



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

SPECrate®2017_fp_peak = Not Run

CPU2017 License: 19

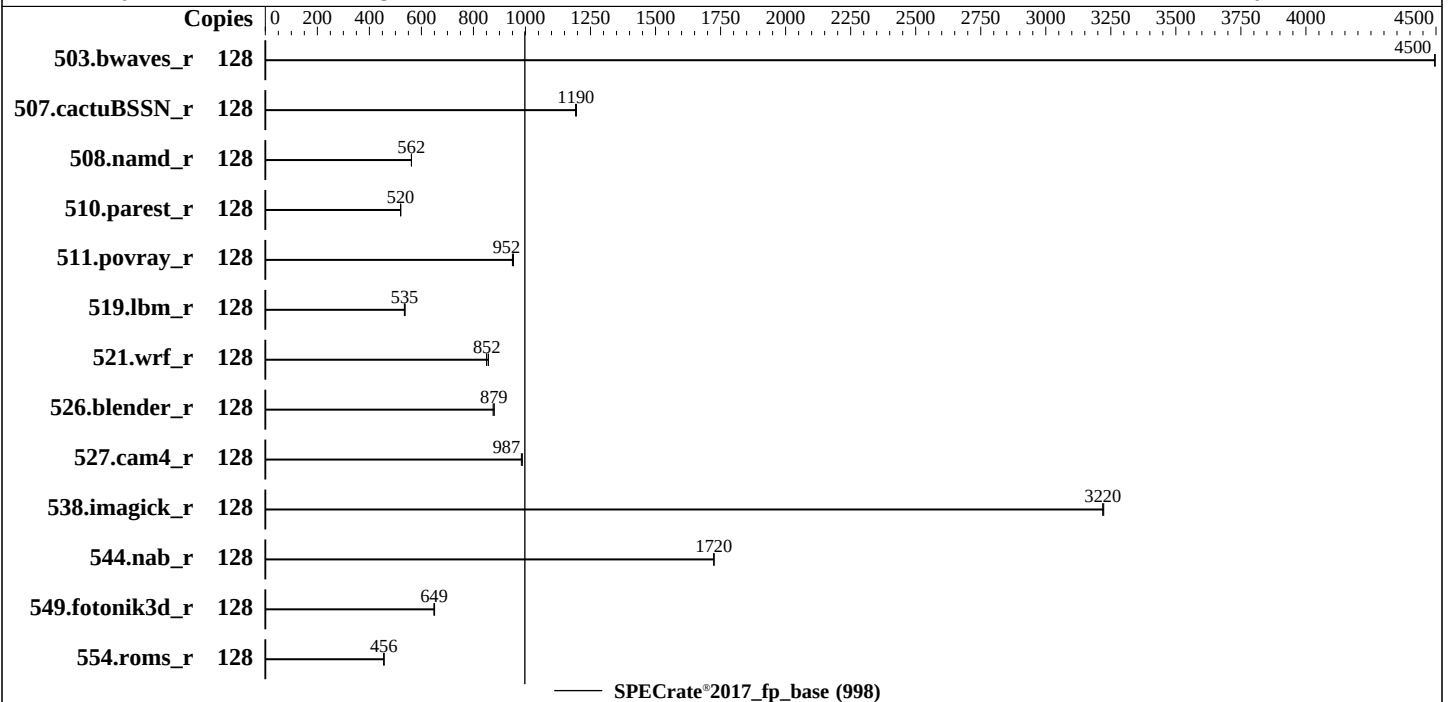
Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025



Hardware

CPU Name: Intel Xeon 6730P
Max MHz: 3800
Nominal: 2500
Enabled: 64 cores, 2 chips, 2 threads/core
Orderable: 1,2 chips
Cache L1: 64 KB I + 48 KB D on chip per core
L2: 2 MB I+D on chip per core
L3: 288 MB I+D on chip per chip
Other: None
Memory: 512 GB (16 x 32 GB 2Rx8 PC5-6400B-R)
Storage: 1 x SSD PCIe M.2, 960GB
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP7 6.4.0-150700.51-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: Fsas Technologies Inc. BIOS Version V1.0.0.0 R1.1.0 for D4134-A1x. Released Oct-2025
File System: xfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: jemalloc memory allocator V5.0.1
Power Management: BIOS set to prefer performance at the cost of additional power usage



