



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

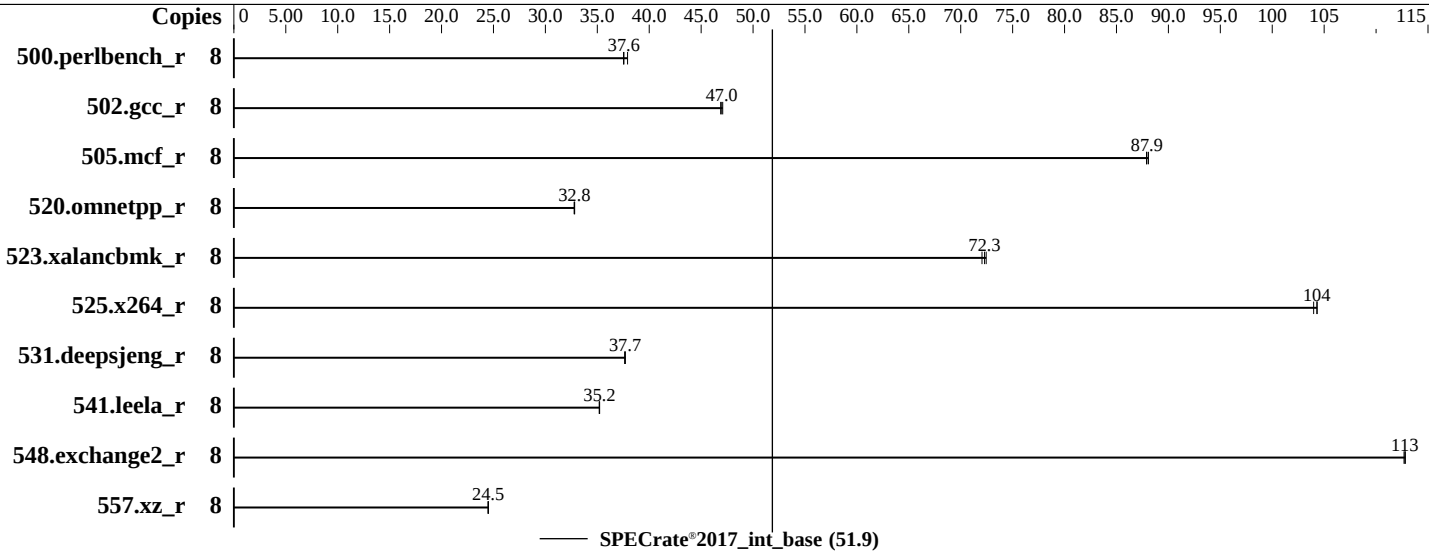
Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024



Hardware

CPU Name: Intel Xeon 6325P
Max MHz: 5200
Nominal: 3500
Enabled: 4 cores, 1 chip, 2 threads/core
Orderable: 1 chip
Cache L1: 32 KB I + 48 KB D on chip per core
L2: 2 MB I+D on chip per core
L3: 12 MB I+D on chip per chip
Other: None
Memory: 64 GB (2 x 32 GB 2Rx8 PC5-4800B-E, running at 4400)
Storage: 1 x SATA M.2 SSD, 960 GB
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP6 6.4.0-150600.21-default
Compiler: C/C++: Version 2024.1 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2024.1 of Intel Fortran Compiler for Linux;
Parallel: No
Firmware: Fujitsu BIOS Version V5.0.0.32 R2.1.0 for D4133-A1x. Released Apr-2025
File System: xfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: None
Power Management: BIOS set to prefer performance at the cost of additional power usage



