



# SPEC CPU®2017 Floating Point Rate Result

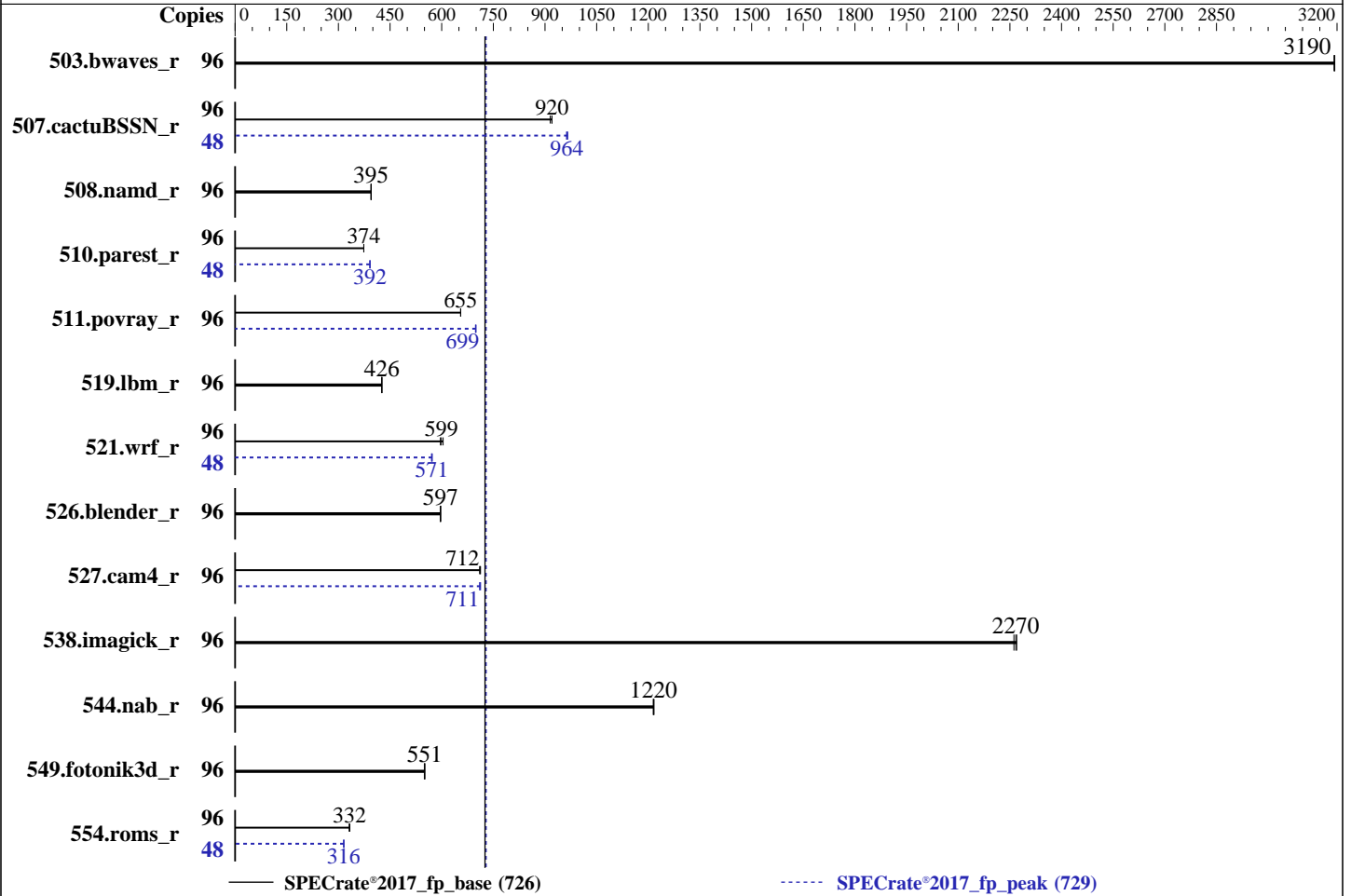
Copyright 2017-2026 Standard Performance Evaluation Corporation

