SPEC CPU®2017 Integer Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation
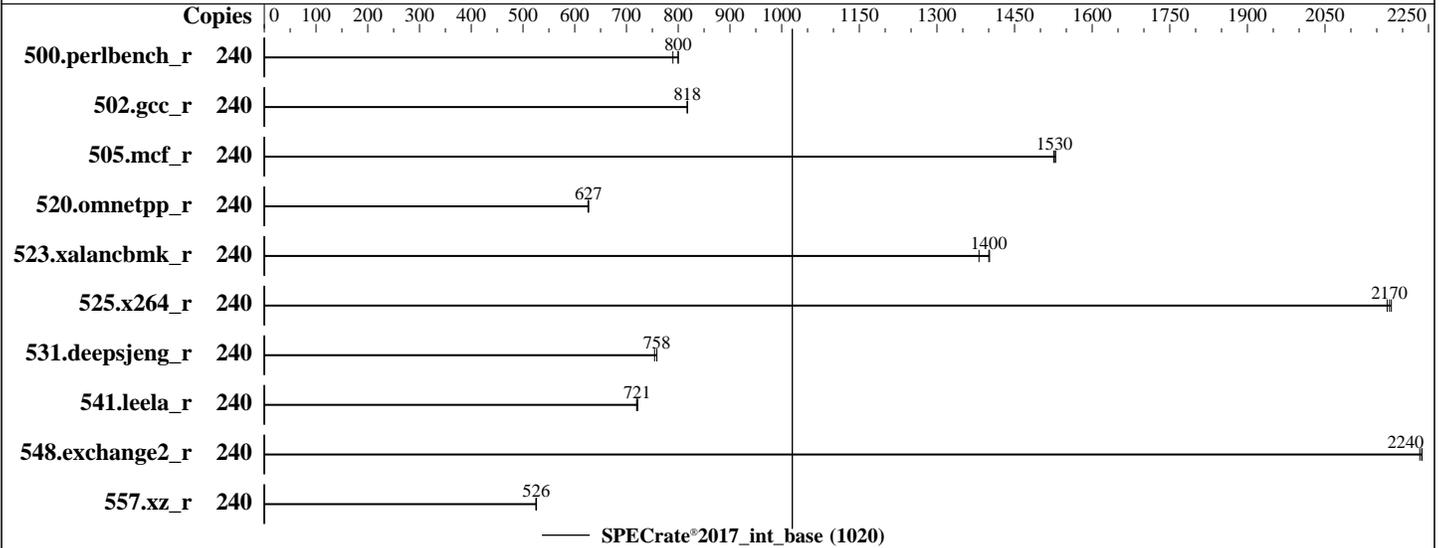
Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

$SPECrate^{®}2017\_int\_base = 1020$

$SPECrate^{®}2017_int_peak = $ Not Run

CPU2017 License: 19	**Test Date:** Jan-2026
Test Sponsor: Fujitsu	**Hardware Availability:** Mar-2026
Tested by: Fsas Technologies Inc.	**Software Availability:** May-2025

Copies

Scale: 0 100 200 300 400 500 600 700 800 900 1000 1150 1300 1450 1600 1750 1900 2050 2250

Benchmark	Copies	Result
500.perlbench_r	240	800
502.gcc_r	240	818
505.mcf_r	240	1530
520.omnetpp_r	240	627
523.xalancbmk_r	240	1400
525.x264_r	240	2170
531.deepsjeng_r	240	758
541.leela_r	240	721
548.exchange2_r	240	2240
557.xz_r	240	526

SPECrate®2017_int_base (1020)

Hardware

CPU Name: Intel Xeon Platinum 8580
 Max MHz: 4000
 Nominal: 2000
Enabled: 120 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: 300 MB I+D on chip per chip
 Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-5600B-R)
Storage: 1 x 960 GB M.2 SATA SSD
Other: CPU Cooling: Air

Software

OS: Red Hat Enterprise Linux 9.6 (Plow)
 5.14.0-570.12.1.el9_6.x86_64
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: Fujitsu BIOS Version V1.0.0.0 R2.9.0 for D3986-A1x. Released Mar-2026
File System: xfs
System State: Run level 5 (multi-user with GUI)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: None
Power Management: BIOS set to prefer performance at the cost of additional power usage

SPEC CPU®2017 Integer Rate Result
Copyright 2017-2026 Standard Performance Evaluation Corporation

Fsas Technologies Inc.
(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

$SPECrate®2017\_int\_base =$ 1020

$SPECrate®2017\_int\_peak =$ Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fsas Technologies Inc.

