



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

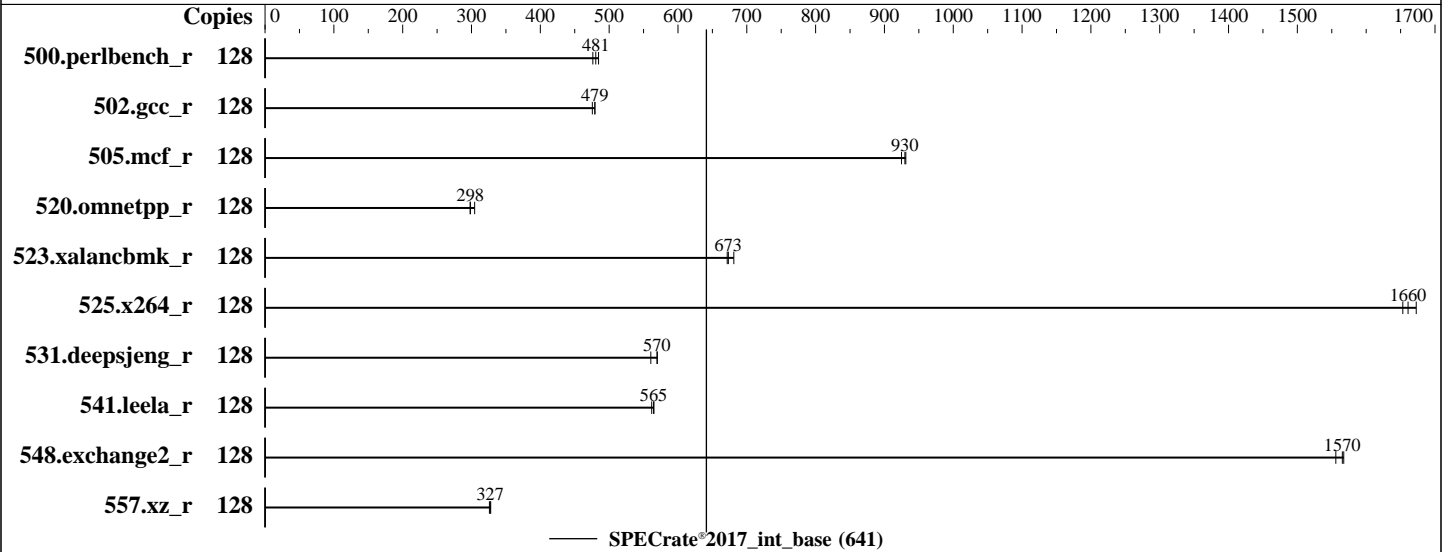
AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024



Hardware

CPU Name: AMD EPYC 9554P
 Max MHz: 3750
 Nominal: 3100
 Enabled: 64 cores, 1 chip, 2 threads/core
 Orderable: 1 chip
 Cache L1: 32 KB I + 32 KB D on chip per core
 L2: 1 MB I+D on chip per core
 L3: 256 MB I+D on chip per chip, 32 MB shared / 8 cores
 Other: None
 Memory: 768 GB (12 x 64 GB 2Rx4 PC5-5600B-R, running at 4800)
 Storage: 502GB SSD
 Other: CPU Cooling: Air

Software

OS: ubuntu 22.04.3 LTS
 kernel version 6.5.0-27-generic
 C/C++/Fortran: Version 4.0.0 of AOCC
 Compiler: No
 Parallel: Version 1.7a released Dec-2023
 Firmware: ext4
 File System: Run level 3 (multi-user)
 System State: 64-bit
 Base Pointers: Not Applicable
 Peak Pointers: None
 Other: BIOS set to prefer performance
 Power Management:



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	128	424	481	428	476	421	485							
502.gcc_r	128	378	479	381	476	378	479							
505.mcf_r	128	224	925	222	930	222	931							
520.omnetpp_r	128	564	298	563	298	551	305							
523.xalancbmk_r	128	201	672	201	673	198	681							
525.x264_r	128	136	1650	134	1670	135	1660							
531.deepsjeng_r	128	262	561	257	570	258	570							
541.leela_r	128	377	562	375	565	375	565							
548.exchange2_r	128	216	1560	214	1570	214	1570							
557.xz_r	128	424	326	422	328	423	327							

SPECrate®2017_int_base = 641

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

The AMD64 AOCC Compiler Suite is available at
<http://developer.amd.com/amd-aocc/>

Submit Notes

The config file option 'submit' was used.
'numactl' was used to bind copies to the cores.
See the configuration file for details.

