



SPEC CPU®2017 Integer Rate Result

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Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(3.60 Ghz, Intel Xeon 6724P)

SPECrate®2017_int_base = 795

SPECrate®2017_int_peak = 825

CPU2017 License: 3

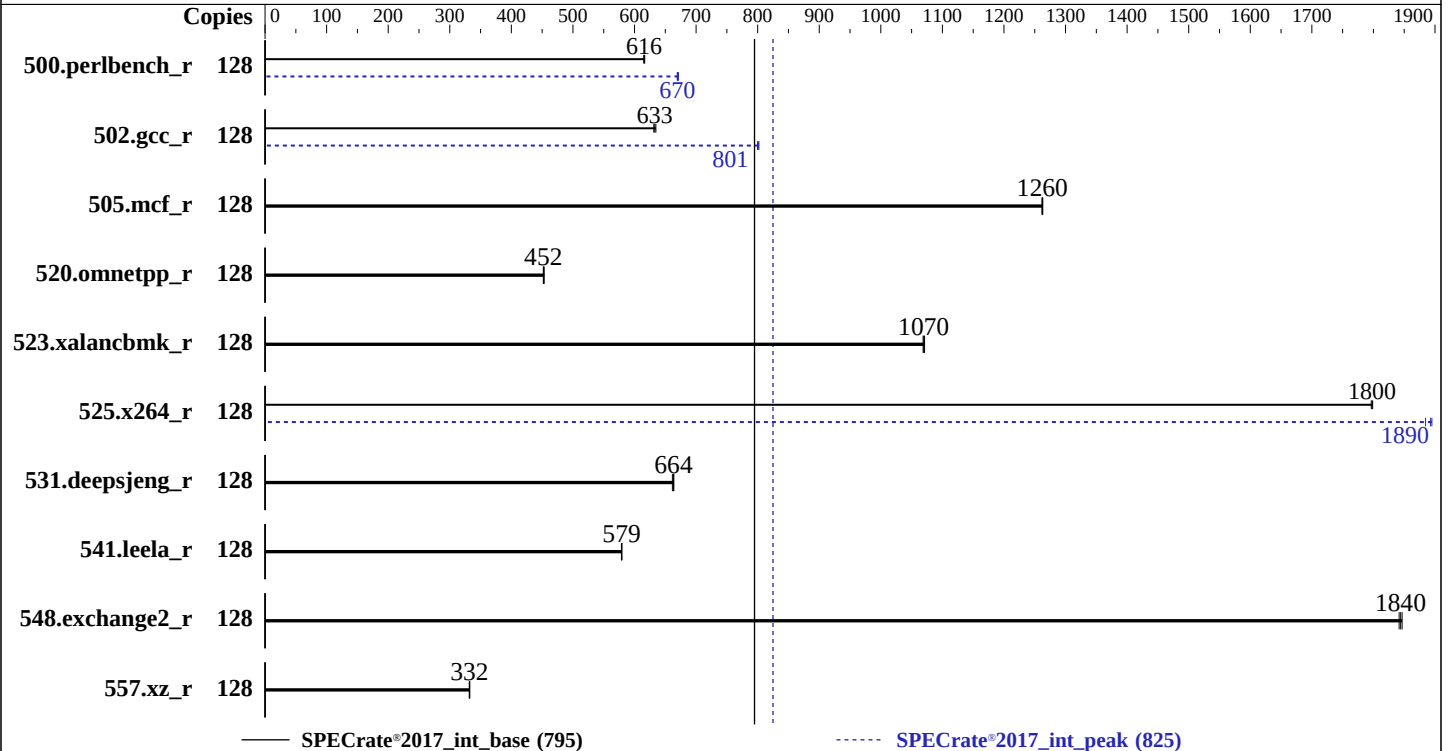
Test Sponsor: HPE

Tested by: HPE

Test Date: Aug-2025

Hardware Availability: Jul-2025

Software Availability: Jul-2025



Hardware

CPU Name: Intel Xeon 6724P
Max MHz: 4300
Nominal: 3600
Enabled: 64 cores, 4 chips, 2 threads/core
Orderable: 1,2,4 Chips
Cache L1: 64 KB I + 48 KB D on chip per core
L2: 2 MB I+D on chip per core
L3: 72 MB I+D on chip per chip
Other: None
Memory: 2 TB (32 x 64 GB 2Rx4 PC5-6400B-R)
Storage: 1 x 1.8 TB NVMe SSD
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP6
Kernel 6.4.0-150600.23.60-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: HPE BIOS Version v1.43 07/09/2025 released Jul-2025
File System: btrfs
System State: Run level 5 (multi-user graphical)
Base Pointers: 64-bit
Peak Pointers: 32/64-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						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	128	331	617	331	615	<u>331</u>	<u>616</u>	128	304	670	304	671	<u>304</u>	<u>670</u>
502.gcc_r	128	286	635	<u>286</u>	<u>633</u>	287	631	128	226	802	227	800	<u>226</u>	<u>801</u>
505.mcf_r	128	<u>164</u>	<u>1260</u>	164	1260	164	1260	128	<u>164</u>	<u>1260</u>	164	1260	164	1260
520.omnetpp_r	128	370	453	<u>372</u>	<u>452</u>	372	452	128	370	453	<u>372</u>	<u>452</u>	372	452
523.xalancbmk_r	128	<u>126</u>	<u>1070</u>	126	1070	126	1070	128	<u>126</u>	<u>1070</u>	126	1070	126	1070
525.x264_r	128	125	1800	125	1800	<u>125</u>	<u>1800</u>	128	119	1880	<u>118</u>	<u>1890</u>	118	1890
531.deepsjeng_r	128	222	662	<u>221</u>	<u>664</u>	221	664	128	222	662	<u>221</u>	<u>664</u>	221	664
541.leela_r	128	<u>366</u>	<u>579</u>	366	579	366	579	128	<u>366</u>	<u>579</u>	366	579	366	579
548.exchange2_r	128	<u>182</u>	<u>1840</u>	182	1850	182	1840	128	<u>182</u>	<u>1840</u>	182	1850	182	1840
557.xz_r	128	416	333	<u>416</u>	<u>332</u>	417	332	128	416	333	<u>416</u>	<u>332</u>	417	332

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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"
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>
tuned-adm profile was set to virtual-host using "tuned-adm profile virtual-host"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/lib/ia32:/home/cpu2017/je5.0.1-32"
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
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)

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General Notes (Continued)

