Dell Inc.

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)

| SPECspeed\textsuperscript{\textregistered}2017\_int\_base & = & 12.2 |
| SPECspeed\textsuperscript{\textregistered}2017\_int\_peak & = & 12.3 |

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**SPECspeed\textsuperscript{\textregistered}2017\_int\_base** (12.2) \quad \quad \quad \quad **SPECspeed\textsuperscript{\textregistered}2017\_int\_peak** (12.3)

**Hardware**

CPU Name: AMD EPYC 7413  
Max MHz: 3600  
Nominal: 2650  
Enabled: 48 cores, 2 chips  
Orderable: 1.2 chips  
Cache L1: 32 KB I + 32 KB D on chip per core  
L2: 512 KB I+D on chip per core  
L3: 128 MB I+D on chip per chip, 32 MB shared / 6 cores  
Other: None  
Memory: 512 GB (16 x 32 GB 2Rx4 PC4-3200AA-R)  
Storage: 64 GB on tmpfs  
Other: None

**Software**

OS: Red Hat Enterprise Linux 8.3 (Ootpa)  
4.18.0-240.el8.x86_64  
Compiler: C/C++/Fortran: Version 3.0.0 of AOCC  
Parallel: Yes  
Firmware: Version 2.0.3 released Jan-2021  
File System: tmpfs  
System State: Run level 3 (multi-user)  
Base Pointers: 64-bit  
Peak Pointers: 64-bit  
Other: jemalloc: jemalloc memory allocator library v5.1.0  
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.
Dell Inc.  
PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)  

SPECspeed®2017_int_base = 12.2  
SPECspeed®2017_int_peak = 12.3  

Results Table

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SPECSpeed®2017_int_base = 12.2  
SPECSpeed®2017_int_peak = 12.3  

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  
'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>

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

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)

SPEC CPU®2017 Integer Speed Result

SPECspeed®2017_int_base = 12.2
SPECspeed®2017_int_peak = 12.3

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Mar-2021
Hardware Availability: Apr-2021
Software Availability: Mar-2021

Operating System Notes (Continued)

To enable Transparent Hugepages (THP) for all allocations, '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:
GOMP_CPU_AFFINITY = "0-47"
LD_LIBRARY_PATH = 
"/mnt/ramdisk/cpu2017-1.1.5/amd_speed_aocc300_milan_B_lib/64;/mnt/ramdisk/cpu2017-1.1.5/amd_speed_aocc300_milan_B_lib/32:" MALLOC_CONF = "retain:true"
OMP_DYNAMIC = "false"
OMP_SCHEDULE = "static"
OMP_STACKSIZE = "128M"
OMP_THREAD_LIMIT = "48"

Environment variables set by runcpu during the 600.perlbench_s peak run:
GOMP_CPU_AFFINITY = "0"

Environment variables set by runcpu during the 602.gcc_s peak run:
GOMP_CPU_AFFINITY = "0"

Environment variables set by runcpu during the 620.omnetpp_s peak run:
GOMP_CPU_AFFINITY = "0"

Environment variables set by runcpu during the 625.x264_s peak run:
GOMP_CPU_AFFINITY = "0"

Environment variables set by runcpu during the 641.leela_s peak run:
GOMP_CPU_AFFINITY = "0"

Environment variables set by runcpu during the 657.xz_s peak run:
GOMP_CPU_AFFINITY = "0-47"

General Notes

Binaries were compiled on a system with 2x AMD EPYC 7742 CPU + 1TiB Memory using OpenSUSE 15.2

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) (Continued on next page)
SPEC CPU®2017 Integer Speed Result

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Dell Inc.

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)  SPECspeed®2017_int_base = 12.2
SPECspeed®2017_int_peak = 12.3

CPU2017 License: 55  Test Date: Mar-2021
Test Sponsor: Dell Inc.  Hardware Availability: Apr-2021
Tested by: Dell Inc.  Software Availability: Mar-2021

General Notes (Continued)

is mitigated in the system as tested and documented.

Benchmark run from a 64 GB ramdisk created with the cmd: "mount -t tmpfs -o size=64G tmpfs /mnt/ramdisk"
jemalloc: configured and built with GCC v4.8.2 in RHEL 7.4 (No options specified)
jemalloc 5.1.0 is available here:
https://github.com/jemalloc/jemalloc/releases/download/5.1.0/jemalloc-5.1.0.tar.bz2

Platform Notes

BIOS settings:
Logical processor : Disabled
L3 Cache as NUMA Domain : Enabled
Virtualization Technology : Disabled
DRAM Refresh Delay : Performance
System Profile : Custom
    CPU Power Management : Maximum Performance
    Memory Patrol Scrub : Disabled
    PCI ASPM L1 Link
    Power Management : Disabled

Sysinfo program /mnt/ramdisk/cpu2017-1.1.5/bin/sysinfo
Rev: r6538 of 2020-09-24 e8664e66d2d7080afeaa89d4b38e2f1c
running on rhel-8-3-amd Fri Mar 5 14:50:13 2021

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 7413 24-Core Processor
  2 "physical id"s (chips)
  48 "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 : 24
siblings : 24
physical 0: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26 27 28 29
physical 1: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26 27 28 29

From lscpu:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 48

(Continued on next page)
Dell Inc.

