SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

$SPECrate^{®}2017\_int\_base =$ 184

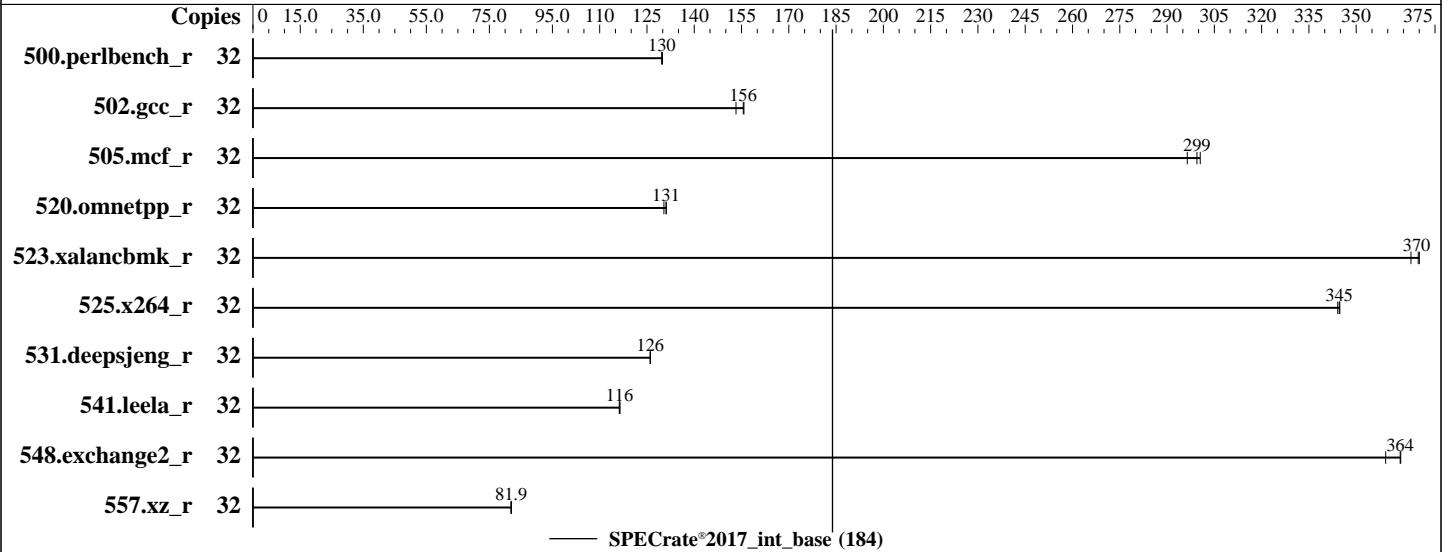$SPECrate^{®}2017\_int\_peak =$ Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Benchmark results bar chart (Copies = 32 for all):
- 500.perlbench_r: 130
- 502.gcc_r: 156
- 505.mcf_r: 299
- 520.omnetpp_r: 131
- 523.xalancbmk_r: 370
- 525.x264_r: 345
- 531.deepsjeng_r: 126
- 541.leela_r: 116
- 548.exchange2_r: 364
- 557.xz_r: 81.9

SPECrate®2017_int_base (184)

Hardware

CPU Name: Intel Xeon Gold 5415+
 Max MHz: 4100
 Nominal: 2900
Enabled: 16 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: 22.5 MB I+D on chip per chip
 Other: None
Memory: 512 GB (16 x 32 GB 2Rx8 PC5-4800B-R, running at 4400)
Storage: 1 x 1920 GB SATA SSD
Other: None

Software

OS: Red Hat Enterprise Linux release 9.0 (Plow)
 5.14.0-70.13.1.el9_0.x86_64
Compiler: C/C++: Version 2023.0 of Intel oneAPI DPC++/C++ Compiler for Linux;
 Fortran: Version 2023.0 of Intel Fortran Compiler for Linux;
Parallel: No
Firmware: Version 2.00.55 Released Mar-2023
File System: xfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: None
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base = 184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	32	393	130	392	130	**393**	**130**							
502.gcc_r	32	291	156	296	153	**291**	**156**							
505.mcf_r	32	174	296	172	301	**173**	**299**							
520.omnetpp_r	32	322	130	**320**	**131**	320	131							
523.xalancbmk_r	32	92.0	367	**91.4**	**370**	91.3	370							
525.x264_r	32	163	344	163	345	**163**	**345**							
531.deepsjeng_r	32	**291**	**126**	291	126	291	126							
541.leela_r	32	**456**	**116**	455	116	456	116							
548.exchange2_r	32	**230**	**364**	230	364	233	359							
557.xz_r	32	422	82.0	**422**	**81.9**	422	81.9							
SPECrate®2017_int_base =	**184**													
SPECrate®2017_int_peak =	**Not Run**													

