SPEC CPU®2026 Floating Point Rate Result

IEIT Systems Co., Ltd.

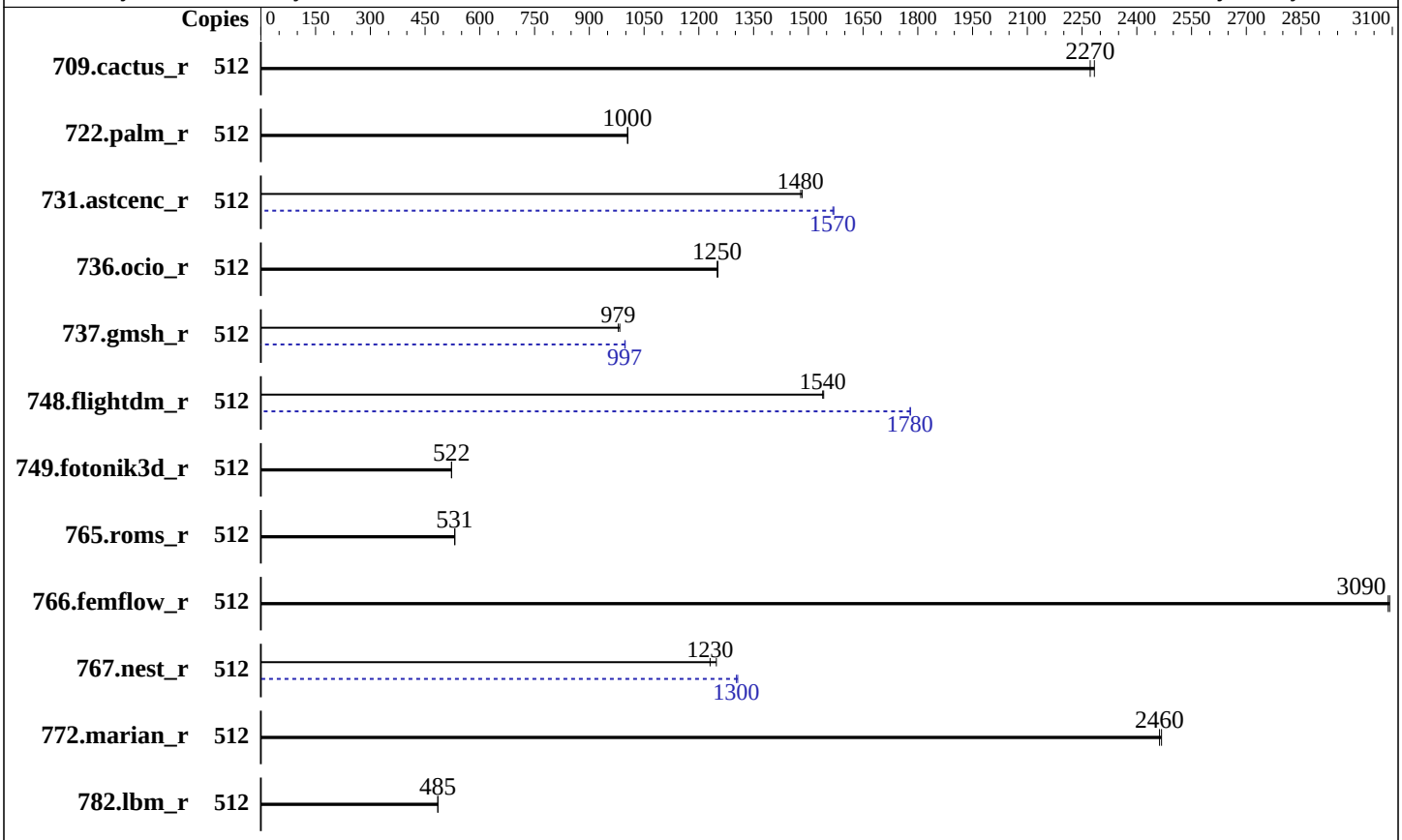
meta brain NF5280G8 (Intel Xeon 6980P)

SPECrate®2026_fp_base = 1190

SPECrate®2026_fp_peak = 1220

CPU2026 License: 3358
Test Sponsor: IEIT Systems Co., Ltd.
Tested by: IEIT Systems Co., Ltd.