Operating System Notes

'ulimit -s unlimited' was used to set environment stack size limit
'ulimit -l 2097152' was used to set environment locked pages in memory limit

runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>

To limit dirty cache to 8% of memory, 'sysctl -w vm.dirty_ratio=8' run as root.
To limit swap usage to minimum necessary, 'sysctl -w vm.swappiness=1' run as root.
To free node-local memory and avoid remote memory usage,
'sysctl -w vm.zone_reclaim_mode=1' run as root.
To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
To disable address space layout randomization (ASLR) to reduce run-to-run
variability, 'sysctl -w kernel.randomize_va_space=0' run as root.

To enable Transparent Hugepages (THP) only on request for base runs,
'echo madvise > /sys/kernel/mm/transparent_hugepage/enabled' run as root.
To enable THP for all allocations for peak runs,
'echo always > /sys/kernel/mm/transparent_hugepage/enabled' and
'echo always > /sys/kernel/mm/transparent_hugepage/defrag' run as root.



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Environment Variables Notes

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

```
LD_LIBRARY_PATH =  
    "/home/spec/amd_rate_aocc400_genoa_B_lib/lib:/home/spec/amd_rate_aocc400_genoa_B_lib/lib32:"  
MALLOC_CONF = "retain:true"
```

General Notes

Binaries were compiled on a system with 2x AMD EPYC 9174F CPU + 1.5TiB Memory using RHEL 8.6

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 Setting:
Numa nodes per socket = NPS4
Determinism Control = Manual
Determinism Enable = Disable Performance Determinism
cTDP Control = Manual
cTDP = 400
Package Power Limit Control = Manual
Package Power Limit = 400

Sysinfo program /home/spec/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on syl-Super-Server Fri Apr 12 16:33:29 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 (249.11-0ubuntu3.12)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. sysctl
15. /sys/kernel/mm/transparent_hugepage
16. /sys/kernel/mm/transparent_hugepage/khugepaged
17. OS release
18. Disk information
19. /sys/devices/virtual/dmi/id
20. dmidecode

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Platform Notes (Continued)

21. BIOS

1. `uname -a`
Linux syl-Super-Server 6.5.0-27-generic #28~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri Mar 15 10:51:06 UTC 2
x86_64 x86_64 x86_64 GNU/Linux

2. `w`
16:33:29 up 3 min, 3 users, load average: 0.50, 0.36, 0.16
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
syl tty1 - 16:32 7.00s 0.29s 0.01s -bash
syl pts/0 - 16:33 7.00s 1.36s 0.20s sudo ./run_amd_rate_aocc400_genoa_B1.py

3. Username
From environment variable \$USER: root
From the command 'logname': syl

4. `ulimit -a`
time(seconds) unlimited
file(blocks) unlimited
data(kbytes) unlimited
stack(kbytes) unlimited
coredump(blocks) 0
memory(kbytes) unlimited
locked memory(kbytes) 2097152
process 3094543
nofiles 1024
vmemory(kbytes) unlimited
locks unlimited
rtprio 0

5. `sysinfo process ancestry`
/sbin/init splash
/bin/login -p --
-bash
sudo ./run_amd_rate_aocc400_genoa_B1.py
sudo ./run_amd_rate_aocc400_genoa_B1.py
python3 ./run_amd_rate_aocc400_genoa_B1.py
/bin/bash ./amd_rate_aocc400_genoa_B1.sh
runcpu --config amd_rate_aocc400_genoa_B1.cfg --tune base --reportable --iterations 3 intrate
runcpu --configfile amd_rate_aocc400_genoa_B1.cfg --tune base --reportable --iterations 3 --nopower
--runmode rate --tune base --size test:train:refrate intrate --nopreenv --note-preenv --logfile
\$SPEC/tmp/CPU2017.001/templogs/preenv.intrate.001.0.log --lognum 001.0 --from_runcpu 2
specperl \$SPEC/bin/sysinfo
\$SPEC = /home/spec

6. `/proc/cpuinfo`
model name : AMD EPYC 9554P 64-Core Processor
vendor_id : AuthenticAMD
cpu family : 25
model : 17
stepping : 1
microcode : 0xa101144
bugs : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass srs0

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Platform Notes (Continued)

TLB size : 3584 4K pages
cpu cores : 64
siblings : 128
1 physical ids (chips)
128 processors (hardware threads)
physical id 0: core ids 0-63
physical id 0: apicids 0-127

