



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECSpeed®2017_fp_base = 236

SPECSpeed®2017_fp_peak = 236

CPU2017 License: 006802

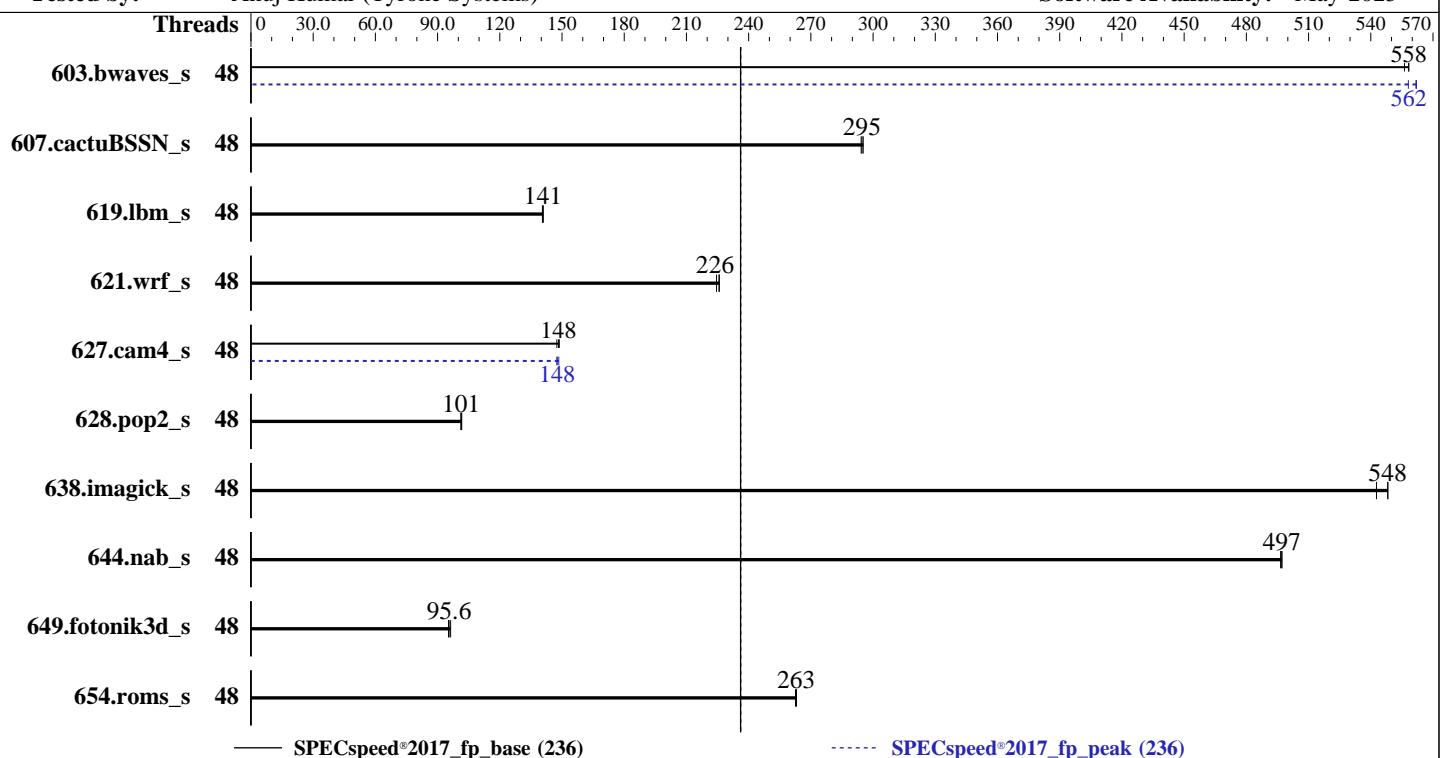
Test Date: May-2025

Test Sponsor: Netweb Technologies India Ltd

Hardware Availability: Jun-2024

Tested by: Anuj Kumar (Tyrone Systems)

