



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

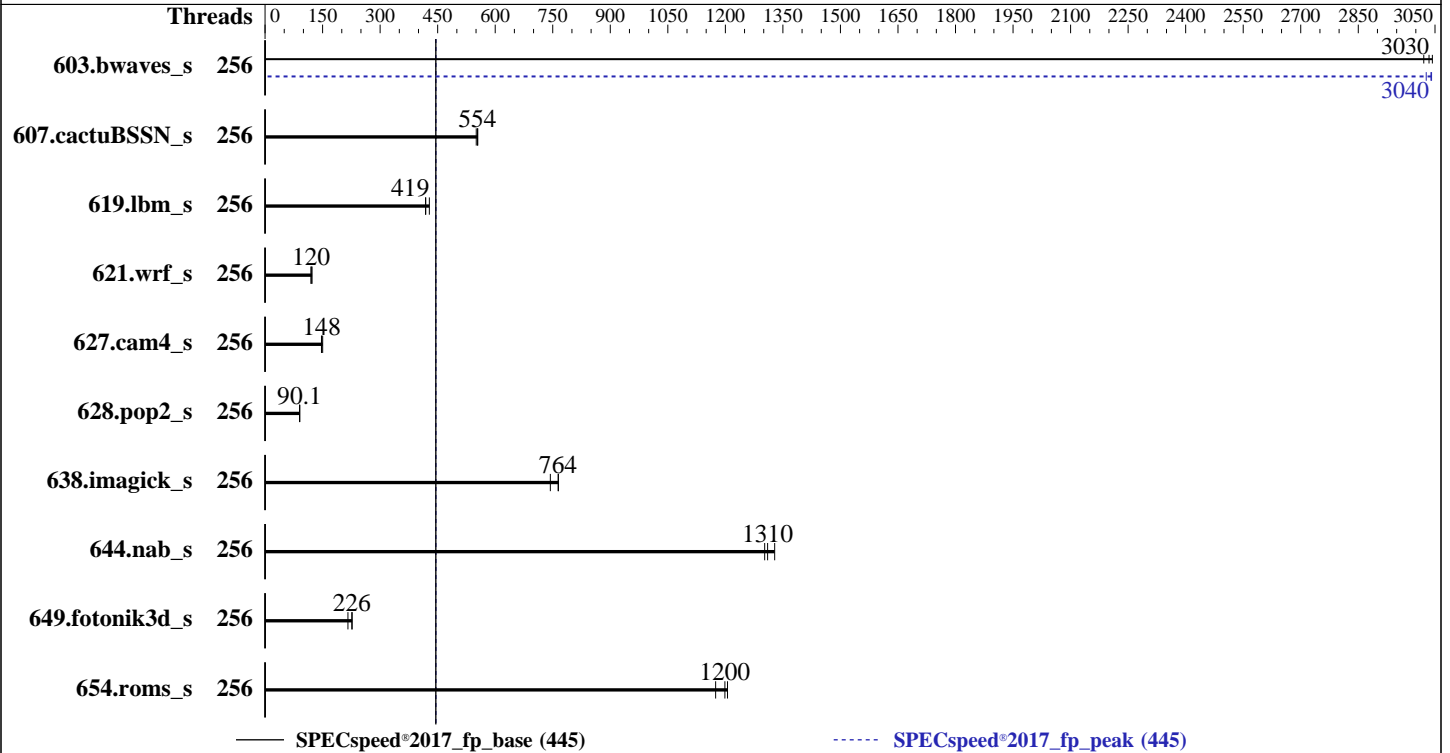
Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026



Hardware

CPU Name: Intel Xeon 6788P
 Max MHz: 3800
 Nominal: 2000
 Enabled: 1032 cores, 12 chips
 Orderable: 4, 8, 12, 16 chip(s)
 Cache L1: 64 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 336 MB I+D on chip per chip
 Other: None
 Memory: 6 TB (96 x 64 GB 2Rx4 PC5-6400B-R)
 Storage: 1 x 1.5 TB NVMe SSD
 Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP7
 Kernel 6.4.0-150700.53.31-default
 Compiler: C/C++: Version 2025.2 of Intel oneAPI DPC++/C++ Compiler for Linux;
 Fortran: Version 2025.2 of Intel Fortran Compiler for Linux;
 Parallel: Yes
 Firmware: HPE Firmware Bundle Version 1.0.308 01/21/2026 released Jan-2026
 File System: xfs
 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 and OS set to prefer performance at the cost of additional power usage



