**Lenovo Global Technology**

**NVIDIA Tesla V100S-PCIE-32GB**

**ThinkSystem SR665**

**SPECCalc_acc_peak = Not Run**

**SPECCalc_acc_base = 14.4**

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**Hardware**

- **CPU Name:** AMD EPYC 7H12
- **CPU Characteristics:** Turbo up to 3.3 GHz
- **CPU MHz:** 2600
- **CPU MHz Maximum:** 3300
- **FPU:** Integrated
- **CPU(s) enabled:** 64 cores, 1 chip, 64 cores/chip, 2 threads/core
- **CPU(s) orderable:** 1-2 chips
- **Primary Cache:** 32 KB I + 32 KB D on chip per core
- **Secondary Cache:** 512 KB I+D on chip per core
- **L3 Cache:** 256 MB I+D on chip per chip
- **Other Cache:** None

**Accelerator**

- **Accel Model Name:** NVIDIA Tesla V100S
- **Accel Vendor:** NVIDIA Corporation
- **Accel Name:** NVIDIA Tesla V100S-PCIE-32GB
- **Type of Accel:** GPU
- **Accel Connection:** PCIe 3.0 16x
- **Does Accel Use ECC:** Yes
- **Accel Description:** NVIDIA Tesla V100S-PCIE-32GB
- **Accel Driver:** NVIDIA UNIX x86_64 Kernel Module 418.39
Lenovo Global Technology
NVIDIA Tesla V100S-PCIE-32GB
ThinkSystem SR665

SPECaccel_acc_peak = Not Run
SPECaccel_acc_base = 14.4

Results Table

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

Platform Notes

Sysinfo program /home/ACCEL1.3/Docs/sysinfo
$Rev: 6965 $ $Date:: 2015-04-21 #$ c05a7f14b1b1765e3fe1df68447e8a35
running on linux-x8nq Fri Mar 27 16:54:35 2020

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:
http://www.spec.org/accel/Docs/config.html#sysinfo
Continued on next page
Lenovo Global Technology
NVIDIA Tesla V100S-PCIE-32GB
ThinkSystem SR665

SPECaccel_acc_peak = Not Run
SPECaccel_acc_base = 14.4

ACCEL license: 28
Test sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

Test date: Mar-2020
Hardware Availability: Jun-2020
Software Availability: Jun-2020

Platform Notes (Continued)

From /proc/cpuinfo
model name : AMD EPYC 7H12 64-Core Processor
1 "physical id"s (chips)
64 "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 : 64
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
cache size : 512 KB

From /proc/meminfo
MemTotal: 263982732 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

From /etc/*release*/etc/*version*
os-release:
NAME="SLES"
VERSION="15-SP1"
VERSION_ID="15.1"
PRETTY_NAME="SUSE Linux Enterprise Server 15 SP1"
ID="sles"
ID_LIKE="suse"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:15:sp1"

uname -a:
Linux linux-x8nq 4.12.14-195-default #1 SMP Tue May 7 10:55:11 UTC 2019
(8fba516) x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Mar 27 16:10

SPEC is set to: /home/ACCEL1.3
Filesystem Type Size Used Avail Use% Mounted on
/dev/sda4 btrfs 444G 142G 302G 32% /home

Additional information from dmidecode:

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.

BIOS Lenovo D8E105F-1.00 03/19/2020
Memory:

Continued on next page
Lenovo Global Technology
NVIDIA Tesla V100S-PCIE-32GB
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Test date: Mar-2020
Hardware Availability: Jun-2020
Software Availability: Jun-2020

Platform Notes (Continued)

8x Samsung M393A4G43AB3-CWE 32 kB 2 rank 3200 MT/s
8x Unknown Unknown

(End of data from sysinfo program)

Base Compiler Invocation

C benchmarks:
  pgcc

Fortran benchmarks:
  pgfortran

Benchmarks using both Fortran and C:
  pgcc pgfortran

Base Optimization Flags

C benchmarks:
  -fast -Mfprelaxed -acc -ta=tesla:cc70 -ta=tesla:cuda10.1

Fortran benchmarks:
  -fast -Mfprelaxed -acc -ta=tesla:cc70 -ta=tesla:cuda10.1

Benchmarks using both Fortran and C:
  353.clvrleaf: -fast -Mfprelaxed -acc -ta=tesla:cc70 -ta=tesla:cuda10.1
  359.miniGhost: -fast -Mfprelaxed -acc -ta=tesla:cc70 -ta=tesla:cuda10.1
  -Mnomain

The flags file that was used to format this result can be browsed at
https://www.spec.org/accel/flags/pgi_flags.20200506.html

You can also download the XML flags source by saving the following link:
https://www.spec.org/accel/flags/pgi_flags.20200506.xml
## SPEC ACCEL ACC Result

**Lenovo Global Technology**

**NVIDIA Tesla V100S-PCIE-32GB**

**ThinkSystem SR665**

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**SPECaccel_acc_peak = Not Run**

**SPECaccel_acc_base = 14.4**

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

Tested with SPEC ACCEL v1.3.
Originally published on 6 May 2020.