Software Availability: May-2025



Hardware		Software	
CPU Name:	Intel Xeon Platinum 8568Y+	OS:	Ubuntu 22.04.5 LTS
Max MHz:	4000	Compiler:	5.15.0-140-generic
Nominal:	2300		C/C++: Version 2024.1 of Intel oneAPI DPC++/C++ Compiler for Linux;
Enabled:	96 cores, 2 chips		Fortran: Version 2024.1 of Intel Fortran Compiler for Linux;
Orderable:	1,2 chips	Parallel:	Yes
Cache L1:	32 KB I + 48 KB D on chip per core	Firmware:	Version 2.4 released Sep-2024
L2:	2 MB I+D on chip per core	File System:	ext4
L3:	300 MB I+D on chip per chip	System State:	Run level 3 (multi-user)
Other:	None	Base Pointers:	64-bit
Memory:	512 GB (16 x 32 GB 2Rx4 PC5-4800B-R)	Peak Pointers:	64-bit
Storage:	1 x 960 GB NVMe	Other:	jemalloc memory allocator V5.0.1
Other:	CPU Cooling: Air	Power Management:	BIOS set to prefer performance at cost of additional power.



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECSpeed®2017_fp_base = 236

SPECSpeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Date: May-2025

Test Sponsor: Netweb Technologies India Ltd

Hardware Availability: Jun-2024

Tested by: Anuj Kumar (Tyrone Systems)

Software Availability: May-2025

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	48	106	558	106	558	106	556	48	105	562	105	562	106	558
607.cactuBSSN_s	48	56.5	295	56.6	295	56.7	294	48	56.5	295	56.6	295	56.7	294
619.lbm_s	48	37.2	141	37.2	141	37.3	141	48	37.2	141	37.2	141	37.3	141
621.wrf_s	48	58.9	225	58.6	226	58.6	226	48	58.9	225	58.6	226	58.6	226
627.cam4_s	48	59.8	148	59.6	149	60.1	148	48	59.7	148	60.1	148	60.0	148
628.pop2_s	48	117	101	117	102	117	101	48	117	101	117	102	117	101
638.imagick_s	48	26.6	543	26.3	548	26.3	548	48	26.6	543	26.3	548	26.3	548
644.nab_s	48	35.1	497	35.1	497	35.2	497	48	35.1	497	35.1	497	35.2	497
649.fotonik3d_s	48	95.7	95.2	95.4	95.6	94.7	96.3	48	95.7	95.2	95.4	95.6	94.7	96.3
654.roms_s	48	60.0	263	59.9	263	59.9	263	48	60.0	263	59.9	263	59.9	263
SPECSpeed®2017_fp_base = 236							SPECSpeed®2017_fp_peak = 236							

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:

```
KMP_AFFINITY = "granularity=fine,compact,1,0"
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"
```

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.

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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

General Notes (Continued)

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:

Power Technology = Custom
ENERGY_PERF_BIAS_CFG mode = Maximum Performance
KTI Prefetch = Enable
LLC Dead Line Alloc = Disable
Hyper-Threading set to Disabled

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on benchmark Mon May 19 17:00:16 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 249 (249.11-0ubuntu3.12)
 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 5.15.0-140-generic #150-Ubuntu SMP Sat Apr 12 06:00:09 UTC 2025 x86_64 x86_64 x86_64
GNU/Linux

2. w
17:00:16 up 1 day, 4:20, 3 users, load average: 5.14, 5.19, 3.09

USER	TTY	FROM	LOGIN@	IDLE	JCPU	PCPU	WHAT
intel	tty1	-	Sun12	28:17m	0.64s	0.01s	-bash
intel	pts/0	-	Sun12	3:57m	0.90s	0.63s	sudo su
intel	tty2	-	Sun12	28:10m	0.01s	0.01s	-bash

