SPEC CPU®2017 Integer Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge R7625 (AMD EPYC 9554 64-Core Processor)

$SPECrate^{®}2017\_int\_base = 1300$

$SPECrate^{®}2017_int_peak = $ Not Run

CPU2017 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Nov-2022
Hardware Availability: Feb-2023
Software Availability: Nov-2022

Copies	value
500.perlbench_r 256	970
502.gcc_r 256	987
505.mcf_r 256	1890
520.omnetpp_r 256	595
523.xalancbmk_r 256	1370
525.x264_r 256	3390
531.deepsjeng_r 256	1160
541.leela_r 256	1130
548.exchange2_r 256	3230
557.xz_r 256	648

Scale: 0 150 300 450 600 750 900 1050 1250 1450 1650 1850 2050 2250 2450 2650 2850 3050 3400

—— SPECrate®2017_int_base (1300)

Hardware

CPU Name: AMD EPYC 9554
 Max MHz: 3750
 Nominal: 3100
Enabled: 128 cores, 2 chips, 2 threads/core
Orderable: 1,2 chips
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: 1536 GB (24 x 64 GB 2Rx4 PC5-4800B-R)
Storage: 130 GB on tmpfs
Other: None

Software

OS: Ubuntu 22.04.1 LTS
 5.15.0-46-generic
Compiler: C/C++/Fortran: Version 4.0.0 of AOCC
Parallel: No
Firmware: Version 1.0.2 released Oct-2022
File System: tmpfs
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.

Standard Performance Evaluation Corporation (info@spec.org)

https://www.spec.org/

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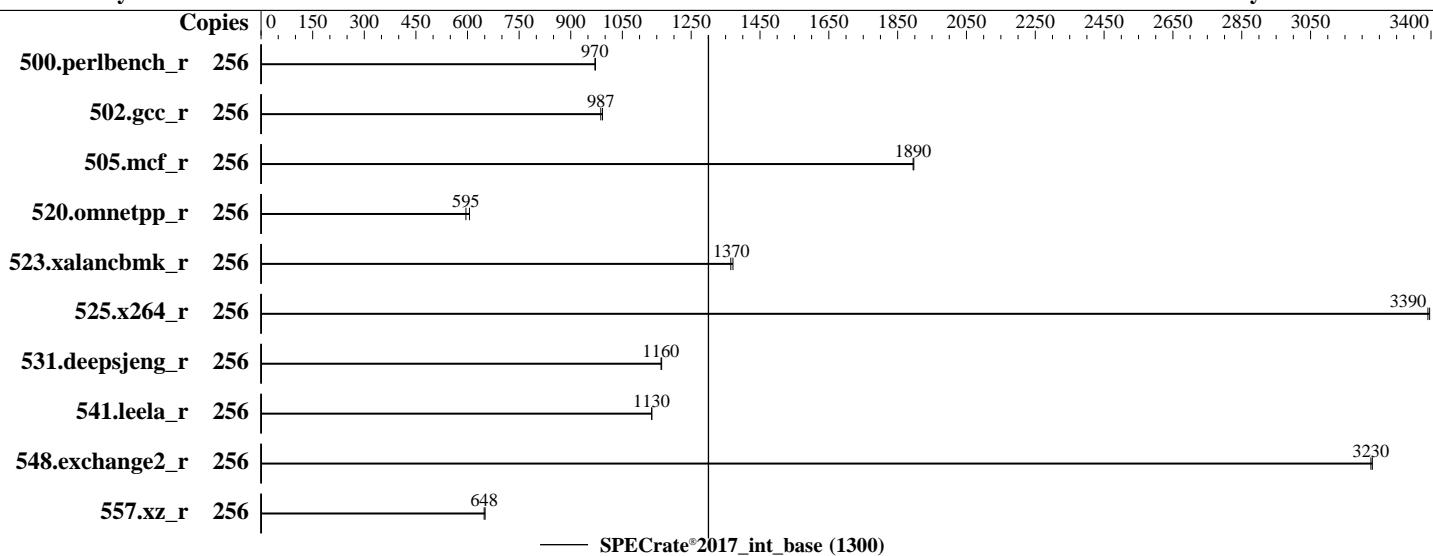SPECrate®2017_int_peak = Not Run

