



# SPEC® CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Hewlett Packard Enterprise

(Test Sponsor: HPE)

### Superdome Flex

(2.50 GHz, Intel Xeon Platinum 8180)

SPECrate2017\_fp\_base = 1840

SPECrate2017\_fp\_peak = Not Run

CPU2017 License: 3

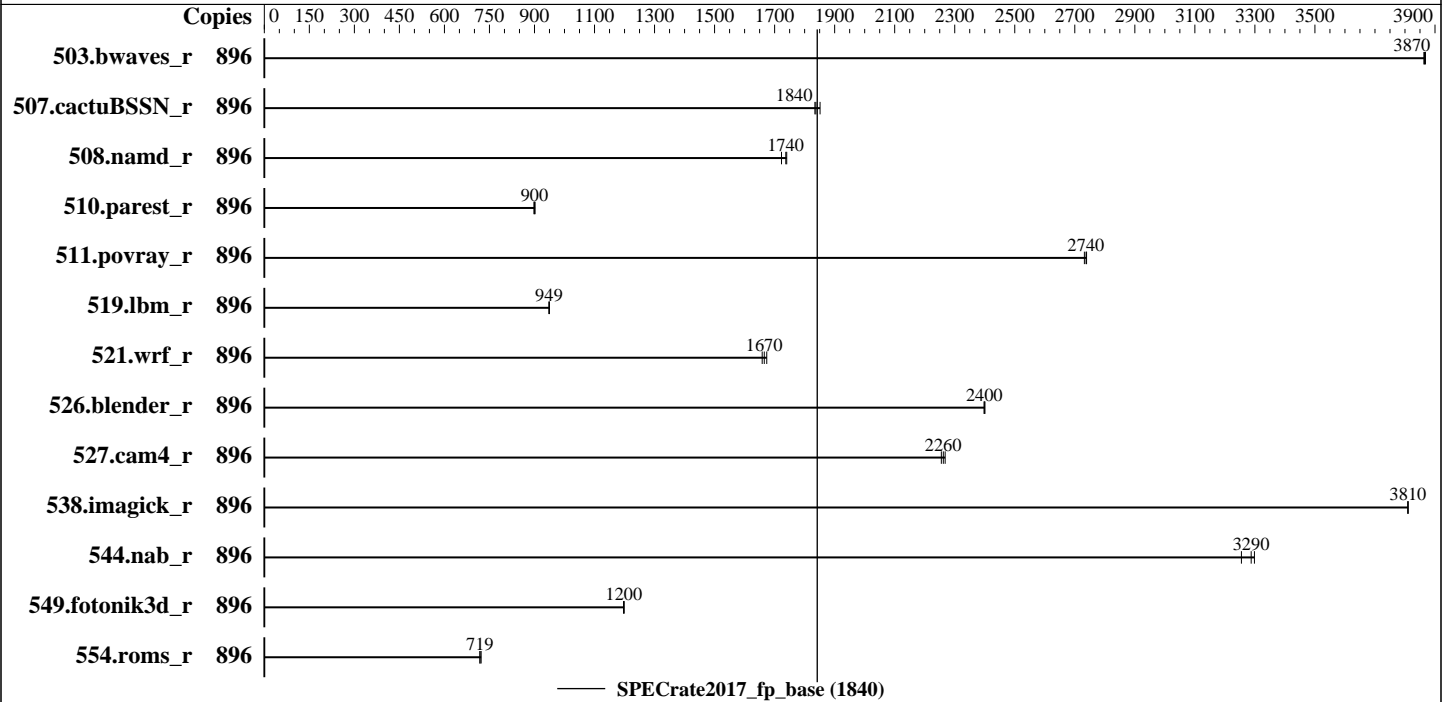
Test Sponsor: HPE

Tested by: HPE

Test Date: Dec-2017

Hardware Availability: Mar-2018

Software Availability: Mar-2018



### Hardware

CPU Name: Intel Xeon Platinum 8180  
 Max MHz.: 3800  
 Nominal: 2500  
 Enabled: 448 cores, 16 chips, 2 threads/core  
 Orderable: 4 to 32 chips  
 Cache L1: 32 KB I + 32 KB D on chip per core  
 L2: 1 MB I+D on chip per core  
 L3: 38.5 MB I+D on chip per chip  
 Other: None  
 Memory: 6 TB (192 x 32 GB 2Rx4 PC4-2666V-R)  
 Storage: 6 TB tmpfs  
 Other: None