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECSpeed®2017_fp_base = 236

SPECSpeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

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) 66002056
process 2062124
nofiles 1024
vmmemory(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 -c
  ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=48 --tune base,peak -o all --define smt-on
  --define drop_caches fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
  ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=48 --tune base,peak --output_format all
  --define smt-on --define drop_caches --nopower --runmode speed --tune base:peak --size refspeed fpspeed
  --nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.004/templogs/preenv.fpspeed.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) PLATINUM 8568Y+
vendor_id       : GenuineIntel
cpu family     : 6
model          : 207
stepping        : 2
microcode       : 0x21000291
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrss_bhi
cpu cores       : 48
siblings        : 48
2 physical ids (chips)
96 processors (hardware threads)
physical id 0: core ids 0-47
physical id 1: core ids 0-47
physical id 0: apicids
0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,66,68,70,72
,74,76,78,80,82,84,86,88,90,92,94
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Date: May-2025

Test Sponsor: Netweb Technologies India Ltd

Hardware Availability: Jun-2024

Tested by: Anuj Kumar (Tyrone Systems)

Software Availability: May-2025

Platform Notes (Continued)

```
physical id 1: apicids
128,130,132,134,136,138,140,142,144,146,148,150,152,154,156,158,160,162,164,166,168,170,172,174,176,178,1
80,182,184,186,188,190,192,194,196,198,200,202,204,206,208,210,212,214,216,218,220,222
```

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 2.37.2:

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):	96
On-line CPU(s) list:	0-95
Vendor ID:	GenuineIntel
Model name:	INTEL(R) XEON(R) PLATINUM 8568Y+
CPU family:	6
Model:	207
Thread(s) per core:	1
Core(s) per socket:	48
Socket(s):	2
Stepping:	2
BogoMIPS:	4600.00
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 aperf mperf tsc_known_freq pnpi 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_13 cat_12 cdp_13 invpcid_single intel_ppin cdp_12 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmii avx2 smep bmii2 erms invpcid cqmq rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves cqmq_llc cqmq_occup_llc cqmq_mbm_total cqmq_mbm_local split_lock_detect avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts avx512vbmi umip pkru ospkewaitpkg 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
Virtualization:	VT-x
L1d cache:	4.5 MiB (96 instances)
L1i cache:	3 MiB (96 instances)
L2 cache:	192 MiB (96 instances)
L3 cache:	600 MiB (2 instances)
NUMA node(s):	4
NUMA node0 CPU(s):	0-23
NUMA node1 CPU(s):	24-47
NUMA node2 CPU(s):	48-71
NUMA node3 CPU(s):	72-95
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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Date: May-2025

Test Sponsor: Netweb Technologies India Ltd

Hardware Availability: Jun-2024

Tested by: Anuj Kumar (Tyrone Systems)

Software Availability: May-2025

Platform Notes (Continued)

```
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 seccomp
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	4.5M	12	Data	1	64	1	64
L1i	32K	3M	8	Instruction	1	64	1	64
L2	2M	192M	16	Unified	2	2048	1	64
L3	300M	600M	20	Unified	3	245760	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: 0-23
node 0 size: 128641 MB
node 0 free: 109350 MB
node 1 cpus: 24-47
node 1 size: 129017 MB
node 1 free: 114881 MB
node 2 cpus: 48-71
node 2 size: 128970 MB
node 2 free: 115106 MB
node 3 cpus: 72-95
node 3 size: 129010 MB
node 3 free: 108246 MB
node distances:
node   0   1   2   3
 0: 10  12  21  21
 1: 12  10  21  21
 2: 21  21  10  12
 3: 21  21  12  10
```

9. /proc/meminfo

```
MemTotal:      528016472 kB
```

10. who -r
run-level 3 May 18 12:42

11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.12)
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	Refresh fwupd metadata and update motd	
* systemd-networkd-wait-online.service	loaded	failed	Wait for Network to be Configured	

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Date: May-2025

Test Sponsor: Netweb Technologies India Ltd

Hardware Availability: Jun-2024

Tested by: Anuj Kumar (Tyrone Systems)

Software Availability: May-2025

Platform Notes (Continued)