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

Compiler Notes

```
SPEC has ruled that the compiler used for this result was performing a compilation
that specifically improves the performance of the 523.xalancbmk_r / 623.xalancbmk_s
benchmarks using a priori knowledge of the SPEC code and dataset to perform a
transformation that has narrow applicability.

In order to encourage optimizations that have wide applicability (see rule 1.4
https://www.spec.org/cpu2017/Docs/runrules.html#rule_1.4), SPEC will no longer
publish results using this optimization.

This result is left in the SPEC results database for historical reference.
```

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 =
     "/spec2017-icc2023.0/lib/intel64:/spec2017-icc2023.0/lib/ia32:/spec2017-icc2023.0/je5.0.1-32"
MALLOC_CONF = "retain:true"
```

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base = 184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

General Notes

```
Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
memory using Red Hat Enterprise Linux 8.4
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.
```

Platform Notes

```
BIOS configuration:
Performance Profile Set to Performance
SNC Set to Enable SNC2 (2-clusters)

Sysinfo program /spec2017-icc2023.0/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost.localdomain Wed Aug 23 14:17:31 2023

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 250 (250-6.el9_0)
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.localdomain 5.14.0-70.13.1.el9_0.x86_64 #1 SMP PREEMPT Thu Apr 14 12:42:38 EDT 2022 x86_64
  x86_64 x86_64 GNU/Linux


-------------------------------------------------------------
2. w
   14:17:31 up 1 min,  1 user,  load average: 0.03, 0.02, 0.00
   USER     TTY        LOGIN@   IDLE   JCPU   PCPU WHAT
```

(Continued on next page)

Standard Performance Evaluation Corporation (info@spec.org)

https://www.spec.org/

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base =   184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Platform Notes (Continued)

```
   root     tty1        14:17   11.00s  1.04s  0.03s -bash

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


    ----------------------------------------------------------
    4. ulimit -a
      real-time non-blocking time  (microseconds, -R) unlimited
      core file size              (blocks, -c) 0
      data seg size               (kbytes, -d) unlimited
      scheduling priority                (-e) 0
      file size                   (blocks, -f) unlimited
      pending signals                    (-i) 2060183
      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) 2060183
      virtual memory              (kbytes, -v) unlimited
      file locks                         (-x) unlimited


    ----------------------------------------------------------
    5. sysinfo process ancestry
     /usr/lib/systemd/systemd rhgb --switched-root --system --deserialize 31
     login -- root
     -bash
     -bash
     runcpu --define default-platform-flags --copies 32 -c ic2023.0-lin-sapphirerapids-rate-20221201.cfg --define
       smt-on --define cores=16 --define physicalfirst --define invoke_with_interleave --define drop_caches
       --tune base --iterations 3 -o all intrate
     runcpu --define default-platform-flags --copies 32 --configfile
       ic2023.0-lin-sapphirerapids-rate-20221201.cfg --define smt-on --define cores=16 --define physicalfirst
       --define invoke_with_interleave --define drop_caches --tune base --iterations 3 --output_format all
       --nopower --runmode rate --tune base --size refrate intrate --nopreenv --note-preenv --logfile
       $SPEC/tmp/CPU2017.178/templogs/preenv.intrate.178.0.log --lognum 178.0 --from_runcpu 2
     specperl $SPEC/bin/sysinfo
    $SPEC = /spec2017-icc2023.0


    ----------------------------------------------------------
    6. /proc/cpuinfo
       model name      : Intel(R) Xeon(R) Gold 5415+
       vendor_id       : GenuineIntel
       cpu family      : 6
       model           : 143
       stepping        : 7
       microcode       : 0x2b000111
       bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs
       cpu cores       : 8
       siblings        : 16
       2 physical ids (chips)
       32 processors (hardware threads)
       physical id 0: core ids 0-7
       physical id 1: core ids 0-7
       physical id 0: apicids 0-15
       physical id 1: apicids 128-143
```

(Continued on next page)

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base =   184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Platform Notes (Continued)

