



SPEC CPU®2026 Floating Point Rate Result

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Supermicro
(Test Sponsor: Intel Corporation)

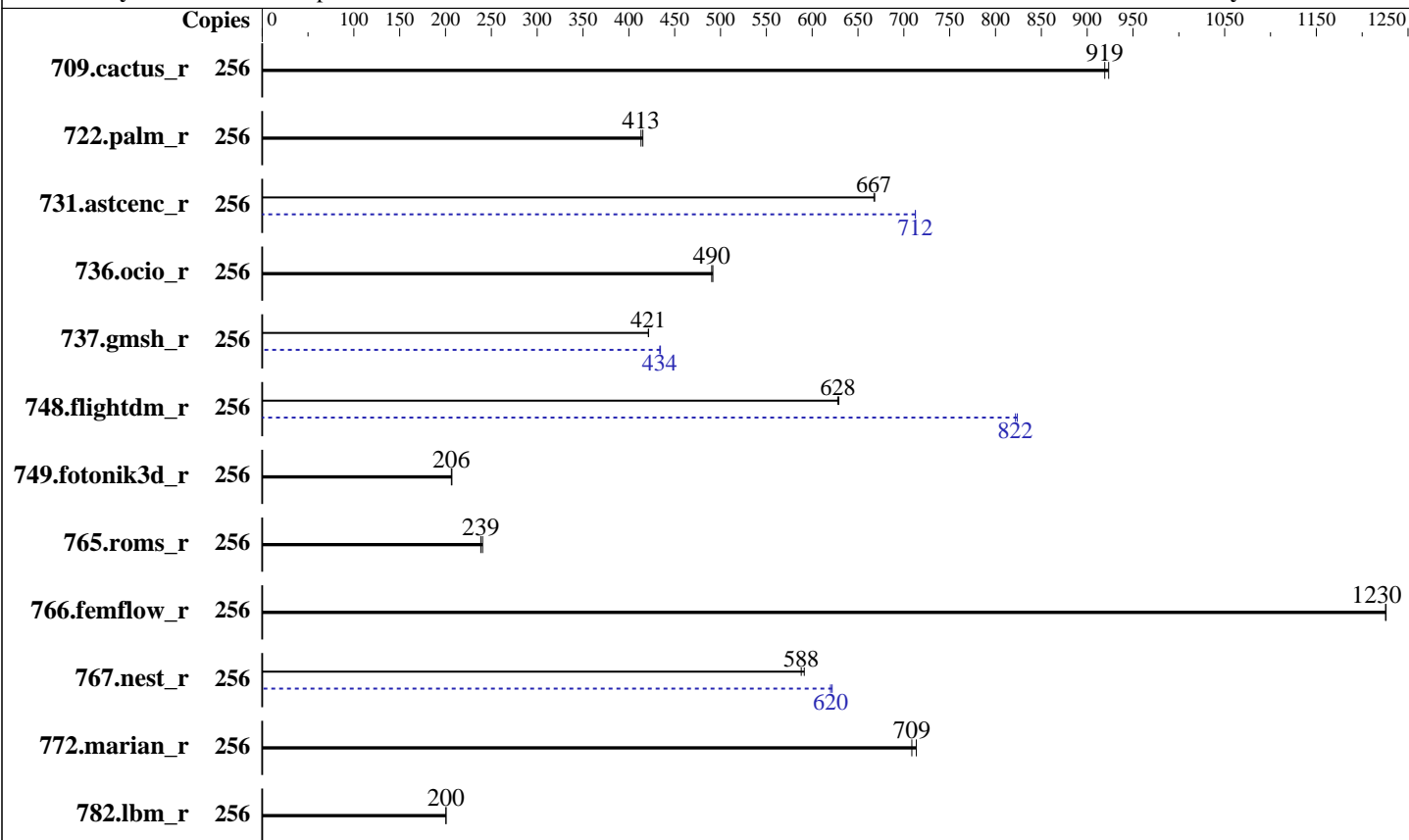
SPECrate®2026_fp_base = 484

Hyper SuperServer SYS-221H-TNR

SPECrate®2026_fp_peak = 501

CPU2026 License: 13
Test Sponsor: Intel Corporation
Tested by: Intel Corporation

Test Date: Feb-2026
Hardware Availability: Mar-2023
Software Availability: Nov-2025



Hardware

CPU Name: Intel Xeon Platinum 8592+
 Max MHz: 3900
 Nominal: 1900
 Enabled: 128 cores, 2 chips, 2 threads/core
 Orderable: 1,2 chips
 Cache L1: 32 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 320 MB I+D on chip per chip
 Other: None
 Memory: 1 TB (16 x 64 GB 2Rx4 PC5-6400B-R, running at 5600)
 Storage: 1 x 1.8 TB PCIe NVMe SSD
 Cooling: Air
 Other: None

