SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

$SPECspeed®2017\_fp\_base =$ **332**

$SPECspeed®2017\_fp\_peak =$ Not Run

CPU2017 License: 19	**Test Date:** Mar-2024
Test Sponsor: Fujitsu	**Hardware Availability:** May-2024
Tested by: Fujitsu	**Software Availability:** Dec-2023

Threads

Benchmark	Threads	Result
603.bwaves_s	72	1110
607.cactuBSSN_s	72	458
619.lbm_s	72	276
621.wrf_s	72	202
627.cam4_s	72	196
628.pop2_s	72	87.5
638.imagick_s	72	682
644.nab_s	72	604
649.fotonik3d_s	72	182
654.roms_s	72	452

SPECspeed®2017_fp_base (332)

Hardware

CPU Name: Intel Xeon Gold 6554S
 Max MHz: 4000
 Nominal: 2200
Enabled: 72 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: 180 MB I+D on chip per chip
 Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-5600B-R, running at 5200)
Storage: 1 x SATA SSD, 1.92TB
Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP5
5.14.21-150500.53-default
Compiler: C/C++: Version 2023.2.3 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2023.2.3 of Intel Fortran Compiler for Linux;
Parallel: Yes
Firmware: Fujitsu BIOS Version V1.0.0.0 R2.4.0 for D3985-A1x. Released May-2024
tested as V1.0.0.0 R2.3.1 for D3985-A1x Mar-2024
File System: btrfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: jemalloc memory allocator V5.0.1
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage

Standard Performance Evaluation Corporation (info@spec.org)
https://www.spec.org/

SPEC CPU®2017 Floating Point Speed Result
Copyright 2017-2024 Standard Performance Evaluation Corporation

Fujitsu
PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base = 332
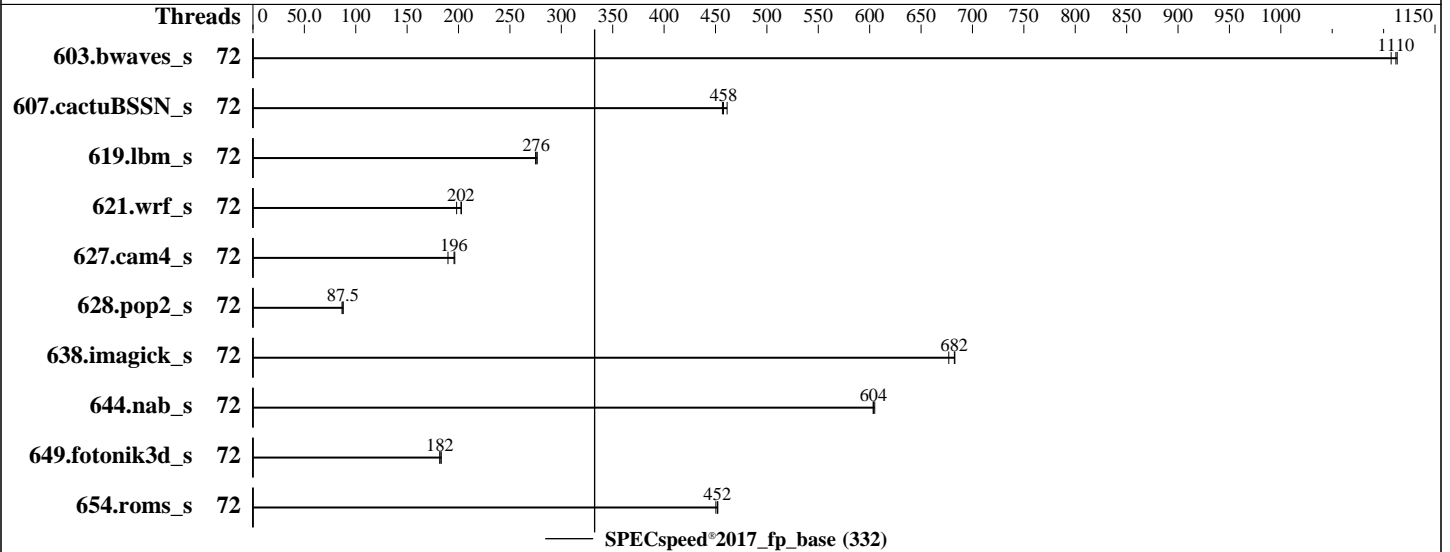
SPECspeed®2017_fp_peak = Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