**Tyrone Systems**  
(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

**SPECrate®2017\_fp\_base = 726**  
**SPECrate®2017\_fp\_peak = 729**

**CPU2017 License:** 6042  
**Test Sponsor:** Netweb Technologies India Ltd  
**Tested by:** Tyrone Systems

**Test Date:** Apr-2026  
**Hardware Availability:** Oct-2025  
**Software Availability:** Mar-2026



### Hardware

CPU Name: Intel Xeon 6520P  
Max MHz: 4000  
Nominal: 2400  
Enabled: 96 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: 144 MB I+D on chip per chip  
Other: None  
Memory: 1536 GB (16 x 96 GB 2Rx4 PC5-6400B-R)  
Storage: 1 x 1 960GB M.2 NVMe SSD  
Other: CPU Cooling: Air

### Software

OS: Ubuntu 22.04.5 LTS  
5.15.0-176-generic  
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: Version ES418INW.M01 released Sep-2025  
File System: ext4  
System State: Run level 3 (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 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Apr-2026

Hardware Availability: Oct-2025

Software Availability: Mar-2026

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
503.bwaves_r	96	<b>302</b>	<b>3190</b>	302	3190	301	3190	96	<b>302</b>	<b>3190</b>	302	3190	301	3190
507.cactuBSSN_r	96	<b>132</b>	<b>920</b>	133	915	132	920	48	63.1	962	62.9	966	<b>63.0</b>	<b>964</b>
508.namd_r	96	<b>231</b>	<b>395</b>	231	395	231	395	96	<b>231</b>	<b>395</b>	231	395	231	395
510.parest_r	96	672	374	672	374	<b>672</b>	<b>374</b>	48	321	392	321	392	<b>321</b>	<b>392</b>
511.povray_r	96	<b>342</b>	<b>655</b>	342	655	342	655	96	321	698	320	700	<b>321</b>	<b>699</b>
519.lbm_r	96	<b>237</b>	<b>426</b>	237	426	238	426	96	<b>237</b>	<b>426</b>	237	426	238	426
521.wrf_r	96	<b>359</b>	<b>599</b>	361	596	356	604	48	188	573	<b>188</b>	<b>571</b>	188	571
526.blender_r	96	<b>245</b>	<b>597</b>	245	597	245	596	96	<b>245</b>	<b>597</b>	245	597	245	596
527.cam4_r	96	<b>236</b>	<b>712</b>	236	713	236	710	96	236	713	<b>236</b>	<b>711</b>	236	710
538.imagick_r	96	<b>105</b>	<b>2270</b>	105	2270	106	2260	96	<b>105</b>	<b>2270</b>	105	2270	106	2260
544.nab_r	96	133	1210	133	1220	<b>133</b>	<b>1220</b>	96	133	1210	133	1220	<b>133</b>	<b>1220</b>
549.fotonik3d_r	96	679	551	<b>680</b>	<b>551</b>	681	550	96	679	551	<b>680</b>	<b>551</b>	681	550
554.roms_r	96	460	331	<b>459</b>	<b>332</b>	458	333	48	242	316	<b>242</b>	<b>316</b>	242	316

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

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/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"  
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  
runcpu command invoked through numactl i.e.:  
numactl --interleave=all runcpu <etc>  
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.