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)  

**SPEC CPU®2017 Integer Speed Result**

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**SPECspeed®2017_int_base = 12.2**

**SPECspeed®2017_int_peak = 12.3**

---

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

---

**Platform Notes (Continued)**

On-line CPU(s) list: 0-47
Thread(s) per core: 1
Core(s) per socket: 24
Socket(s): 2
NUMA node(s): 8
Vendor ID: AuthenticAMD
CPU family: 25
Model: 1
Model name: AMD EPYC 7413 24-Core Processor
Stepping: 1
CPU MHz: 3089.055
BogoMIPS: 5289.71
Virtualization: AMD-V
L1d cache: 32K
L1i cache: 32K
L2 cache: 512K
L3 cache: 32768K
NUMA node0 CPU(s): 0-5
NUMA node1 CPU(s): 6-11
NUMA node2 CPU(s): 12-17
NUMA node3 CPU(s): 18-23
NUMA node4 CPU(s): 24-29
NUMA node5 CPU(s): 30-35
NUMA node6 CPU(s): 36-41
NUMA node7 CPU(s): 42-47

Flags:

```
fpu vme de pse tsc msr pae mca cmov pat pse36 clflush mmx mpx mppr ms rdtscp lm
constant_tsc rep_good nopl nonstop_tsc cpuid extd_apicid aperfmperf pni pclmulqdq
monitor ssse3 fma cx16 sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx f16c
rdxrdi rmw_cl x86evtx cmp_legacy svm extapic cx8 legacy abm sse4a misalignsse 3dnowprefetch
osvw ibs skinit wdt tce topoext perfctr_core perfctr_nb bpext perfctr_llc mwaitx cpb
cat_13 cdp_13 invpcid_single hw_pstate sme ssbd mba sev ibrs ibpb vmbc
```

/proc/cpuinfo cache data

```
   cache size : 512 KB
```

From numactl --hardware WARNING: a numactl 'node' might or might not correspond to a physical chip.
available: 8 nodes (0-7)
node 0 cpus: 0 1 2 3 4 5
node 0 size: 64073 MB
node 0 free: 58319 MB

(Continued on next page)
Dell Inc. PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)

SPEC®2017_int_base = 12.2
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CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.
Test Date: Mar-2021
Hardware Availability: Apr-2021
Software Availability: Mar-2021

Platform Notes (Continued)

node 1 cpus: 6 7 8 9 10 11
node 1 size: 64494 MB
node 1 free: 64345 MB
node 2 cpus: 12 13 14 15 16 17
node 2 size: 64508 MB
node 2 free: 64263 MB
node 3 cpus: 18 19 20 21 22 23
node 3 size: 64440 MB
node 3 free: 64191 MB
node 4 cpus: 24 25 26 27 28 29
node 4 size: 64502 MB
node 4 free: 64452 MB
node 5 cpus: 30 31 32 33 34 35
node 5 size: 64500 MB
node 5 free: 64457 MB
node 6 cpus: 36 37 38 39 40 41
node 6 size: 64508 MB
node 6 free: 64456 MB
node 7 cpus: 42 43 44 45 46 47
node 7 size: 64501 MB
node 7 free: 64448 MB

node distances:

From /proc/meminfo
MemTotal: 527965820 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

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

From /etc/*release* /etc/*version*
os-release:
NAME="Red Hat Enterprise Linux"
VERSION="8.3 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.3"

(Continued on next page)
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SPECspeed®2017_int_base = 12.2
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CPU2017 License: 55
Test Date: Mar-2021
Test Sponsor: Dell Inc.
Hardware Availability: Apr-2021
Tested by: Dell Inc.
Software Availability: Mar-2021

Platform Notes (Continued)

PLATFORM_ID="platform:el8"
PRETTY_NAME="Red Hat Enterprise Linux 8.3 (Ootpa)"
ANSI_COLOR="0;31"
redhat-release: Red Hat Enterprise Linux release 8.3 (Ootpa)
system-release: Red Hat Enterprise Linux release 8.3 (Ootpa)
system-release-cpe: cpe:/o:redhat:enterprise_linux:8.3:ga

uname -a:
Linux rhel-8-3-amd 4.18.0-240.el8.x86_64 #1 SMP Wed Sep 23 05:13:10 EDT 2020 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
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: Full AMD retpoline, IBPB: conditional, IBRS_FW, STIBP: disabled, RSB filling
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 3 Nov 25 11:39