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	8	336	37.9	<u>339</u>	<u>37.6</u>	339	37.5							
502.gcc_r	8	<u>241</u>	<u>47.0</u>	241	47.1	242	46.9							
505.mcf_r	8	147	88.1	147	87.9	<u>147</u>	<u>87.9</u>							
520.omnetpp_r	8	320	32.8	<u>320</u>	<u>32.8</u>	320	32.8							
523.xalancbmk_r	8	117	72.0	117	72.5	<u>117</u>	<u>72.3</u>							
525.x264_r	8	134	104	135	104	<u>134</u>	<u>104</u>							
531.deepsjeng_r	8	<u>243</u>	<u>37.7</u>	244	37.6	243	37.7							
541.leela_r	8	<u>376</u>	<u>35.2</u>	377	35.2	376	35.2							
548.exchange2_r	8	<u>186</u>	<u>113</u>	186	113	186	113							
557.xz_r	8	<u>353</u>	<u>24.5</u>	352	24.5	<u>353</u>	<u>24.5</u>							

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

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

Submit Notes

The taskset mechanism was used to bind copies to processors. The config file option 'submit' was used to generate taskset 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"
echo 15000000 > /proc/sys/kernel/sched_min_granularity_ns

Environment Variables Notes

Environment variables set by runcpu before the start of the run:

LD_LIBRARY_PATH =

"/home/benchmark/speccpu-24.1/lib/intel64:/home/benchmark/speccpu-24.1/lib/ia32:/home/benchmark/speccpu-24.1/je5.0.1-32"

MALLOC_CONF = "retain:true"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
memory using Red Hat Enterprise Linux 8.4
Transparent Huge Pages enabled by default

Prior to runcpu invocation

Filesystem page cache synced and cleared with:

sync; echo 3> /proc/sys/vm/drop_caches

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.



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Platform Notes

BIOS configuration:

Fan Control = Full

Total Memory Encryption = Disabled

DMI Max Link Speed = Gen3

Package C-State limit = C0

Sysinfo program /home/benchmark/speccpu-24.1/bin/sysinfo

Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197

running on localhost Fri Apr 4 20:03:49 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 localhost 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09)
x86_64 x86_64 x86_64 GNU/Linux

2. w
20:03:49 up 2:17, 1 user, load average: 2.19, 6.17, 7.36
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root tty1 - 17:52 2:10m 0.76s 0.06s -bash

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

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Platform Notes (Continued)

```
pending signals          (-i) 254395
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) 254395
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=8 -c
ic2024.1-lin-core-avx2-rate-20240308.cfg --define smt-on --define cores=4 --define physicallogical
--define no-numa --tune base -o all --define drop_caches intrate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=8 --configfile
ic2024.1-lin-core-avx2-rate-20240308.cfg --define smt-on --define cores=4 --define physicallogical
--define no-numa --tune base --output_format all --define drop_caches --nopower --runmode rate --tune base
--size refrate intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.001/temlogs/preenv.intrate.001.0.log --lognum 001.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/benchmark/speccpu-24.1
```

6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) 6325P
vendor_id       : GenuineIntel
cpu family      : 6
model           : 183
stepping        : 1
microcode       : 0x12c
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
cpu cores       : 4
siblings        : 8
1 physical ids (chips)
8 processors (hardware threads)
physical id 0:  core ids 0-3
physical id 0:  apicids 0-7
```

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:      46 bits physical, 48 bits virtual
Byte Order:         Little Endian
CPU(s):            8
On-line CPU(s) list: 0-7
Vendor ID:          GenuineIntel
BIOS Vendor ID:     Intel(R) Corporation
```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Platform Notes (Continued)

Model name: Intel(R) Xeon(R) 6325P
BIOS Model name: Intel(R) Xeon(R) 6325P CPU @ 4.7GHz
BIOS CPU family: 179
CPU family: 6
Model: 183
Thread(s) per core: 2
Core(s) per socket: 4
Socket(s): 1
Stepping: 1
CPU(s) scaling MHz: 31%
CPU max MHz: 5200.0000
CPU min MHz: 800.0000
BogoMIPS: 6988.80
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 sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec xgetbv1 xsaves split_lock_detect user_shstk avx_vnni dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp hwp_pkg_req hfi vnmi umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid movdiri movdir64b fsrm md_clear serialize pconfig arch_lbr ibt flush_l1d arch_capabilities VT-x
Virtualization: 192 KiB (4 instances)
L1d cache: 128 KiB (4 instances)
L1i cache: 8 MiB (4 instances)
L2 cache: 12 MiB (1 instance)
L3 cache:
NUMA node(s): 1
NUMA node0 CPU(s): 0-7
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	192K	12	Data	1	64	1	64
L1i	32K	128K	8	Instruction	1	64	1	64
L2	2M	8M	16	Unified	2	2048	1	64
L3	12M	12M	6	Unified	3	32768	1	64