Test Date: May-2026
Hardware Availability: Sep-2025
Software Availability: May-2026



Hardware

CPU Name:	Intel Xeon 6980P
Max MHz:	3900
Nominal:	2000
Enabled:	256 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:	504 MB I+D on chip per chip
Other:	None
Memory:	1536 GB (24 x 64 GB 2Rx4 PC5-88/64B-H)
Storage:	1 x 1.92 TB NVME SSD
Cooling:	Air
Other:	None

Software

OS:	SUSE Linux Enterprise Server 15.7 6.4.0-150700.51-default
Compiler:	C/C++: Version 2026.0 of Intel oneAPI DPC++/C++ Compiler for Linux; Fortran: Version 2026.0 of Intel Fortran Compiler for Linux
Compiler Category:	Vendor
Firmware:	Version 04.03.01 released Feb-2026
File System:	xfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other:	jemalloc memory allocator v5.3
Power Management:	BIOS set to prefer performance at the cost of additional power usage.

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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
709.cactus_r	512	192	2280	**193**	**2270**			512	192	2280	**193**	**2270**		
722.palm_r	512	672	1010	**673**	**1000**			512	672	1010	**673**	**1000**		
731.astcenc_r	512	**291**	**1480**	290	1480			512	**274**	**1570**	274	1570		
736.ocio_r	512	358	1250	**358**	**1250**			512	358	1250	**358**	**1250**		
737.gmsh_r	512	**240**	**979**	239	983			512	235	998	**236**	**997**		
748.flightdm_r	512	238	1540	**238**	**1540**			512	**206**	**1780**	206	1780		
749.fotonik3d_r	512	1133	523	**1133**	**522**			512	1133	523	**1133**	**522**		
765.roms_r	512	**1519**	**531**	1517	532			512	**1519**	**531**	1517	532		
766.femflow_r	512	243	3090	**243**	**3090**			512	243	3090	**243**	**3090**		
767.nest_r	512	325	1250	**330**	**1230**			512	**312**	**1300**	311	1310		
772.marian_r	512	**328**	**2460**	328	2470			512	**328**	**2460**	328	2470		
782.lbm_r	512	**605**	**485**	605	485			512	**605**	**485**	605	485		

SPECrate®2026_fp_base = 1190

SPECrate®2026_fp_peak = 1220

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/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
```

(Continued on next page)

General Notes (Continued)

```
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:
ENERGY_PERF_BIAS_CFG mode set to Performance
SNC set to Enabled
VT Support set to Disable
Hardware P-states set to Disable

Sysinfo program /home/cpu2026/bin/sysinfo
Rev: 779ab21020787073335a329f3a45e2cd
running on localhost Mon May 18 05:16:45 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
11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)
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
```

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Platform Notes (Continued)

```
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 -srvm
  Linux 6.4.0-150700.51-default #1 SMP PREEMPT_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611) x86_64

------------------------------------------------------------
2. w
   05:16:45 up 2 min,  1 user,  load average: 12.35, 6.11, 2.30
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
  root     tty1     -                05:16   13.00s  1.51s  0.04s sh
  reportable-ic2026.0-lin-graniterapids-rate-smt-on-20260429.sh

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

------------------------------------------------------------
4. ulimit -a
  core file size          (blocks, -c) unlimited
  data seg size           (kbytes, -d) unlimited
  scheduling priority             (-e) 0
  file size               (blocks, -f) unlimited
  pending signals                 (-i) 6189548
  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) 6189548
  virtual memory          (kbytes, -v) unlimited
  file locks                      (-x) unlimited

------------------------------------------------------------
5. sysinfo process ancestry
 /usr/lib/systemd/systemd --switched-root --system --deserialize=31
 login -- root
```

(Continued on next page)

Platform Notes (Continued)

```
 -bash
 sh reportable-ic2026.0-lin-graniterapids-rate-smt-on-20260429.sh
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 512 -c
  ic2026.0-graniterapids-cpu2026-1.0.1-rate-20260429.cfg --define smt-on --define cores=256 --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 512 --configfile
  ic2026.0-graniterapids-cpu2026-1.0.1-rate-20260429.cfg --define smt-on --define cores=256 --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/CPU2026.009/templogs/preenv.fprate.009.0.log --lognum 009.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026

------------------------------------------------------------
6. /proc/cpuinfo
    model name      : Intel(R) Xeon(R) 6980P
    vendor_id       : GenuineIntel
    cpu family      : 6
    model           : 173
    stepping        : 1
    microcode       : 0x10003d0
    bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
    cpu cores       : 128
    siblings        : 256
    2 physical ids (chips)
    512 processors (hardware threads)
    physical id 0: core ids 0-42,64-106,128-169
    physical id 1: core ids 0-42,64-106,128-169
    physical id 0: apicids 0-85,128-213,256-339
    physical id 1: apicids 512-597,640-725,768-851
 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 2.40.4:
  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):                                  512
  On-line CPU(s) list:                     0-511
  Vendor ID:                               GenuineIntel
  Model name:                              Intel(R) Xeon(R) 6980P
  CPU family:                              6
  Model:                                   173
```

(Continued on next page)

Platform Notes (Continued)