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.5
Filesystem Type Size Used Avail Use% Mounted on
tmpfs tmpfs 64G 5.4G 59G 9% /mnt/ramdisk

From /sys/devices/virtual/dmi/id
Vendor: Dell Inc.
Product: PowerEdge R6525
Product Family: PowerEdge
Serial: C3KRPX2

Additional information from dmidecode 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:
3x 80AD80B380AD HMA84GR7CJR4N-XN 32 GB 2 rank 3200

(Continued on next page)
Dell Inc.
PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)

SPECspeed\textsuperscript{\textregistered}2017\_int\_base = 12.2
SPECspeed\textsuperscript{\textregistered}2017\_int\_peak = 12.3

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

### Platform Notes (Continued)

13x 80AD863280AD HMA84GR7CJR4N-XN 32 GB 2 rank 3200
16x Not Specified Not Specified

BIOS:
- BIOS Vendor: Dell Inc.
- BIOS Version: 2.0.3
- BIOS Date: 01/15/2021
- BIOS Revision: 2.0

(End of data from sysinfo program)

### 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)
-----------------------------------------------
AMD clang version 12.0.0 (CLANG: AOCC\_3.0.0-Build\#78 2020\_12\_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86\_64\_unknown\_linux\_gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin
-----------------------------------------------

-----------------------------------------------
C++     | 620.omnetpp\_s(base, peak) 623.xalancbmk\_s(base, peak) 631.deepsjeng\_s(base, peak) 641.leela\_s(base, peak)
-----------------------------------------------
AMD clang version 12.0.0 (CLANG: AOCC\_3.0.0-Build\#78 2020\_12\_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86\_64\_unknown\_linux\_gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin
-----------------------------------------------

-----------------------------------------------
Fortran | 648.exchange2\_s(base, peak)
-----------------------------------------------
AMD clang version 12.0.0 (CLANG: AOCC\_3.0.0-Build\#78 2020\_12\_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86\_64\_unknown\_linux\_gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin
-----------------------------------------------
### SPEC CPU®2017 Integer Speed Result

**Dell Inc.**

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)

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<td>Hardware Availability: Apr-2021</td>
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<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: Mar-2021</td>
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</tbody>
</table>

#### Base Compiler Invocation

C benchmarks:
- clang

C++ benchmarks:
- clang++

Fortran benchmarks:
- flang

#### Base Portability Flags

- 600.perlbench_s: -DSPEC_LINUX_X64 -DSPEC_LP64
- 602.gcc_s: -DSPEC_LP64
- 605.mcf_s: -DSPEC_LP64
- 620.omnetpp_s: -DSPEC_LP64
- 623.xalancbmk_s: -DSPEC_LINUX -DSPEC_LP64
- 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:**
- -m64 -mno-adx -mno-sse4a -W1,-allow-multiple-definition
- -W1,-mllvm -W1,-enable-licm-vrp -W1,-mllvm -W1,-region-vectorize
- -W1,-mllvm -W1,-function-specialize
- -W1,-mllvm -W1,-align-all-nofallthru-blocks=6
- -W1,-mllvm -W1,-reduce-array-computations=3 -O3 -march=znver3
- -fveclib=AMDLIBM -ffast-math -flto -fstruct-layout=5
- -mllvm -unroll-threshold=50 -mllvm -inline-threshold=1000
- -fremap-arrays -mllvm -function-specialize -flv-function-specialization
- -mllvm -enable-gvn-hoist -mllvm -global-vectorize-slp=true
- -mllvm -enable-licm-vrp -mllvm -reduce-array-computations=3 -z muldefs
- -DSPEC_OPENMP -fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc
- -lflang -lflangrti

**C++ benchmarks:**
- -m64 -std=c++98 -mno-adx -mno-sse4a
- -W1,-mllvm -W1,-do-block-reorder=aggressive
- -W1,-mllvm -W1,-region-vectorize -W1,-mllvm -W1,-function-specialize

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## SPEC CPU®2017 Integer Speed Result

### Dell Inc.

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)  

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**Test Sponsor:** Dell Inc.  
**Tested by:** Dell Inc.  
**Test Date:** Mar-2021  
**Hardware Availability:** Apr-2021  
**Software Availability:** Mar-2021

### Base Optimization Flags (Continued)

C++ benchmarks (continued):
- `-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6`
- `-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -march=znver3`
- `-fveclib=AMDLIBM -ffast-math -flto -mllvm -enable-partial-unswitch`
- `-mllvm -unroll-threshold=100 -finline-aggressive`
- `-fllvm-function-specialization -mllvm -loop-unswitch-threshold=200000`
- `-mllvm -reroll-loops -mllvm -aggressive-loop-unswitch`
- `-mllvm -extra-vectorizer-passes -mllvm -reduce-array-computations=3`
- `-mllvm -global-vectorize-slp=true -mllvm -convert-pow-exp-to-int=false`
- `-z muldefs -mllvm -do-block-reorder=aggressive`
- `-fvirtual-function-elimination -fvisibility=hidden -DSPEC_OPENMP`
- `-fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc -lflang -lflangrti`

