



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

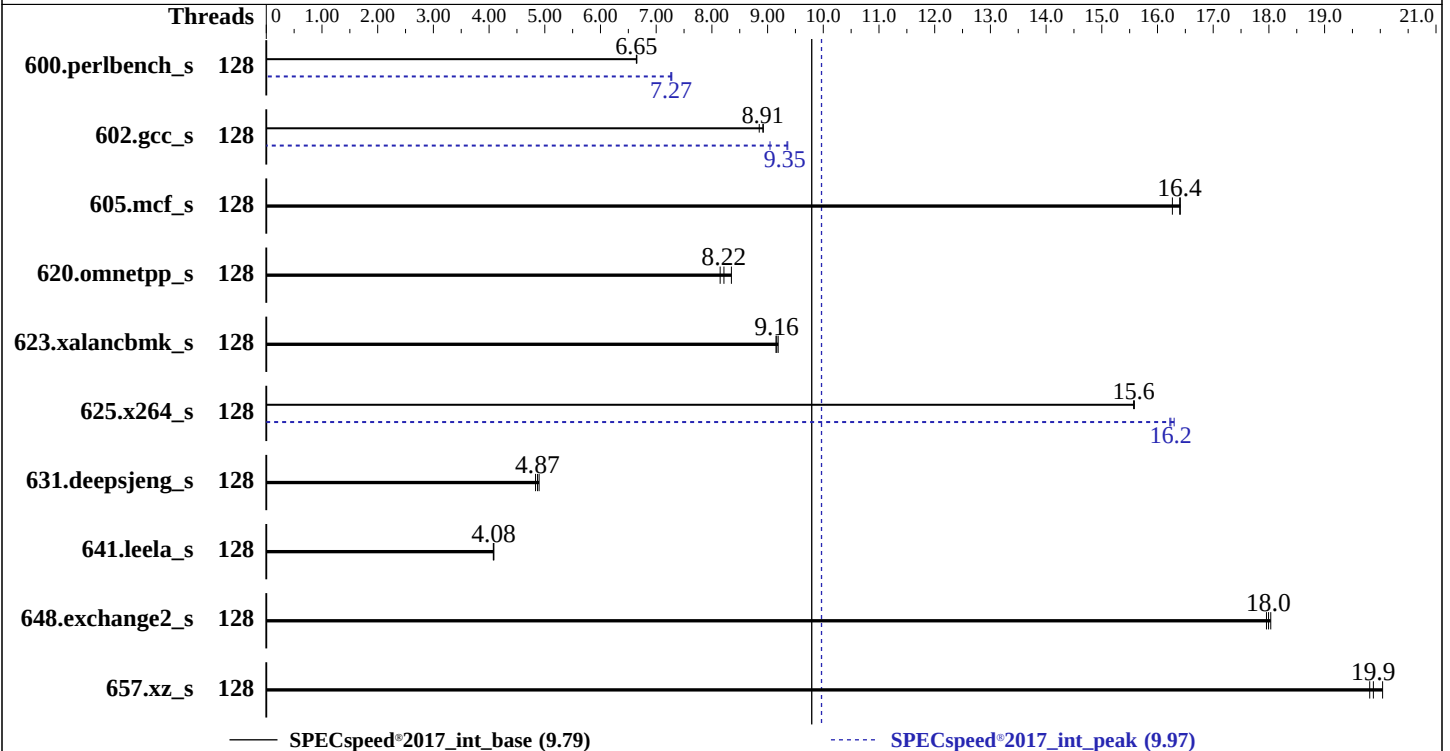
Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023



Hardware

CPU Name: Intel Xeon Gold 6530
Max MHz: 4000
Nominal: 2100
Enabled: 64 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: 160 MB I+D on chip per chip
Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-4800B-R, running at 4400)
Storage: 960 GB SATA SSD
Other: CPU Cooling: Air

Software

OS: Ubuntu 22.04.5 LTS
6.8.0-49-generic
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: Version EG0.10.01 released Mar-2024
File System: ext4
System State: Run level 5 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: jemalloc memory allocator V5.0.1
Power Management: OS set to prefer performance at the expense of additional power usage