8. numactl --hardware

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

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Platform Notes (Continued)

available: 1 nodes (0)
node 0 cpus: 0-7
node 0 size: 63624 MB
node 0 free: 62931 MB
node distances:
node 0
0: 10

9. /proc/meminfo
MemTotal: 65151952 kB

10. who -r
run-level 3 Apr 4 17:46

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	apparmor auditd cron getty@ irqbalance issue-generator kbdsettings lvm2-monitor postfix purge-kernels rollback sshd systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
enabled-runtime	systemd-remount-fs
disabled	YaST2-Firstboot YaST2-Second-Stage autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell display-manager ebttables exchange-bmc-os-info firewallld fsidd gpm grub2-once haveged ipmi ipmievdev issue-add-ssh-keys kdump kdump-early kdump-notify kexec-load klog lunmask man-db-create multipathd nfs nfs-blkmap nsd rpcbind rpmconfigcheck rsyncd rsyslog sep5 serial-getty@ smartd smartd_generate_opts snmpd snmptrapd systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd 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=69cd5337-d082-4cee-8e02-ec4054c30a5a
splash=silent
resume=/dev/disk/by-uuid/a5855c9d-a4a0-4b74-baec-bd075bde416b
quiet
security=apparmor
crashkernel=347M,high
crashkernel=72M,low
mitigations=auto

14. cpupower frequency-info
analyzing CPU 3:
current policy: frequency should be within 800 MHz and 5.20 GHz.
The governor "powersave" may decide which speed to use
within this range.
boost state support:
Supported: yes
Active: yes

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Platform Notes (Continued)

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+madvice	[madvice] never
enabled	[always]	madvice	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
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: /home/benchmark/speccpu-24.1

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda5	xfs	751G	59G	693G	8%	/home

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

Vendor:	FUJITSU
Product:	PRIMERGY RX1330 M6
Product Family:	SERVER
Serial:	xxxxxxxxxx

21. dmidecode

Additional information from dmidecode 3.4 follows. WARNING: Use caution when you interpret this section.

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

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:

2x Samsung M324R4GA3BB0-CQK0D 32 GB 2 rank 4800, configured at 4400

22. BIOS

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

BIOS Vendor: FUJITSU // American Megatrends International, LLC.

BIOS Version: V5.0.0.32 R2.1.0 for D4133-A1x

BIOS Date: 02/26/2025

BIOS Revision: 2.1

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 2017-2025 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY RX1330 M6,
Intel Xeon 6325P, 3.5 GHz

SPECrate®2017_int_base = 51.9

SPECrate®2017_int_peak = Not Run

CPU2017 License: 19

Test Sponsor: Fujitsu

Tested by: Fujitsu

Test Date: Apr-2025

Hardware Availability: Apr-2025

Software Availability: Jun-2024

Base Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
502.gcc_r: -DSPEC_LP64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

-w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX2 -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 -xCORE-AVX2 -O3 -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/opt/intel/oneapi/compiler/2024.1/lib -lqkmalloc

Fortran benchmarks:

-w -m64 -Wl,-z,muldefs -xCORE-AVX2 -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/Fujitsu-Platform-Settings-V1.0-RPL-R-RevA.html>

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2017/flags/Fujitsu-Platform-Settings-V1.0-RPL-R-RevA.xml>

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.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 2025-04-04 07:03:49-0400.

Report generated on 2025-05-08 09:59:39 by CPU2017 PDF formatter v6716.

Originally published on 2025-05-06.