/DellFiles/bin/dell-run-main.sh speed  
/bin/bash /home/DellFiles/bin/Intel/dell-run-speccpu.sh speed --define DL-VERS=6.3 --output_format  
html,pdf,txt  
/bin/bash /home/DellFiles/bin/Intel/dell-run-speccpu.sh speed --define DL-VERS=6.3 --output_format  
html,pdf,txt  
runcpu --nobuild --action validate --define default-platform-flags -c  
ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=48 --tune base,peak -o all --define  
intspeedaffinity --define drop_caches --iterations 2 --define DL-VERS=6.3 --output_format html,pdf,txt  
intspeed  
runcpu --nobuild --action validate --define default-platform-flags --configfile  
ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=48 --tune base,peak --output_format all  
--define intspeedaffinity --define drop_caches --iterations 2 --define DL-VERS=6.3 --output_format  
html,pdf,txt --nopower --runmode speed --tune base:peak --size refspeed intspeed --nopreenv --note-preenv  
--logfile $SPEC/Tmp/CPU2017.001/templogs/preenv.intspeed.001.0.log --lognum 001.0 --from_runcpu 2  
specperl $SPEC/bin/sysinfo  
$SPEC = /mnt/ramdisk/cpu2017-1.1.9-ic2024.1
```

```
-----  
6. /proc/cpuinfo  
model name          : Intel(R) Xeon(R) 6527P  
vendor_id           : GenuineIntel  
cpu family          : 6  
model               : 173  
stepping             : 1  
microcode           : 0x10003c2  
bugs                : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi  
cpu cores            : 24  
siblings             : 24
```

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## Platform Notes (Continued)

2 physical ids (chips)  
48 processors (hardware threads)  
physical id 0: core ids 0-23  
physical id 1: core ids 0-23  
physical id 0: apicids 0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46  
physical id 1: apicids  
128,130,132,134,136,138,140,142,144,146,148,150,152,154,156,158,160,162,164,166,168,170,172,174  
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 2.39.3:  
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): 48  
On-line CPU(s) list: 0-47  
Vendor ID: GenuineIntel  
BIOS Vendor ID: Intel  
Model name: Intel(R) Xeon(R) 6527P  
BIOS Model name: Intel(R) Xeon(R) 6527P CPU @ 3.0GHz  
BIOS CPU family: 179  
CPU family: 6  
Model: 173  
Thread(s) per core: 1  
Core(s) per socket: 24  
Socket(s): 2  
Stepping: 1  
BogoMIPS: 6000.00  
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 pnpi  
pclmulqdq dtes64 monitor ds\_cpl vmx smx est tm2 ssse3 sdbg fma cx16  
xtrpr 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 cqmq rdt\_a avx512f avx512dq rdseed adix smap avx512ifma clflushopt  
clwb intel\_pt avx512cd sha\_ni avx512bw avx512vl xsaveopt xsavec  
xgetbv1 xsaves cqmm\_llc cqmm\_occup\_llc cqmm\_mbm\_total cqmm\_mbm\_local  
split\_lock\_detect user\_shstck avx\_vnni avx512\_bf16 wbnoinvd dtherm ida  
arat pln pts vnmi avx512vbmi umip pku ospke waitpkg avx512\_vbmi2 gfn  
vaes vpclmulqdq avx512\_vnni avx512\_bitalg tme avx512\_vpocntdq 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\_ll1d arch\_capabilities  
Virtualization: VT-x  
L1d cache: 2.3 MiB (48 instances)  
L1i cache: 3 MiB (48 instances)  
L2 cache: 96 MiB (48 instances)  
L3 cache: 288 MiB (2 instances)  
NUMA node(s): 2  
NUMA node0 CPU(s): 0-23  
NUMA node1 CPU(s): 24-47  
Vulnerability Gather data sampling: Not affected

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## Platform Notes (Continued)

Vulnerability Itlb multihit:	Not affected
Vulnerability Llft:	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; PBRSB-eIBRS
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	2.3M	12	Data	1	64	1	64
L1i	64K	3M	16	Instruction	1	64	1	64
L2	2M	96M	16	Unified	2	2048	1	64
L3	144M	288M	16	Unified	3	147456	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: 0-23  
node 0 size: 515662 MB  
node 0 free: 504163 MB  
node 1 cpus: 24-47  
node 1 size: 516077 MB  
node 1 free: 514967 MB  
node distances:  
node 0 1  
0: 10 21  
1: 21 10

-----  
9. /proc/meminfo

MemTotal: 1056501544 kB

-----  
10. who -r  
run-level 3 Jun 12 22:20

-----  
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 firewalld getty@  
irqbalance issue-generator kbdsettings klog lvm2-monitor nsqd nvmefc-boot-connections  
nvmf-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore 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 ebtables exchange-bmc-os-info fsidd

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## Platform Notes (Continued)