```
   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 2.37.4:
     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):                        32
     On-line CPU(s) list:           0-31
     Vendor ID:                     GenuineIntel
     BIOS Vendor ID:                Intel(R) Corporation
     Model name:                    Intel(R) Xeon(R) Gold 5415+
     BIOS Model name:               Intel(R) Xeon(R) Gold 5415+
     CPU family:                    6
     Model:                         143
     Thread(s) per core:            2
     Core(s) per socket:            8
     Socket(s):                     2
     Stepping:                      7
     BogoMIPS:                      5800.00
     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
                                    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
                                    intel_ppin cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi
                                    flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms
                                    invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt
                                    clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1
                                    xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local split_lock_detect
                                    avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts 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:                     768 KiB (16 instances)
     L1i cache:                     512 KiB (16 instances)
     L2 cache:                      32 MiB (16 instances)
     L3 cache:                      45 MiB (2 instances)
     NUMA node(s):                  4
     NUMA node0 CPU(s):             0-3,16-19
     NUMA node1 CPU(s):             4-7,20-23
     NUMA node2 CPU(s):             8-11,24-27
     NUMA node3 CPU(s):             12-15,28-31
     Vulnerability Itlb multihit:   Not affected
     Vulnerability L1tf:            Not affected
     Vulnerability Mds:             Not affected
     Vulnerability Meltdown:        Not affected
     Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
     Vulnerability Spectre v1:      Mitigation; usercopy/swapgs barriers and __user pointer sanitization
     Vulnerability Spectre v2:      Mitigation; Enhanced IBRS, IBPB conditional, RSB filling
     Vulnerability Srbds:           Not affected
     Vulnerability Tsx async abort: Not affected
```

(Continued on next page)

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base =   184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Platform Notes (Continued)

```
   From lscpu --cache:
        NAME ONE-SIZE ALL-SIZE WAYS TYPE          LEVEL  SETS PHY-LINE COHERENCY-SIZE
        L1d      48K     768K   12 Data            1    64      1           64
        L1i      32K     512K    8 Instruction     1    64      1           64
        L2        2M      32M   16 Unified         2  2048      1           64
        L3     22.5M      45M   15 Unified         3 24576      1           64


   ----------------------------------------------------------------
   8. numactl --hardware
   NOTE: a numactl 'node' might or might not correspond to a physical chip.
     available: 4 nodes (0-3)
     node 0 cpus: 0-3,16-19
     node 0 size: 128084 MB
     node 0 free: 127712 MB
     node 1 cpus: 4-7,20-23
     node 1 size: 129022 MB
     node 1 free: 128580 MB
     node 2 cpus: 8-11,24-27
     node 2 size: 128985 MB
     node 2 free: 128478 MB
     node 3 cpus: 12-15,28-31
     node 3 size: 129011 MB
     node 3 free: 128626 MB
     node distances:
     node   0   1   2   3
       0:  10  12  21  21
       1:  12  10  21  21
       2:  21  21  10  12
       3:  21  21  12  10


   ----------------------------------------------------------------
   9. /proc/meminfo
      MemTotal:      527465648 kB


   ----------------------------------------------------------------
   10. who -r
      run-level 3 Aug 23 14:16


   ----------------------------------------------------------------
   11. Systemd service manager version: systemd 250 (250-6.el9_0)
     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         ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online
                     accounts-daemon atd auditd avahi-daemon bluetooth chronyd crond cups dbus-broker gdm
                     getty@ insights-client-boot irqbalance iscsi iscsi-onboot kdump libstoragemgmt
                     low-memory-monitor lvm2-monitor mcelog mdmonitor microcode multipathd nis-domainname
                     nvmefc-boot-connections ostree-remount power-profiles-daemon qemu-guest-agent rhsmcertd
                     rsyslog rtkit-daemon selinux-autorelabel-mark sep5 smartd sshd sssd switcheroo-control
                     sysstat systemd-network-generator tuned udisks2 upower vgauthd vmtoolsd
     enabled-runtime systemd-remount-fs
```

(Continued on next page)

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base =   184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Platform Notes (Continued)

```
  disabled         arp-ethers blk-availability brltty canberra-system-bootup canberra-system-shutdown
                   canberra-system-shutdown-reboot chrony-wait cni-dhcp console-getty cpupower cups-browsed
                   dbus-daemon debug-shell dnsmasq firewalld iprdump iprinit iprupdate iscsid iscsiuio kpatch
                   kvm_stat ledmon man-db-restart-cache-update nftables nvmf-autoconnect podman
                   podman-auto-update podman-restart psacct ras-mc-ctl rasdaemon rdisc rhcd rhsm rhsm-facts
                   rpmdb-rebuild serial-getty@ speech-dispatcherd sshd-keygen@ systemd-boot-check-no-failures
                   systemd-pstore systemd-sysext wpa_supplicant
  indirect         spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo