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Results Table

Benchmark	Base						Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	256	19.5	3020	19.4	3040	<u>19.4</u>	<u>3030</u>	256	<u>19.4</u>	<u>3040</u>	19.4	3040	19.5	3030
607.cactuBSSN_s	256	30.3	551	30.1	555	<u>30.1</u>	<u>554</u>	256	30.3	551	30.1	555	<u>30.1</u>	<u>554</u>
619.lbm_s	256	12.5	418	<u>12.5</u>	<u>419</u>	12.2	428	256	12.5	418	<u>12.5</u>	<u>419</u>	12.2	428
621.wrf_s	256	108	123	110	120	<u>110</u>	<u>120</u>	256	108	123	110	120	<u>110</u>	<u>120</u>
627.cam4_s	256	59.0	150	<u>60.1</u>	<u>148</u>	60.3	147	256	59.0	150	<u>60.1</u>	<u>148</u>	60.3	147
628.pop2_s	256	132	90.0	<u>132</u>	<u>90.1</u>	131	90.4	256	132	90.0	<u>132</u>	<u>90.1</u>	131	90.4
638.imagick_s	256	19.4	744	18.9	765	<u>18.9</u>	<u>764</u>	256	19.4	744	18.9	765	<u>18.9</u>	<u>764</u>
644.nab_s	256	<u>13.3</u>	<u>1310</u>	13.2	1330	13.4	1300	256	<u>13.3</u>	<u>1310</u>	13.2	1330	13.4	1300
649.fotonik3d_s	256	<u>40.3</u>	<u>226</u>	42.2	216	40.1	227	256	<u>40.3</u>	<u>226</u>	42.2	216	40.1	227
654.roms_s	256	13.4	1170	<u>13.1</u>	<u>1200</u>	13.1	1210	256	13.4	1170	<u>13.1</u>	<u>1200</u>	13.1	1210

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

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

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"
Transparent Huge Pages enabled by default
Prior to runcpu invocation
Filesystem page cache synced and cleared with:
sync; echo 3> /proc/sys/vm/drop_caches

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
KMP_AFFINITY = "granularity=fine,compact"
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 Redhat Enterprise Linux 8.0
NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown)
is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1)
is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2)
is mitigated in the system as tested and documented.
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

Platform Notes

BIOS Configuration:
Workload Profile set to HPC
Workload Profile set to Custom

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026

Platform Notes (Continued)

Power Regulator set to OS Control
 Energy Efficient Turbo set to Disabled
 Energy/Performance Bias set to Maximum Performance
 Intel Hyper-Threading set to Disabled
 Adjacent Sector Prefetch set to Disabled
 LLC Prefetch set to Enabled
 Last Level Cache (LLC) Dead Line Allocation set to Disabled
 Enhanced Processor Performance Profile set to Aggressive
 Memory Patrol Scrubbing set to Disabled
 Advanced Memory Protection set to Advanced ECC Support
 SR-IOV set to Disabled
 Intel Virtualization Technology (Intel VT, VT-x) set to Disabled
 Dynamic Prefetch Throttling set to Disabled
 Enabled Cores per Processor set to 64
 Page Policy set to Open Adaptive
 Sub-NUMA Clustering set to Auto

Sysinfo program /home/cpu2017/bin/sysinfo
 Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
 running on gnh-108 Sun Mar 1 17:13:06 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 254 (254.27+suse.179.g75eab961ea)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
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 -a
 Linux gnh-108 6.4.0-150700.53.31-default #1 SMP PREEMPT_DYNAMIC Tue Feb 3 14:18:17 UTC 2026 (73f3a11)
 x86_64 x86_64 x86_64 GNU/Linux