### Software

OS: SUSE Linux Enterprise Server 12 (x86\_64) SP3, Kernel 4.4.92-6.30-default  
 Compiler: C/C++: Version 18.0.0.128 of Intel C/C++ Compiler for Linux;  
 Fortran: Version 18.0.0.128 of Intel Fortran Compiler for Linux  
 Parallel: No  
 Firmware: HPE Firmware Bundle Version 2.3.110 released Dec-2017  
 File System: tmpfs  
 System State: Run level 3 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: Not Applicable  
 Other: HPE Foundation Software 1.0, Build 717a130.sles12sp3-1710052000



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## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
503.bwaves_r	896	2323	3870	2326	3860	<u>2325</u>	<u>3870</u>							
507.cactuBSSN_r	896	613	1850	618	1830	<u>617</u>	<u>1840</u>							
508.namd_r	896	494	1720	489	1740	<u>490</u>	<u>1740</u>							
510.parest_r	896	<u>2604</u>	<u>900</u>	2598	902	2610	898							
511.povray_r	896	764	2740	766	2730	<u>764</u>	<u>2740</u>							
519.lbm_r	896	994	950	<u>995</u>	<u>949</u>	996	949							
521.wrf_r	896	<u>1205</u>	<u>1670</u>	1210	1660	1199	1670							
526.blender_r	896	568	2400	569	2400	<u>569</u>	<u>2400</u>							
527.cam4_r	896	695	2260	<u>693</u>	<u>2260</u>	691	2270							
538.imagick_r	896	585	3810	585	3810	<u>585</u>	<u>3810</u>							
544.nab_r	896	463	3260	457	3300	<u>459</u>	<u>3290</u>							
549.fotonik3d_r	896	2913	1200	2918	1200	<u>2915</u>	<u>1200</u>							
554.roms_r	896	<u>1981</u>	<u>719</u>	1971	722	1983	718							

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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"  
Transparent Huge Pages enabled with:  
echo always > /sys/kernel/mm/transparent\_hugepage/enabled  
Prior to runcpu invocation  
Filesystem page cache synced and cleared with:  
sync; echo 3> /proc/sys/vm/drop\_caches  
The tmpfs filesystem was set up with:  
mkdir -p /dev/shm/cpu2017-16S  
mount -t tmpfs -o size=6144G,rw tmpfs /dev/shm/cpu2017-16S

## General Notes

Environment variables set by runcpu before the start of the run:  
LD\_LIBRARY\_PATH = "/dev/shm/cpu2017-16S/lib/ia32:/dev/shm/cpu2017-16S/lib/intel64"  
LD\_LIBRARY\_PATH = "\$LD\_LIBRARY\_PATH:/dev/shm/cpu2017-16S/je5.0.1-32:/dev/shm/cpu2017-16S/je5.0.1-64"  
Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM  
memory using Redhat Enterprise Linux 7.4



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## Platform Notes

Rack Management Controller setting:  
modify npar pnum=0 ras=hpc

Sysinfo program /dev/shm/cpu2017-16S/bin/sysinfo  
Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f  
running on uv4test40-sys Mon Dec 18 22:44:08 2017

SUT (System Under Test) info as seen by some common utilities.  
For more information on this section, see  
<https://www.spec.org/cpu2017/Docs/config.html#sysinfo>

From /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) Platinum 8180 CPU @ 2.50GHz
 16 "physical id"s (chips)
 896 "processors"
```

cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)