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s	128	267	6.65	<u>267</u>	<u>6.65</u>	267	6.64	128	<u>244</u>	<u>7.27</u>	244	7.27	244	7.28
602.gcc_s	128	<u>447</u>	<u>8.91</u>	446	8.92	450	8.85	128	440	9.04	425	9.36	<u>426</u>	<u>9.35</u>
605.mcf_s	128	290	16.3	<u>288</u>	<u>16.4</u>	288	16.4	128	290	16.3	<u>288</u>	<u>16.4</u>	288	16.4
620.omnetpp_s	128	<u>199</u>	<u>8.22</u>	200	8.15	195	8.35	128	<u>199</u>	<u>8.22</u>	200	8.15	195	8.35
623.xalanchmk_s	128	155	9.15	154	9.19	<u>155</u>	<u>9.16</u>	128	155	9.15	154	9.19	<u>155</u>	<u>9.16</u>
625.x264_s	128	113	15.6	113	15.6	<u>113</u>	<u>15.6</u>	128	<u>109</u>	<u>16.2</u>	109	16.2	108	16.3
631.deepsjeng_s	128	293	4.90	296	4.83	<u>294</u>	<u>4.87</u>	128	293	4.90	296	4.83	<u>294</u>	<u>4.87</u>
641.leela_s	128	418	4.08	419	4.08	<u>418</u>	<u>4.08</u>	128	418	4.08	419	4.08	<u>418</u>	<u>4.08</u>
648.exchange2_s	128	164	18.0	163	18.0	<u>163</u>	<u>18.0</u>	128	164	18.0	163	18.0	<u>163</u>	<u>18.0</u>
657.xz_s	128	312	19.8	308	20.0	<u>311</u>	<u>19.9</u>	128	312	19.8	308	20.0	<u>311</u>	<u>19.9</u>

SPECspeed®2017_int_base = **9.79**

SPECspeed®2017_int_peak = **9.97**

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"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:

KMP_AFFINITY = "granularity=fine,scatter"

LD_LIBRARY_PATH =

"/home/speccpu/cpu2017/lib/intel64:/home/speccpu/cpu2017/lib/ia32:/home/speccpu/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

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

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

Sysinfo program /home/speccpu/cpu2017/bin/sysinfo

Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197

running on intel Mon Dec 23 14:48:52 2024

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

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Platform Notes (Continued)

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 (249.11-0ubuntu3.12)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. sysctl
16. /sys/kernel/mm/transparent_hugepage
17. /sys/kernel/mm/transparent_hugepage/khugepaged
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

```
1. uname -a
Linux intel 6.8.0-49-generic #49~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Wed Nov  6 17:42:15 UTC 2 x86_64 x86_64
x86_64 GNU/Linux
```

```
2. w
14:48:52 up 4:01, 2 users, load average: 0.21, 0.10, 0.02
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
intel     :1        :1            10:48    ?xdm?  11:38   0.00s /usr/libexec/gdm-x-session --run-script env
GNOME_SHELL_SESSION_MODE=ubuntu /usr/bin/gnome-session --session=ubuntu
intel     pts/1    -             14:48    3.00s  1.14s  0.00s sudo
./reportable-ic2023.2.3-lin-sapphirerapids-speed-smt-on-20231121.sh
```

```
3. Username
From environment variable $USER:  root
From the command 'logname':      intel
```

```
4. ulimit -a
time(seconds)      unlimited
file(blocks)        unlimited
data(kbytes)        unlimited
stack(kbytes)       unlimited
coredump(blocks)    0
memory(kbytes)      unlimited
locked memory(kbytes) 132058160
process             4126513
nofiles             1024
vmemory(kbytes)     unlimited
locks               unlimited
```

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Platform Notes (Continued)