 2. w
 17:13:06 up 3:28, 2 users, load average: 150.59, 204.83, 218.79
 USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

```
test      ttyS0      -           13:48      3:16m 0.18s 0.02s login -- test
test      pts/0       -           13:48      3:16m 1.01s 0.16s sudo su
```

3. Username

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

4. ulimit -a

```
core file size          (blocks, -c) 0
data seg size           (kbytes, -d) unlimited
scheduling priority     (-e) 0
file size               (blocks, -f) unlimited
pending signals         (-i) 24378831
max locked memory       (kbytes, -l) 8192
max memory size         (kbytes, -m) unlimited
open files              (-n) 40000
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) 24378831
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=39
login -- test
-bash
sudo su
sudo su
su
bash
bash
runcpu --nobuild --action validate --define default-platform-flags -c
  ic2025.2-linux64-core-avx2-speed-20250605.cfg --define cores=256 --tune base,peak -o all --define
  drop_caches fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
  ic2025.2-linux64-core-avx2-speed-20250605.cfg --define cores=256 --tune base,peak --output_format all
  --define drop_caches --nopower --runmode speed --tune base:peak --size refspeed fpspeed --nopreenv
  --note-preenv --logfile $SPEC/tmp/CPU2017.016/templogs/preenv.fpspeed.016.0.log --lognum 016.0
  --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) 6788P
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     : 64
siblings       : 64
12 physical ids (chips)
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

768 processors (hardware threads)

physical id 0: core ids 0-31,64-95
 physical id 1: core ids 0-31,64-95
 physical id 2: core ids 0-31,64-95
 physical id 3: core ids 0-31,64-95
 physical id 4: core ids 0-31,64-95
 physical id 5: core ids 0-31,64-95
 physical id 6: core ids 0-31,64-95
 physical id 7: core ids 0-31,64-95
 physical id 8: core ids 0-31,64-95
 physical id 9: core ids 0-31,64-95
 physical id 10: core ids 0-31,64-95
 physical id 11: core ids 0-31,64-95

physical id 0: apicids
 0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,128,130,132,134,136,138,140,142,144,146,148,150,152,154,156,158,160,162,164,166,168,170,172,174,176,178,180,182,184,186,188,190

physical id 1: apicids
 256,258,260,262,264,266,268,270,272,274,276,278,280,282,284,286,288,290,292,294,296,298,300,302,304,306,308,310,312,314,316,318,384,386,388,390,392,394,396,398,400,402,404,406,408,410,412,414,416,418,420,422,424,426,428,430,432,434,436,438,440,442,444,446

physical id 2: apicids
 512,514,516,518,520,522,524,526,528,530,532,534,536,538,540,542,544,546,548,550,552,554,556,558,560,562,564,566,568,570,572,574,640,642,644,646,648,650,652,654,656,658,660,662,664,666,668,670,672,674,676,678,680,682,684,686,688,690,692,694,696,698,700,702

physical id 3: apicids
 768,770,772,774,776,778,780,782,784,786,788,790,792,794,796,798,800,802,804,806,808,810,812,814,816,818,820,822,824,826,828,830,896,898,900,902,904,906,908,910,912,914,916,918,920,922,924,926,928,930,932,934,936,938,940,942,944,946,948,950,952,954,956,958

physical id 4: apicids
 1024,1026,1028,1030,1032,1034,1036,1038,1040,1042,1044,1046,1048,1050,1052,1054,1056,1058,1060,1062,1064,1066,1068,1070,1072,1074,1076,1078,1080,1082,1084,1086,1152,1154,1156,1158,1160,1162,1164,1166,1168,1170,1172,1174,1176,1178,1180,1182,1184,1186,1188,1190,1192,1194,1196,1198,1200,1202,1204,1206,1208,1210,1212,1214

physical id 5: apicids
