SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

HITACHI

BladeSymphony BS320 (Intel Xeon E5503)

SPECint®_rate2006 =   77.8

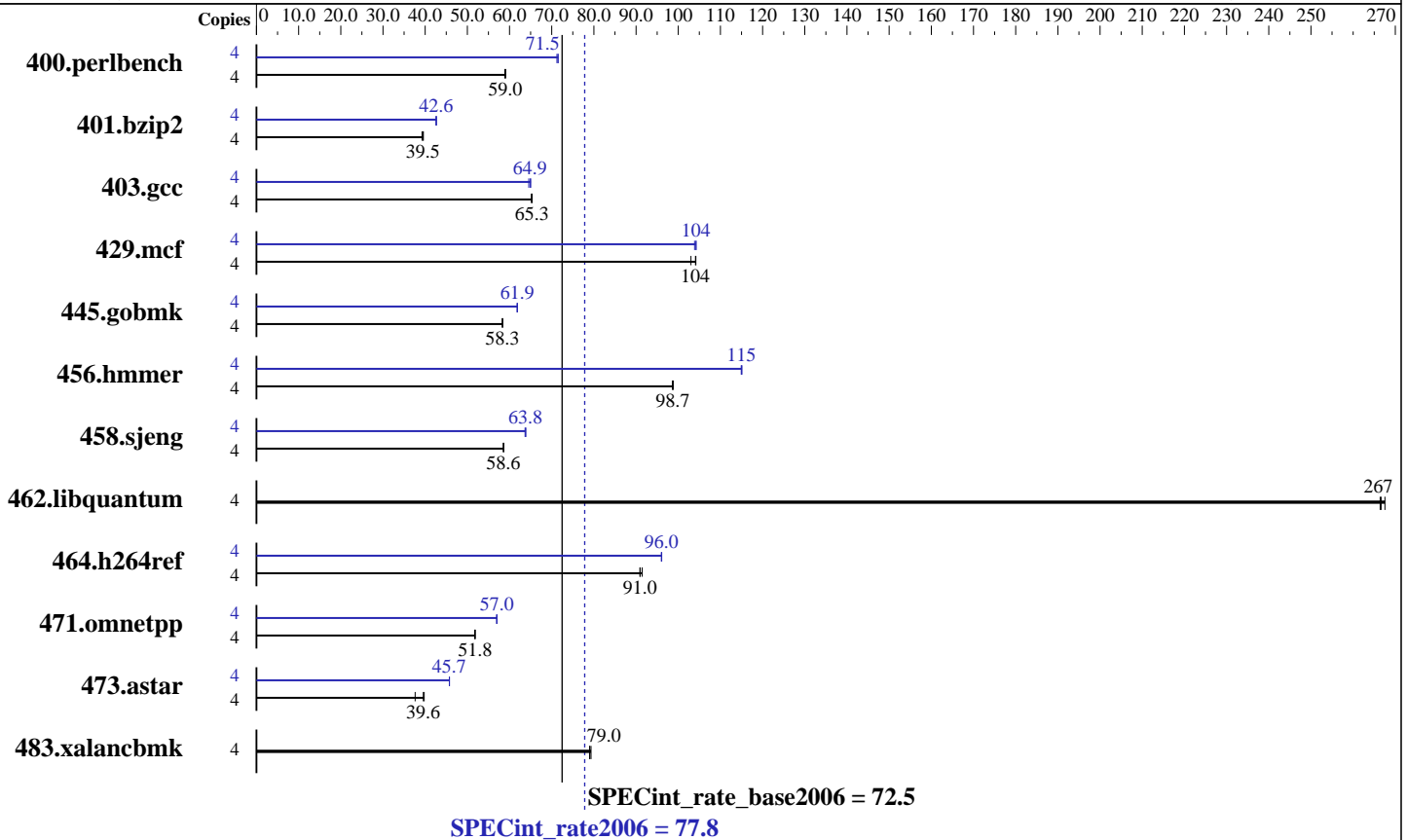SPECint_rate_base2006 = 72.5

CPU2006 license: 872

Test sponsor: HITACHI

Tested by: HITACHI

Test date: Jul-2010

Hardware Availability: Mar-2010

Software Availability: Dec-2009

Copies 0 10.0 20.0 30.0 40.0 50.0 60.0 70.0 80.0 90.0 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 270

400.perlbench 4 — 71.5 / 4 — 59.0

401.bzip2 4 — 42.6 / 4 — 39.5

403.gcc 4 — 64.9 / 4 — 65.3

429.mcf 4 — 104 / 4 — 104

445.gobmk 4 — 61.9 / 4 — 58.3

456.hmmer 4 — 115 / 4 — 98.7

458.sjeng 4 — 63.8 / 4 — 58.6

462.libquantum 4 — 267

464.h264ref 4 — 96.0 / 4 — 91.0

471.omnetpp 4 — 57.0 / 4 — 51.8

473.astar 4 — 45.7 / 4 — 39.6

483.xalancbmk 4 — 79.0

SPECint_rate_base2006 = 72.5

SPECint_rate2006 = 77.8

Hardware

CPU Name: Intel Xeon E5503

CPU Characteristics:

CPU MHz: 2000

FPU: Integrated

CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip

CPU(s) orderable: 1, 2 chips

Primary Cache: 32 KB I + 32 KB D on chip per core

Secondary Cache: 256 KB I+D on chip per core

L3 Cache: 4 MB I+D on chip per chip

Other Cache: None

Memory: 24 GB (6 x 4 GB PC3-10600R, 2 rank, CL9-9-9)

Disk Subsystem: 1 x 73 GB 10000 rpm SAS

Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 5.4.3, Advanced Platform, Kernel 2.6.18-164.9.1.el5 on an x86_64