Test Date: Mar-2024
Hardware Availability: May-2024
Software Availability: Dec-2023

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	72	53.0	1110	53.3	1110	**53.1**	**1110**							
607.cactuBSSN_s	72	36.5	457	**36.4**	**458**	36.1	461							
619.lbm_s	72	**19.0**	**276**	18.9	277	19.1	275							
621.wrf_s	72	**65.4**	**202**	65.2	203	66.7	198							
627.cam4_s	72	45.1	196	**45.3**	**196**	46.7	190							
628.pop2_s	72	137	86.6	**136**	**87.5**	135	87.7							
638.imagick_s	72	21.3	677	**21.1**	**682**	21.1	683							
644.nab_s	72	**28.9**	**604**	28.9	605	29.0	603							
649.fotonik3d_s	72	49.7	183	**50.1**	**182**	50.2	182							
654.roms_s	72	35.0	450	34.8	452	**34.8**	**452**							

SPECspeed®2017_fp_base =	332
SPECspeed®2017_fp_peak =	Not Run

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"
cpupower -c all frequency-set -g performance
echo 20000000 > /sys/kernel/debug/sched/wakeup_granularity_ns
tuned-adm profile throughput-performance
```

Environment Variables Notes

```
Environment variables set by runcpu before the start of the run:
KMP_AFFINITY = "granularity=fine,compact,1,0"
LD_LIBRARY_PATH = "/home/benchmark/speccpu-23.2/lib/intel64:/home/benchmark/speccpu-23.2/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
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
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
```

Standard Performance Evaluation Corporation (info@spec.org)
https://www.spec.org/

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

$SPECspeed®2017_fp_base = $ 332

$SPECspeed®2017_fp_peak = $ Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

Test Date: Mar-2024
Hardware Availability: May-2024
Software Availability: Dec-2023

Platform Notes

```
BIOS configuration:
ASPM Support = Auto
Adjacent Cache Line Prefetch = Disabled
Override OS Energy Performance = Enabled
Energy Performance = Balanced Energy
LLC Prefetch = Enabled
CPU Performance Boost = Aggressive
Fan Control = Full
DBP-F = Enabled
CPU C1 auto demotion = Enabled
CPU C1 auto undemotion = Enabled
IODC Configuration = Enable for Remote InvItoM and Remote WCiLF

Sysinfo program /home/benchmark/speccpu-23.2/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Tue Mar 26 16:54:25 2024

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

------------------------------------------------------------
Table of contents
------------------------------------------------------------
 1. uname -a
 2. w
 3. Username
 4. ulimit -a
 5. sysinfo process ancestry
 6. /proc/cpuinfo
 7. lscpu
 8. numactl --hardware
 9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 249 (249.16+suse.171.gdad0071f15)
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
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 -a
  Linux localhost 5.14.21-150500.53-default #1 SMP PREEMPT_DYNAMIC Wed May 10 07:56:26 UTC 2023 (b630043)
  x86_64 x86_64 x86_64 GNU/Linux


------------------------------------------------------------
2. w
  16:54:26 up 33 min,  1 user,  load average: 7.73, 43.89, 48.90
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
  root     tty1     -                16:22   30:02   0.95s  0.17s -bash

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

(Continued on next page)

SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base =   332

SPECspeed®2017_fp_peak = Not Run

CPU2017 License: 19	**Test Date:** Mar-2024
Test Sponsor: Fujitsu	**Hardware Availability:** May-2024
Tested by: Fujitsu	**Software Availability:** Dec-2023