Software

OS: Ubuntu 24.04 LTS
 6.8.0-90-generic
 Compiler: C/C++: Version 2025.3 of Intel oneAPI DPC++/C++ Compiler for Linux;
 Fortran: Version 2025.3 of Intel Fortran Compiler for Linux
 Compiler Category: Vendor
 Firmware: Version 5.32 released Jul-2025
 File System: ext4
 System State: Run level 5 (Multiuser with networking)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: jemalloc memory allocator v5.3
 Power Management: BIOS and OS 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
709.cactus_r	256	238	923	<u>239</u>	<u>919</u>			256	238	923	<u>239</u>	<u>919</u>		
722.palm_r	256	814	415	<u>818</u>	<u>413</u>			256	814	415	<u>818</u>	<u>413</u>		
731.ascenc_r	256	322	668	<u>322</u>	<u>667</u>			256	<u>302</u>	<u>712</u>	302	713		
736.ocio_r	256	<u>457</u>	<u>490</u>	456	492			256	<u>457</u>	<u>490</u>	456	492		
737.gmsh_r	256	<u>279</u>	<u>421</u>	279	421			256	270	435	<u>271</u>	<u>434</u>		
748.flightdm_r	256	291	629	<u>292</u>	<u>628</u>			256	<u>223</u>	<u>822</u>	223	824		
749.fotonik3d_r	256	1430	207	<u>1434</u>	<u>206</u>			256	1430	207	<u>1434</u>	<u>206</u>		
765.roms_r	256	<u>1691</u>	<u>239</u>	1677	240			256	<u>1691</u>	<u>239</u>	1677	240		
766.femflow_r	256	<u>306</u>	<u>1230</u>	306	1230			256	<u>306</u>	<u>1230</u>	306	1230		
767.nest_r	256	<u>345</u>	<u>588</u>	343	591			256	326	622	<u>327</u>	<u>620</u>		
772.marian_r	256	<u>570</u>	<u>709</u>	566	714			256	<u>570</u>	<u>709</u>	566	714		
782.lbm_r	256	<u>732</u>	<u>200</u>	732	201			256	<u>732</u>	<u>200</u>	732	201		

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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"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/root/cpu2026/lib"
MALLOC_CONF = "retain:true"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using CentOS Stream 9.
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

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General Notes (Continued)

runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>

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 CentOS Stream 9, and the system compiler gcc 11.5.0
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

Platform Notes

BIOS Configuration :
Workload Profile set to Disabled
Power Performance Tuning set to BIOS Controls EPB
Energy Perf Bias CFG mode set to Extreme Performance
KTI Prefetch set to Enabled
LLC Dead Line Alloc set to Disabled
Sub NUMA Clustering (SNC) set to Enable SNC2 (2-clusters)
Stale A to S Dir optimization set to Disabled
BMC Configuration:
System Fan speed set to full speed

Sysinfo program /root/cpu2026/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on smc-emr Fri Feb 6 06:27:56 2026

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

Table of contents

1. uname -srvm
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

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Platform Notes (Continued)

- 11. systemd service manager version: systemd 255 (255.4-lubuntu8.8)
- 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. 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 -srvn
   Linux 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 14:14:30 UTC 2025 x86_64
-----
```

```
-----
2. w
   06:27:56 up 8:00, 3 users, load average: 66.88, 194.38, 230.35
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU      WHAT
root      tty1     10.125.130.14 04:31       2:38        0.00s     0.05s     sshd: root@notty
root      tty1     -              23:21       7:06m       0.16s     0.01s     -bash
-----
```

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

```
-----
4. ulimit -a
time(seconds)          unlimited
file(blocks)           unlimited
data(kbytes)           unlimited
stack(kbytes)          unlimited
coredump(blocks)       0
memory(kbytes)         unlimited
locked memory(kbytes)  132054144
process                4126381
nofiles                1024
vmemory(kbytes)        unlimited
locks                  unlimited
rtprio                 0
-----
```

```
-----
5. sysinfo process ancestry
-----
```

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Platform Notes (Continued)

```

/sbin/init
tmux new -s spec
-bash
-bash
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 256 -c
ic2025.3-sapphirerapids-cpu2026-0.902-rate-20260121.cfg --define smt-on --define cores=128 --define
physicalfirst --define invoke_with_interleave --define drop_caches --tune base,peak -o all fprate
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 256 --configfile
ic2025.3-sapphirerapids-cpu2026-0.902-rate-20260121.cfg --define smt-on --define cores=128 --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/CPU2026.008/templogs/preenv.fprate.008.0.log --lognum 008.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /root/cpu2026

```