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Apr-2026

Hardware Availability: Oct-2025

Software Availability: Mar-2026

## 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.

NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) 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 Settings:

Hyper-Threading [ALL]: Enable

Sysinfo program /home/cpu2017/bin/sysinfo  
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197  
running on benchmark Sat Apr 25 10:42:59 2026

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

-----  
Table of contents

- 1. uname -a
- 2. w
- 3. Username
- 4. ulimit -a
- 5. sysinfo process ancestry
- 6. /proc/cpuinfo
- 7. lscpu
- 8. numactl --hardware
- 9. /proc/meminfo
- 10. who -r
- 11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.19)
- 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. 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 benchmark 5.15.0-176-generic #186-Ubuntu SMP Fri Mar 13 11:01:42 UTC 2026 x86\_64 x86\_64 x86\_64 GNU/Linux

-----  
2. w  
10:42:59 up 1 day, 4:22, 2 users, load average: 57.37, 86.38, 92.12  
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT  
intel tty1 - Fri06 28:18m 2.47s 0.05s -bash  
intel pts/0 - Fri06 5:12m 1.35s 2.40s sudo su

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

**CPU2017 License:** 6042

**Test Sponsor:** Netweb Technologies India Ltd

**Tested by:** Tyrone Systems

**Test Date:** Apr-2026

**Hardware Availability:** Oct-2025

**Software Availability:** Mar-2026

## Platform Notes (Continued)

### 3. Username

```
From environment variable $USER:  root
From the command 'logname':      intel
```

### 4. ulimit -a

```
time(seconds)          unlimited
file(blocks)           unlimited
data(kbytes)           unlimited
stack(kbytes)          unlimited
coredump(blocks)       0
memory(kbytes)         unlimited
locked memory(kbytes) 198110456
process                6190484
nofiles                1024
vmemory(kbytes)        unlimited
locks                  unlimited
rtprio                 0
```

### 5. sysinfo process ancestry

```
/sbin/init
/bin/login -p --
-bash
sudo su
sudo su
su
bash
bash
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=96 -c
  ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=48 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base,peak -o all fprate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=96 --configfile
  ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=48 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base,peak --output_format all --nopower
  --runmode rate --tune base:peak --size refrate fprate --nopreenv --note-preenv --logfile
  $SPEC/tmp/CPU2017.004/templogs/preenv.fprate.004.0.log --lognum 004.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

### 6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) 6520P
vendor_id      : GenuineIntel
cpu family     : 6
model          : 173
stepping       : 1
microcode      : 0x1000405
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi vmscape
cpu cores      : 24
siblings       : 48
2 physical ids (chips)
96 processors (hardware threads)
physical id 0: core ids 0-23
physical id 1: core ids 0-23
physical id 0: apicids 0-47
physical id 1: apicids 128-175
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 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Apr-2026

Hardware Availability: Oct-2025

Software Availability: Mar-2026

## Platform Notes (Continued)

### 7. lscpu

From lscpu from util-linux 2.37.2:

```

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):                       96
On-line CPU(s) list:         0-95
Vendor ID:                    GenuineIntel
Model name:                   Intel(R) Xeon(R) 6520P
CPU family:                   6
Model:                        173
Thread(s) per core:          2
Core(s) per socket:          24
Socket(s):                    2
Stepping:                     1
CPU max MHz:                  4000.0000
CPU min MHz:                  800.0000
BogoMIPS:                     4800.00
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 invpcid_single
                               cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi
                               flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep
                               bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
                               avx512ifma clflushopt clwb intel_pt avx512cd sha_ni avx512bw
                               avx512vl xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc
                               cqm_mbm_total cqm_mbm_local split_lock_detect avx_vnni avx512_bf16
                               wbnoinvd dtherm ida arat pln pts hwp hwp_act_window hwp_epp
                               hwp_pkg_req 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 amx_bf16 avx512_fp16
                               amx_tile amx_int8 flush_lld arch_capabilities ibpb_exit_to_user
Virtualization:              VT-x
L1d cache:                   2.3 MiB (48 instances)
L1i cache:                   3 MiB (48 instances)
L2 cache:                    96 MiB (48 instances)
L3 cache:                    288 MiB (2 instances)
NUMA node(s):                2
NUMA node0 CPU(s):          0-23,48-71
NUMA node1 CPU(s):          24-47,72-95
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 and

```

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Apr-2026

Hardware Availability: Oct-2025

Software Availability: Mar-2026

## Platform Notes (Continued)

