



SPEC CPU®2017 Floating Point Speed Result

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Dell Inc.

SPECSpeed®2017_fp_base = 155

PowerEdge R470 (Intel Xeon 6505P)

SPECSpeed®2017_fp_peak = 155

CPU2017 License: 6573

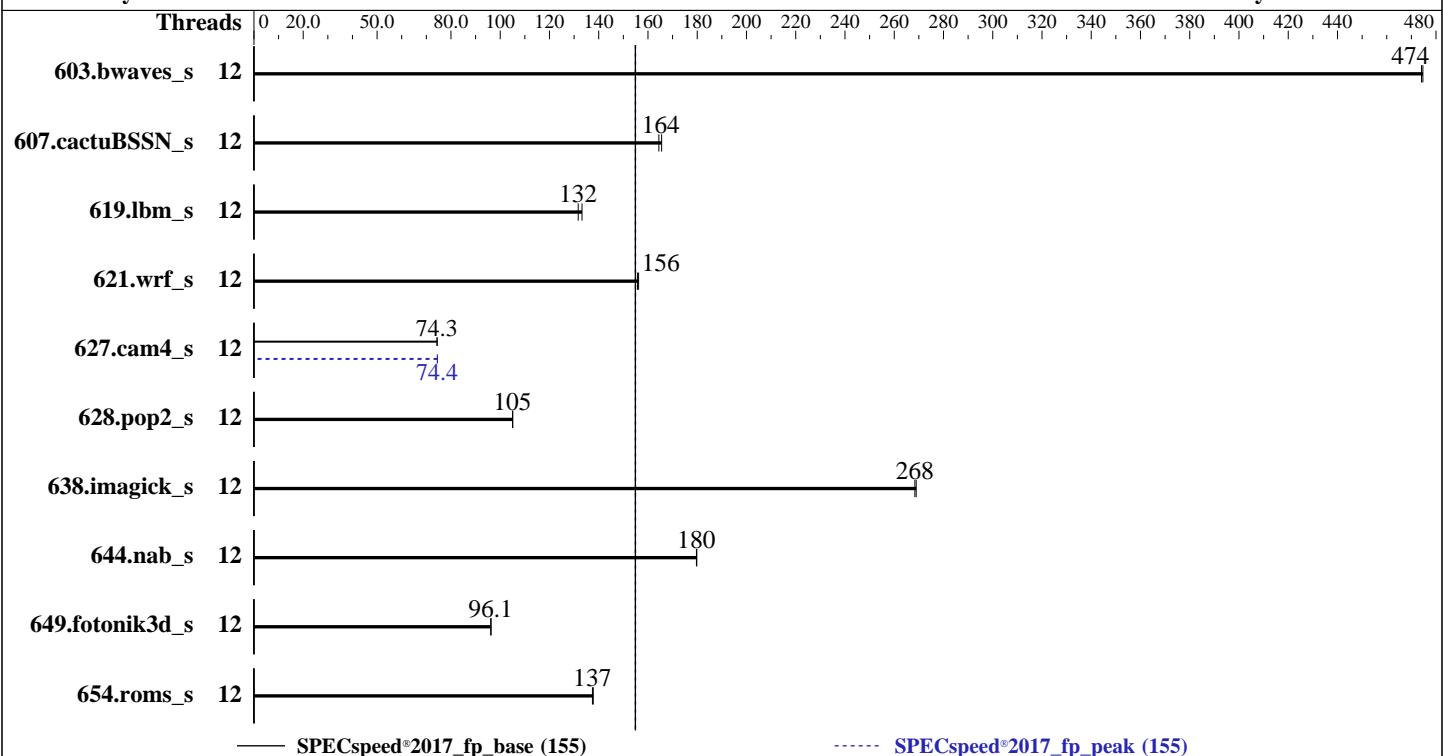
Test Date: Jun-2025

Test Sponsor: Dell Inc.

Hardware Availability: Apr-2025

Tested by: Dell Inc.

Software Availability: Jun-2024



— SPECSpeed®2017_fp_base (155)

----- SPECSpeed®2017_fp_peak (155)

Hardware

CPU Name: Intel Xeon 6505P
 Max MHz: 4100
 Nominal: 2200
 Enabled: 12 cores, 1 chip
 Orderable: 1 chip
 Cache L1: 64 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 48 MB I+D on chip per chip
 Other: None
 Memory: 512 GB (8 x 64 GB 2Rx4 PC5-6400B-R)
 Storage: 40 GB on tmpfs
 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: Yes
 Firmware: Version 1.3.2 released May-2025
 File System: tmpfs
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: jemalloc memory allocator V5.0.1
 Power Management: BIOS set to prefer performance at the cost of additional power usage.