Test Date: Jan-2026
Hardware Availability: Mar-2026
Software Availability: May-2025

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	240	**478**	**800**	484	790	477	800							
502.gcc_r	240	**416**	**818**	415	818	416	817							
505.mcf_r	240	254	1530	**254**	**1530**	254	1530							
520.omnetpp_r	240	**503**	**627**	503	626	502	627							
523.xalancbmk_r	240	183	1380	181	1400	**181**	**1400**							
525.x264_r	240	**193**	**2170**	194	2170	193	2180							
531.deepsjeng_r	240	**363**	**758**	363	759	365	754							
541.leela_r	240	551	721	**551**	**721**	552	720							
548.exchange2_r	240	**281**	**2240**	281	2240	282	2230							
557.xz_r	240	493	526	494	525	**493**	**526**							

SPECrate®2017_int_base =	**1020**
SPECrate®2017_int_peak =	**Not Run**

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

Compiler Notes

```
SPEC has ruled that the compiler used for this result was performing a compilation
that specifically improves the performance of the 523.xalancbmk_r / 623.xalancbmk_s
benchmarks using a priori knowledge of the SPEC code and dataset to perform a
transformation that has narrow applicability.

In order to encourage optimizations that have wide applicability (see rule 1.4
https://www.spec.org/cpu2017/Docs/runrules.html#rule_1.4), SPEC will no longer
publish results using this optimization.

This result is left in the SPEC results database for historical reference.
```

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/benchmark/cpu2017/lib/intel64:/home/benchmark/cpu2017/lib/ia32:/home/benchmark/cpu2017/je5.0.1-
    32"
MALLOC_CONF = "retain:true"
```

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base = 1020

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fsas Technologies Inc.

Test Date: Jan-2026
Hardware Availability: Mar-2026
Software Availability: May-2025

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.
```

Platform Notes

```
BIOS configuration:
DCU Streamer Prefetcher = Disabled
UPI Link Frequency Select = 14.4GT/s
HWPM Support = Disabled
CPU Performance Boost = Aggressive
SNC (Sub NUMA) = Enable SNC2

Sysinfo program /home/benchmark/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost.localdomain Tue Jan  6 09:50:16 2026

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 252 (252-51.el9)
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
------------------------------------------------------------

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

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

$SPECrate®2017\_int\_base =$ **1020**

$SPECrate®2017\_int\_peak =$ Not Run

CPU2017 License: 19		**Test Date:**	Jan-2026
Test Sponsor:	Fujitsu	**Hardware Availability:**	Mar-2026
Tested by:	Fsas Technologies Inc.	**Software Availability:**	May-2025

Platform Notes (Continued)

```
 1. uname -a
   Linux localhost.localdomain 5.14.0-570.12.1.el9_6.x86_64 #1 SMP PREEMPT_DYNAMIC Fri Apr 4 10:41:31 EDT 2025
   x86_64 x86_64 x86_64 GNU/Linux

   ----------------------------------------------------------
 2. w
    09:50:16 up 4 min,  2 users,  load average: 0.25, 0.15, 0.07
   USER     TTY         LOGIN@   IDLE   JCPU   PCPU WHAT
   root     seat0      09:49    0.00s  0.00s  0.00s /usr/libexec/gdm-wayland-session --register-session
   gnome-session
   root     tty2       09:49    4:13   0.03s  0.03s /usr/libexec/gnome-session-binary

   ----------------------------------------------------------
 3. Username
   From environment variable $USER:  root

   ----------------------------------------------------------
 4. ulimit -a
   real-time non-blocking time  (microseconds, -R) unlimited
   core file size              (blocks, -c) unlimited
   data seg size               (kbytes, -d) unlimited
   scheduling priority                 (-e) 0
   file size                   (blocks, -f) unlimited
   pending signals                     (-i) 4124572
   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) 4124572
   virtual memory              (kbytes, -v) unlimited
   file locks                          (-x) unlimited

   ----------------------------------------------------------
 5. sysinfo process ancestry
   /usr/lib/systemd/systemd rhgb --switched-root --system --deserialize 31
   /usr/lib/systemd/systemd --user
   /usr/libexec/gnome-terminal-server
   bash
   bash
   runcpu --nobuild --action validate --define default-platform-flags --define numcopies=240 -c
    ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=120 --define physicalfirst
    --define invoke_with_interleave --define drop_caches --tune base -o all intrate
   runcpu --nobuild --action validate --define default-platform-flags --define numcopies=240 --configfile
    ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=120 --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/CPU2017.001/templogs/preenv.intrate.001.0.log --lognum 001.0 --from_runcpu 2
   specperl $SPEC/bin/sysinfo
   $SPEC = /home/benchmark/cpu2017