```
  Thread(s) per core:                  2
  Core(s) per socket:                  128
  Socket(s):                           2
  Stepping:                            1
  CPU(s) scaling MHz:                  21%
  CPU max MHz:                         3900.0000
  CPU min MHz:                         800.0000
  BogoMIPS:                            4000.00
  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 ds_cpl smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm
                                       pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes
                                       xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb
                                       cat_l3 cat_l2 cdp_l3 intel_ppin cdp_l2 ssbd mba ibrs ibpb stibp
                                       ibrs_enhanced 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 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 ibt amx_bf16 avx512_fp16 amx_tile amx_int8 flush_l1d
                                       arch_capabilities
  L1d cache:                           12 MiB (256 instances)
  L1i cache:                           16 MiB (256 instances)
  L2 cache:                            512 MiB (256 instances)
  L3 cache:                            1008 MiB (2 instances)
  NUMA node(s):                        6
  NUMA node0 CPU(s):                   0-42,256-298
  NUMA node1 CPU(s):                   43-85,299-341
  NUMA node2 CPU(s):                   86-127,342-383
  NUMA node3 CPU(s):                   128-170,384-426
  NUMA node4 CPU(s):                   171-213,427-469
  NUMA node5 CPU(s):                   214-255,470-511
  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
  Vulnerability Reg file data sampling: Not affected
  Vulnerability Retbleed:              Not affected
  Vulnerability Spec rstack overflow:  Not affected
```

(Continued on next page)

Platform Notes (Continued)

```
  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;
                                                    PBRSB-eIBRS Not affected; BHI BHI_DIS_S
   Vulnerability Srbds:                 Not affected
   Vulnerability Tsx async abort:       Not affected

From lscpu --cache:
     NAME ONE-SIZE ALL-SIZE WAYS TYPE        LEVEL   SETS PHY-LINE COHERENCY-SIZE
     L1d       48K      12M   12 Data            1     64        1             64
     L1i       64K      16M   16 Instruction     1     64        1             64
     L2         2M     512M   16 Unified         2   2048        1             64
     L3       504M    1008M   16 Unified         3 516096        1             64

------------------------------------------------------------
8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
  available: 6 nodes (0-5)
  node 0 cpus: 0-42,256-298
  node 0 size: 257479 MB
  node 0 free: 256499 MB
  node 1 cpus: 43-85,299-341
  node 1 size: 257986 MB
  node 1 free: 256941 MB
  node 2 cpus: 86-127,342-383
  node 2 size: 258025 MB
  node 2 free: 257415 MB
  node 3 cpus: 128-170,384-426
  node 3 size: 258025 MB
  node 3 free: 257381 MB
  node 4 cpus: 171-213,427-469
  node 4 size: 258025 MB
  node 4 free: 257458 MB
  node 5 cpus: 214-255,470-511
  node 5 size: 257871 MB
  node 5 free: 257300 MB
  node distances:
  node   0   1   2   3   4   5
    0:  10  15  17  21  28  26
    1:  15  10  15  23  26  23
    2:  17  15  10  26  23  21
    3:  21  28  26  10  15  17
    4:  23  26  23  15  10  15
    5:  26  23  21  17  15  10

------------------------------------------------------------
9. /proc/meminfo
```

(Continued on next page)

Platform Notes (Continued)

```
    MemTotal:       1584551280 kB

------------------------------------------------------------
10. who -r
  run-level 3 May 18 05:15

------------------------------------------------------------
11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)
  Default Target  Status
  multi-user      degraded

------------------------------------------------------------
12. Failed units, from systemctl list-units --state=failed
    UNIT                LOAD   ACTIVE SUB    DESCRIPTION
  * kdump-early.service loaded failed failed Load kdump kernel early on startup
  * kdump.service       loaded failed failed Load kdump kernel and initrd

------------------------------------------------------------
13. Services, from systemctl list-unit-files
  STATE            UNIT FILES
  enabled          apparmor auditd cron getty@ irqbalance issue-generator kbdsettings kdump kdump-early
                   kdump-notify nvmefc-boot-connections nvmf-autoconnect postfix purge-kernels rollback
                    systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
  enabled-runtime  systemd-remount-fs
  disabled          boot-sysctl ca-certificates chrony-wait chronyd console-getty debug-shell
                   exchange-bmc-os-info fsidd grub2-once haveged ipmievd issue-add-ssh-keys kexec-load
                  lunmask nfs nfs-blkmap rpcbind rpmconfigcheck serial-getty@ systemd-boot-check-no-failures
                    systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync
                      systemd-timesyncd tuned
  indirect          systemd-userdbd wickedd