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:             AuthenticAMD
Model name:            AMD EPYC 9554P 64-Core Processor
CPU family:            25
Model:                 17
Thread(s) per core:   2
Core(s) per socket:   64
Socket(s):             1
Stepping:              1
Frequency boost:      enabled
CPU max MHz:          3762.9880
CPU min MHz:          1500.0000
BogoMIPS:              6200.05
Flags:                 fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36
                    clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp
                    lm constant_tsc rep_good amd_lbr_v2 nopl nonstop_tsc cpuid extd_apicid
                    aperfmperf rapl pni pclmulqdq monitor ssse3 fma cx16 pcid sse4_1 sse4_2
                    x2apic movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy svm
                    extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw ibs skinit
                    wdt tce topoext perfctr_core perfctr_nb bpext perfctr_llc mwaitx cpb
                    cat_l3 cdp_l3 invpcid_single hw_pstate ssbd mba perfmon_v2 ibrs ibpb
                    stibp ibrs_enhanced vmmcall fsgsbase bmi1 avx2 smep bmi2 erms invpcid
                    cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb
                    avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves
                    cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local avx512_bf16 clzero
                    irperf xsaveerptr rdpru wbnoinvd amd_ppin cppc arat npt lbrv svm_lock
                    nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter
                    pfthreshold avic v_vmsave_vmload vgif x2avic v_spec_ctrl vnmi
                    avx512vbmi umip pku ospke avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni
                    avx512_bitalg avx512_vpopcntdq la57 rdpid overflow_recov succor smca
                    fsrm flush_lld

Virtualization:        AMD-V
L1d cache:            2 MiB (64 instances)
L1i cache:            2 MiB (64 instances)
L2 cache:             64 MiB (64 instances)
L3 cache:             256 MiB (8 instances)
NUMA node(s):         4
NUMA node0 CPU(s):   0-15,64-79
NUMA node1 CPU(s):   16-31,80-95
NUMA node2 CPU(s):   32-47,96-111
NUMA node3 CPU(s):   48-63,112-127

```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Platform Notes (Continued)

Vulnerability Gather data sampling: Not affected
 Vulnerability Itlb multihit: Not affected
 Vulnerability Lltf: Not affected
 Vulnerability Mds: Not affected
 Vulnerability Meltdown: Not affected
 Vulnerability Mmio stale data: Not affected
 Vulnerability Retbleed: Not affected
 Vulnerability Spec rstack overflow: Mitigation; Safe RET
 Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
 Vulnerability Spectre v1: Mitigation; usercopy/swaps barriers and __user pointer sanitization
 Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS, IBPB conditional, STIBP always-on, RSB filling, PBR SB-eIBRS Not affected
 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	32K	2M	8	Data	1	64	1	64
L1i	32K	2M	8	Instruction	1	64	1	64
L2	1M	64M	8	Unified	2	2048	1	64
L3	32M	256M	16	Unified	3	32768	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: 0-15,64-79
node 0 size: 193172 MB
node 0 free: 192147 MB
node 1 cpus: 16-31,80-95
node 1 size: 193527 MB
node 1 free: 192820 MB
node 2 cpus: 32-47,96-111
node 2 size: 193527 MB
node 2 free: 192795 MB
node 3 cpus: 48-63,112-127
node 3 size: 193482 MB
node 3 free: 192770 MB
node distances:
node  0  1  2  3
  0:  10  12  12  12
  1:  12  10  12  12
  2:  12  12  10  12
  3:  12  12  12  10

```

9. /proc/meminfo

MemTotal: 792279616 kB

10. who -r

run-level 3 Apr 12 16:32 last=5

11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.12)

Default Target	Status
graphical	running

12. Services, from systemctl list-unit-files

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Platform Notes (Continued)

STATE	UNIT FILES
enabled	ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon anacron 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 switcheroo-control systemd-oom systemd-pstore systemd-resolved systemd-timesyncd 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 upower wpa_supplicant-nl80211@ wpa_supplicant-wired@ wpa_supplicant@
generated	apport speech-dispatcher
indirect	saned@ spice-vdagentd uidd
masked	alsa-utils cryptdisks cryptdisks-early hwclock pulseaudio-enable-autospawn rc rcS saned sudo x11-common

13. Linux kernel boot-time arguments, from /proc/cmdline
 BOOT_IMAGE=/boot/vmlinuz-6.5.0-27-generic
 root=UUID=9ae13624-eaf9-4a96-9836-e3ff9ade049c
 ro
 quiet
 splash
 vt.handoff=7