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Results Table

| Benchmark | Base | | | | | | | | Peak | | | | | | | |
|------------------------------|---------|-------------|-------------|-------------|------------|---------|-------|---------|-------------|-------------|-------------|------------|---------|-------|---------|-------|
| | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 603.bwaves_s | 12 | 124 | 475 | 124 | 474 | | | 12 | 124 | 475 | 124 | 474 | | | | |
| 607.cactuBSSN_s | 12 | 101 | 164 | 101 | 166 | | | 12 | 101 | 164 | 101 | 166 | | | | |
| 619.lbm_s | 12 | 39.8 | 132 | 39.3 | 133 | | | 12 | 39.8 | 132 | 39.3 | 133 | | | | |
| 621.wrf_s | 12 | 84.9 | 156 | 84.7 | 156 | | | 12 | 84.9 | 156 | 84.7 | 156 | | | | |
| 627.cam4_s | 12 | 119 | 74.3 | 119 | 74.4 | | | 12 | 119 | 74.4 | 119 | 74.6 | | | | |
| 628.pop2_s | 12 | 113 | 105 | 113 | 105 | | | 12 | 113 | 105 | 113 | 105 | | | | |
| 638.imagick_s | 12 | 53.6 | 269 | 53.8 | 268 | | | 12 | 53.6 | 269 | 53.8 | 268 | | | | |
| 644.nab_s | 12 | 97.2 | 180 | 97.2 | 180 | | | 12 | 97.2 | 180 | 97.2 | 180 | | | | |
| 649.fotonik3d_s | 12 | 94.8 | 96.1 | 94.7 | 96.3 | | | 12 | 94.8 | 96.1 | 94.7 | 96.3 | | | | |
| 654.roms_s | 12 | 114 | 138 | 115 | 137 | | | 12 | 114 | 138 | 115 | 137 | | | | |
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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,compact"
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

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.

Benchmark run from a 40 GB ramdisk created with the cmd: "mount -t tmpfs -o size=40G tmpfs /mnt/ramdisk"



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Platform Notes

BIOS Settings:

```
Logical Processor : Disabled
MADT Core Enumeration : Linear
    LLC Prefetch : Enabled
    Optimizer Mode : Enabled

    System Profile : Custom
CPU Power Management : Maximum Performance
    C1E : Disabled
    C-States : Autonomous
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 1234567-R470 Thu Jun 12 13:19:10 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 1234567-R470 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
```

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Platform Notes (Continued)

```
13:19:10 up 3:04, 1 user, load average: 2.44, 4.17, 2.89
USER      TTY      FROM          LOGIN@     IDLE     JCPU    PCPU WHAT
root      tty1      -           10:14     2:18m   0.82s   0.00s /bin/bash
/home/DellFiles/bin/Intel/dell-run-speccpu.sh speed --define DL-VERS=6.2a --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) 2061750
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) 2061750
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=6.2a --output_format
  html,pdf,txt
/bin/bash /home/DellFiles/bin/Intel/dell-run-speccpu.sh speed --define DL-VERS=6.2a --output_format
  html,pdf,txt
runcpu --nobuild --action validate --define default-platform-flags -c
  ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=12 --tune base,peak -o all --define
  drop_caches --iterations 2 --define DL-VERS=6.2a --output_format html,pdf,txt fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
  ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=12 --tune base,peak --output_format all
  --define drop_caches --iterations 2 --define DL-VERS=6.2a --output_format html,pdf,txt --nopower --runmode
  speed --tune base:peak --size refspeed fpspeed --nopreenv --note-preenv --logfile
  $SPEC/tmp/CPU2017.002/templogs/preenv.fpspeed.002.0.log --lognum 002.0 --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) 6505P
vendor_id       : GenuineIntel
cpu family     : 6
model          : 173
stepping        : 1
microcode      : 0x10003c2
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
```

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Platform Notes (Continued)

```
cpu cores      : 12
siblings      : 12
1 physical ids (chips)
12 processors (hardware threads)
physical id 0: core ids 0-11
physical id 0: apicids 0,2,4,6,8,10,12,14,16,18,20,22
```

