



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

### Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

CPU2017 License: 9006  
Test Sponsor: NEC Corporation  
Tested by: NEC Corporation

Test Date: Jul-2025  
Hardware Availability: Jun-2025  
Software Availability: Apr-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 PC5-5600B-E, running at 4400)  
 Storage: 1 x 1.92 TB SATA, SSD  
 Other: CPU Cooling: Air

### Software

OS: Red Hat Enterprise Linux 9.4 (Plow)  
 5.14.0-427.13.1.el9\_4.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: Yes  
 Firmware: NEC BIOS Version U65 v2.10 12/06/2024 released Jun-2025  
 File System: ext4  
 System State: Run level 5 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: 64-bit  
 Other: jemalloc memory allocator V5.0.1  
 Power Management: BIOS set to prefer performance at the cost of additional power usage



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

CPU2017 License: 9006  
Test Sponsor: NEC Corporation  
Tested by: NEC Corporation

Test Date: Jul-2025  
Hardware Availability: Jun-2025  
Software Availability: Apr-2024

## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s	8	<b>158</b>	<b>11.2</b>	159	11.1	158	11.2	8	141	12.6	141	12.6	<b>141</b>	<b>12.6</b>
602.gcc_s	8	<b>268</b>	<b>14.9</b>	265	15.0	268	14.8	8	250	15.9	253	15.7	<b>252</b>	<b>15.8</b>
605.mcf_s	8	<b>151</b>	<b>31.2</b>	151	31.2	151	31.2	8	<b>151</b>	<b>31.2</b>	151	31.2	151	31.2
620.omnetpp_s	8	174	9.40	174	9.38	<b>174</b>	<b>9.39</b>	8	174	9.40	174	9.38	<b>174</b>	<b>9.39</b>
623.xalancbmk_s	8	80.5	17.6	80.1	17.7	<b>80.2</b>	<b>17.7</b>	8	80.5	17.6	80.1	17.7	<b>80.2</b>	<b>17.7</b>
625.x264_s	8	60.6	29.1	<b>60.4</b>	<b>29.2</b>	60.4	29.2	8	57.2	30.8	57.1	30.9	<b>57.2</b>	<b>30.8</b>
631.deepsjeng_s	8	153	9.39	<b>153</b>	<b>9.39</b>	153	9.38	8	153	9.39	<b>153</b>	<b>9.39</b>	153	9.38
641.leela_s	8	<b>222</b>	<b>7.67</b>	223	7.67	222	7.67	8	<b>222</b>	<b>7.67</b>	223	7.67	222	7.67
648.exchange2_s	8	83.3	35.3	<b>82.9</b>	<b>35.5</b>	82.8	35.5	8	83.3	35.3	<b>82.9</b>	<b>35.5</b>	82.8	35.5
657.xz_s	8	<b>433</b>	<b>14.3</b>	433	14.3	435	14.2	8	<b>433</b>	<b>14.3</b>	433	14.3	435	14.2

SPECspeed®2017\_int\_base = **15.7**

SPECspeed®2017\_int\_peak = **16.1**

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

## Operating System Notes

```
Stack size set to unlimited using "ulimit -s unlimited"
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
```

## Environment Variables Notes

```
Environment variables set by runcpu before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
MALLOCONF = "retain:true"
OMP_STACKSIZE = "192M"
```

## General Notes

```
Binaries compiled on a system with 2x Intel Xeon 6369P CPU + 64GB RAM
memory using Redhat Enterprise Linux 9.4
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)
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
```



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

### Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

**CPU2017 License:** 9006

**Test Sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test Date:** Jul-2025

**Hardware Availability:** Jun-2025

**Software Availability:** Apr-2024

## Platform Notes

### BIOS Settings:

Workload Profile set to General Throughput Compute  
Thermal configuration set to Maximum Cooling  
Enhanced Processor Performance Profile set to Enabled  
Workload Profile set to Custom  
Power Regulator set to Dynamic Power Saving Mode