```
cpu cores      : 28
siblings       : 56
physical 0:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 1:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 2:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 3:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 4:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 5:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 6:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 7:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 8:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 9:    cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26 27
                28 29 30
physical 10:   cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26
                27 28 29 30
physical 11:   cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26
                27 28 29 30
physical 12:   cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26
                27 28 29 30
physical 13:   cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26
                27 28 29 30
```

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## Platform Notes (Continued)

physical 14: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26  
27 28 29 30  
physical 15: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24 25 26  
27 28 29 30

From lscpu:

Architecture: x86\_64  
CPU op-mode(s): 32-bit, 64-bit  
Byte Order: Little Endian  
CPU(s): 896  
On-line CPU(s) list: 0-895  
Thread(s) per core: 2  
Core(s) per socket: 28  
Socket(s): 16  
NUMA node(s): 16  
Vendor ID: GenuineIntel  
CPU family: 6  
Model: 85  
Model name: Intel(R) Xeon(R) Platinum 8180 CPU @ 2.50GHz  
Stepping: 4  
CPU MHz: 3800.000  
CPU max MHz: 3800.0000  
CPU min MHz: 1000.0000  
BogoMIPS: 5000.46  
Virtualization: VT-x  
NUMA node0 CPU(s): 0-27,448-475  
NUMA node1 CPU(s): 28-55,476-503  
NUMA node2 CPU(s): 56-83,504-531  
NUMA node3 CPU(s): 84-111,532-559  
NUMA node4 CPU(s): 112-139,560-587  
NUMA node5 CPU(s): 140-167,588-615  
NUMA node6 CPU(s): 168-195,616-643  
NUMA node7 CPU(s): 196-223,644-671  
NUMA node8 CPU(s): 224-251,672-699  
NUMA node9 CPU(s): 252-279,700-727  
NUMA node10 CPU(s): 280-307,728-755  
NUMA node11 CPU(s): 308-335,756-783  
NUMA node12 CPU(s): 336-363,784-811  
NUMA node13 CPU(s): 364-391,812-839  
NUMA node14 CPU(s): 392-419,840-867  
NUMA node15 CPU(s): 420-447,868-895

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  
aperfperf eagerfpu pni pclmulqdq dtes64 monitor ds\_cpl vmx smx est tm2 ssse3 sdbg  
fma cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic movbe popcnt tsc\_deadline\_timer aes  
xsave avx fl6c rdrand lahf\_lm abm 3dnowprefetch ida arat epb pln pts dtherm intel\_pt

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## Platform Notes (Continued)

tpr\_shadow vnmi flexpriority ept vpid fsgsbase tsc\_adjust bmil hle avx2 smep bmi2  
erms invpcid rtm cqm mpx avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd  
avx512bw avx512vl xsaveopt xsavec xgetbv1 cqm\_llc cqm\_occup\_llc pku ospke

```
/proc/cpuinfo cache data
cache size : 39424 KB
```

From numactl --hardware WARNING: a numactl 'node' might or might not correspond to a physical chip.

```
available: 16 nodes (0-15)
node 0 cpus: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469
470 471 472 473 474 475
node 0 size: 372922 MB
node 0 free: 360689 MB
node 1 cpus: 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
53 54 55 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494
495 496 497 498 499 500 501 502 503
node 1 size: 375250 MB
node 1 free: 364437 MB
node 2 cpus: 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80
81 82 83 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522
523 524 525 526 527 528 529 530 531
node 2 size: 375250 MB
node 2 free: 364799 MB
node 3 cpus: 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105
106 107 108 109 110 111 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547
548 549 550 551 552 553 554 555 556 557 558 559
node 3 size: 375250 MB
node 3 free: 364486 MB
node 4 cpus: 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129
130 131 132 133 134 135 136 137 138 139 560 561 562 563 564 565 566 567 568 569 570 571
572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587
node 4 size: 375250 MB
node 4 free: 364836 MB
node 5 cpus: 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157
158 159 160 161 162 163 164 165 166 167 588 589 590 591 592 593 594 595 596 597 598 599
600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615
node 5 size: 375250 MB
node 5 free: 364837 MB
node 6 cpus: 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185
186 187 188 189 190 191 192 193 194 195 616 617 618 619 620 621 622 623 624 625 626 627
628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643
node 6 size: 375250 MB
node 6 free: 364843 MB
node 7 cpus: 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213
214 215 216 217 218 219 220 221 222 223 644 645 646 647 648 649 650 651 652 653 654 655
```

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## Platform Notes (Continued)