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):                12
On-line CPU(s) list:  0-11
Vendor ID:             GenuineIntel
BIOS Vendor ID:       Intel
Model name:            Intel(R) Xeon(R) 6505P
BIOS Model name:      Intel(R) Xeon(R) 6505P CPU @ 2.2GHz
BIOS CPU family:      179
CPU family:            6
Model:                 173
Thread(s) per core:   1
Core(s) per socket:   12
Socket(s):             1
Stepping:              1
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 xtTopology nonstop_tsc cpuid aperfmpf tsc_known_freq pn
                      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_12 cdp_l3 intel_ppin cdp_l12
                      ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow flexpriority ept
                      vpid ept_ad fsgsbase tsc_adjust bmil hle avx2 smep bmi2 erms invpcid
                      rtm cq_m rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt
                      clwb intel_pt avx512cd sha_ni avx512bw avx512v1 xsaveopt xsavec
                      xgetbv1 xsaves cq_m_llc cq_m_occup_llc cq_m_mb_m_total cq_m_mb_m_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_vpopcntdq la57
                      rdpid bus_lock_detect cldemote movdir64b enqcmd fsrm md_clear
                      serialize tsxldtrk poconfig arch_lbr ibt amx_bf16 avx512_fp16 amx_tile
                      amx_int8 flush_l1d arch_capabilities
Virtualization:        VT-x
L1d cache:             576 KiB (12 instances)
L1i cache:             768 KiB (12 instances)
L2 cache:              24 MiB (12 instances)
L3 cache:              48 MiB (1 instance)
NUMA node(s):          1
NUMA node0 CPU(s):     0-11
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf:    Not affected
```

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Platform Notes (Continued)

| | |
|---------------------------------------|---|
| 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; PBRSB-eIBRS Not affected; 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 | 576K | 12 | Data | 1 | 64 | 1 | 64 |
| L1i | 64K | 768K | 16 | Instruction | 1 | 64 | 1 | 64 |
| L2 | 2M | 24M | 16 | Unified | 2 | 2048 | 1 | 64 |
| L3 | 48M | 48M | 16 | Unified | 3 | 49152 | 1 | 64 |

8. numactl --hardware

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

| | |
|-----------------|-------------|
| available: | 1 nodes (0) |
| node 0 cpus: | 0-11 |
| node 0 size: | 515466 MB |
| node 0 free: | 497884 MB |
| node distances: | |
| node 0 | |
| 0: | 10 |

9. /proc/meminfo

| | |
|-----------|--------------|
| MemTotal: | 527837892 kB |
|-----------|--------------|

10. who -r

| | |
|-------------|--------------|
| run-level 3 | Jun 12 10:14 |
|-------------|--------------|

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 | ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd bluetooth cron display-manager getty@ irqbalance issue-generator kbdsettings klog lvm2-monitor nsqd nvmefc-boot-connections nvmf-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore wpa_supplicant |
| 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 dnsmasq ebtables 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 nm-cloud-setup nmb openvpn@ ostree-remount pppoe pppoe-server rpcbind rpmconfigcheck rsyncd rtkit-daemon serial-getty@ smartd_generate_opts smb snmpd snmptrapd speech-dispatcherd systemd-boot-check-no-failures systemd-confext |

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Platform Notes (Continued)

```
systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd udisks2
update-system-flatpaks upower vncserver@ wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6
wickedd-nanny wpa_supplicant@
indirect pcsd systemd-userdbd wickedd
```

```
-----  
13. Linux kernel boot-time arguments, from /proc/cmdline  
BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default  
root=UUID=1c12c33d-b75a-4b70-bf85-f673b4f99355  
splash=silent  
resume=/dev/disk/by-uuid/8694d044-c578-4891-879e-7f98dfefef12  
mitigations=auto  
quiet  
security=apparmor
```

```
-----  
14. cpupower frequency-info  
analyzing CPU 9:  
    Unable to determine current policy  
    boost state support:  
        Supported: yes  
        Active: yes
```

```
-----  
15. sysctl  
kernel.numa_balancing          0  
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
```

```
-----  
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  
pages_to_scan        4096
```

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Platform Notes (Continued)

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 40G 11G 30G 28% /mnt/ramdisk

20. /sys/devices/virtual/dmi/id
Vendor: Dell Inc.
Product: PowerEdge R470
Product Family: PowerEdge
Serial: 1234567

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:
8x 00CE042300CE M321R8GA0PB2-CCPEC 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 | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(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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=====

=====

C++, C, Fortran | 607.cactuBSSN_s(base, peak)

=====

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Compiler Version Notes (Continued)

Fortran | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
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Fortran, C | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)

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Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
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Base Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx

Base Portability Flags

603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
-assume byterecl
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64



SPEC CPU®2017 Floating Point Speed Result

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Dell Inc.

SPECSpeed®2017_fp_base = 155

PowerEdge R470 (Intel Xeon 6505P)

SPECSpeed®2017_fp_peak = 155

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

C benchmarks:

```
-w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -Ofast -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp  
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:

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

Benchmarks using both Fortran and C:

```
-w -m64 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp  
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512  
-nostandard-realloc-lhs -align array32byte -auto  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using Fortran, C, and C++:

```
-w -std=c++14 -m64 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast  
-ffast-math -flto -mfpmath=sse -funroll-loops  
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int  
-mprefer-vector-width=512 -nostandard-realloc-lhs -align array32byte  
-auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Peak Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx



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Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

619.lbm_s: basepeak = yes

638.imagick_s: basepeak = yes

644.nab_s: basepeak = yes

Fortran benchmarks:

603.bwaves_s: basepeak = yes

649.fotonik3d_s: basepeak = yes

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes

627.cam4_s: -w -m64 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-Wno-implicit-int -mprefer-vector-width=512
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

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

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

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