Sysinfo program /home/cpu2017/bin/sysinfo  
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197  
running on localhost.localdomain Tue Jul 1 18:59:36 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 252 (252-32.e19\_4)
12. Failed units, from systemctl list-units --state=failed
13. Services, from systemctl list-unit-files
14. Linux kernel boot-time arguments, from /proc/cmdline
15. cpupower frequency-info
16. tuned-adm active
17. sysctl
18. /sys/kernel/mm/transparent\_hugepage
19. /sys/kernel/mm/transparent\_hugepage/khugepaged
20. OS release
21. Disk information
22. /sys/devices/virtual/dmi/id
23. dmidecode
24. BIOS

```
1. uname -a
Linux localhost.localdomain 5.14.0-427.13.1.el9_4.x86_64 #1 SMP PREEMPT_DYNAMIC Wed Apr 10 10:29:16 EDT
2024 x86_64 x86_64 x86_64 GNU/Linux
```

```
2. w
18:59:36 up 1 min, 2 users, load average: 0.46, 0.20, 0.08
USER      TTY      LOGIN@   IDLE   JCPU   PCPU   WHAT
root     seat0    18:58    0.00s  0.00s  0.00s  /usr/libexec/gdm-wayland-session --register-session
gnome-session
root     tty2    18:58    1:36   0.00s  0.00s  /usr/libexec/gnome-session-binary
```

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

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

### Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

**CPU2017 License:** 9006  
**Test Sponsor:** NEC Corporation  
**Tested by:** NEC Corporation

**Test Date:** Jul-2025  
**Hardware Availability:** Jun-2025  
**Software Availability:** Apr-2024

## Platform Notes (Continued)

```

4. ulimit -a
real-time non-blocking time (microseconds, -R) unlimited
core file size (blocks, -c) 0
data seg size (kbytes, -d) unlimited
scheduling priority (-e) 0
file size (blocks, -f) unlimited
pending signals (-i) 254521
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) 254521
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 --flagsurl=Intel-ic2024-official-linux64.xml,Default-Platform-Flags.xml
-c ic2024.1-lin-core-avx2-speed-20240308n.cfg --define cores=4 --tune base,peak -o all --define
intspeedaffinity --define smt-on --define drop_caches --nopower --runmode speed --tune base:peak --size
refspeed intspeerd
runcpu --nobuild --action validate --flagsurl Intel-ic2024-official-linux64.xml,Default-Platform-Flags.xml
--configfile ic2024.1-lin-core-avx2-speed-20240308n.cfg --define cores=4 --tune base,peak --output_format
all --define intspeerdaffinity --define smt-on --define drop_caches --nopower --runmode speed --tune
base:peak --size refspeerd --nopower --runmode speed --tune base:peak --size refspeerd intspeerd --nopreenv
--note-preenv --logfile $SPEC/tmp/CPU2017.019/templogs/preenv.intspeerd.019.0.log --lognum 019.0
--from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017

-----

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
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

```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

### Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

**CPU2017 License:** 9006  
**Test Sponsor:** NEC Corporation  
**Tested by:** NEC Corporation

**Test Date:** Jul-2025  
**Hardware Availability:** Jun-2025  
**Software Availability:** Apr-2024

## Platform Notes (Continued)

From lscpu from util-linux 2.37.4:

```

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
Model name:           Intel(R) Xeon(R) 6325P
BIOS Model name:     Intel(R) Xeon(R) 6325P
CPU family:           6
Model:                183
Thread(s) per core:  2
Core(s) per socket:  4
Socket(s):            1
Stepping:             1
CPU(s) scaling MHz:  30%
CPU max MHz:          6700.0000
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
                    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
Virtualization:       VT-x
L1d cache:            192 KiB (4 instances)
L1i cache:            128 KiB (4 instances)
L2 cache:             8 MiB (4 instances)
L3 cache:             12 MiB (1 instance)
NUMA node(s):        1
NUMA node0 CPU(s):   0-7
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit:      Not affected
Vulnerability Lltf:               Not affected
Vulnerability Mds:                Not affected
Vulnerability Meltdown:           Not affected
Vulnerability Mmio stale data:    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,
                    PBRSE-eIBRS SW sequence
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

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

### Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

**CPU2017 License:** 9006  
**Test Sponsor:** NEC Corporation  
**Tested by:** NEC Corporation

**Test Date:** Jul-2025  
**Hardware Availability:** Jun-2025  
**Software Availability:** Apr-2024

### Platform Notes (Continued)

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.
available: 1 nodes (0)
node 0 cpus: 0-7
node 0 size: 63690 MB
node 0 free: 62252 MB
node distances:
node 0
0: 10
```