Fortran benchmarks:
- `-m64 -mno-adx -mno-sse4a -Wl,-mllvm -Wl,-inline-recursion=4`
- `-Wl,-mllvm -Wl,-lsr-in-nested-loop -Wl,-mllvm -Wl,-enable-iv-split`
- `-Wl,-mllvm -Wl,-region-vectorize -Wl,-mllvm -Wl,-function-specialize`
- `-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6`
- `-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -march=znver3`
- `-fveclib=AMDLIBM -ffast-math -flto -z muldefs`
- `-mllvm -unroll-aggressive -mllvm -unroll-threshold=150 -DSPEC_OPENMP`
- `-fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc -lflang -lflangrti`

### Base Other Flags

**C benchmarks:**
- `-Wno-unused-command-line-argument -Wno-return-type`

**C++ benchmarks:**
- `-Wno-unused-command-line-argument -Wno-return-type`

**Fortran benchmarks:**
- `-Wno-return-type`

### Peak Compiler Invocation

**C benchmarks:**
- `clang`

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SPEC CPU®2017 Integer Speed Result

PowerEdge R6525 (AMD EPYC 7413 24-Core Processor)

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Test Date: Mar-2021
Hardware Availability: Apr-2021
Software Availability: Mar-2021

Peak Compiler Invocation (Continued)

C++ benchmarks:
clang++

Fortran benchmarks:
flang

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

- 600.perlbench_s: -m64 -mno-adx -mno-sse4a -Wl,-allow-multiple-definition
- Wl,-mllvm -Wl,-enable-licm-vrp
- Wl,-mllvm -Wl,-function-specialize
- Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
- Wl,-mllvm -Wl,-reduce-array-computations=3 -Ofast
- march=znver3 -fveclib=AMDLIBM -ffast-math -flto
- fstruct-layout=5 -mllvm -unroll-threshold=50
- fremap-arrays -fllvm-function-specialization
- mllvm -inline-threshold=1000 -mllvm -enable-gvn-hoist
- mllvm -global-vectorize-slp=true
- mllvm -function-specialize -mllvm -enable-licm-vrp
- mllvm -reduce-array-computations=3 -DSPEC_OPENMP -fopenmp
- fopenmp=libomp -lomp -lxmlibm -ljemalloc -lflang

- 602.gcc_s: Same as 600.perlbench_s

- 605.mcf_s: basepeak = yes

- 625.x264_s: Same as 600.perlbench_s

- 657.xz_s: Same as 600.perlbench_s

C++ benchmarks:

- 620.omnetpp_s: -m64 -std=c++98 -mno-adx -mno-sse4a
- Wl,-mllvm -Wl,-do-block-reorder=aggressive
- Wl,-mllvm -Wl,-function-specialize
- Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6

(Continued on next page)
### Peak Optimization Flags (Continued)

620.omnetpp_s (continued):
-\texttt{-Wl, -mllvm \ -Wl,} \texttt{-reduce-array-computations=3} \texttt{-Ofast}
-\texttt{-march=znver3} \texttt{-fveclib=AMDLIBM} \texttt{-ffast-math} \texttt{-flto}
-\texttt{-finline-aggressive} \texttt{-mllvm \ -unroll-threshold=100}
-\texttt{-flv-function-specialization} \texttt{-mllvm \ -enable-licm-vrp}
-\texttt{-mllvm \ -reroll-loops} \texttt{-mllvm \ -aggressive-loop-unswitch}
-\texttt{-mllvm \ -reduce-array-computations=3}
-\texttt{-mllvm \ -global-vectorize-slp=true}
-\texttt{-mllvm \ -do-block-reorder=aggressive}
-\texttt{-fvirtual-function-elimination} \texttt{-fvisibility=hidden}
-\texttt{-DSPEC\_OPENMP} \texttt{-fopenmp} \texttt{-fopenmp=libomp} \texttt{-lomp} \texttt{-lamdlibm}
-\texttt{-ljemalloc} \texttt{-flang}

623.xalancbmk_s: basepeak = yes
631.deepsjeng_s: basepeak = yes
641.leela_s: Same as 620.omnetpp_s

### Peak Other Flags

C benchmarks:
-\texttt{-Wno-unused-command-line-argument} \texttt{-Wno-return-type}

C++ benchmarks:
-\texttt{-Wno-unused-command-line-argument} \texttt{-Wno-return-type}

Fortran benchmarks:
-\texttt{-Wno-return-type}

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


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

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

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