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

Dell Inc.

PowerEdge R900 (Intel Xeon E7330, 2.40 GHz)

SPECint®_rate2006 =   177

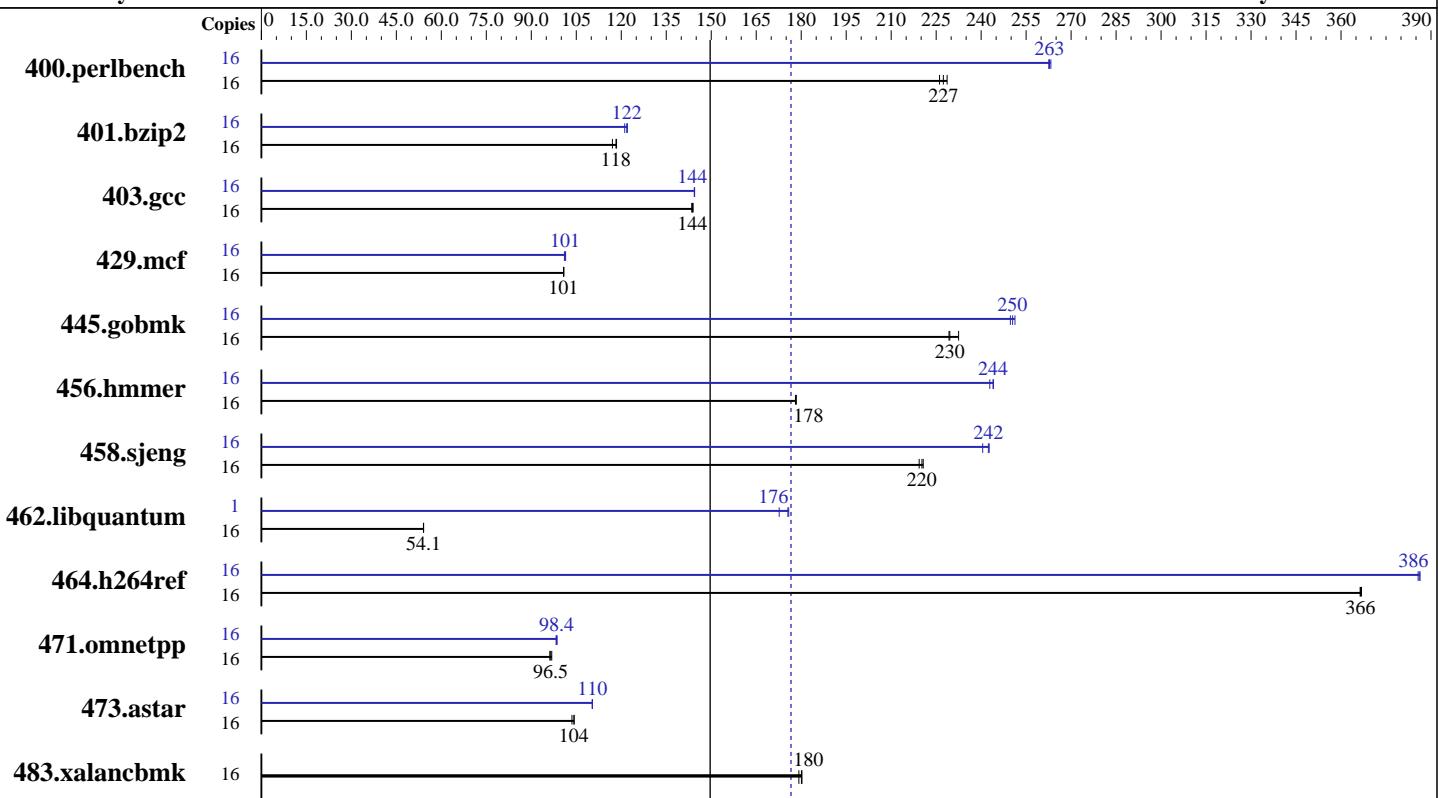SPECint_rate_base2006 =   150

CPU2006 license: 55

Test sponsor: Dell Inc.

Tested by: Dell Inc.

Test date: Oct-2007

Hardware Availability: Nov-2007

Software Availability: Nov-2007

Copies

Benchmark	Copies	Peak	Base
400.perlbench	16	263	227
401.bzip2	16	122	118
403.gcc	16	144	144
429.mcf	16	101	101
445.gobmk	16	250	230
456.hmmer	16	244	178
458.sjeng	16	242	220
462.libquantum	1 / 16	176	54.1
464.h264ref	16	386	366
471.omnetpp	16	98.4	96.5
473.astar	16	110	104
483.xalancbmk	16		180

SPECint_rate_base2006 = 150

SPECint_rate2006 = 177

Hardware

CPU Name: Intel Xeon E7330

CPU Characteristics: 1066 MHz system bus

CPU MHz: 2400

FPU: Integrated

CPU(s) enabled: 16 cores, 4 chips, 4 cores/chip

CPU(s) orderable: 2,4 chips

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

Secondary Cache: 6 MB I+D on chip per chip, 3 MB shared / 2 cores

L3 Cache: None

Other Cache: None

Memory: 16 GB (16 x 1GB 667 MHz ECC CL5 FB-DIMM)