   ----------------------------------------------------------
 6. /proc/cpuinfo
      model name      : INTEL(R) XEON(R) PLATINUM 8580
      vendor_id       : GenuineIntel
      cpu family      : 6
      model           : 207
```

(Continued on next page)

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base = 1020

SPECrate®2017_int_peak = Not Run

CPU2017 License:	19	**Test Date:**	Jan-2026
Test Sponsor:	Fujitsu	**Hardware Availability:**	Mar-2026
Tested by:	Fsas Technologies Inc.	**Software Availability:**	May-2025

Platform Notes (Continued)

```
      stepping        : 2
      microcode       : 0x210002b3
      bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
      cpu cores       : 60
      siblings        : 120
      2 physical ids (chips)
      240 processors (hardware threads)
      physical id 0: core ids 0-59
      physical id 1: core ids 0-59
      physical id 0: apicids 0-119
      physical id 1: apicids 128-247
   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 2.37.4:
      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):                           240
      On-line CPU(s) list:              0-239
      Vendor ID:                        GenuineIntel
      BIOS Vendor ID:                   Intel(R) Corporation
      Model name:                       INTEL(R) XEON(R) PLATINUM 8580
      BIOS Model name:                  INTEL(R) XEON(R) PLATINUM 8580
      CPU family:                       6
      Model:                            207
      Thread(s) per core:               2
      Core(s) per socket:               60
      Socket(s):                        2
      Stepping:                         2
      CPU(s) scaling MHz:               28%
      CPU max MHz:                      4000.0000
      CPU min MHz:                       800.0000
      BogoMIPS:                         4000.00
      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 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 avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln
                                        pts 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:                        5.6 MiB (120 instances)
      L1i cache:                        3.8 MiB (120 instances)
```

(Continued on next page)

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base =   1020

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fsas Technologies Inc.

Test Date: Jan-2026
Hardware Availability: Mar-2026
Software Availability: May-2025

Platform Notes (Continued)

```
  L2 cache:                             240 MiB (120 instances)
  L3 cache:                             600 MiB (2 instances)
  NUMA node(s):                         4
  NUMA node0 CPU(s):                    0-29,120-149
  NUMA node1 CPU(s):                    30-59,150-179
  NUMA node2 CPU(s):                    60-89,180-209
  NUMA node3 CPU(s):                    90-119,210-239
  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/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     5.6M  12 Data              1     64      1            64
      L1i      32K     3.8M   8 Instruction       1     64      1            64
      L2        2M     240M  16 Unified           2   2048      1            64
      L3      300M     600M  20 Unified           3 245760      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: 0-29,120-149
  node 0 size: 257172 MB
  node 0 free: 255704 MB
  node 1 cpus: 30-59,150-179
  node 1 size: 258032 MB
  node 1 free: 257074 MB
  node 2 cpus: 60-89,180-209
  node 2 size: 257987 MB
  node 2 free: 256457 MB
  node 3 cpus: 90-119,210-239
  node 3 size: 258016 MB
  node 3 free: 256826 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:       1055958092 kB

  -------------------------------------------------------------
10. who -r
   run-level 5 Jan 6 09:46
```

(Continued on next page)

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base = 1020

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Jan-2026

Hardware Availability: Mar-2026

Software Availability: May-2025

Platform Notes (Continued)

```
    ----------------------------------------------------------
11. Systemd service manager version: systemd 252 (252-51.el9)
  Default Target  Status
  graphical       running

    ----------------------------------------------------------
12. Services, from systemctl list-unit-files
  STATE            UNIT FILES
  enabled          ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online
                   accounts-daemon atd auditd avahi-daemon bluetooth crond cups dbus-broker firewalld gdm
                   getty@ insights-client-boot irqbalance iscsi-onboot iscsi-starter kdump libstoragemgmt
                   lm_sensors low-memory-monitor lvm2-monitor mcelog mdmonitor microcode multipathd
                   nis-domainname nvmefc-boot-connections ostree-remount pmcd pmie pmlogger qemu-guest-agent
                   rhsmcertd rsyslog rtkit-daemon selinux-autorelabel-mark smartd sshd sssd
                   switcheroo-control sysstat systemd-boot-update systemd-network-generator systemd-pstore
                   tuned udisks2 upower vgauthd vmtoolsd
  enabled-runtime  systemd-remount-fs
  disabled         arp-ethers blk-availability brltty canberra-system-bootup canberra-system-shutdown
                   canberra-system-shutdown-reboot chrony-wait chronyd chronyd-restricted cni-dhcp
                   console-getty cpupower cups-browsed dbus-daemon debug-shell dnf-system-upgrade dnsmasq
                   fancontrol grafana-server iprdump iprinit iprupdate iscsi-init iscsid iscsiuio kpatch
                   kvm_stat ledmon lvm-devices-import man-db-restart-cache-update netavark-dhcp-proxy
                   netavark-firewalld-reload nftables nvmf-autoconnect ostree-readonly-sysroot-migration
                   ostree-state-overlay@ pcp-geolocate pesign pmfind pmie_farm pmlogger_farm pmproxy podman
                   podman-auto-update podman-clean-transient podman-kube@ podman-restart postfix powertop
                   psacct ras-mc-ctl rasdaemon rdisc rhcd rhsm rhsm-facts rpmdb-rebuild rrdcached
                   selinux-check-proper-disable serial-getty@ speech-dispatcherd sshd-keygen@
                   systemd-boot-check-no-failures systemd-sysext trace-cmd tuned-ppd wpa_supplicant
  indirect         iscsi spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo
                   systemd-sysupdate systemd-sysupdate-reboot