----------------------------------------------------------
14. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=(hd0,gpt3)/boot/vmlinuz-5.14.0-70.13.1.el9_0.x86_64
  root=UUID=cc4bab05-907e-44ef-b818-2b2874390234
  ro
  crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M
  resume=UUID=5ba347ca-8beb-4f6e-9c11-de63dc4ddf5f
  rhgb
  quiet

----------------------------------------------------------
15. cpupower frequency-info
  analyzing CPU 0:
    Unable to determine current policy
    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                  40
  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
```

(Continued on next page)

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base = 184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Platform Notes (Continued)

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


      -----------------------------------------------------------
    20. OS release
      From /etc/*-release /etc/*-version
      os-release     Red Hat Enterprise Linux 9.0 (Plow)
      redhat-release Red Hat Enterprise Linux release 9.0 (Plow)
      system-release Red Hat Enterprise Linux release 9.0 (Plow)

      -----------------------------------------------------------
    21. Disk information
    SPEC is set to: /spec2017-icc2023.0
      Filesystem      Type  Size  Used Avail Use% Mounted on
      /dev/sda3       xfs   420G   63G  358G  15% /

      -----------------------------------------------------------
    22. /sys/devices/virtual/dmi/id
        Vendor:        XFUSION
        Product:       5288 V7
        Product Family: Eagle Stream
        Serial:        serial


      -----------------------------------------------------------
    23. dmidecode
      Additional information from dmidecode 3.3 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 Samsung M321R4GA3BB6-CQKDG 32 GB 2 rank 4800, configured at 4400



      -----------------------------------------------------------
    24. BIOS
    (This section combines info from /sys/devices and dmidecode.)
      BIOS Vendor:      XFUSION
      BIOS Version:     2.00.55
      BIOS Date:        03/07/2023
      BIOS Revision:    0.55
```

Compiler Version Notes

```
    ==================================================================================================
    C       | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base) 525.x264_r(base) 557.xz_r(base)
    --------------------------------------------------------------------------------------------------
    Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201
    Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
    --------------------------------------------------------------------------------------------------


    ==================================================================================================
    C++     | 520.omnetpp_r(base) 523.xalancbmk_r(base) 531.deepsjeng_r(base) 541.leela_r(base)
```

(Continued on next page)

xFusion

SPECrate®2017_int_base =   184

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Compiler Version Notes (Continued)

```
----------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
----------------------------------------------------------------------------


==============================================================================
Fortran | 548.exchange2_r(base)
----------------------------------------------------------------------------
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
----------------------------------------------------------------------------
```

Base Compiler Invocation

C benchmarks:
`icx`

C++ benchmarks:
`icpx`

Fortran benchmarks:
`ifx`

Base Portability Flags

500.perlbench_r: `-DSPEC_LP64 -DSPEC_LINUX_X64`
502.gcc_r: `-DSPEC_LP64`
505.mcf_r: `-DSPEC_LP64`
520.omnetpp_r: `-DSPEC_LP64`
523.xalancbmk_r: `-DSPEC_LP64 -DSPEC_LINUX`
525.x264_r: `-DSPEC_LP64`
531.deepsjeng_r: `-DSPEC_LP64`
541.leela_r: `-DSPEC_LP64`
548.exchange2_r: `-DSPEC_LP64`
557.xz_r: `-DSPEC_LP64`

Base Optimization Flags

C benchmarks:
```
-w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin
-lqkmalloc
```

(Continued on next page)

xFusion

FusionServer 5288 V7 (Intel Xeon Gold 5415+)

SPECrate®2017_int_base =   184

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6488
Test Sponsor: xFusion
Tested by: xFusion

Test Date: Aug-2023
Hardware Availability: Jan-2023
Software Availability: Dec-2022

Base Optimization Flags (Continued)

C++ benchmarks:
```
-w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin
-lqkmalloc
```

Fortran benchmarks:
```
-w -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/intel/compiler/2023.0.0/linux/compiler/lib/intel64_lin
-lqkmalloc
```

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/Intel-ic2023-official-linux64.html
http://www.spec.org/cpu2017/flags/xFusion-Platform-Settings-SPR-V1.1-revC.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Intel-ic2023-official-linux64.xml
http://www.spec.org/cpu2017/flags/xFusion-Platform-Settings-SPR-V1.1-revC.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 2023-08-23 14:17:30-0400.
Report generated on 2024-01-29 18:07:24 by CPU2017 PDF formatter v6716.
Originally published on 2023-09-13.