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
503.bwaves_r	128	286	4500	285	4500	<u>286</u>	<u>4500</u>							
507.cactuBSSN_r	128	135	1200	136	1190	<u>136</u>	<u>1190</u>							
508.namd_r	128	216	562	217	562	<u>217</u>	<u>562</u>							
510.parest_r	128	644	520	<u>644</u>	<u>520</u>	644	520							
511.povray_r	128	313	954	<u>314</u>	<u>952</u>	315	950							
519.lbm_r	128	252	534	251	537	<u>252</u>	<u>535</u>							
521.wrf_r	128	337	850	<u>337</u>	<u>852</u>	334	858							
526.blender_r	128	<u>222</u>	<u>879</u>	223	876	222	880							
527.cam4_r	128	227	984	<u>227</u>	<u>987</u>	227	987							
538.imagick_r	128	98.8	3220	<u>98.9</u>	<u>3220</u>	98.9	3220							
544.nab_r	128	<u>125</u>	<u>1720</u>	125	1720	125	1720							
549.fotonik3d_r	128	<u>769</u>	<u>649</u>	769	649	767	651							
554.roms_r	128	<u>446</u>	<u>456</u>	447	455	445	457							

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_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/Benchmark/cpu2017/lib/intel64:/home/Benchmark/cpu2017/je5.0.1-64"
MALLOCONF = "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.

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

General Notes (Continued)

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.

jemalloc, a general purpose malloc implementation

built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5

sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

Platform Notes

BIOS configuration:

Fan Control = Full

SNC (Sub NUMA) = Enabled

CPU Performance Boost = Aggressive

Sysinfo program /home/Benchmark/cpu2017/bin/sysinfo

Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197

running on localhost Thu Oct 2 07:40:24 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 (254.24+suse.148.g83b9060b6e)
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 localhost 6.4.0-150700.51-default #1 SMP PREEMPT_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611)
x86_64 x86_64 x86_64 GNU/Linux
```

```
2. w
07:40:25 up 8 min, 1 user, load average: 0.00, 0.10, 0.09
USER  TTY      FROM          LOGIN@  IDLE   JCPU   PCPU   WHAT
root  tty1      -             07:40   9.00s  1.26s  0.13s  -bash
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Platform Notes (Continued)

3. Username

From environment variable \$USER: root

4. ulimit -a

```
core file size          (blocks, -c) unlimited
data seg size           (kbytes, -d) unlimited
scheduling priority     (-e) 0
file size               (blocks, -f) unlimited
pending signals         (-i) 2062258
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) 2062258
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
login -- root
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 -c
ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=64 --define physicalfirst
--define invoke_with_interleave --define drop_caches --tune base -o all fprate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 --configfile
ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=64 --define physicalfirst
--define invoke_with_interleave --define drop_caches --tune base --output_format all --nopower --runmode
rate --tune base --size refrate fprate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.001/templogs/preenv.fprate.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) 6730P
vendor_id       : GenuineIntel
cpu family      : 6
model           : 173
stepping        : 1
microcode       : 0x10003c2
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
cpu cores       : 32
siblings        : 64
2 physical ids (chips)
128 processors (hardware threads)
physical id 0: core ids 0-15,64-79
physical id 1: core ids 0-15,64-79
physical id 0: apicids 0-31,128-159
physical id 1: apicids 256-287,384-415
```

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

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

SPECrate®2017_fp_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Platform Notes (Continued)

7. lscpu

From lscpu from util-linux 2.40.4:

```
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):                128
On-line CPU(s) list:   0-127
Vendor ID:             GenuineIntel
Model name:            Intel(R) Xeon(R) 6730P
CPU family:            6
Model:                 173
Thread(s) per core:    2
Core(s) per socket:    32
Socket(s):             2
Stepping:              1
CPU(s) scaling MHz:    23%
CPU max MHz:           3800.0000
CPU min MHz:           800.0000
BogoMIPS:              5000.00
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 user_shstk avx_vnni avx512_bf16 wbnoinvd dtherm ida
                    arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req 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:             3 MiB (64 instances)
L1i cache:             4 MiB (64 instances)
L2 cache:              128 MiB (64 instances)
L3 cache:              576 MiB (2 instances)
NUMA node(s):          4
NUMA node0 CPU(s):     0-15,64-79
NUMA node1 CPU(s):     16-31,80-95
NUMA node2 CPU(s):     32-47,96-111
NUMA node3 CPU(s):     48-63,112-127
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
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Platform Notes (Continued)

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; PBRSE-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	3M	12	Data	1	64	1	64
L1i	64K	4M	16	Instruction	1	64	1	64
L2	2M	128M	16	Unified	2	2048	1	64
L3	288M	576M	16	Unified	3	294912	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: 0-15,64-79
node 0 size: 128623 MB
node 0 free: 128072 MB
node 1 cpus: 16-31,80-95
node 1 size: 129015 MB
node 1 free: 128495 MB
node 2 cpus: 32-47,96-111
node 2 size: 128976 MB
node 2 free: 128451 MB
node 3 cpus: 48-63,112-127
node 3 size: 128975 MB
node 3 free: 128464 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: 527965820 kB

10. who -r

run-level 3 Oct 2 07:33

11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)

Default Target Status
multi-user running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance issue-generator kbdsettings klog lvm2-monitor nscd nvme-fc-boot-connections nvmm-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	autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

SPECrate®2017_fp_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Platform Notes (Continued)

chronyd console-getty cups cups-browsed debug-shell ebttables exchange-bmc-os-info
firewalld fsidd 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-sysexit systemd-time-wait-sync systemd-timesyncd
vncserver@
systemd-userdbd wickedd

indirect

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

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
root=UUID=90732971-989d-4632-82bc-39689e893398
splash=silent
mitigations=auto
quiet
security=apparmor

14. cpupower frequency-info

analyzing CPU 39:
current policy: frequency should be within 800 MHz and 3.80 GHz.
The governor "powersave" may decide which speed to use
within this range.
boost state support:
Supported: yes
Active: yes

15. 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

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

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Platform Notes (Continued)