------------------------------------------------------------
14. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
  root=UUID=7cece0ec-b93a-495a-a08e-02ba26514396
  splash=silent
  mitigations=auto
  quiet
  security=apparmor
  nohz_full=1-511

------------------------------------------------------------
15. cpupower frequency-info
  analyzing CPU 0:
    current policy: frequency should be within 800 MHz and 3.90 GHz.
                    The governor "powersave" may decide which speed to use
                    within this range.
```

(Continued on next page)

Platform Notes (Continued)

```
    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               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

------------------------------------------------------------
18. /sys/kernel/mm/transparent_hugepage
  defrag          always defer defer+madvise [madvise] never
  enabled         [always] madvise never
  hpage_pmd_size  2097152
  shmem_enabled   always within_size advise [never] deny force

------------------------------------------------------------
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
```

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Platform Notes (Continued)

```
------------------------------------------------------------
20. OS release
  From /etc/*-release /etc/*-version
  os-release SUSE Linux Enterprise Server 15 SP7

------------------------------------------------------------
21. Disk information
SPEC is set to: /home/cpu2026
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/nvme0n1p3 xfs   852G  140G  712G  17% /home

------------------------------------------------------------
22. /sys/devices/virtual/dmi/id
    Vendor:          IEIT SYSTEMS
    Product:         NF5280-M8-A0-R0-H0
    Product Family: Not specified
    Serial:          000000000

------------------------------------------------------------
23. dmidecode
  Additional information from dmidecode 3.6 follows.  WARNING: Use caution when you interpret this section.
  The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately
  determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the
   "DMTF SMBIOS" standard.
   Memory:
     8x Hynix HMCG98BDJHA380N 64 GB 4 rank 12800, configured at 8800
     16x Hynix HMCG98BDJHA383N 64 GB 4 rank 12800, configured at 8800


------------------------------------------------------------
24. BIOS
(This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor:       American Megatrends International, LLC.
   BIOS Version:      04.03.01
   BIOS Date:         02/03/2026
```

Compiler Version Notes

```
==============================================================================
C       | 782.lbm_r(base, peak)
------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
  Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 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 2026.0.0 Build 20260331
Copyright (C) 1985-2026 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 2026.0.0 Build 20260331
Copyright (C) 1985-2026 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
  2026.0.0 Build 20260331
Copyright (C) 1985-2026 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

Base Portability Flags

737.gmsh_r: `-fno-associative-math`

Base Optimization Flags

C benchmarks:
`-m64 -std=c18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500 -xgraniterapids -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 -Wl,-plugin-opt=-inline-threshold=1500 -xgraniterapids -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 -Wl,-plugin-opt=-inline-threshold=1500 -xgraniterapids -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 -Wl,-plugin-opt=-inline-threshold=1500 -xgraniterapids -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`

Peak Compiler Invocation

C benchmarks:
`icx`

C++ benchmarks:
`icpx`

Fortran benchmarks:
`ifx`

(Continued on next page)

Peak Compiler Invocation (Continued)

Benchmarks using both C and C++:
icpx icx

Peak Portability Flags

737.gmsh_r: -fno-associative-math

Peak Optimization Flags

C benchmarks:

782.lbm_r: basepeak = yes

C++ benchmarks:

731.astcenc_r: -m64 -std=c++17 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xHost(pass 1)
-ffp-model=fast -xgraniterapids(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

Fortran benchmarks:

722.palm_r: basepeak = yes

749.fotonik3d_r: basepeak = yes

765.roms_r: basepeak = yes

(Continued on next page)

Peak Optimization Flags (Continued)

Benchmarks using both C and C++:

709.cactus_r: `basepeak = yes`

737.gmsh_r: `-m64 -std=c++17 -std=c18 -Wl,-z,muldefs`
`-Wl,-plugin-opt=-inline-threshold=1500`
`-fprofile-generate`(pass 1)
`-fprofile-use=default.profdata`(pass 2) `-xHost`(pass 1)
`-ffp-model=fast -xgraniterapids`(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-ic2026-official-linux64-v1.1.html`
`http://www.spec.org/cpu2026/results/flags/IEIT-Platform-Settings-intel-V2.0.html`

You can also download the XML flags sources by saving the following links:
`http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.xml`
`http://www.spec.org/cpu2026/results/flags/IEIT-Platform-Settings-intel-V2.0.xml`

For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

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