    ----------------------------------------------------------
13. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=(hd0,gpt2)/vmlinuz-5.14.0-570.12.1.el9_6.x86_64
  root=/dev/mapper/rhel-root
  ro
  crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M
  resume=/dev/mapper/rhel-swap
  rd.lvm.lv=rhel/root
  rd.lvm.lv=rhel/swap
  rhgb
  quiet

    ----------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 25:
    current policy: frequency should be within 800 MHz and 4.00 GHz.
                    The governor "schedutil" may decide which speed to use
                    within this range.
    boost state support:
      Supported: yes
      Active: yes

    ----------------------------------------------------------
15. tuned-adm active
  Current active profile: balanced

    ----------------------------------------------------------
16. sysctl
```

(Continued on next page)

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base =   1020

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Jan-2026

Hardware Availability: Mar-2026

Software Availability: May-2025

Platform Notes (Continued)

```
   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+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     Red Hat Enterprise Linux 9.6 (Plow)
   redhat-release Red Hat Enterprise Linux release 9.6 (Plow)
   system-release Red Hat Enterprise Linux release 9.6 (Plow)


   ------------------------------------------------------------
20. Disk information
SPEC is set to: /home/benchmark/cpu2017
   Filesystem           Type  Size  Used Avail Use% Mounted on
   /dev/mapper/rhel-home xfs   819G   27G  793G   4% /home


   ------------------------------------------------------------
21. /sys/devices/virtual/dmi/id
     Vendor:        FUJITSU
     Product:       PRIMEQUEST 4400E
     Product Family: SERVER
     Serial:        xxxxxxxxxx


   ------------------------------------------------------------
22. dmidecode
   Additional information from dmidecode 3.6 follows.  WARNING: Use caution when you interpret this section.
```

(Continued on next page)

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base =   1020

SPECrate®2017_int_peak = Not Run

CPU2017 License:	19	**Test Date:**	Jan-2026
Test Sponsor:	Fujitsu	**Hardware Availability:**	Mar-2026
Tested by:	Fsas Technologies Inc.	**Software Availability:**	May-2025

Platform Notes (Continued)

```
   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-CWMXH 64 GB 2 rank 5600


   ------------------------------------------------------------
  23. BIOS
  (This section combines info from /sys/devices and dmidecode.)
     BIOS Vendor:      FUJITSU
     BIOS Version:     V1.0.0.0 R2.9.0 for D3986-A1x
     BIOS Date:        08/22/2025
     BIOS Revision:    2.9
     Firmware Revision: 1.91
```

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.
----------------------------------------------------------------------------------------------------


====================================================================================================
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
```

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Fsas Technologies Inc.
(Test Sponsor: Fujitsu)

PRIMEQUEST 4400E, Intel Xeon Platinum 8580, 2.00GHz

SPECrate®2017_int_base =   1020

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19	**Test Date:** Jan-2026
Test Sponsor: Fujitsu	**Hardware Availability:** Mar-2026
Tested by: Fsas Technologies Inc.	**Software Availability:** May-2025

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 -xsapphirerapids -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 -xsapphirerapids -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 -xsapphirerapids -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/Intel-ic2024-official-linux64.html
http://www.spec.org/cpu2017/flags/Fujitsu-Platform-Settings-V1.0-EMR-RevD.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/Fujitsu-Platform-Settings-V1.0-EMR-RevD.xml

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

Tested with SPEC CPU®2017 v1.1.9 on 2026-01-05 19:50:16-0500.
Report generated on 2026-03-02 20:49:12 by CPU2017 PDF formatter v6716.
Originally published on 2026-03-02.