9. /proc/meminfo

MemTotal: 65218752 kB

10. who -r

run-level 5 Jul 1 18:58

11. Systemd service manager version: systemd 252 (252-32.el9\_4)

```
Default Target Status
graphical degraded
```

12. Failed units, from systemctl list-units --state=failed

```
UNIT LOAD ACTIVE SUB DESCRIPTION
* sep5.service loaded failed failed systemd script to load sep5 driver at boot time
```

13. Services, from systemctl list-unit-files

```
STATE UNIT FILES
enabled ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online
accounts-daemon ahslog amsd atd auditd avahi-daemon bluetooth chronyd cpqFca cpqIde
cpqScsi crond cups dbus-broker firewallld gdm getty@ insights-client-boot irqbalance
iscsi-onboot iscsi-starter kdump libstoragemgmt lm_sensors low-memory-monitor lvm2-monitor
mcelog mdmonitor microcode mr_cpqScsi multipathd nis-domainname nvme-fc-boot-connections
ostree-remount pmcd pmie pmlogger power-profiles-daemon qemu-guest-agent rhsmcertd rpcbind
rsyslog rtkit-daemon selinux-autorelabel-mark sep5 smad smartd sshd sssd
switcheroo-control sysstat systemd-boot-update systemd-network-generator tuned udisks2
upower vgauthd vmtoolsd
enabled-runtime systemd-fsck-root systemd-remount-fs
disabled amsd_rev arp-ethers autofs blk-availability brltty canberra-system-bootup
canberra-system-shutdown canberra-system-shutdown-reboot chrony-wait chronyd-restricted
cni-dhcp console-getty cpqFca_rev cpqIde_rev cpqScsi_rev cpqiScsi cpupower cups-browsed
dbus-daemon debug-shell dnf-system-upgrade dnsmasq dovecot fancontrol fcoe grafana-server
gssproxy iprdump iprinit iprupdate ipsec iscsi-init iscsid iscsiui kpatch kvm_stat ledmon
lldpad man-db-restart-cache-update mr_cpqScsi_rev netavark-dhcp-proxy
netavark-firewalld-reload nfs-blkmap nfs-server nftables nmb nvmmf-autoconnect
ostree-readonly-sysroot-migration ostree-state-overlay@ 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 saslauthd selinux-check-proper-disable serial-getty@ smad_rev smb
snmpd snmptrapd spamassassin speech-dispatcherd sshd-keygen@
systemd-boot-check-no-failures systemd-pstore systemd-sysext target targetclid tog-pegasus
vsftpd wpa_supplicant
```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

Test Date: Jul-2025

Hardware Availability: Jun-2025

Software Availability: Apr-2024

### Platform Notes (Continued)

indirect iscsi spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo  
systemd-sysupdate systemd-sysupdate-reboot vsftpd@

-----  
14. Linux kernel boot-time arguments, from /proc/cmdline  
BOOT\_IMAGE=(hd0,gpt2)/vmlinuz-5.14.0-427.13.1.el9\_4.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

-----  
15. cpupower frequency-info  
analyzing CPU 6:  
current policy: frequency should be within 800 MHz and 6.70 GHz.  
The governor "powersave" may decide which speed to use  
within this range.  
boost state support:  
Supported: yes  
Active: yes

-----  
16. tuned-adm active  
It seems that tuned daemon is not running, preset profile is not activated.  
Preset profile: throughput-performance

-----  
17. 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

-----  
18. /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  
-----

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

### Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

**CPU2017 License:** 9006  
**Test Sponsor:** NEC Corporation  
**Tested by:** NEC Corporation

**Test Date:** Jul-2025  
**Hardware Availability:** Jun-2025  
**Software Availability:** Apr-2024

## Platform Notes (Continued)

```

19. /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

```

```

20. OS release
   From /etc/*-release /etc/*-version
   os-release             Red Hat Enterprise Linux 9.4 (Plow)
   redhat-release         Red Hat Enterprise Linux release 9.4 (Plow)
   system-release         Red Hat Enterprise Linux release 9.4 (Plow)