```

656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671
node 7 size: 375250 MB
node 7 free: 364830 MB
node 8 cpus: 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241
242 243 244 245 246 247 248 249 250 251 672 673 674 675 676 677 678 679 680 681 682 683
684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699
node 8 size: 375250 MB
node 8 free: 364845 MB
node 9 cpus: 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269
270 271 272 273 274 275 276 277 278 279 700 701 702 703 704 705 706 707 708 709 710 711
712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727
node 9 size: 375250 MB
node 9 free: 364827 MB
node 10 cpus: 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297
298 299 300 301 302 303 304 305 306 307 728 729 730 731 732 733 734 735 736 737 738 739
740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755
node 10 size: 375250 MB
node 10 free: 364821 MB
node 11 cpus: 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325
326 327 328 329 330 331 332 333 334 335 756 757 758 759 760 761 762 763 764 765 766 767
768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783
node 11 size: 375250 MB
node 11 free: 364840 MB
node 12 cpus: 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353
354 355 356 357 358 359 360 361 362 363 784 785 786 787 788 789 790 791 792 793 794 795
796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811
node 12 size: 375250 MB
node 12 free: 364138 MB
node 13 cpus: 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381
382 383 384 385 386 387 388 389 390 391 812 813 814 815 816 817 818 819 820 821 822 823
824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839
node 13 size: 375250 MB
node 13 free: 364435 MB
node 14 cpus: 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409
410 411 412 413 414 415 416 417 418 419 840 841 842 843 844 845 846 847 848 849 850 851
852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867
node 14 size: 375250 MB
node 14 free: 364496 MB
node 15 cpus: 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437
438 439 440 441 442 443 444 445 446 447 868 869 870 871 872 873 874 875 876 877 878 879
880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895
node 15 size: 375241 MB
node 15 free: 364012 MB
node distances:
node  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15
  0: 10 16 16 24 43 43 43 43 43 43 43 43 43 43 43 43
  1: 16 10 24 16 43 43 43 43 43 43 43 43 43 43 43 43

```

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2:	16	24	10	16	43	43	43	43	43	43	43	43	43	43	43	43	43
3:	24	16	16	10	43	43	43	43	43	43	43	43	43	43	43	43	43
4:	43	43	43	43	10	16	16	24	43	43	43	43	43	43	43	43	43
5:	43	43	43	43	16	10	24	16	43	43	43	43	43	43	43	43	43
6:	43	43	43	43	16	24	10	16	43	43	43	43	43	43	43	43	43
7:	43	43	43	43	24	16	16	10	43	43	43	43	43	43	43	43	43
8:	43	43	43	43	43	43	43	43	10	16	16	24	43	43	43	43	43
9:	43	43	43	43	43	43	43	43	16	10	24	16	43	43	43	43	43
10:	43	43	43	43	43	43	43	43	16	24	10	16	43	43	43	43	43
11:	43	43	43	43	43	43	43	43	24	16	16	10	43	43	43	43	43
12:	43	43	43	43	43	43	43	43	43	43	43	10	16	16	24	16	24
13:	43	43	43	43	43	43	43	43	43	43	43	16	10	24	16	16	24
14:	43	43	43	43	43	43	43	43	43	43	43	16	24	10	16	16	24
15:	43	43	43	43	43	43	43	43	43	43	43	24	16	16	10	16	24

From /proc/meminfo

MemTotal: 6145710096 kB  
HugePages\_Total: 0  
Hugepagesize: 2048 kB

/usr/bin/lsb\_release -d

SUSE Linux Enterprise Server 12 SP3

From /etc/\*release\* /etc/\*version\*

SuSE-release:

SUSE Linux Enterprise Server 12 (x86\_64)

VERSION = 12

PATCHLEVEL = 3

# This file is deprecated and will be removed in a future service pack or release.

# Please check /etc/os-release for details about this release.

hpe-foundation-release: HPE Foundation Software 1.0, Build

717a130.sles12sp3-1710052000

os-release:

NAME="SLES"

VERSION="12-SP3"

VERSION\_ID="12.3"

PRETTY\_NAME="SUSE Linux Enterprise Server 12 SP3"

ID="sles"

ANSI\_COLOR="0;32"

CPE\_NAME="cpe:/o:suse:sles:12:sp3"

uname -a:

Linux uv4test40-sys 4.4.92-6.30-default #1 SMP Mon Dec 4 08:08:30 UTC 2017 (1fb0e00)  
x86\_64 x86\_64 x86\_64 GNU/Linux

run-level 3 Dec 17 01:00

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## Platform Notes (Continued)

SPEC is set to: /dev/shm/cpu2017-16S

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
tmpfs	tmpfs	6.0T	163G	5.9T	3%	/dev/shm/cpu2017-16S

Additional information from dmidecode 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.

BIOS HPE IP147.006.000.143.000.1712051837 12/05/2017

Memory:

192x Hynix HMA84GR7AFR4N-VK 32 GB 2 rank 2666

(End of data from sysinfo program)

## Compiler Version Notes

=====  
CC 519.lbm\_r(base) 538.imagick\_r(base) 544.nab\_r(base)  
-----

icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
CXXC 508.namd\_r(base) 510.parest\_r(base)  
-----

icpc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
CC 511.povray\_r(base) 526.blender\_r(base)  
-----

icpc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
FC 507.cactuBSSN\_r(base)  
-----

icpc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
icc (ICC) 18.0.0 20170811  
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## Compiler Version Notes (Continued)

ifort (IFORT) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====  
FC 503.bwaves\_r(base) 549.fotonik3d\_r(base) 554.roms\_r(base)

ifort (IFORT) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====  
CC 521.wrf\_r(base) 527.cam4\_r(base)

ifort (IFORT) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

## Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

ifort icc

Benchmarks using both C and C++:

icpc icc

Benchmarks using Fortran, C, and C++:

icpc icc ifort

## Base Portability Flags

503.bwaves\_r: -DSPEC\_LP64

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SPECrate2017\_fp\_peak = Not Run

**CPU2017 License:** 3

**Test Sponsor:** HPE

**Tested by:** HPE

**Test Date:** Dec-2017

**Hardware Availability:** Mar-2018

**Software Availability:** Mar-2018

## Base Portability Flags (Continued)