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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	256	419	972	**420**	**970**									
502.gcc_r	256	365	992	**367**	**987**									
505.mcf_r	256	**218**	**1890**	218	1900									
520.omnetpp_r	256	**564**	**595**	555	606									
523.xalancbmk_r	256	197	1370	**198**	**1370**									
525.x264_r	256	**132**	**3390**	132	3400									
531.deepsjeng_r	256	**252**	**1160**	252	1160									
541.leela_r	256	373	1140	**374**	**1130**									
548.exchange2_r	256	208	3230	**208**	**3230**									
557.xz_r	256	**426**	**648**	425	651									
SPECrate®2017_int_base =		**1300**												
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.
```

(Continued on next page)

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

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Operating System Notes (Continued)

```
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.
```

Environment Variables Notes

```
Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH =
     "/mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b/amd_rate_aocc400_genoa_B_lib/lib
     :/mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b/amd_rate_aocc400_genoa_B_lib/lib
     32:"
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.


 Benchmark run from a 130 GB ramdisk created with the cmd: "mount -t tmpfs -o size=130G tmpfs /mnt/ramdisk"
```

Platform Notes

```
 BIOS settings:
          DRAM Refresh Delay : Performance
       DIMM Self Healing on
   Uncorrectable Memory Error : Disabled
    Virtualization Technology : Disabled
        NUMA Nodes per Socket : 4
     L3 Cache as NUMA Domain : Enabled

             System Profile : Custom
         Memory Patrol Scrub : Disabled
```

(Continued on next page)

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Platform Notes (Continued)

```
          PCI ASPM L1 Link
             Power Management : Disabled
             Determinism Slider : Power Determinism

 Sysinfo program /mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b/bin/sysinfo
 Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acafc64d
 running on amd-sut Fri Nov  4 19:09:54 2022

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

 From /proc/cpuinfo
    model name : AMD EPYC 9554 64-Core Processor
       2  "physical id"s (chips)
       256 "processors"
    cores, siblings (Caution: counting these is hw and system dependent. The following
    excerpts from /proc/cpuinfo might not be reliable.  Use with caution.)
       cpu cores : 64
       siblings  : 128
       physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
       25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
       53 54 55 56 57 58 59 60 61 62 63
       physical 1: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
       25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
       53 54 55 56 57 58 59 60 61 62 63

 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):                    256
    On-line CPU(s) list:       0-255
    Vendor ID:                 AuthenticAMD
    Model name:                AMD EPYC 9554 64-Core Processor
    CPU family:                25
    Model:                     17
    Thread(s) per core:        2
    Core(s) per socket:        64
    Socket(s):                 2
    Stepping:                  1
    Frequency boost:           enabled
    CPU max MHz:               3764.0000
    CPU min MHz:               400.0000
    BogoMIPS:                  6201.46
    Flags:                     fpu vme de pse tsc msr pae mce cx8 apic sep mtrr
```

(Continued on next page)

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SPECrate®2017_int_base =   1300

SPECrate®2017_int_peak = Not Run

Platform Notes (Continued)

```
    pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt
    pdpe1gb rdtscp lm constant_tsc rep_good 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 ibrs
    ibpb stibp 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 v_spec_ctrl avx512vbmi umip pku
    ospke avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg avx512_vpopcntdq
    la57 rdpid overflow_recov succor smca fsrm flush_l1d
  Virtualization:                AMD-V
  L1d cache:                     4 MiB (128 instances)
  L1i cache:                     4 MiB (128 instances)
  L2 cache:                      128 MiB (128 instances)
  L3 cache:                      512 MiB (16 instances)
  NUMA node(s):                  16
  NUMA node0 CPU(s):             0-7,128-135
  NUMA node1 CPU(s):             32-39,160-167
  NUMA node2 CPU(s):             16-23,144-151
  NUMA node3 CPU(s):             48-55,176-183
  NUMA node4 CPU(s):             24-31,152-159
  NUMA node5 CPU(s):             56-63,184-191
  NUMA node6 CPU(s):             8-15,136-143
  NUMA node7 CPU(s):             40-47,168-175
  NUMA node8 CPU(s):             64-71,192-199
  NUMA node9 CPU(s):             96-103,224-231
  NUMA node10 CPU(s):            80-87,208-215
  NUMA node11 CPU(s):            112-119,240-247
  NUMA node12 CPU(s):            88-95,216-223
  NUMA node13 CPU(s):            120-127,248-255
  NUMA node14 CPU(s):            72-79,200-207
  NUMA node15 CPU(s):            104-111,232-239
  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; Retpolines, IBPB conditional, IBRS_FW,
```

(Continued on next page)

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Platform Notes (Continued)