```
max_ptes_none      511
max_ptes_shared    256
max_ptes_swap      64
pages_to_scan      4096
scan_sleep_millisecs 10000
```

18. OS release

```
From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP7
```

19. Disk information

```
SPEC is set to: /home/Benchmark/cpu2017
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p3 xfs   911G  43G  869G   5% /home
```

20. /sys/devices/virtual/dmi/id

```
Vendor:      Fsas Technologies
Product:     PRIMERGY RX2530 M8
Product Family: SERVER
Serial:      xxxxxxxxxx
```

21. dmidecode

Additional information from dmidecode 3.6 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 M321R4GA3EB2-CCPKF 32 GB 2 rank 6400
```

22. BIOS

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

```
BIOS Vendor:      Fsas Technologies
BIOS Version:     V1.0.0.0 R1.1.0 for D4134-A1x
BIOS Date:        09/05/2025
BIOS Revision:    1.1
Firmware Revision: 3.1
```

Compiler Version Notes

```
=====  
C          | 519.lbm_r(base) 538.imagick_r(base) 544.nab_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++        | 508.namd_r(base) 510.parest_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)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Compiler Version Notes (Continued)

=====
C++, C | 511.povray_r(base) 526.blender_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.
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++, C, Fortran | 507.cactuBSSN_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.
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.
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.
=====

=====
Fortran | 503.bwaves_r(base) 549.fotonik3d_r(base) 554.roms_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.
=====

=====
Fortran, C | 521.wrf_r(base) 527.cam4_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.
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.
=====

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using both C and C++:

icpx icx

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

SPECrate®2017_fp_peak = Not Run

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Base Compiler Invocation (Continued)

Benchmarks using Fortran, C, and C++:

icpx icx ifx

Base Portability Flags

503.bwaves_r: -DSPEC_LP64
507.cactuBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64
510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
526.blender_r: -DSPEC_LP64 -DSPEC_LINUX -funsigned-char
527.cam4_r: -DSPEC_LP64 -DSPEC_CASE_FLAG
538.imagick_r: -DSPEC_LP64
544.nab_r: -DSPEC_LP64
549.fotonik3d_r: -DSPEC_LP64
554.roms_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

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

C++ benchmarks:

-w -std=c++14 -m64 -Wl,-z,muldefs -xsapfirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -mprefer-vector-width=512 -ljemalloc
-L/usr/local/jemalloc64-5.0.1/lib

Fortran benchmarks:

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

Benchmarks using both Fortran and C:

-w -m64 -std=c11 -Wl,-z,muldefs -xsapfirerapids -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fsas Technologies Inc.

(Test Sponsor: Fujitsu)

SPECrate®2017_fp_base = 998

PRIMERGY RX2530 M8, Intel Xeon 6730P, 2.50GHz

SPECrate®2017_fp_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fsas Technologies Inc.

Test Date: Oct-2025

Hardware Availability: Oct-2025

Software Availability: Jun-2025

Base Optimization Flags (Continued)

Benchmarks using both Fortran and C (continued):

-Wno-implicit-int -mprefer-vector-width=512 -nostandard-realloc-lhs
-align array32byte -auto -ljemalloc -L/usr/local/jemalloc64-5.0.1/lib

Benchmarks using both 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 -Wno-implicit-int -mprefer-vector-width=512
-ljemalloc -L/usr/local/jemalloc64-5.0.1/lib

Benchmarks using Fortran, C, and C++:

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

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/Fsas-Platform-Settings-V1.0-GNR-RevA.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/Fsas-Platform-Settings-V1.0-GNR-RevA.xml>

SPEC CPU and SPECrate are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

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 2025-10-01 18:40:24-0400.

Report generated on 2025-10-21 18:47:42 by CPU2017 PDF formatter v6716.

Originally published on 2025-10-21.