```

```

21. Disk information
   SPEC is set to: /home/cpu2017
   Filesystem            Type  Size  Used Avail Use% Mounted on
   /dev/mapper/rhel-root ext4  1.8T  66G  1.6T   4% /

```

```

22. /sys/devices/virtual/dmi/id
   Vendor:                NEC
   Product:                Express5800/R110m-1
   Product Family:        Express5800
   Serial:                 SGH404JTQ8

```

```

23. dmidecode
   Additional information from dmidecode 3.5 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:
     2x Samsung M324R4GA3DB0-CWMOL 32 GB 2 rank 5600, configured at 4400

```

```

24. BIOS
   (This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor:            NEC
   BIOS Version:           2.10
   BIOS Date:              12/06/2024
   BIOS Revision:         2.10
   Firmware Revision:     1.68

```

## Compiler Version Notes

```

=====
C      | 600.perlbench_s(base, peak) 602.gcc_s(base, peak) 605.mcf_s(base, peak) 625.x264_s(base, peak)
      | 657.xz_s(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.
=====

```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## NEC Corporation

SPECspeed®2017\_int\_base = 15.7

Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

**CPU2017 License:** 9006  
**Test Sponsor:** NEC Corporation  
**Tested by:** NEC Corporation

**Test Date:** Jul-2025  
**Hardware Availability:** Jun-2025  
**Software Availability:** Apr-2024

### Compiler Version Notes (Continued)

C++ | 620.omnetpp\_s(base, peak) 623.xalancbmk\_s(base, peak) 631.deepsjeng\_s(base, peak)  
| 641.leela\_s(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 | 648.exchange2\_s(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

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

### Base Portability Flags

600.perlbench\_s: -DSPEC\_LP64 -DSPEC\_LINUX\_X64  
602.gcc\_s: -DSPEC\_LP64  
605.mcf\_s: -DSPEC\_LP64  
620.omnetpp\_s: -DSPEC\_LP64  
623.xalancbmk\_s: -DSPEC\_LP64 -DSPEC\_LINUX  
625.x264\_s: -DSPEC\_LP64  
631.deepsjeng\_s: -DSPEC\_LP64  
641.leela\_s: -DSPEC\_LP64  
648.exchange2\_s: -DSPEC\_LP64  
657.xz\_s: -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 -fiopenmp  
-DSPEC\_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

NEC Corporation

SPECspeed®2017\_int\_base = 15.7

Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

Test Date: Jul-2025

Hardware Availability: Jun-2025

Software Availability: Apr-2024

## Base Optimization Flags (Continued)

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/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

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
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

## Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

```
600.perlbench_s: -w -m64 -std=c11 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profddata(pass 2) -xCORE-AVX2 -flto
-Ofast(pass 1) -O3 -ffast-math -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -fno-strict-overflow
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

NEC Corporation

SPECspeed®2017\_int\_base = 15.7

Express5800/R110m-1 (Intel Xeon 6325P)

SPECspeed®2017\_int\_peak = 16.1

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

Test Date: Jul-2025

Hardware Availability: Jun-2025

Software Availability: Apr-2024

## Peak Optimization Flags (Continued)

```
602.gcc_s: -w -m64 -std=c11 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2 -flto
-Ofast(pass 1) -O3 -ffast-math -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

605.mcf\_s: basepeak = yes

```
625.x264_s: -w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX2 -O3
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-fno-alias -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

657.xz\_s: basepeak = yes

C++ benchmarks:

620.omnetpp\_s: basepeak = yes

623.xalancbmk\_s: basepeak = yes

631.deepsjeng\_s: basepeak = yes

641.leela\_s: basepeak = yes

Fortran benchmarks:

648.exchange2\_s: basepeak = yes

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

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

<http://www.spec.org/cpu2017/flags/NEC-Platform-Settings-V1.2-R110m-1-RevF.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/NEC-Platform-Settings-V1.2-R110m-1-RevF.xml>

SPEC CPU and SPECspeed 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](mailto:info@spec.org).

Tested with SPEC CPU®2017 v1.1.9 on 2025-07-01 05:59:35-0400.

Report generated on 2026-04-14 10:01:30 by CPU2017 PDF formatter v6716.

Originally published on 2026-04-13.