rtprio 0

```
-----
5. sysinfo process ancestry
/sbin/init splash
/lib/systemd/systemd --user
/usr/libexec/gnome-terminal-server
bash
sudo ./reportable-ic2023.2.3-lin-sapphirerapids-speed-smt-on-20231121.sh
sudo ./reportable-ic2023.2.3-lin-sapphirerapids-speed-smt-on-20231121.sh
sh ./reportable-ic2023.2.3-lin-sapphirerapids-speed-smt-on-20231121.sh
runcpu --nobuild --action validate --define default-platform-flags -c
ic2023.2.3-lin-sapphirerapids-speed-20231121.cfg --define cores=64 --tune base,peak -o all --define
intspeedaffinity --define smt-on --define drop_caches intspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
ic2023.2.3-lin-sapphirerapids-speed-20231121.cfg --define cores=64 --tune base,peak --output_format all
--define intspeedaffinity --define smt-on --define drop_caches --nopower --runmode speed --tune base:peak
--size refspeed intspeed --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.037/templogs/preenv.intspeed.037.0.log --lognum 037.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/speccpu/cpu2017
-----
```

```
6. /proc/cpuinfo
model name      : INTEL(R) XEON(R) GOLD 6530
vendor_id       : GenuineIntel
cpu family      : 6
model           : 207
stepping        : 2
microcode       : 0x21000283
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
cpu cores       : 32
siblings        : 64
2 physical ids (chips)
128 processors (hardware threads)
physical id 0:  core ids 0-31
physical id 1:  core ids 0-31
physical id 0:  apicids 0-63
physical id 1:  apicids 128-191
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 2.37.2:
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):                128
On-line CPU(s) list:   0-127
Vendor ID:             GenuineIntel
Model name:            INTEL(R) XEON(R) GOLD 6530
CPU family:            6
Model:                207
Thread(s) per core:    2
Core(s) per socket:    32
Socket(s):             2
Stepping:              2
```

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Platform Notes (Continued)

CPU max MHz: 4000.0000
CPU min MHz: 800.0000
BogoMIPS: 4200.00
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 intel_ppin cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow 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 user_shstk avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts vnni avx512vbmi umip pku ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpopcntdq la57 rdpid bus_lock_detect cldemote movdiri movdir64b enqcmd fsrm md_clear serialize tsxldtrk pconfig arch_lbr ibt amx_bf16 avx512_fp16 amx_tile amx_int8 flush_l1d arch_capabilities
Virtualization: VT-x
L1d cache: 3 MiB (64 instances)
L1i cache: 2 MiB (64 instances)
L2 cache: 128 MiB (64 instances)
L3 cache: 320 MiB (2 instances)
NUMA node(s): 2
NUMA node0 CPU(s): 0-31,64-95
NUMA node1 CPU(s): 32-63,96-127
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf: Not affected
Vulnerability Mds: Not affected
Vulnerability Meltdown: Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed: Not affected
Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling; PBRSE-eIBRS SW sequence; BHI BHI_DIS_S
Vulnerability Srbds: Not affected
Vulnerability Tsx async abort: Not affected

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	3M	12	Data	1	64	1	64
L1i	32K	2M	8	Instruction	1	64	1	64
L2	2M	128M	16	Unified	2	2048	1	64
L3	160M	320M	20	Unified	3	131072	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: 0-31,64-95
node 0 size: 515637 MB
node 0 free: 512305 MB

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Platform Notes (Continued)

node 1 cpus: 32-63,96-127

node 1 size: 516066 MB

node 1 free: 514023 MB

node distances:

node 0 1

0: 10 21

1: 21 10

9. /proc/meminfo
MemTotal: 1056465308 kB

10. who -r
run-level 5 Dec 23 10:49

11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.12)
Default Target Status
graphical running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon anacron anydesk apparmor avahi-daemon bluetooth console-setup cron cups cups-browsed dmesg e2scrub_reap getty@ gpu-manager grub-common grub-initrd-fallback irqbalance kerneloops keyboard-setup networkd-dispatcher openvpn power-profiles-daemon rsyslog secureboot-db setvtrgb snapd ssh switcheroo-control systemd-oom systemd-pstore systemd-resolved systemd-timesyncd teamviewerd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades wpa_supplicant
enabled-runtime	netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled	acpid brltty console-getty debug-shell nftables openvpn-client@ openvpn-server@ openvpn@ rsync rtkit-daemon serial-getty@ speech-dispatcherd systemd-boot-check-no-failures systemd-network-generator systemd-networkd systemd-networkd-wait-online systemd-sysext systemd-time-wait-sync tlp upower wpa_supplicant-nl80211@ wpa_supplicant-wired@ wpa_supplicant@
generated	apport cpufrequtils loadcpufreq speech-dispatcher
indirect	saned@ spice-vdagentd uidd
masked	alsa-utils cryptdisks cryptdisks-early hwclock pulseaudio-enable-autospawn rc rcS saned screen-cleanup sudo systemd-rfkill x11-common

13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-6.8.0-49-generic
root=UUID=073562bb-1438-42b9-adfa-6a6f7f3d3559
ro
quiet
splash
vt.handoff=7

14. cpupower frequency-info
analyzing CPU 40:
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