```

507.cactuBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64
510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
526.blender_r: -DSPEC_LP64 -DSPEC_LINUX -funsigned-char
527.cam4_r: -DSPEC_LP64 -DSPEC_CASE_FLAG
538.imagick_r: -DSPEC_LP64
544.nab_r: -DSPEC_LP64
549.fotonik3d_r: -DSPEC_LP64
554.roms_r: -DSPEC_LP64

```

## Base Optimization Flags

C benchmarks:

```

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

```

C++ benchmarks:

```

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

```

Fortran benchmarks:

```

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

```

Benchmarks using both Fortran and C:

```

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

```

Benchmarks using both C and C++:

```

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

```

Benchmarks using Fortran, C, and C++:

```

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

```



# SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Hewlett Packard Enterprise**

(Test Sponsor: HPE)

**Superdome Flex**

(2.50 GHz, Intel Xeon Platinum 8180)

SPECrate2017\_fp\_base = 1840

SPECrate2017\_fp\_peak = Not Run

**CPU2017 License:** 3

**Test Sponsor:** HPE

**Tested by:** HPE

**Test Date:** Dec-2017

**Hardware Availability:** Mar-2018

**Software Availability:** Mar-2018

## Base Other Flags

C benchmarks:

-m64 -std=c11

C++ benchmarks:

-m64

Fortran benchmarks:

-m64

Benchmarks using both Fortran and C:

-m64 -std=c11

Benchmarks using both C and C++:

-m64 -std=c11

Benchmarks using Fortran, C, and C++:

-m64 -std=c11

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

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.html>

[http://www.spec.org/cpu2017/flags/HPE-Superdome\\_Flex-RevA.html](http://www.spec.org/cpu2017/flags/HPE-Superdome_Flex-RevA.html)

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

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.xml>

[http://www.spec.org/cpu2017/flags/HPE-Superdome\\_Flex-RevA.xml](http://www.spec.org/cpu2017/flags/HPE-Superdome_Flex-RevA.xml)

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