```
gpm grub2-once haveged 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=2496bb61-4fa4-445e-bc61-cd2a7fba9d70
    splash=silent
    resume=/dev/disk/by-uuid/816ff46e-01f4-42bf-92a4-d2dcf2cddd35
    mitigations=auto
    quiet
    security=apparmor

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

-----
15. sysctl
kernel.numa_balancing          1
kernel.randomize_va_space       2
vm.compaiction_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

-----
16. /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

-----
17. /sys/kernel/mm/transparent_hugepage/khugepaged
alloc_sleep_millisecs  60000
defrag              1
max_ptes_none       511
max_ptes_shared     256
max_ptes_swap       64
```

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## Platform Notes (Continued)

```
pages_to_scan      4096
scan_sleep_millisecs 10000
```

```
-----  
18. OS release  
From /etc/*-release /etc/*-version  
os-release SUSE Linux Enterprise Server 15 SP6
```

```
-----  
19. Disk information  
SPEC is set to: /mnt/ramdisk/cpu2017-1.1.9-ic2024.1  
Filesystem      Type   Size  Used Avail Use% Mounted on  
tmpfs          tmpfs   50G   5.0G  46G  10% /mnt/ramdisk
```

```
-----  
20. /sys/devices/virtual/dmi/id  
Vendor:        Dell Inc.  
Product:       PowerEdge R770  
Product Family: PowerEdge  
Serial:        5B2KQ54
```

```
-----  
21. 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 002C069D002C MTC40F2046S1RC64BD2 QSFF 64 GB 2 rank 6400
```

```
-----  
22. BIOS  
(This section combines info from /sys/devices and dmidecode.)  
BIOS Vendor:      Dell Inc.  
BIOS Version:    1.3.2  
BIOS Date:       05/15/2025  
BIOS Revision:   1.3
```

## Compiler Version Notes

```
=====  
C | 600.perlbench_s(base, peak) 602.gcc_s(base, peak) 605.mcf_s(base, peak) 625.x264_s(base, peak)  
| 657.xz_s(base, peak)
```

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

```
=====  
C++ | 620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak) 631.deepsjeng_s(base, peak)  
| 641.leela_s(base, peak)
```

```
-----  
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 | 648.exchange2_s(base, peak)
```

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## Compiler Version Notes (Continued)

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

600.perlbench\_s: -DSPEC\_LP64 -DSPEC\_LINUX\_X64  
602.gcc\_s: -DSPEC\_LP64  
605.mcf\_s: -DSPEC\_LP64  
620.omnetpp\_s: -DSPEC\_LP64  
623.xalancbmk\_s: -DSPEC\_LP64 -DSPEC\_LINUX  
625.x264\_s: -DSPEC\_LP64  
631.deepsjeng\_s: -DSPEC\_LP64  
641.leela\_s: -DSPEC\_LP64  
648.exchange2\_s: -DSPEC\_LP64  
657.xz\_s: -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 -fopenmp  
-DSPEC\_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

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/usr/local/jemalloc64-5.0.1/lib -ljemalloc

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# SPEC CPU®2017 Integer Speed Result

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Dell Inc.

SPECspeed®2017\_int\_base = 14.7

PowerEdge R770 (Intel Xeon 6527P)

SPECspeed®2017\_int\_peak = 14.9

CPU2017 License: 6573

Test Date: Jun-2025

Test Sponsor: Dell Inc.

Hardware Availability: Apr-2025

Tested by: Dell Inc.

Software Availability: Jun-2024

## Base Optimization Flags (Continued)

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math -fsto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-nostandard-realloc-lhs -align array32byte  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

## Peak Compiler Invocation

C benchmarks:

```
icx
```

C++ benchmarks:

```
icpx
```

Fortran benchmarks:

```
ifx
```

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

```
600.perlbench_s: -w -m64 -std=c11 -Wl,-z,muldefs  
-fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)  
-fsto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-fiopenmp -DSPEC_OPENMP -fno-strict-overflow  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

```
602.gcc_s: -w -m64 -std=c11 -Wl,-z,muldefs  
-fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)  
-fsto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib  
-ljemalloc
```

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Tested by: Dell Inc.

Software Availability: Jun-2024

## Peak Optimization Flags (Continued)

605.mcf\_s: basepeak = yes

625.x264\_s: -w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3  
-ffast-math -futto -mfpmath=sse -funroll-loops  
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC\_OPENMP  
-fno-alias -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

657.xz\_s: basepeak = yes

C++ benchmarks:

620.omnetpp\_s: basepeak = yes

623.xalancbmk\_s: basepeak = yes

631.deepsjeng\_s: basepeak = yes

641.leela\_s: basepeak = yes

Fortran benchmarks:

648.exchange2\_s: 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/Dell-Platform-Flags-PowerEdge-Intel-Xeon-v1.13.html>

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/Dell-Platform-Flags-PowerEdge-Intel-Xeon-v1.13.xml>

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