```
     STIBP always-on, RSB filling
     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       4M    8 Data             1     64        1             64
     L1i       32K       4M    8 Instruction      1     64        1             64
     L2         1M     128M    8 Unified          2   2048        1             64
     L3        32M     512M   16 Unified          3  32768        1             64

 /proc/cpuinfo cache data
    cache size : 1024 KB

 From numactl --hardware
 WARNING: a numactl 'node' might or might not correspond to a physical chip.
   available: 16 nodes (0-15)
   node 0 cpus: 0 1 2 3 4 5 6 7 128 129 130 131 132 133 134 135
   node 0 size: 96310 MB
   node 0 free: 95885 MB
   node 1 cpus: 32 33 34 35 36 37 38 39 160 161 162 163 164 165 166 167
   node 1 size: 96763 MB
   node 1 free: 96406 MB
   node 2 cpus: 16 17 18 19 20 21 22 23 144 145 146 147 148 149 150 151
   node 2 size: 96764 MB
   node 2 free: 96323 MB
   node 3 cpus: 48 49 50 51 52 53 54 55 176 177 178 179 180 181 182 183
   node 3 size: 96763 MB
   node 3 free: 96394 MB
   node 4 cpus: 24 25 26 27 28 29 30 31 152 153 154 155 156 157 158 159
   node 4 size: 96764 MB
   node 4 free: 96446 MB
   node 5 cpus: 56 57 58 59 60 61 62 63 184 185 186 187 188 189 190 191
   node 5 size: 96763 MB
   node 5 free: 96404 MB
   node 6 cpus: 8 9 10 11 12 13 14 15 136 137 138 139 140 141 142 143
   node 6 size: 96764 MB
   node 6 free: 96441 MB
   node 7 cpus: 40 41 42 43 44 45 46 47 168 169 170 171 172 173 174 175
   node 7 size: 96747 MB
   node 7 free: 96395 MB
   node 8 cpus: 64 65 66 67 68 69 70 71 192 193 194 195 196 197 198 199
   node 8 size: 96728 MB
   node 8 free: 96424 MB
   node 9 cpus: 96 97 98 99 100 101 102 103 224 225 226 227 228 229 230 231
   node 9 size: 96763 MB
   node 9 free: 96536 MB
```

(Continued on next page)

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Platform Notes (Continued)

```
   node 10 cpus: 80 81 82 83 84 85 86 87 208 209 210 211 212 213 214 215
   node 10 size: 96764 MB
   node 10 free: 96524 MB
   node 11 cpus: 112 113 114 115 116 117 118 119 240 241 242 243 244 245 246 247
   node 11 size: 96763 MB
   node 11 free: 96534 MB
   node 12 cpus: 88 89 90 91 92 93 94 95 216 217 218 219 220 221 222 223
   node 12 size: 96764 MB
   node 12 free: 96422 MB
   node 13 cpus: 120 121 122 123 124 125 126 127 248 249 250 251 252 253 254 255
   node 13 size: 96763 MB
   node 13 free: 96510 MB
   node 14 cpus: 72 73 74 75 76 77 78 79 200 201 202 203 204 205 206 207
   node 14 size: 96764 MB
   node 14 free: 96478 MB
   node 15 cpus: 104 105 106 107 108 109 110 111 232 233 234 235 236 237 238 239
   node 15 size: 96732 MB
   node 15 free: 92924 MB
   node distances:
   node   0    1    2    3    4    5    6    7    8    9   10   11   12   13   14   15
     0:  10   11   12   12   12   12   12   12   32   32   32   32   32   32   32   32
     1:  11   10   12   12   12   12   12   12   32   32   32   32   32   32   32   32
     2:  12   12   10   11   12   12   12   12   32   32   32   32   32   32   32   32
     3:  12   12   11   10   12   12   12   12   32   32   32   32   32   32   32   32
     4:  12   12   12   12   10   11   12   12   32   32   32   32   32   32   32   32
     5:  12   12   12   12   11   10   12   12   32   32   32   32   32   32   32   32
     6:  12   12   12   12   12   12   10   11   32   32   32   32   32   32   32   32
     7:  12   12   12   12   12   12   11   10   32   32   32   32   32   32   32   32
     8:  32   32   32   32   32   32   32   32   10   11   12   12   12   12   12   12
     9:  32   32   32   32   32   32   32   32   11   10   12   12   12   12   12   12
    10:  32   32   32   32   32   32   32   32   12   12   10   11   12   12   12   12
    11:  32   32   32   32   32   32   32   32   12   12   11   10   12   12   12   12
    12:  32   32   32   32   32   32   32   32   12   12   12   12   10   11   12   12
    13:  32   32   32   32   32   32   32   32   12   12   12   12   11   10   12   12
    14:  32   32   32   32   32   32   32   32   12   12   12   12   12   12   10   11
    15:  32   32   32   32   32   32   32   32   12   12   12   12   12   12   11   10