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Platform Notes (Continued)

15. sysctl

kernel.numa_balancing	1
kernel.randomize_va_space	2
vm.compaction_proactiveness	20
vm.dirty_background_bytes	0
vm.dirty_background_ratio	10
vm.dirty_bytes	0
vm.dirty_expire_centisecs	3000
vm.dirty_ratio	20
vm.dirty_writeback_centisecs	500
vm.dirtytime_expire_seconds	43200
vm.extfrag_threshold	500
vm.min_unmapped_ratio	1
vm.nr_hugepages	0
vm.nr_hugepages_mempolicy	0
vm.nr_overcommit_hugepages	0
vm.swappiness	60
vm.watermark_boost_factor	15000
vm.watermark_scale_factor	10
vm.zone_reclaim_mode	0

16. /sys/kernel/mm/transparent_hugepage

defrag	always	defer	defer+madvice	[madvice]	never
enabled	always	[madvice] never			
hpage_pmd_size	2097152				
shmem_enabled	always	within_size	advise	[never]	deny force

17. /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

18. OS release

From /etc/*-release /etc/*-version
os-release Ubuntu 22.04.5 LTS

19. Disk information

SPEC is set to: /home/speccpu/cpu2017

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda2	ext4	879G	684G	151G	82%	/

20. /sys/devices/virtual/dmi/id

Vendor:	Fusionstor
Product:	Invento_i6000
Product Family:	SG_Intel_EagleStream
Serial:	HQ3110001BDA03CD0002

21. dmidecode

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Platform Notes (Continued)

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 NO DIMM NO DIMM

16x Samsung M321R8GA0BB0-CQKZJ 64 GB 2 rank 4800, configured at 4400

22. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: American Megatrends International, LLC.

BIOS Version: EG0.10.01

BIOS Date: 03/22/2024

BIOS Revision: 5.32

Compiler Version Notes

```
=====
C      | 600.perlbench_s(base, peak) 602.gcc_s(base, peak) 605.mcf_s(base, peak) 625.x264_s(base, peak)
      | 657.xz_s(base, peak)
=====
```

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++    | 620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak) 631.deepsjeng_s(base, peak)
      | 641.leela_s(base, peak)
=====
```

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.

```
=====
Fortran | 648.exchange2_s(base, peak)
=====
```

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.

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Base Portability Flags

600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xalancbmk_s: -DSPEC_LP64 -DSPEC_LINUX
625.x264_s: -DSPEC_LP64
631.deepsjeng_s: -DSPEC_LP64
641.leela_s: -DSPEC_LP64
648.exchange2_s: -DSPEC_LP64
657.xz_s: -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 -fiopenmp
-DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

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/jemalloc64-5.0.1/lib -ljemalloc

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
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

```
600.perlbench_s: -w -m64 -std=c11 -Wl, -z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-flto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-fiopenmp -DSPEC_OPENMP -fno-strict-overflow
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

```
602.gcc_s: -w -m64 -std=c11 -Wl, -z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-flto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc
```

605.mcf_s: basepeak = yes

```
625.x264_s: -w -std=c11 -m64 -Wl, -z,muldefs -xsapphirerapids -O3
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-fno-alias -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

657.xz_s: basepeak = yes

C++ benchmarks:

620.omnetpp_s: basepeak = yes

623.xalancbmk_s: basepeak = yes

631.deepsjeng_s: basepeak = yes

641.leela_s: basepeak = yes

Fortran benchmarks:

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Fusionstor

(Test Sponsor: Meganet)

SPECspeed®2017_int_base = 9.79

Invento i6000 (Intel Xeon Gold 6530)

SPECspeed®2017_int_peak = 9.97

CPU2017 License: 6221

Test Sponsor: Meganet

Tested by: Fusionstor system

Test Date: Dec-2024

Hardware Availability: Dec-2022

Software Availability: Dec-2023

Peak Optimization Flags (Continued)

648.exchange2_s: basepeak = yes

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

<http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.html>

<http://www.spec.org/cpu2017/flags/Fusionstor-Platform-Flags-Intel-ICX-rev6.html>

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

<http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/Fusionstor-Platform-Flags-Intel-ICX-rev6.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 2024-12-23 04:18:52-0500.

Report generated on 2025-03-12 10:24:25 by CPU2017 PDF formatter v6716.

Originally published on 2025-03-11.