```

-----
6. /proc/cpuinfo
model name      : INTEL(R) XEON(R) PLATINUM 8592+
vendor_id      : GenuineIntel
cpu family     : 6
model          : 207
stepping       : 2
microcode      : 0x210002b3
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi vmscape
cpu cores      : 64
siblings       : 128
2 physical ids (chips)
256 processors (hardware threads)
physical id 0: core ids 0-63
physical id 1: core ids 0-63
physical id 0: apicids 0-127
physical id 1: apicids 128-255

```

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):                256
On-line CPU(s) list:   0-255
Vendor ID:             GenuineIntel
BIOS Vendor ID:       Intel(R) Corporation

```

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Platform Notes (Continued)

Model name:	INTEL(R) XEON(R) PLATINUM 8592+
BIOS Model name:	INTEL(R) XEON(R) PLATINUM 8592+ CPU @ 1.9GHz
BIOS CPU family:	179
CPU family:	6
Model:	207
Thread(s) per core:	2
Core(s) per socket:	64
Socket(s):	2
Stepping:	2
CPU(s) scaling MHz:	100%
CPU max MHz:	3900.0000
CPU min MHz:	800.0000
BogoMIPS:	3800.00

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 pdc_m 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 vmmi 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_lld arch_capabilities ibpb_exit_to_user

Virtualization:	VT-x
L1d cache:	6 MiB (128 instances)
L1i cache:	4 MiB (128 instances)
L2 cache:	256 MiB (128 instances)
L3 cache:	640 MiB (2 instances)
NUMA node(s):	4
NUMA node0 CPU(s):	0-31,128-159
NUMA node1 CPU(s):	32-63,160-191
NUMA node2 CPU(s):	64-95,192-223
NUMA node3 CPU(s):	96-127,224-255
Vulnerability Gather data sampling:	Not affected
Vulnerability Itlb multihit:	Not affected
Vulnerability L1tf:	Not affected
Vulnerability Mds:	Not affected
Vulnerability Meltdown:	Not affected

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Platform Notes (Continued)

Vulnerability Mmio stale data: Not affected
 Vulnerability Reg file data sampling: Not affected
 Vulnerability Retbleed: Not affected
 Vulnerability Spec rstack overflow: Not affected
 Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
 Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
 Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling; PBRBSB-eIBRS SW sequence; BHI BHI_DIS_S
 Vulnerability Srbds: 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	6M	12	Data	1	64	1	64
L1i	32K	4M	8	Instruction	1	64	1	64
L2	2M	256M	16	Unified	2	2048	1	64
L3	320M	640M	20	Unified	3	262144	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: 0-31,128-159
node 0 size: 257650 MB
node 0 free: 239354 MB
node 1 cpus: 32-63,160-191
node 1 size: 257982 MB
node 1 free: 241718 MB
node 2 cpus: 64-95,192-223
node 2 size: 258026 MB
node 2 free: 241006 MB
node 3 cpus: 96-127,224-255
node 3 size: 258013 MB
node 3 free: 240738 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: 1056433172 kB

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Platform Notes (Continued)

10. who -r
run-level 5 Feb 5 22:30

11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.8)
Default Target Status
graphical 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

Legend: LOAD -> Reflects whether the unit definition was properly loaded.
ACTIVE -> The high-level unit activation state, i.e. generalization of SUB.
SUB -> The low-level unit activation state, values depend on unit type.
2 loaded units listed.

13. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager apparmor apport 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 keyboard-setup lvm2-monitor multipathd networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb snapd sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades vgauth
enabled-runtime	netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled	console-getty debug-shell iscsid nftables rsync serial-getty@ ssh systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-networkd-wait-online@ systemd-pcrlock-file-system systemd-pcrlock-firmware-code systemd-pcrlock-firmware-config systemd-pcrlock-machine-id systemd-pcrlock-make-policy systemd-pcrlock-secureboot-authority systemd-pcrlock-secureboot-policy systemd-sysext systemd-time-wait-sync upower
indirect	systemd-sysupdate systemd-sysupdate-reboot uidd
masked	cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common

14. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-6.8.0-90-generic
root=UUID=637c87f4-ebc0-4fd2-bd43-98bf140085e1
ro

15. cpupower frequency-info
analyzing CPU 137:

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Platform Notes (Continued)

current policy: frequency should be within 800 MHz and 3.90 GHz.
The governor "performance" may decide which speed to use within this range.

boost state support:
Supported: yes
Active: yes

16. 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

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

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Platform Notes (Continued)