```

seccomp
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 Tsa: Not affected
Vulnerability Tsx async abort: Not affected
Vulnerability Vmscape: Mitigation; IBPB before exit to userspace

```

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	2.3M	12	Data	1	64	1	64
L1i	64K	3M	16	Instruction	1	64	1	64
L2	2M	96M	16	Unified	2	2048	1	64
L3	144M	288M	16	Unified	3	147456	1	64

8. numactl --hardware

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

```

available: 2 nodes (0-1)
node 0 cpus: 0-23,48-71
node 0 size: 773613 MB
node 0 free: 748403 MB
node 1 cpus: 24-47,72-95
node 1 size: 774124 MB
node 1 free: 738826 MB
node distances:
node  0  1
  0: 10 21
  1: 21 10

```

9. /proc/meminfo

MemTotal: 1584883668 kB

10. who -r

run-level 3 Apr 24 06:22

11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.19)

```

Default Target Status
multi-user degraded

```

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

UNIT	LOAD	ACTIVE	SUB	DESCRIPTION
* fwupd-refresh.service	loaded	failed	failed	Refresh fwupd metadata and update motd
* systemd-networkd-wait-online.service	loaded	failed	failed	Wait for Network to be Configured

13. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager apparmor atop atopacct binfmt-support blk-availability cloud-config cloud-final cloud-init cloud-init-local console-setup cron dmesg e2scrub_reap finalrd getty@ gpu-manager grub-common grub-initrd-fallback irqbalance keyboard-setup lvm2-monitor lxd-agent multipathd networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb snapd ssh systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

**CPU2017 License:** 6042

**Test Sponsor:** Netweb Technologies India Ltd

**Tested by:** Tyrone Systems

**Test Date:** Apr-2026

**Hardware Availability:** Oct-2025

**Software Availability:** Mar-2026

## Platform Notes (Continued)

```

enabled-runtime udisks2 ufw unattended-upgrades vgauth
disabled netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
console-getty debug-shell ipmievd iscsid nftables rsync serial-getty@
systemd-boot-check-no-failures systemd-network-generator systemd-sysext
systemd-time-wait-sync upower
generated apport openipmi
indirect uidd
masked cryptdisks cryptdisks-early hwclock lvm2 multipath-tools-boot rc rcS screen-cleanup sudo
x11-common

```

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

```

BOOT_IMAGE=/vmlinuz-5.15.0-176-generic
root=UUID=d23f4c96-e4ba-4003-a8ac-11587c2fe77c
ro

```

### 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+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 Ubuntu 22.04.5 LTS

```

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

**Tyrone Systems**  
(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

**SPECrate®2017\_fp\_base = 726**  
**SPECrate®2017\_fp\_peak = 729**

**CPU2017 License:** 6042  
**Test Sponsor:** Netweb Technologies India Ltd  
**Tested by:** Tyrone Systems

**Test Date:** Apr-2026  
**Hardware Availability:** Oct-2025  
**Software Availability:** Mar-2026

## Platform Notes (Continued)

### 19. Disk information

SPEC is set to: /home/cpu2017  
Filesystem Type Size Used Avail Use% Mounted on  
/dev/nvme0n1p5 ext4 701G 424G 242G 64% /home

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

Vendor: Tyrone Systems  
Product: Tyrone Camarero MDI300A3R-212  
Product Family: MDI300A3R-212  
Serial: 2X25003

### 21. dmidecode

Additional information from dmidecode 3.3 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 NO DIMM NO DIMM  
16x Samsung M321RYGA0PB2-CCPWC 96 GB 2 rank 6400

### 22. BIOS

(This section combines info from /sys/devices and dmidecode.)  
BIOS Vendor: American Megatrends International, LLC.  
BIOS Version: ES418INW.M01  
BIOS Date: 09/19/2025  
BIOS Revision: 5.35