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 Configurations : Parameters are selected in the order shown below
Workload Profile set to General Throughput Compute
Enhanced Processor Performance Profile set to Aggressive
Thermal Configuration set to Maximum Cooling
Memory Patrol Scrubbing set to Disabled
Last Level Cache (LLC) Prefetch set to Enabled
XPT Prefetch set to Disabled
Intel UPI Prefetch set to Disabled
Workload Profile set to Custom
Collaborative Power Control set to Enabled

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Tue Aug 26 20:15:37 2025

SUT (System Under Test) info as seen by some common utilities.

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1. uname -a
 2. w
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 4. ulimit -a
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 6. /proc/cpuinfo
 7. lscpu
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 10. who -r
 11. Systemd service manager version: systemd 254 (254.27+suse.167.g130293e510)
 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
-
1. uname -a
Linux localhost 6.4.0-150600.23.60-default #1 SMP PREEMPT_DYNAMIC Tue Jul 1 14:43:49 UTC 2025 (6f98261)
x86_64 x86_64 x86_64 GNU/Linux
 2. w

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Platform Notes (Continued)

20:15:37 up 4:31, 2 users, load average: 48.09, 55.54, 57.53
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
benchmark pts/5 :pts/3:S.0 15:57 4:09m 0.85s 0.02s sudo su

3. Username

From environment variable \$USER: root
From the command 'logname': benchmark

4. ulimit -a

core file size (blocks, -c) 0
data seg size (kbytes, -d) unlimited
scheduling priority (-e) 0
file size (blocks, -f) unlimited
pending signals (-i) 8255337
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) 8255337
virtual memory (kbytes, -v) unlimited
file locks (-x) unlimited

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
SCREEN -S cpu2017
/bin/bash
sudo su
sudo su
su
bash
bash
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 -c
6724P-avx512-rate-20240308.cfg --define smt-on --define cores=64 --define physicalfirst --define
invoke_with_interleave --define drop_caches --tune base,peak -o all intrate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 --configfile
6724P-avx512-rate-20240308.cfg --define smt-on --define cores=64 --define physicalfirst --define
invoke_with_interleave --define drop_caches --tune base,peak --output_format all --nopower --runmode rate
--tune base:peak --size refrate intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.003/temlogs/preenv.intrate.003.0.log --lognum 003.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