 1280,1282,1284,1286,1288,1290,1292,1294,1296,1298,1300,1302,1304,1306,1308,1310,1312,1314,1316,1318,1320,1322,1324,1326,1328,1330,1332,1334,1336,1338,1340,1342,1408,1410,1412,1414,1416,1418,1420,1422,1424,1426,1428,1430,1432,1434,1436,1438,1440,1442,1444,1446,1448,1450,1452,1454,1456,1458,1460,1462,1464,1466,1468,1470

physical id 6: apicids
 1536,1538,1540,1542,1544,1546,1548,1550,1552,1554,1556,1558,1560,1562,1564,1566,1568,1570,1572,1574,1576,1578,1580,1582,1584,1586,1588,1590,1592,1594,1596,1598,1664,1666,1668,1670,1672,1674,1676,1678,1680,1682,1684,1686,1688,1690,1692,1694,1696,1698,1700,1702,1704,1706,1708,1710,1712,1714,1716,1718,1720,1722,1724,1726

physical id 7: apicids
 1792,1794,1796,1798,1800,1802,1804,1806,1808,1810,1812,1814,1816,1818,1820,1822,1824,1826,1828,1830,1832,1834,1836,1838,1840,1842,1844,1846,1848,1850,1852,1854,1920,1922,1924,1926,1928,1930,1932,1934,1936,1938,1940,1942,1944,1946,1948,1950,1952,1954,1956,1958,1960,1962,1964,1966,1968,1970,1972,1974,1976,1978,1980,1982

physical id 8: apicids
 2048,2050,2052,2054,2056,2058,2060,2062,2064,2066,2068,2070,2072,2074,2076,2078,2080,2082,2084,2086,2088,2090,2092,2094,2096,2098,2100,2102,2104,2106,2108,2110,2176,2178,2180,2182,2184,2186,2188,2190,2192,2194,2196,2198,2200,2202,2204,2206,2208,2210,2212,2214,2216,2218,2220,2222,2224,2226,2228,2230,2232,2234,2236,2238

physical id 9: apicids
 2304,2306,2308,2310,2312,2314,2316,2318,2320,2322,2324,2326,2328,2330,2332,2334,2336,2338,2340,2342,2344,2346,2348,2350,2352,2354,2356,2358,2360,2362,2364,2366,2432,2434,2436,2438,2440,2442,2444,2446,2448,2450,2452,2454,2456,2458,2460,2462,2464,2466,2468,2470,2472,2474,2476,2478,2480,2482,2484,2486,2488,2490,2492,2494

physical id 10: apicids

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250 (2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

2560, 2562, 2564, 2566, 2568, 2570, 2572, 2574, 2576, 2578, 2580, 2582, 2584, 2586, 2588, 2590, 2592, 2594, 2596, 2598, 2600, 2602, 2604, 2606, 2608, 2610, 2612, 2614, 2616, 2618, 2620, 2622, 2688, 2690, 2692, 2694, 2696, 2698, 2700, 2702, 2704, 2706, 2708, 2710, 2712, 2714, 2716, 2718, 2720, 2722, 2724, 2726, 2728, 2730, 2732, 2734, 2736, 2738, 2740, 2742, 2744, 2746, 2748, 2750

physical id 11: apicids

2816, 2818, 2820, 2822, 2824, 2826, 2828, 2830, 2832, 2834, 2836, 2838, 2840, 2842, 2844, 2846, 2848, 2850, 2852, 2854, 2856, 2858, 2860, 2862, 2864, 2866, 2868, 2870, 2872, 2874, 2876, 2878, 2944, 2946, 2948, 2950, 2952, 2954, 2956, 2958, 2960, 2962, 2964, 2966, 2968, 2970, 2972, 2974, 2976, 2978, 2980, 2982, 2984, 2986, 2988, 2990, 2992, 2994, 2996, 2998, 3000, 3002, 3004, 3006

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):                768
On-line CPU(s) list:   0-767
Vendor ID:             GenuineIntel
Model name:            Intel(R) Xeon(R) 6788P
CPU family:            6
Model:                 173
Thread(s) per core:   1
Core(s) per socket:   64
Socket(s):             12
Stepping:              1
CPU(s) scaling MHz:   21%
CPU max MHz:           3800.0000
CPU min MHz:           800.0000
BogoMIPS:              3999.53
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
pdpelgb rdtscp lm constant_tsc arch_perfmon pebs bts rep_good nopl
xtopology nonstop_tsc cpuid aperfmperf pni pclmulqdq dtes64
monitor 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 bmil hle avx2 smep bmi2 erms
invpcid rtm 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_vpopttdq
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
L1d cache:            36 MiB (768 instances)
L1i cache:            48 MiB (768 instances)
L2 cache:             1.5 GiB (768 instances)
L3 cache:             3.9 GiB (12 instances)
NUMA node(s):         24
NUMA node0 CPU(s):   0-31

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