14. sysctl

kernel.numa_balancing	1
kernel.randomize_va_space	0
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	8
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	1
vm.watermark_boost_factor	15000
vm.watermark_scale_factor	10
vm.zone_reclaim_mode	1

15. /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

16. /sys/kernel/mm/transparent_hugepage/khugepaged

alloc_sleep_millisecs	60000
-----------------------	-------

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Platform Notes (Continued)

```

defrag                1
max_ptes_none         511
max_ptes_shared       256
max_ptes_swap         64
pages_to_scan         4096
scan_sleep_millisecs  10000

```

```

-----
17. OS release
From /etc/*-release /etc/*-version
os-release Ubuntu 22.04.3 LTS

```

```

-----
18. Disk information
SPEC is set to: /home/spec
Filesystem  Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p2  ext4  468G   16G  429G   4% /

```

```

-----
19. /sys/devices/virtual/dmi/id
Vendor:          Supermicro
Product:         Super Server
Product Family:  SMC H13
Serial:          123456789

```

```

-----
20. 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:
12x NO DIMM NO DIMM
6x Samsung M321R8GA0PB0-CWMKH 64 GB 2 rank 5600, configured at 4800
6x Samsung M321R8GA0PB0-CWMXH 64 GB 2 rank 5600, configured at 4800

```

```

-----
21. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:      American Megatrends International, LLC.
BIOS Version:     1.7a
BIOS Date:        12/06/2023
BIOS Revision:    5.27

```

Compiler Version Notes

```

=====
C      | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base) 525.x264_r(base) 557.xz_r(base)
-----

```

```

AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on LLVM Mirror.Version.14.0.6)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin
-----

```

```

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

```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Compiler Version Notes (Continued)

AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on LLVM Mirror.Version.14.0.6)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

Fortran | 548.exchange2_r(base)

AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on LLVM Mirror.Version.14.0.6)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
flang

Base Portability Flags

500.perlbench_r: -DSPEC_LINUX_X64 -DSPEC_LP64
502.gcc_r: -DSPEC_LP64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LINUX -DSPEC_LP64
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:
-m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

Base Optimization Flags (Continued)

C benchmarks (continued):

```
-Wl,-mllvm -Wl,-ldist-scalar-expand -fenable-aggressive-gather
-z muldefs -O3 -march=znver4 -fveclib=AMDLIBM -ffast-math
-fstruct-layout=7 -mllvm -unroll-threshold=50
-mllvm -inline-threshold=1000 -fremap-arrays -fstrip-mining
-mllvm -reduce-array-computations=3 -zopt -lamdlibm -lflang
-lamdalloc
```

C++ benchmarks:

```
-m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -z muldefs -O3
-march=znver4 -fveclib=AMDLIBM -ffast-math
-mllvm -unroll-threshold=100 -finline-aggressive
-mllvm -loop-unswitch-threshold=200000
-mllvm -reduce-array-computations=3 -zopt
-fvirtual-function-elimination -fvisibility=hidden -lamdlibm -lflang
-lamdalloc-ext
```

Fortran benchmarks:

```
-m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-inline-recursion=4 -Wl,-mllvm -Wl,-lsr-in-nested-loop
-Wl,-mllvm -Wl,-enable-iv-split -z muldefs -O3 -march=znver4
-fveclib=AMDLIBM -ffast-math -fepilog-vectorization-of-inductions
-mllvm -optimize-strided-mem-cost -floop-transform
-mllvm -unroll-aggressive -mllvm -unroll-threshold=500 -lamdlibm
-lflang -lamdalloc
```

Base Other Flags

C benchmarks:

```
-Wno-unused-command-line-argument
```

C++ benchmarks:

```
-Wno-unused-command-line-argument
```

Fortran benchmarks:

```
-Wno-unused-command-line-argument
```

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

<http://www.spec.org/cpu2017/flags/aocc400-flags.html>

<http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-Genoa-revC.html>



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Supermicro

AS-1115HS-TNR
AMD EPYC 9554P

SPECrate®2017_int_base = 641

SPECrate®2017_int_peak = Not Run

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: Apr-2024
Hardware Availability: Nov-2022
Software Availability: Mar-2024

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

<http://www.spec.org/cpu2017/flags/aocc400-flags.xml>
<http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-Genoa-revC.xml>

SPEC CPU and SPECrate 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 2024-04-12 19:33:29-0400.
Report generated on 2024-06-24 10:35:34 by CPU2017 PDF formatter v6716.
Originally published on 2024-06-18.