Platform Notes (Continued)

```
  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) 4124904
    max locked memory       (kbytes, -l) 64
    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) 4124904
    virtual memory          (kbytes, -v) unlimited
    file locks                      (-x) unlimited


    ------------------------------------------------------------
  5. sysinfo process ancestry
   /usr/lib/systemd/systemd --switched-root --system --deserialize 30
   login -- root
   -bash
   -bash
   runcpu --nobuild --action validate --define default-platform-flags -c
     ic2023.2.3-lin-core-avx512-speed-20231121.cfg --define cores=72 --tune base -o all --define
     fpspeedaffinity --define drop_caches --define smt-on fpspeed
   runcpu --nobuild --action validate --define default-platform-flags --configfile
     ic2023.2.3-lin-core-avx512-speed-20231121.cfg --define cores=72 --tune base --output_format all --define
     fpspeedaffinity --define drop_caches --define smt-on --nopower --runmode speed --tune base --size refspeed
     fpspeed --nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.001/templogs/preenv.fpspeed.001.0.log
     --lognum 001.0 --from_runcpu 2
   specperl $SPEC/bin/sysinfo
  $SPEC = /home/benchmark/speccpu-23.2


    ------------------------------------------------------------
  6. /proc/cpuinfo
    model name        : INTEL(R) XEON(R) GOLD 6554S
    vendor_id         : GenuineIntel
    cpu family        : 6
    model             : 207
    stepping          : 2
    microcode         : 0x21000200
    bugs              : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb
    cpu cores         : 36
    siblings          : 72
    2 physical ids (chips)
    144 processors (hardware threads)
    physical id 0: core ids 0-35
    physical id 1: core ids 0-35
    physical id 0: apicids 0-71
    physical id 1: apicids 128-199
   Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
   virtualized systems.  Use the above data carefully.


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

(Continued on next page)

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base = 332

SPECspeed®2017_fp_peak = Not Run

CPU2017 License:	19	**Test Date:**	Mar-2024
Test Sponsor:	Fujitsu	**Hardware Availability:**	May-2024
Tested by:	Fujitsu	**Software Availability:**	Dec-2023

Platform Notes (Continued)

```
  7. lscpu

From lscpu from util-linux 2.37.4:
  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):                   144
  On-line CPU(s) list:      0-143
  Vendor ID:                GenuineIntel
  Model name:               INTEL(R) XEON(R) GOLD 6554S
  CPU family:               6
  Model:                    207
  Thread(s) per core:       2
  Core(s) per socket:       36
  Socket(s):                2
  Stepping:                 2
  CPU max MHz:              4000.0000
  CPU min MHz:              800.0000
  BogoMIPS:                 4400.00
  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 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
                            invpcid_single cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow
                            vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 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 avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts hwp
                            hwp_act_window hwp_epp hwp_pkg_req hfi 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 avx512_fp16
                            amx_tile flush_l1d arch_capabilities
  Virtualization:           VT-x
  L1d cache:                3.4 MiB (72 instances)
  L1i cache:                2.3 MiB (72 instances)
  L2 cache:                 144 MiB (72 instances)
  L3 cache:                 360 MiB (2 instances)
  NUMA node(s):             2
  NUMA node0 CPU(s):        0-35,72-107
  NUMA node1 CPU(s):        36-71,108-143
  Vulnerability Itlb multihit:   Not affected
  Vulnerability L1tf:            Not affected
  Vulnerability Mds:             Not affected
  Vulnerability Meltdown:        Not affected
  Vulnerability Mmio stale data: Not affected
  Vulnerability Retbleed:        Not affected
  Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl and seccomp
  Vulnerability Spectre v1:      Mitigation; usercopy/swapgs barriers and __user pointer sanitization
  Vulnerability Spectre v2:      Mitigation; Enhanced IBRS, IBPB conditional, RSB filling, PBRSB-eIBRS SW
                                 sequence
  Vulnerability Srbds:           Not affected
  Vulnerability Tsx async abort: Not affected