```

NUMA node1 CPU(s):      32-63
NUMA node2 CPU(s):      64-95
NUMA node3 CPU(s):      96-127
NUMA node4 CPU(s):      128-159
NUMA node5 CPU(s):      160-191
NUMA node6 CPU(s):      192-223
NUMA node7 CPU(s):      224-255
NUMA node8 CPU(s):      256-287
NUMA node9 CPU(s):      288-319
NUMA node10 CPU(s):     320-351
NUMA node11 CPU(s):     352-383
NUMA node12 CPU(s):     384-415
NUMA node13 CPU(s):     416-447
NUMA node14 CPU(s):     448-479
NUMA node15 CPU(s):     480-511
NUMA node16 CPU(s):     512-543
NUMA node17 CPU(s):     544-575
NUMA node18 CPU(s):     576-607
NUMA node19 CPU(s):     608-639
NUMA node20 CPU(s):     640-671
NUMA node21 CPU(s):     672-703
NUMA node22 CPU(s):     704-735
NUMA node23 CPU(s):     736-767
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
Vulnerability Spectre v1: Mitigation; usercopy/swaps 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	36M	12	Data	1	64	1	64
L1i	64K	48M	16	Instruction	1	64	1	64
L2	2M	1.5G	16	Unified	2	2048	1	64
L3	336M	3.9G	16	Unified	3	344064	1	64

8. numactl --hardware

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

available: 24 nodes (0-23)

```

node 0 cpus: 0-31
node 0 size: 256990 MB
node 0 free: 251236 MB
node 1 cpus: 32-63
node 1 size: 250021 MB
node 1 free: 248618 MB

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026

Platform Notes (Continued)

```

node 2 cpus: 64-95
node 2 size: 258039 MB
node 2 free: 254869 MB
node 3 cpus: 96-127
node 3 size: 250037 MB
node 3 free: 248898 MB
node 4 cpus: 128-159
node 4 size: 258039 MB
node 4 free: 255815 MB
node 5 cpus: 160-191
node 5 size: 250037 MB
node 5 free: 243130 MB
node 6 cpus: 192-223
node 6 size: 258039 MB
node 6 free: 250093 MB
node 7 cpus: 224-255
node 7 size: 250037 MB
node 7 free: 244836 MB
node 8 cpus: 256-287
node 8 size: 258000 MB
node 8 free: 257704 MB
node 9 cpus: 288-319
node 9 size: 250037 MB
node 9 free: 249812 MB
node 10 cpus: 320-351
node 10 size: 258039 MB
node 10 free: 257742 MB
node 11 cpus: 352-383
node 11 size: 250037 MB
node 11 free: 249785 MB
node 12 cpus: 384-415
node 12 size: 258039 MB
node 12 free: 257843 MB
node 13 cpus: 416-447
node 13 size: 250037 MB
node 13 free: 249771 MB
node 14 cpus: 448-479
node 14 size: 258039 MB
node 14 free: 257817 MB
node 15 cpus: 480-511
node 15 size: 250037 MB
node 15 free: 249818 MB
node 16 cpus: 512-543
node 16 size: 258039 MB
node 16 free: 257663 MB
node 17 cpus: 544-575
node 17 size: 250037 MB
node 17 free: 249691 MB
node 18 cpus: 576-607
node 18 size: 258039 MB
node 18 free: 257741 MB
node 19 cpus: 608-639
node 19 size: 250037 MB
node 19 free: 249676 MB
node 20 cpus: 640-671
node 20 size: 258039 MB
node 20 free: 257733 MB
node 21 cpus: 672-703
node 21 size: 250037 MB
node 21 free: 249651 MB