6. /proc/cpuinfo

model name : Intel(R) Xeon(R) 6724P
vendor_id : GenuineIntel
cpu family : 6
model : 173
stepping : 1
microcode : 0x10003c2
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
cpu cores : 16
siblings : 32

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Platform Notes (Continued)

4 physical ids (chips)
128 processors (hardware threads)
physical id 0: core ids 0-15
physical id 1: core ids 0-15
physical id 2: core ids 0-15
physical id 3: core ids 0-15
physical id 0: apicids 0-31
physical id 1: apicids 128-159
physical id 2: apicids 256-287
physical id 3: apicids 384-415

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, 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) 6724P
CPU family:	6
Model:	173
Thread(s) per core:	2
Core(s) per socket:	16
Socket(s):	4
Stepping:	1
BogoMIPS:	7200.00
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 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:	288 MiB (4 instances)
NUMA node(s):	4
NUMA node0 CPU(s):	0-15, 64-79
NUMA node1 CPU(s):	16-31, 80-95

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Platform Notes (Continued)

NUMA node2 CPU(s): 32-47,96-111
NUMA node3 CPU(s): 48-63,112-127
Vulnerability Gather data sampling: Not affected
Vulnerability Indirect target selection: 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; 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	72M	288M	16	Unified	3	73728	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: 515687 MB
node 0 free: 507086 MB
node 1 cpus: 16-31,80-95
node 1 size: 516087 MB
node 1 free: 513135 MB
node 2 cpus: 32-47,96-111
node 2 size: 516048 MB
node 2 free: 509634 MB
node 3 cpus: 48-63,112-127
node 3 size: 516043 MB
node 3 free: 511834 MB
node distances:
node 0 1 2 3
0: 10 21 21 21
1: 21 10 21 21
2: 21 21 10 21
3: 21 21 21 10

9. /proc/meminfo

MemTotal: 2113400016 kB

10. who -r

run-level 5 Aug 26 15:44

11. Systemd service manager version: systemd 254 (254.27+suse.167.g130293e510)

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Platform Notes (Continued)

Default Target Status
graphical running

12. Services, from systemctl list-unit-files

STATE UNIT FILES

enabled ModemManager YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd
bluetooth chronyd cron display-manager getty@ irqbalance iscsi issue-generator kbdsettings
klog lvm2-monitor nsd nvme-fc-boot-connections nvme-autoconnect postfix purge-kernels
rollback rsyslog smartd sshd systemd-pstore virtqemu-wicked wickedd-auto4 wickedd-dhcp4
wickedd-dhcp6 wickedd-nanny wpa_supplicant

enabled-runtime systemd-remount-fs

disabled NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon autofs
autovast-initscripts blk-availability bluetooth-mesh boot-sysctl ca-certificates
chrony-wait console-getty cups cups-browsed debug-shell dmraid-activation dnsmasq ebttables
exchange-bmc-os-info firewalld fsidd gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievdev
iscsi-init iscsid issue-add-ssh-keys kexec-load ksm kvm_stat libvirt-guests lunmask
man-db-create multipathd nfs nfs-blkmap nfs-server nfs-server nmb openvpn@ ostree-remount
rpcbind rpmconfigcheck rsyncd rtkit-daemon serial-getty@ smartd-generate_opts smb snmpd
snmptrapd speech-dispatcher systemd-boot-check-no-failures systemd-confext
systemd-network-generator systemd-nspawn@ systemd-sysext systemd-time-wait-sync
systemd-timesyncd tcsh tuned udisks2 update-systemd-flatpaks upower virtinterfaced
virtlockd virtlogd virtnetworkd virtnodevdev virtnwfilterd virtsecret virtstoraged

indirect pcscd saned@ systemd-userdbd tftpd wickedd

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

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.23.60-default
root=UUID=31ddc59e-f5ed-47da-8154-f16fa2fc98b8
splash=silent
mitigations=auto
quiet
security=apparmor

14. cpupower frequency-info

analyzing CPU 89:
Unable to determine current policy
boost state support:
Supported: yes
Active: yes