19. OS release
From /etc/*-release /etc/*-version
os-release Ubuntu 24.04 LTS

20. Disk information
SPEC is set to: /root/cpu2026
Filesystem Type Size Used Avail Use% Mounted on
/dev/nvme0nlp2 ext4 1.8T 380G 1.3T 23% /

21. /sys/devices/virtual/dmi/id
Vendor: Supermicro
Product: SYS-221H-TNR
Product Family: Family
Serial: S495122X2832926

22. 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 M321R8GA0PB2-CCPEC 64 GB 2 rank 6400, configured at 5600
9x Samsung M321R8GA0PB2-CCPPC 64 GB 2 rank 6400, configured at 5600
5x Samsung M321R8GA0PB2-CCPWC 64 GB 2 rank 6400, configured at 5600

23. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 2.7
BIOS Date: 07/11/2025
BIOS Revision: 5.32

Compiler Version Notes

=====
C | 782.lbm_r(base, peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

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Compiler Version Notes (Continued)

```

=====
C++      | 731.astcenc_r(base, peak) 736.ocio_r(base, peak)
         | 748.flightdm_r(base, peak) 766.femflow_r(base, peak)
         | 767.nest_r(base, peak) 772.marian_r(base, peak)
=====

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
=====

```

```

=====
C++, C   | 709.cactus_r(base, peak) 737.gmsh_r(base, peak)
=====

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
=====

```

```

=====
Fortran  | 722.palm_r(base, peak) 749.fotonik3d_r(base, peak) 765.roms_r(base,
         | peak)
=====

```

```

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version
2025.3.0 Build 20251010
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
=====

```

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Benchmarks using both C and C++:

icpx icx



SPEC CPU®2026 Floating Point Rate Result

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Supermicro

(Test Sponsor: Intel Corporation)

SPECrate®2026_fp_base = 484

Hyper SuperServer SYS-221H-TNR

SPECrate®2026_fp_peak = 501

CPU2026 License: 13

Test Sponsor: Intel Corporation

Tested by: Intel Corporation

Test Date: Feb-2026

Hardware Availability: Mar-2023

Software Availability: Nov-2025

Base Portability Flags

```
709.cactus_r: -DSPEC_LP64
722.palm_r: -DSPEC_LP64
731.ascenc_r: -DSPEC_LP64
736.ocio_r: -DSPEC_LP64
737.gmsh_r: -DSPEC_LP64 -fno-associative-math
748.flightdm_r: -DSPEC_LP64
749.fotonik3d_r: -DSPEC_LP64
765.roms_r: -DSPEC_LP64
766.femflow_r: -DSPEC_LP64
767.nest_r: -DSPEC_LP64
772.marian_r: -DSPEC_LP64
782.lbm_r: -DSPEC_LP64
```

Base Optimization Flags

C benchmarks:

```
-m64 -std=c18 -Wl,-z,muldefs -xsaphirerapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/jemalloc-5.3.0/lib
-ljemalloc
```

C++ benchmarks:

```
-m64 -std=c++17 -Wl,-z,muldefs -xsaphirerapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/jemalloc-5.3.0/lib
-ljemalloc
```

Fortran benchmarks:

```
-m64 -stand f18 -Wl,-z,muldefs -xsaphirerapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

Benchmarks using both C and C++:

```
-m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xsaphirerapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/jemalloc-5.3.0/lib
-ljemalloc
```



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Hardware Availability: Mar-2023
Software Availability: Nov-2025

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Benchmarks using both C and C++:

icpx icx

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

782.lbm_r: basepeak = yes

C++ benchmarks:

731.astcenc_r: -m64 -std=c++17 -Wl,-z,muldefs -fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xHost(pass 1)
-ffp-model=fast -xsapphirerapids(pass 2) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

736.ocio_r: basepeak = yes

748.flightdm_r: Same as 731.astcenc_r

766.femflow_r: basepeak = yes

767.nest_r: Same as 731.astcenc_r

772.marian_r: basepeak = yes

(Continued on next page)



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Peak Optimization Flags (Continued)

Fortran benchmarks:

722.palm_r: basepeak = yes
749.fotonik3d_r: basepeak = yes
765.roms_r: basepeak = yes

Benchmarks using both C and C++:

709.cactus_r: basepeak = yes
737.gmsh_r: -m64 -std=c++17 -std=c18 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xHost(pass 1)
-ffp-model=fast -xsapphirerapids(pass 2) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

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

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.html>
<http://www.spec.org/cpu2026/results/flags/Intel-Platform-Settings-EMR-v2.html>

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

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.xml>
<http://www.spec.org/cpu2026/results/flags/Intel-Platform-Settings-EMR-v2.xml>

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