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

```

node 22 cpus: 704-735
node 22 size: 258039 MB
node 22 free: 257677 MB
node 23 cpus: 736-767
node 23 size: 248967 MB
node 23 free: 248635 MB
node distances:
node  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
0: 10 12 16 16 16 16 18 18 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
1: 12 10 16 16 16 16 18 18 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
2: 16 16 10 12 18 18 16 16 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
3: 16 16 12 10 18 18 16 16 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
4: 16 16 18 18 10 12 16 16 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
5: 16 16 18 18 12 10 16 16 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
6: 18 18 16 16 16 16 10 12 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
7: 18 18 16 16 16 16 12 10 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40
8: 40 40 40 40 40 40 40 40 10 12 16 16 16 16 18 18 40 40 40 40 40 40 40
9: 40 40 40 40 40 40 40 40 12 10 16 16 16 16 18 18 40 40 40 40 40 40 40
10: 40 40 40 40 40 40 40 40 16 16 10 12 18 18 16 16 40 40 40 40 40 40 40
11: 40 40 40 40 40 40 40 40 16 16 12 10 18 18 16 16 40 40 40 40 40 40 40
12: 40 40 40 40 40 40 40 40 16 16 18 18 10 12 16 16 40 40 40 40 40 40 40
13: 40 40 40 40 40 40 40 40 16 16 18 18 12 10 16 16 40 40 40 40 40 40 40
14: 40 40 40 40 40 40 40 40 18 18 16 16 16 16 10 12 40 40 40 40 40 40 40
15: 40 40 40 40 40 40 40 40 18 18 16 16 16 16 12 10 40 40 40 40 40 40 40
16: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 10 12 16 16 16 16 18 18
17: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 12 10 16 16 16 18 18
18: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 16 16 10 12 18 18 16 16
19: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 16 16 12 10 18 18 16 16
20: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 16 16 18 18 10 12 16 16
21: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 16 16 18 18 12 10 16 16
22: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 18 18 16 16 16 16 10 12
23: 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 18 18 16 16 16 16 12 10

```

```

9. /proc/meminfo
MemTotal: 6241018480 kB

```

```

10. who -r
run-level 3 Mar 1 13:48

```

```

11. Systemd service manager version: systemd 254 (254.27+suse.179.g75eab961ea)
Default Target Status
multi-user running

```

```

12. Services, from systemctl list-unit-files
STATE UNIT FILES
enabled YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd bluetooth chronyd
cpuset_cpunodemap cpuset_memory_spread cron dcd dcdchkgracefulshutdown dcdshutdown
display-manager getty@ hpe-auto-config hpe_irqbalance iscsi issue-generator kbdsettings
kdump kdump-early kdump-notify klog lvm2-monitor nscd postfix purge-kernels rollback
rsyslog smartd sshd systemd-pstore vgauthd vmblock-fuse vmtoolsd vsftpd wicked
wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
enabled-runtime systemd-fsck-root systemd-remount-fs
disabled accounts-daemon amavis apache2 apache2@ autofs autoyast-initscripts blk-availability
bluetooth-mesh boot-sysctl ca-certificates certmonger chrony-wait clamd clamonacc
console-getty cups cups-browsed cxl-monitor debug-shell ebttables exchange-bmc-os-info
firewalld fsidd gpm grub2-once haveged ipmi ipmievd irqbalance iscsi-init iscsid

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026

Platform Notes (Continued)

```

indirect
issue-add-ssh-keys kexec-load lunmask man-db-create mariadb mariadb@ multipathd named
ndctl-monitor nfs nfs-blkmap nfs-server nfsserver nmb ostree-remount ostree-state-overlay@
rpcbind rpmconfigcheck rsyncd rtkit-daemon samba-bgqd smartd_generate_opts smb snmpd
snmptrapd spamd spampd speech-dispatcherd srp_daemon srp_daemon_port@ sysstat
sysstat_collect sysstat_summary systemd-boot-check-no-failures systemd-confext
systemd-network-generator systemd-sysexit systemd-time-wait-sync systemd-timesyncd tuned
udisks2 update-system-flatpaks upower vncserver@ winbind wsdd ypbind
serial-getty@ systemd-userdbd tftpd wickedd

```

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