Compiler: Intel C++ Compiler 11.1 for Linux Build 20091012 Package ID: l_cproc_p_11.1.059

Auto Parallel: No

File System: ext3

System State: Multi-user run level 3

Base Pointers: 32-bit

Peak Pointers: 32/64-bit

Other Software: Microquill SmartHeap V8.1

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

HITACHI

BladeSymphony BS320 (Intel Xeon E5503)

SPECint_rate2006 =   77.8

SPECint_rate_base2006 = 72.5

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	661	59.1	664	58.9	**662**	**59.0**	4	546	71.5	**547**	**71.5**	549	71.2
401.bzip2	4	975	39.6	**978**	**39.5**	983	39.3	4	905	42.7	907	42.6	**905**	**42.6**
403.gcc	4	494	65.2	493	65.3	**493**	**65.3**	4	499	64.5	**496**	**64.9**	495	65.0
429.mcf	4	354	103	**350**	**104**	350	104	4	**350**	**104**	350	104	351	104
445.gobmk	4	719	58.3	**719**	**58.3**	720	58.3	4	679	61.8	**678**	**61.9**	678	61.9
456.hmmer	4	**378**	**98.7**	378	98.6	378	98.8	4	325	115	324	115	**324**	**115**
458.sjeng	4	**826**	**58.6**	827	58.5	826	58.6	4	**759**	**63.8**	758	63.9	760	63.7
462.libquantum	4	311	266	310	268	**311**	**267**	4	311	266	310	268	**311**	**267**
464.h264ref	4	**973**	**91.0**	974	90.9	968	91.4	4	**922**	**96.0**	921	96.1	922	96.0
471.omnetpp	4	482	51.9	**482**	**51.8**	483	51.8	4	438	57.0	**439**	**57.0**	439	57.0
473.astar	4	**710**	**39.6**	746	37.6	706	39.8	4	**614**	**45.7**	614	45.7	614	45.8
483.xalancbmk	4	348	79.3	**349**	**79.0**	349	79.0	4	348	79.3	**349**	**79.0**	349	79.0

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

Submit Notes

```
The config file option 'submit' was used.
'/usr/bin/numactl' used to bind processes to CPUs
```

Operating System Notes

```
'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
```

Base Compiler Invocation

C benchmarks:
```
icc -m32
```

C++ benchmarks:
```
icpc -m32
```

Base Portability Flags

```
 400.perlbench: -DSPEC_CPU_LINUX_IA32
 462.libquantum: -DSPEC_CPU_LINUX
 483.xalancbmk: -DSPEC_CPU_LINUX
```

SPEC CINT2006 Result

HITACHI

BladeSymphony BS320 (Intel Xeon E5503)

SPECint_rate2006 =　　77.8

SPECint_rate_base2006 =　72.5

CPU2006 license: 872　　　　　　　　　　　　　　　　　　**Test date:**　　Jul-2010
Test sponsor:　HITACHI　　　　　　　　　　　　　　　　**Hardware Availability:**　Mar-2010
Tested by:　　HITACHI　　　　　　　　　　　　　　　　　**Software Availability:**　Dec-2009

Base Optimization Flags

C benchmarks:
```
-xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch
```

C++ benchmarks:
```
-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/home/bsc/smartheap/lib -lsmartheap
```

Base Other Flags

C benchmarks:

> 403.gcc: `-Dalloca=_alloca`

Peak Compiler Invocation

C benchmarks (except as noted below):
```
icc -m32
```

> 401.bzip2: `icc -m64`

> 456.hmmer: `icc -m64`

> 458.sjeng: `icc -m64`

C++ benchmarks (except as noted below):
```
icpc -m32
```

> 473.astar: `icpc -m64`

Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LINUX_IA32`
401.bzip2: `-DSPEC_CPU_LP64`
456.hmmer: `-DSPEC_CPU_LP64`
458.sjeng: `-DSPEC_CPU_LP64`
462.libquantum: `-DSPEC_CPU_LINUX`
473.astar: `-DSPEC_CPU_LP64`
483.xalancbmk: `-DSPEC_CPU_LINUX`

SPEC CINT2006 Result

HITACHI

BladeSymphony BS320 (Intel Xeon E5503)

SPECint_rate2006 =   77.8

SPECint_rate_base2006 = 72.5

CPU2006 license: 872
Test sponsor: HITACHI
Tested by: HITACHI

Test date: Jul-2010
Hardware Availability: Mar-2010
Software Availability: Dec-2009

Peak Optimization Flags

C benchmarks:

```
   400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -ansi-alias

       401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -opt-prefetch -ansi-alias -auto-ilp32

         403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -static

         429.mcf: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

       445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2
                  -ipo -no-prec-div -ansi-alias

      456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2
                  -ansi-alias -auto-ilp32

       458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -unroll4 -auto-ilp32

   462.libquantum: basepeak = yes

      464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -unroll2 -ansi-alias
```

C++ benchmarks:

```
     471.omnetpp: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
                  -ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs
                  -L/home/bsc/smartheap/lib -lsmartheap

       473.astar: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
                  -ansi-alias -opt-ra-region-strategy=routine -Wl,-z,muldefs
                  -L/home/bsc/smartheap/lib -lsmartheap64

   483.xalancbmk: basepeak = yes
```

Peak Other Flags

C benchmarks:

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

HITACHI

BladeSymphony BS320 (Intel Xeon E5503)

SPECint_rate2006 = 77.8

SPECint_rate_base2006 = 72.5

Peak Other Flags (Continued)

403.gcc: `-Dalloca=_alloca`

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100929.03.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100929.03.xml`

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

Tested with SPEC CPU2006 v1.1.
Report generated on Wed Jul 23 12:52:12 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 28 September 2010.