 From /proc/meminfo
    MemTotal:       1584825332 kB
    HugePages_Total:         0
    Hugepagesize:         2048 kB

 /sbin/tuned-adm active
     Current active profile: latency-performance

 /sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has
    performance
```

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Platform Notes (Continued)

```
 /usr/bin/lsb_release -d
    Ubuntu 22.04.1 LTS

 From /etc/*release* /etc/*version*
    debian_version: bookworm/sid
    os-release:
        PRETTY_NAME="Ubuntu 22.04.1 LTS"
        NAME="Ubuntu"
        VERSION_ID="22.04"
        VERSION="22.04.1 LTS (Jammy Jellyfish)"
        VERSION_CODENAME=jammy
        ID=ubuntu
        ID_LIKE=debian
        HOME_URL="https://www.ubuntu.com/"

 uname -a:
    Linux amd-sut 5.15.0-46-generic #49-Ubuntu SMP Thu Aug 4 18:03:25 UTC 2022 x86_64
    x86_64 x86_64 GNU/Linux

 Kernel self-reported vulnerability status:

 CVE-2018-12207 (iTLB Multihit):                    Not affected
 CVE-2018-3620 (L1 Terminal Fault):                 Not affected
 Microarchitectural Data Sampling:                  Not affected
 CVE-2017-5754 (Meltdown):                          Not affected
 mmio_stale_data:                                   Not affected
 retbleed:                                          Not affected
 CVE-2018-3639 (Speculative Store Bypass):          Mitigation: Speculative Store
                                                    Bypass disabled via prctl and
                                                    seccomp
 CVE-2017-5753 (Spectre variant 1):                 Mitigation: usercopy/swapgs
                                                    barriers and __user pointer
                                                    sanitization
 CVE-2017-5715 (Spectre variant 2):                 Mitigation: Retpolines, IBPB:
                                                    conditional, IBRS_FW, STIBP:
                                                    always-on, RSB filling
 CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
 CVE-2019-11135 (TSX Asynchronous Abort):           Not affected

 run-level 3 Nov 4 16:46

 SPEC is set to: /mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b
    Filesystem      Type   Size  Used Avail Use% Mounted on
    tmpfs           tmpfs  130G  3.4G  127G   3% /mnt/ramdisk

 From /sys/devices/virtual/dmi/id
```

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Platform Notes (Continued)

```
        Vendor:        Dell Inc.
        Product:       PowerEdge R7625
        Product Family: PowerEdge
        Serial:        1234567

  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:
      24x 80AD000080AD HMCG94MEBRA109N 64 GB 2 rank 4800

  BIOS:
    BIOS Vendor:       Dell Inc.
    BIOS Version:      1.0.2
    BIOS Date:         10/17/2022
    BIOS Revision:     1.0

  (End of data from sysinfo program)
```

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)
--------------------------------------------------------------------------------
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)
```

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

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
-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
```

(Continued on next page)

Dell Inc.

PowerEdge R7625 (AMD EPYC 9554 64-Core Processor)

SPECrate®2017_int_base =   1300

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6573	**Test Date:** Nov-2022
Test Sponsor: Dell Inc.	**Hardware Availability:** Feb-2023
Tested by: Dell Inc.	**Software Availability:** Nov-2022

Base Optimization Flags (Continued)

C benchmarks (continued):
```
-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/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.0.html
```

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/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.0.xml
```

SPEC CPU®2017 Integer Rate Result

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PowerEdge R7625 (AMD EPYC 9554 64-Core Processor)

SPECrate®2017_int_base = 1300

SPECrate®2017_int_peak = Not Run

CPU2017 License: 6573		**Test Date:**	Nov-2022
Test Sponsor:	Dell Inc.	**Hardware Availability:**	Feb-2023
Tested by:	Dell Inc.	**Software Availability:**	Nov-2022

For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

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