M Computers s.r.o.

HPC S2600WF (Intel Xeon Silver 4114, 2.20 GHz)

SPECint®2006 = Not Run
SPECint_base2006 = 57.8

CPU2006 license: 4204
Test sponsor: M Computers s.r.o.
Tested by: M Computers s.r.o.
Test date: Sep-2017
Hardware Availability: Jul-2017

SPECint_base2006 = 57.8

CPU Name: Intel Xeon Silver 4114
CPU Characteristics: Intel Turbo Boost Technology up to 3.00 GHz
CPU MHz: 2200
FPU: Integrated
CPU(s) enabled: 20 cores, 2 chips, 10 cores/chip
CPU(s) orderable: 1.2 chip
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 1 MB I+D on chip per core
L3 Cache: 13.75 MB I+D on chip per chip
Other Cache: None
Memory: 768 GB (24 x 32 GB 2Rx8 PC4-2400V-R, running at 2400 MT/s)
Disk Subsystem: 1 x 1600 GB SATA SSD
Other Hardware: None

Hardware

Operating System: SUSE Linux Enterprise Server 12 SP2
4.4.21-69-default
Compiler: C/C++: Version 17.0.4.196 of Intel C/C++ Compiler for Linux
Auto Parallel: Yes
File System: xfs
System State: Run level 3
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V11.2

Software

Operating System: SUSE Linux Enterprise Server 12 SP2
4.4.21-69-default
Compiler: C/C++: Version 17.0.4.196 of Intel C/C++ Compiler for Linux
Auto Parallel: Yes
File System: xfs
System State: Run level 3
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V11.2
**Results Table**

<table>
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<tr>
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<th>Base Seconds</th>
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<th>Base Seconds</th>
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<td>111</td>
<td>62.1</td>
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</tr>
</tbody>
</table>

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"

**Platform Notes**

BIOS settings:
- Intel(R) Hyper-Threading Tech=Disabled
- Patrol Scrub=Disabled
- CPU and Power Performance Policy=Performance
- Set Fan Profile=Performance

Sysinfo program /spec/config/sysinfo.rev6993
Revision 6993 of 2015-11-06 (300de342723409e6453f54e8c50448c3)
running on kvasir Sat Sep 2 17:38:08 2017

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/cpu2006/Docs/config.html#sysinfo](http://www.spec.org/cpu2006/Docs/config.html#sysinfo)

From /proc/cpuinfo
- model name : Intel(R) Xeon(R) Silver 4114 CPU @ 2.20GHz
- 2 "physical id"s (chips)
- 20 "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 : 10
  - siblings : 10
  - physical 0: cores 0 1 2 3 4 8 9 10 11 12

Continued on next page
Platform Notes (Continued)

  physical 1: cores 0 1 2 3 4 8 9 10 11 12
  cache size : 14080 KB

From /proc/meminfo
  MemTotal:  791028784 kB
  HugePages_Total:   0
  Hugepagesize:  2048 kB

/usr/bin/lsb_release -d
  SUSE Linux Enterprise Server 12 SP2

From /etc/*release* /etc/*version*
  SuSE-release:
    SUSE Linux Enterprise Server 12 (x86_64)
    VERSION = 12
    PATCHLEVEL = 2
    # This file is deprecated and will be removed in a future service pack or
    # release.
    # Please check /etc/os-release for details about this release.
  os-release:
    NAME="SLES"
    VERSION="12-SP2"
    VERSION_ID="12.2"
    PRETTY_NAME="SUSE Linux Enterprise Server 12 SP2"
    ID="sles"
    ANSI_COLOR="0;32"
    CPE_NAME="cpe:/o:suse:sles:12:sp2"

uname -a:
  Linux kvasir 4.4.21-69-default #1 SMP Tue Oct 25 10:58:20 UTC 2016 (9464f67)
x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Sep 2 09:18

SPEC is set to: /spec
  Filesystem      Type Size  Used Avail Use% Mounted on
  /dev/sda1      xfs  650G  82G  569G  13% /

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 Intel Corporation S6C620.86B.0X.01.0007.060920171037 06/09/2017
  Memory:
    24x Kinston 9965640-006.A01G 32 GB 2 rank 2400 MHz

(End of data from sysinfo program)
SPEC CINT2006 Result

M Computers s.r.o.
HPC S2600WF (Intel Xeon Silver 4114, 2.20 GHz)

SPECint2006 = Not Run
SPECint_base2006 = 57.8

CPU2006 license: 4204
Test sponsor: M Computers s.r.o.
Tested by: M Computers s.r.o.

Test date: Sep-2017
Hardware Availability: Jul-2017
Software Availability: Apr-2017

General Notes

Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/spec/lib/ia32:/spec/lib/intel64:/spec/sh11.2"
OMP_NUM_THREADS = "20"

Binaries compiled on a system with 2x Intel Xeon-SP 4112 CPU + 192GB RAM
memory using Redhat Enterprise Linux 7.3
Transparent huge pages enabled by default.
Filesystem page cache cleared with:
echo 1 > /proc/sys/vm/drop_caches

Baseline Compiler Invocation

C benchmarks:
  icc -m64

C++ benchmarks:
  icpc -m64

Baseline Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Baseline Optimization Flags

C benchmarks:
  -xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -qopt-prefetch
  -auto-p32

C++ benchmarks:
  -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -auto-p32
  -Wl,-z,muldefs -L/sh11.2 -lsmartheap64
M Computers s.r.o.

HPC S2600WF (Intel Xeon Silver 4114, 2.20 GHz)

**SPECint2006 = Not Run**

**SPECint_base2006 = 57.8**

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### Base Other Flags

- **C benchmarks:**
  
  403.gcc: -Dalloca=_alloca

---

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 webmaster@spec.org.

Tested with SPEC CPU2006 v1.2.
Originally published on 19 September 2017.