## Compiler Version Notes

=====  
C | 519.lbm\_r(base, peak) 538.imagick\_r(base, peak) 544.nab\_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++ | 508.namd\_r(base, peak) 510.parest\_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++, C | 511.povray\_r(base, peak) 526.blender\_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.  
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, peak)

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

**Tyrone Systems**  
(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

**SPECrate®2017\_fp\_base = 726**  
**SPECrate®2017\_fp\_peak = 729**

**CPU2017 License:** 6042  
**Test Sponsor:** Netweb Technologies India Ltd  
**Tested by:** Tyrone Systems

**Test Date:** Apr-2026  
**Hardware Availability:** Oct-2025  
**Software Availability:** Mar-2026

## Compiler Version Notes (Continued)

-----  
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, peak) 549.fotonik3d_r(base, peak) 554.roms_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.  
-----

=====

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

Benchmarks using Fortran, C, and C++:

icpx icx ifx

## Base Portability Flags

503.bwaves\_r: -DSPEC\_LP64

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

**Tyrone Systems**  
(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

**SPECrate®2017\_fp\_base = 726**

**SPECrate®2017\_fp\_peak = 729**

**CPU2017 License:** 6042  
**Test Sponsor:** Netweb Technologies India Ltd  
**Tested by:** Tyrone Systems

**Test Date:** Apr-2026  
**Hardware Availability:** Oct-2025  
**Software Availability:** Mar-2026

## Base Portability Flags (Continued)

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 -xsaphirerapids -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 -xsaphirerapids -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 -xsaphirerapids -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 -xsaphirerapids -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

### Benchmarks using both C and C++:

-w -std=c++14 -m64 -std=c11 -Wl,-z,muldefs -xsaphirerapids -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

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

**CPU2017 License:** 6042

**Test Sponsor:** Netweb Technologies India Ltd

**Tested by:** Tyrone Systems

**Test Date:** Apr-2026

**Hardware Availability:** Oct-2025

**Software Availability:** Mar-2026

## Base Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++:

```
-w -m64 -std=c++14 -std=c11 -Wl,-z,muldefs -xsaphirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-gopt-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
```

## Peak 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

Benchmarks using Fortran, C, and C++:

icpx icx ifx

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

519.lbm\_r: basepeak = yes

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Apr-2026

Hardware Availability: Oct-2025

Software Availability: Mar-2026

## Peak Optimization Flags (Continued)

538.imagick\_r: basepeak = yes

544.nab\_r: basepeak = yes

### C++ benchmarks:

508.namd\_r: basepeak = yes

510.parest\_r: -w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids  
-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:

503.bwaves\_r: basepeak = yes

549.fotonik3d\_r: basepeak = yes

554.roms\_r: -w -m64 -Wl,-z,muldefs -xsapphirerapids -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 -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

### Benchmarks using both C and C++:

511.povray\_r: -w -std=c++14 -m64 -std=c11 -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 -Wno-implicit-int  
-mprefer-vector-width=512 -ljemalloc  
-L/usr/local/jemalloc64-5.0.1/lib

526.blender\_r: basepeak = yes

### 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

(Continued on next page)



# SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)  
(Tyrone Camarero MDI300A3R-212)  
(2.40 GHz, Intel Xeon 6520P)

SPECrate®2017\_fp\_base = 726

SPECrate®2017\_fp\_peak = 729

**CPU2017 License:** 6042

**Test Sponsor:** Netweb Technologies India Ltd

**Tested by:** Tyrone Systems

**Test Date:** Apr-2026

**Hardware Availability:** Oct-2025

**Software Availability:** Mar-2026

## Peak Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++ (continued):

```
-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/Tyrone-Platform-Settings-V1.2-EMR-revE.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/Tyrone-Platform-Settings-V1.2-EMR-revE.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](mailto:info@spec.org).

Tested with SPEC CPU®2017 v1.1.9 on 2026-04-25 06:42:59-0400.

Report generated on 2026-06-09 16:41:01 by CPU2017 PDF formatter v6716.

Originally published on 2026-06-09.