```

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.53.31-default
root=UUID=8f7dbb2d-77d8-40d9-b606-6b60ffd4e6ad
rd.auto=1
console=ttyS0,115200n8
selinux=0
security=
splash=silent
mitigations=auto
console=ttyS0,115200
udev.children-max=512
nmi_watchdog=0
uv_nmi.action=kdump
add_efi_memmap
tsc=nowatchdog
earlyprintk=ttyS0,115200
log_buf_len=8M
numa_balancing=disable
crashkernel=1G,high
watchdog_thresh=60
workqueue.watchdog_thresh=120

```

14. cpupower frequency-info

```

analyzing CPU 170:
  current policy: frequency should be within 800 MHz and 3.80 GHz.
                   The governor "performance" may decide which speed to use
                   within this range.

boost state support:
  Supported: yes
  Active: yes

```

15. tuned-adm active

No current active profile.

16. sysctl

```

kernel.numa_balancing          0
kernel.randomize_va_space      2
vm.compaction_proactiveness    20
vm.dirty_background_bytes      0
vm.dirty_background_ratio      10
vm.dirty_bytes                 0
vm.dirty_expire_centisecs      3000
vm.dirty_ratio                 20
vm.dirty_writeback_centisecs   500
vm.dirtytime_expire_seconds    43200
vm.extfrag_threshold           500
vm.min_unmapped_ratio          1

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

```

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+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

```

```

-----
19. OS release
From /etc/*-release /etc/*-version
os-release           SUSE Linux Enterprise Server 15 SP7
hpe-foundation-release HPE Foundation Software 2.5.9, Build 757.1570.260209T0200.a.sles15sp7hpe-260209T0200

```

```

-----
20. Disk information
SPEC is set to: /home/cpu2017
Filesystem  Type  Size  Used Avail Use% Mounted on
/dev/nvme1n1p2 xfs  1.5T  64G  1.4T   5% /

```

```

-----
21. /sys/devices/virtual/dmi/id
Vendor:      HPE
Product:     Compute Scale-up Server 3250
Product Family: 1590PID03030202
Serial:      5UFD3H1626-000

```

```

-----
22. 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:
 46x Samsung M321R8GA0EB2-CCPKC 64 GB 2 rank 6400
 50x Samsung M321R8GA0EB2-CCPWC 64 GB 2 rank 6400

```

```

-----
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:      HPE
BIOS Version:     Bundle:1.0.308-20260123_101935 SFW:010.001.004.000.2601210240

```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Mar-2026
Hardware Availability: Apr-2026
Software Availability: Feb-2026

Platform Notes (Continued)

BIOS Date: 01/21/2026

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 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

=====
C++, C, Fortran | 607.cactuBSSN_s(base, peak)
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.

=====
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 2025.2.0 Build 20250605
Copyright (C) 1985-2025 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 2025.2.0 Build 20250605
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2025.2.0 Build 20250605
Copyright (C) 1985-2025 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



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026

Base Portability Flags

```

603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_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

```

Base Optimization Flags

C benchmarks:

```

-w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX2 -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

```

Fortran benchmarks:

```

-w -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xCORE-AVX2 -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

```

Benchmarks using both Fortran and C:

```

-w -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX2 -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -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 -xCORE-AVX2 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

```



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026

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

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 -xCORE-AVX2 -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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

Compute Scale-up Server 3250

(2.00 GHz, Intel Xeon 6788P)

SPECspeed®2017_fp_base = 445

SPECspeed®2017_fp_peak = 445

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Mar-2026

Hardware Availability: Apr-2026

Software Availability: Feb-2026

Peak Optimization Flags (Continued)

627.cam4_s: basepeak = yes

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

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

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-CSS-GNR-rev1.3.html>

<http://www.spec.org/cpu2017/flags/Intel-ic2025-official-linux64.html>

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

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-CSS-GNR-rev1.3.xml>

<http://www.spec.org/cpu2017/flags/Intel-ic2025-official-linux64.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 2026-03-01 18:13:06-0500.

Report generated on 2026-04-22 06:55:20 by CPU2017 PDF formatter v6716.

Originally published on 2026-04-21.