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 lxp-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-cmcs ubuntu-advantage udisks2 ufw unattended-upgrades vauth
enabled-runtime	netplan-ovs-cleanupsystemd-fsck-root systemd-remount-fs
disabled	console-getty debug-shell iscsid nftables rsync serial-getty@ systemd-boot-check-no-failures systemd-network-generator systemd-sysext
generated	systemd-time-wait-sync upower
indirect	apport
masked	uidd 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-5.15.0-140-generic
root=UUID=d23f4c96-e4ba-4003-a8ac-11587c2fe77c
ro
```

15. sysctl

kernel.numa_balancing	1
kernel.randomize_va_space	2
vm.compaaction_proactiveness	20
vm.dirty_background_bytes	0
vm.dirty_background_ratio	10
vm.dirty_bytes	0
vm.dirty_expire_centisecs	3000
vm.dirty_ratio	20
vm.dirty_writeback_centisecs	500
vm.dirtytime_expire_seconds	43200
vm.extfrag_threshold	500
vm.min_unmapped_ratio	1
vm.nr_hugepages	0
vm.nr_hugepages_mempolicy	0
vm.nr_overcommit_hugepages	0
vm.swappiness	60
vm.watermark_boost_factor	15000
vm.watermark_scale_factor	10
vm.zone_reclaim_mode	0

16. /sys/kernel/mm/transparent_hugepage

defrag	always defer defer+madvise [madvise] never
enabled	always [madvise] never
huge_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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

Platform Notes (Continued)

```
pages_to_scan      4096
scan_sleep_millisecs 10000
```

```
-----  
18. OS release
From /etc/*-release /etc/*-version
os-release Ubuntu 22.04.5 LTS
```

```
-----  
19. Disk information
SPEC is set to: /home/cpu2017
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p5  ext4  701G  136G  530G  21% /home
```

```
-----  
20. /sys/devices/virtual/dmi/id
Vendor:        Tyrone Systems
Product:       SDI200A3N-212
Product Family: Family
Serial:        A495115X4412722
```

```
-----  
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 M321R4GA0BB0-CQKET 32 GB 1 rank 4800
```

```
-----  
22. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:      American Megatrends International, LLC.
BIOS Version:     2.4
BIOS Date:        09/23/2024
BIOS Revision:    5.32
```

Compiler Version Notes

```
=====  
C          | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_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.
```

```
=====  
C++, C, Fortran | 607.cactusBSSN_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.
```

```
-----  
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.
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECSpeed®2017_fp_base = 236

SPECSpeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

Compiler Version Notes (Continued)

=====
Fortran | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_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.
=====

=====
Fortran, C | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_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.
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

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx

Base Portability Flags

603.bwaves_s: -DSPEC_LP64
607.cactusBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
-assume byterecl
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

Base Optimization Flags

C benchmarks:

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

Fortran benchmarks:

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

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

Benchmarks using Fortran, C, and C++:

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

Peak Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECSPEED®2017_fp_base = 236

SPECSPEED®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

619.lbm_s: basepeak = yes

638.imagick_s: basepeak = yes

644.nab_s: basepeak = yes

Fortran benchmarks:

```
603.bwaves_s: -w -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xsapphirerapids
-Ofast -ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc
```

649.fotonik3d_s: basepeak = yes

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes

```
627.cam4_s: -w -m64 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-Wno-implicit-int -mprefer-vector-width=512
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

Tyrone Camarero SDI200A3N-212
(2.30 GHz, Intel Xeon Platinum 8568Y+)

SPECspeed®2017_fp_base = 236

SPECspeed®2017_fp_peak = 236

CPU2017 License: 006802

Test Sponsor: Netweb Technologies India Ltd

Tested by: Anuj Kumar (Tyrone Systems)

Test Date: May-2025

Hardware Availability: Jun-2024

Software Availability: May-2025

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-revA.html>

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

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

<http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.2-EMR-revA.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.

Tested with SPEC CPU®2017 v1.1.9 on 2025-05-19 13:00:16-0400.

Report generated on 2025-06-17 18:12:14 by CPU2017 PDF formatter v6716.

Originally published on 2025-06-17.