 From lscpu --cache:
```

(Continued on next page)

Standard Performance Evaluation Corporation (info@spec.org)

https://www.spec.org/

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base = 332

SPECspeed®2017_fp_peak = Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

Test Date: Mar-2024
Hardware Availability: May-2024
Software Availability: Dec-2023

Platform Notes (Continued)

```
     NAME ONE-SIZE ALL-SIZE WAYS TYPE          LEVEL    SETS PHY-LINE COHERENCY-SIZE
     L1d      48K     3.4M  12 Data             1      64       1              64
     L1i      32K     2.3M   8 Instruction      1      64       1              64
     L2        2M     144M  16 Unified          2    2048       1              64
     L3      180M     360M  20 Unified          3  147456       1              64


    -------------------------------------------------------------
    8. numactl --hardware
    NOTE: a numactl 'node' might or might not correspond to a physical chip.
      available: 2 nodes (0-1)
      node 0 cpus: 0-35,72-107
      node 0 size: 515658 MB
      node 0 free: 513758 MB
      node 1 cpus: 36-71,108-143
      node 1 size: 515597 MB
      node 1 free: 514356 MB
      node distances:
      node   0   1
        0:  10  21
        1:  21  10


    -------------------------------------------------------------
    9. /proc/meminfo
      MemTotal:       1056005924 kB


    -------------------------------------------------------------
    10. who -r
      run-level 3 Mar 26 16:21


    -------------------------------------------------------------
    11. Systemd service manager version: systemd 249 (249.16+suse.171.gdad0071f15)
      Default Target  Status
      multi-user      degraded


    -------------------------------------------------------------
    12. Failed units, from systemctl list-units --state=failed
        UNIT          LOAD   ACTIVE SUB    DESCRIPTION
      * sep5.service loaded failed failed systemd script to load sep5 driver at boot time


    -------------------------------------------------------------
    13. Services, from systemctl list-unit-files
      STATE            UNIT FILES
      enabled          YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance
                       issue-generator kbdsettings kdump kdump-early klog lvm2-monitor nscd postfix purge-kernels
                       rollback rsyslog sep5 smartd sshd systemd-pstore tuned wicked wickedd-auto4 wickedd-dhcp4
                       wickedd-dhcp6 wickedd-nanny
      enabled-runtime  systemd-remount-fs
      disabled         autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
                       chronyd console-getty cups cups-browsed debug-shell ebtables exchange-bmc-os-info
                       firewalld gpm grub2-once haveged haveged-switch-root ipmi ipmievd issue-add-ssh-keys
                       kexec-load lunmask man-db-create multipathd nfs nfs-blkmap rpcbind rpmconfigcheck rsyncd
                       serial-getty@ smartd_generate_opts snmpd snmptrapd systemd-boot-check-no-failures
                       systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd udisks2
                       vncserver@
      indirect         wickedd


    -------------------------------------------------------------
    14. Linux kernel boot-time arguments, from /proc/cmdline
      BOOT_IMAGE=/boot/vmlinuz-5.14.21-150500.53-default
      root=UUID=87f6e000-dba2-474c-9bb5-7d0e1b533f58
```

(Continued on next page)

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base =   332

SPECspeed®2017_fp_peak = Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

Test Date: Mar-2024
Hardware Availability: May-2024
Software Availability: Dec-2023

Platform Notes (Continued)

```
    splash=silent
    quiet
    security=apparmor
    crashkernel=407M,high
    crashkernel=72M,low
    mitigations=auto


  ----------------------------------------------------------
15. cpupower frequency-info
  analyzing CPU 0:
    current policy: frequency should be within 800 MHz and 4.00 GHz.
                    The governor "performance" may decide which speed to use
                    within this range.
    boost state support:
      Supported: yes
      Active: yes


  ----------------------------------------------------------
16. tuned-adm active
  Current active 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                   10
  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
```

Fujitsu

PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

$SPECspeed®2017\_fp\_base =$ 332

$SPECspeed®2017\_fp\_peak =$ Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

Test Date: Mar-2024
Hardware Availability: May-2024
Software Availability: Dec-2023

Platform Notes (Continued)