15. tuned-adm active

Current active profile: virtual-host

16. sysctl

kernel.numa_balancing	1
kernel.randomize_va_space	2
vm.compaction_proactiveness	20
vm.dirty_background_bytes	0
vm.dirty_background_ratio	5
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

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Platform Notes (Continued)

```
vm.min_unmapped_ratio      1
vm.nr_hugepages             0
vm.nr_hugepages_mempolicy   0
vm.nr_overcommit_hugepages  0
vm.swappiness               10
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+madvice [madvice] never
enabled         [always] madvice 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 SUSE Linux Enterprise Server 15 SP6
-----
```

```
-----
20. Disk information
SPEC is set to: /home/cpu2017
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/nvme3n1p3  btrfs    1.8T  316G  1.5T  18% /home
-----
```

```
-----
21. /sys/devices/virtual/dmi/id
Vendor:         HPE
Product:        HPE ProLiant Compute DL580 Gen12
Product Family: ProLiant
Serial:         SANJACSCM
-----
```

```
-----
22. 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:
  4x Hynix HMC694AHBRA480N 64 GB 2 rank 6400
  5x Micron MTC40F2046S1RC64BD2 MWFF 64 GB 2 rank 6400
  23x Micron MTC40F2046S1RC64BD2 QSFF 64 GB 2 rank 6400
-----
```

```
-----
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:      HPE
-----
```

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Platform Notes (Continued)

BIOS Version: 1.43
BIOS Date: 07/09/2025
BIOS Revision: 1.43
Firmware Revision: 1.17

Compiler Version Notes

=====
C | 502.gcc_r(peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
=====

=====
C | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
| 557.xz_r(base, peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
=====

=====
C | 502.gcc_r(peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
=====

=====
C | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
| 557.xz_r(base, peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
=====

=====
C++ | 520.omnetpp_r(base, peak) 523.xalancbmk_r(base, peak) 531.deepsjeng_r(base, peak)
| 541.leela_r(base, peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
=====

=====
Fortran | 548.exchange2_r(base, peak)
=====

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

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SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant Compute DL580 Gen12

(3.60 Ghz, Intel Xeon 6724P)

SPECrate®2017_int_base = 795

SPECrate®2017_int_peak = 825

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Aug-2025

Hardware Availability: Jul-2025

Software Availability: Jul-2025

Base Compiler Invocation (Continued)

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

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-AVX512 -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-AVX512 -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-AVX512 -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



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Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Peak Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64

502.gcc_r: -D_FILE_OFFSET_BITS=64

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

Peak Optimization Flags

C benchmarks:

500.perlbench_r: -w -std=c11 -m64 -wl, -z, muldefs

-fprofile-generate(pass 1)

-fprofile-use=default.profddata(pass 2) -xCORE-AVX2(pass 1)

-flto -Ofast -xCORE-AVX512 -ffast-math -mfpmath=sse

-funroll-loops -qopt-mem-layout-trans=4

-fno-strict-overflow

-L/opt/intel/oneapi/compiler/2024.1/lib -lqkmallo

502.gcc_r: -m32 -L/opt/intel/oneapi/compiler/2024.1/lib32 -std=gnu89

-wl, -z, muldefs -fprofile-generate(pass 1)

-fprofile-use=default.profddata(pass 2) -xCORE-AVX2(pass 1)

-flto -Ofast -xCORE-AVX512 -ffast-math -mfpmath=sse

-funroll-loops -qopt-mem-layout-trans=4

-L/usr/local/jemalloc32-5.0.1/lib -ljemalloc

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Peak Optimization Flags (Continued)

505.mcf_r: basepeak = yes

525.x264_r: -w -std=c11 -m64 -WL,-z,muldefs -xCORE-AVX512 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fno-alias
-L/opt/intel/oneapi/compiler/2024.1/lib -lqkmallo

557.xz_r: basepeak = yes

C++ benchmarks:

520.omnetpp_r: basepeak = yes

523.xalancbmk_r: basepeak = yes

531.deepsjeng_r: basepeak = yes

541.leela_r: basepeak = yes

Fortran benchmarks:

548.exchange2_r: basepeak = yes

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-GNR-rev1.3.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/HPE-Platform-Flags-Intel-GNR-rev1.3.xml>

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