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

NEC Corporation

Express5800/120Bb-6
(Intel Xeon processor 5110)

SPECint®_rate2006 = 39.7
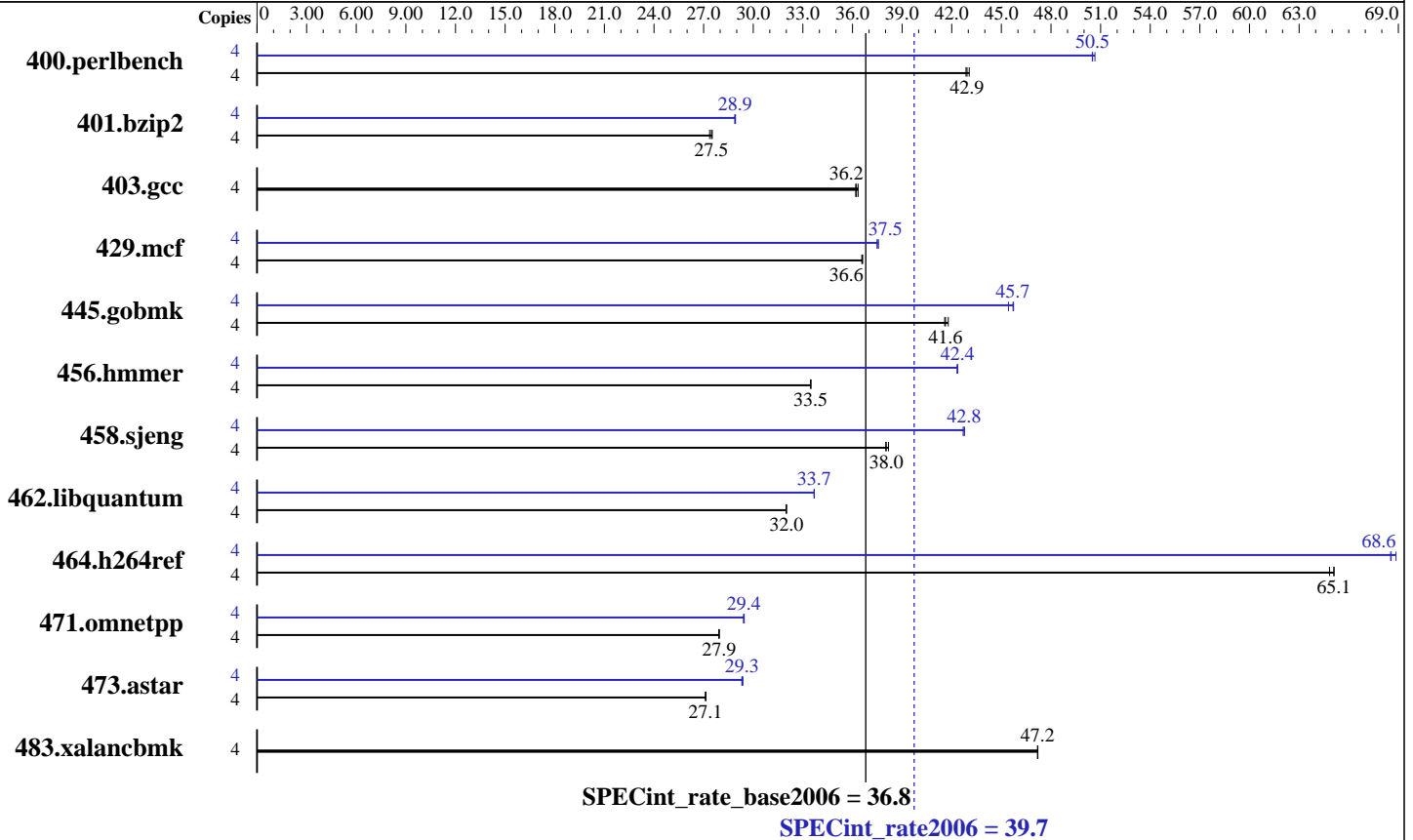
SPECint_rate_base2006 = 36.8

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Oct-2007

Hardware Availability: May-2007

Software Availability: Jun-2007

Benchmark	Copies	Value (blue)	Value (base)
400.perlbench	4 / 4	50.5	42.9
401.bzip2	4 / 4	28.9	27.5
403.gcc	4		36.2
429.mcf	4 / 4	37.5	36.6
445.gobmk	4 / 4	45.7	41.6
456.hmmer	4 / 4	42.4	33.5
458.sjeng	4 / 4	42.8	38.0
462.libquantum	4 / 4	33.7	32.0
464.h264ref	4 / 4	68.6	65.1
471.omnetpp	4 / 4	29.4	27.9
473.astar	4 / 4	29.3	27.1
483.xalancbmk	4		47.2

SPECint_rate_base2006 = 36.8

SPECint_rate2006 = 39.7

Hardware

CPU Name: Intel Xeon 5110
CPU Characteristics: 1.60 GHz, 4 MB L2, 1066 MHz bus
CPU MHz: 1600
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: 4 MB I+D on chip per chip
L3 Cache: None
Other Cache: None
Memory: 8 GB (4x2 GB PC2-5300F, 2 rank, CL5-5-5, ECC)
Disk Subsystem: 1x146.5 GB SAS, 10000RPM
Other Hardware: None