```
-----------------------------------------------------------
20. OS release
  From /etc/*-release /etc/*-version
  os-release SUSE Linux Enterprise Server 15 SP5


-----------------------------------------------------------
21. Disk information
SPEC is set to: /home/benchmark/speccpu-23.2
  Filesystem      Type   Size  Used Avail Use% Mounted on
  /dev/sda3       btrfs  741G   72G  669G  10% /home


-----------------------------------------------------------
22. /sys/devices/virtual/dmi/id
    Vendor:         FUJITSU
    Product:        PRIMERGY TX2550 M7
    Product Family: SERVER
    Serial:         EWCCxxxxxx


-----------------------------------------------------------
23. dmidecode
  Additional information from dmidecode 3.4 follows.  WARNING: Use caution when you interpret this section.
  The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately
  determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the
  "DMTF SMBIOS" standard.
  Memory:
    16x Hynix HMCG94AGBRA181N 64 GB 2 rank 5600, configured at 5200



-----------------------------------------------------------
24. BIOS
(This section combines info from /sys/devices and dmidecode.)
    BIOS Vendor:      FUJITSU
    BIOS Version:     V1.0.0.0 R2.3.1 for D3985-A1x
    BIOS Date:        03/19/2024
    BIOS Revision:    2.3
    Firmware Revision: 2.36
```

Compiler Version Notes

```
==============================================================================================
C             | 619.lbm_s(base) 638.imagick_s(base) 644.nab_s(base)
----------------------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
----------------------------------------------------------------------------------------------


==============================================================================================
C++, C, Fortran | 607.cactuBSSN_s(base)
----------------------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
----------------------------------------------------------------------------------------------


==============================================================================================
Fortran       | 603.bwaves_s(base) 649.fotonik3d_s(base) 654.roms_s(base)
```

(Continued on next page)

SPEC CPU®2017 Floating Point Speed Result
Copyright 2017-2024 Standard Performance Evaluation Corporation

Fujitsu
PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base = 332

SPECspeed®2017_fp_peak = Not Run

Compiler Version Notes (Continued)

```
----------------------------------------------------------------------------------------------
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
----------------------------------------------------------------------------------------------


==============================================================================================
Fortran, C    | 621.wrf_s(base) 627.cam4_s(base) 628.pop2_s(base)
----------------------------------------------------------------------------------------------
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
----------------------------------------------------------------------------------------------
```

Base Compiler Invocation

C benchmarks:
`icx`

Fortran benchmarks:
`ifx`

Benchmarks using both Fortran and C:
`ifx icx`

Benchmarks using Fortran, C, and C++:
`icpx icx ifx`

Base Portability Flags

603.bwaves_s: `-DSPEC_LP64`
607.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`

SPEC CPU®2017 Floating Point Speed Result
Copyright 2017-2024 Standard Performance Evaluation Corporation

Fujitsu
PRIMERGY TX2550 M7, Intel Xeon Gold 6554S, 2.20GHz

SPECspeed®2017_fp_base = 332

SPECspeed®2017_fp_peak = Not Run

CPU2017 License: 19	**Test Date:** Mar-2024
Test Sponsor: Fujitsu	**Hardware Availability:** May-2024
Tested by: Fujitsu	**Software Availability:** Dec-2023

Base Optimization Flags

C benchmarks:
```
-w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -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-AVX512 -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-AVX512 -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-AVX512 -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
```

The flags files that were used to format this result can be browsed at
  http://www.spec.org/cpu2017/flags/Fujitsu-Platform-Settings-V1.0-EMR-RevD.html
  http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.html

You can also download the XML flags sources by saving the following links:
  http://www.spec.org/cpu2017/flags/Fujitsu-Platform-Settings-V1.0-EMR-RevD.xml
  http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.xml

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 2024-03-26 03:54:25-0400.
Report generated on 2024-04-24 14:36:20 by CPU2017 PDF formatter v6716.
Originally published on 2024-04-24.