Software

Operating System: 64-Bit SUSE LINUX Enterprise Server 10, Kernel 2.6.16.21-0.8-smp for x86_64
Compiler: Intel C++ Compiler for IA32/EM64T application, Version 10.0 - Build 20070426 Package ID: l_cc_p_10.0.023
Auto Parallel: No
File System: ext2
System State: Multiuser, Runlevel 3
Base Pointers: 32-bit
Peak Pointers: 32/64-bit
Other Software: MicroQuill SmartHeap library 8.1 binutils-2.17.tar.gz, Version 2.17

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/120Bb-6
(Intel Xeon processor 5110)

SPECint_rate2006 = 39.7

SPECint_rate_base2006 = 36.8

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

Test date: Oct-2007
Hardware Availability: May-2007
Software Availability: Jun-2007

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	908	43.1	912	42.9	**910**	**42.9**	4	774	50.5	771	50.7	**774**	**50.5**
401.bzip2	4	**1405**	**27.5**	1402	27.5	1411	27.4	4	1334	28.9	**1335**	**28.9**	1336	28.9
403.gcc	4	**889**	**36.2**	890	36.2	886	36.3	4	**889**	**36.2**	890	36.2	886	36.3
429.mcf	4	**997**	**36.6**	998	36.6	996	36.6	4	971	37.6	**973**	**37.5**	973	37.5
445.gobmk	4	**1008**	**41.6**	1004	41.8	1009	41.6	4	917	45.7	924	45.4	**918**	**45.7**
456.hmmer	4	1115	33.5	1115	33.5	**1115**	**33.5**	4	882	42.3	881	42.4	**881**	**42.4**
458.sjeng	4	**1272**	**38.0**	1268	38.2	1273	38.0	4	1132	42.8	**1132**	**42.8**	1134	42.7
462.libquantum	4	**2590**	**32.0**	2591	32.0	2589	32.0	4	**2461**	**33.7**	2460	33.7	2461	33.7
464.h264ref	4	1365	64.8	1360	65.1	**1360**	**65.1**	4	1286	68.9	**1291**	**68.6**	1292	68.5
471.omnetpp	4	895	27.9	895	27.9	**895**	**27.9**	4	849	29.5	**849**	**29.4**	850	29.4
473.astar	4	**1035**	**27.1**	1036	27.1	1034	27.1	4	**958**	**29.3**	958	29.3	956	29.4
483.xalancbmk	4	585	47.2	**585**	**47.2**	585	47.2	4	585	47.2	**585**	**47.2**	585	47.2

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

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
'/usr/bin/taskset' used to bind processes to CPUs

General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer,
for peak, are compiled in 64-bit mode

Base Compiler Invocation

C benchmarks:
```
icc
```

C++ benchmarks:
```
icpc
```

Base Portability Flags

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

SPEC CINT2006 Result

NEC Corporation

Express5800/120Bb-6
(Intel Xeon processor 5110)

SPECint_rate2006 =   39.7

SPECint_rate_base2006 = 36.8

CPU2006 license: 9006		**Test date:**	Oct-2007
Test sponsor: NEC Corporation		**Hardware Availability:**	May-2007
Tested by: NEC Corporation		**Software Availability:**	Jun-2007

Base Optimization Flags

C benchmarks:
```
-fast
```

C++ benchmarks:
```
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/opt/SmartHeap_8.1/lib -lsmartheap
```

Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

Peak Compiler Invocation

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

```
401.bzip2: /opt/intel/cce/10.0.023/bin/icc
           -L/opt/intel/cce/10.0.023/lib
           -I/opt/intel/cce/10.0.023/include

456.hmmer: /opt/intel/cce/10.0.023/bin/icc
           -L/opt/intel/cce/10.0.023/lib
           -I/opt/intel/cce/10.0.023/include
```

C++ benchmarks:
```
icpc
```

Peak Portability Flags

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

Peak Optimization Flags

C benchmarks:

NEC Corporation

Express5800/120Bb-6
(Intel Xeon processor 5110)

SPECint_rate2006 =   39.7

SPECint_rate_base2006 = 36.8

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Oct-2007

Hardware Availability: May-2007

Software Availability: Jun-2007

Peak Optimization Flags (Continued)

```
  400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -fast -ansi-alias
                 -prefetch

       401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -fast

         403.gcc: basepeak = yes

         429.mcf: -fast -prefetch

       445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xT -O2 -ipo
                  -no-prec_div -ansi-alias

       456.hmmer: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2
                  -ansi-alias

       458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4

  462.libquantum: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -Ob0
                  -prefetch -opt-streaming-stores always

      464.h264ref: Same as 456.hmmer
```

C++ benchmarks:

```
     471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo
                  -no-prec_div -ansi-alias -Wl,-z,muldefs
                  -L/opt/SmartHeap_8.1/lib -lsmartheap

        473.astar: Same as 471.omnetpp

     483.xalancbmk: basepeak = yes
```

Peak Other Flags

C benchmarks:

```
         403.gcc: -Dalloca=_alloca
```

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/NEC-ic10-INT-ia32-intel64-linux-flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/NEC-ic10-INT-ia32-intel64-linux-flags.xml

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/120Bb-6
(Intel Xeon processor 5110)

SPECint_rate2006 = 39.7

SPECint_rate_base2006 = 36.8

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

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 14:26:20 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 27 November 2007.