Disk Subsystem: 1 x 73 GB SAS 15K RPM

Other Hardware: None

Software

Operating System: 64-Bit SUSE LINUX Enterprise Server 10 SP1

Compiler: Intel C++ Compiler for Linux32 and Linux64 version 10.1 Build 20070725

Auto Parallel: Yes

File System: ReiserFS

System State: Multi-user, run level 3

Base Pointers: 32-bit

Peak Pointers: 32/64-bit

Other Software: SmartHeap library V8.1

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge R900 (Intel Xeon E7330, 2.40 GHz)

SPECint_rate2006 =   177

SPECint_rate_base2006 = 150

CPU2006 license: 55

Test sponsor: Dell Inc.

Tested by: Dell Inc.

Test date: Oct-2007

Hardware Availability: Nov-2007

Software Availability: Nov-2007

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	16	684	229	691	226	**687**	**227**	16	594	263	595	263	**595**	**263**
401.bzip2	16	1319	117	**1306**	**118**	1304	118	16	**1267**	**122**	1274	121	1265	122
403.gcc	16	895	144	**896**	**144**	898	143	16	892	144	**892**	**144**	892	144
429.mcf	16	1448	101	1447	101	**1448**	**101**	16	1444	101	1438	101	**1441**	**101**
445.gobmk	16	722	232	732	229	**731**	**230**	16	668	251	**670**	**250**	672	250
456.hmmer	16	837	178	838	178	**837**	**178**	16	612	244	**612**	**244**	615	243
458.sjeng	16	877	221	883	219	**879**	**220**	16	798	243	**799**	**242**	805	241
462.libquantum	16	6134	54.0	**6131**	**54.1**	6129	54.1	1	118	176	**118**	**176**	120	173
464.h264ref	16	965	367	**966**	**366**	966	366	16	916	386	**917**	**386**	918	386
471.omnetpp	16	1040	96.2	**1036**	**96.5**	1033	96.8	16	1014	98.6	1018	98.3	**1016**	**98.4**
473.astar	16	1085	104	1077	104	**1078**	**104**	16	1017	110	**1018**	**110**	1018	110
483.xalancbmk	16	**613**	**180**	616	179	612	180	16	**613**	**180**	616	179	612	180

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

Compiler Invocation Notes

```
OMP_NUM_THREADS set to number of cores
KMP_STACK_SIZE set to 64M
KMP_AFFINITY set to physical,0
```

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
```

Platform Notes

```
BIOS Settings:
Adjacent Cache Line Prefetch = Disabled (default Enabled)
Hardware Prefetcher = Disabled (default Enabled)
```

Base Compiler Invocation

C benchmarks:

```
icc
```

C++ benchmarks:

```
icpc
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge R900 (Intel Xeon E7330, 2.40 GHz)

SPECint_rate2006 = 177

SPECint_rate_base2006 = 150

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Oct-2007
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Base Portability Flags

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

Base Optimization Flags

C benchmarks:

```
    -fast -inline-calloc -opt-malloc-options=3
```

C++ benchmarks:

```
    -xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
    -L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap
```

Base Other Flags

C benchmarks:

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

Peak Compiler Invocation

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

```
   401.bzip2: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc
            -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib
            -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include

   456.hmmer: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc
            -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib
            -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/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
```

SPEC CINT2006 Result

Dell Inc.

PowerEdge R900 (Intel Xeon E7330, 2.40 GHz)

SPECint_rate2006 = 177

SPECint_rate_base2006 = 150

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Oct-2007
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Peak Portability Flags (Continued)

483.xalancbmk: `-DSPEC_CPU_LINUX`

Peak Optimization Flags

C benchmarks:

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 -prefetch`

403.gcc: `-fast -inline-calloc -opt-malloc-options=3`

429.mcf: `-fast -prefetch`

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

456.hmmer: `-fast -unroll2 -ansi-alias -opt-multi-version-aggressive`

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

462.libquantum: `-fast -unroll4 -Ob0 -prefetch`
`-opt-streaming-stores always -vec-guard-write`
`-opt-malloc-options=3 -parallel -par-runtime-control`

464.h264ref: `-prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2`
`-ansi-alias`

C++ benchmarks:

471.omnetpp: `-prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo`
`-no-prec-div -ansi-alias -opt-ra-region-strategy=block`
`-Wl,-z,muldefs`
`-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap`

473.astar: `-prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo`
`-no-prec-div -ansi-alias -opt-ra-region-strategy=routine`
`-Wl,-z,muldefs`
`-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap`

483.xalancbmk: `basepeak = yes`

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge R900 (Intel Xeon E7330, 2.40 GHz)

SPECint_rate2006 =   177

SPECint_rate_base2006 = 150

CPU2006 license: 55
Test sponsor: Dell Inc.
Tested by: Dell Inc.

Test date: Oct-2007
Hardware Availability: Nov-2007
Software Availability: Nov-2007

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/Intel-ic10-ia32-intel64-linux-flags.20090714.02.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.02.xml`

SPEC and SPECint are registered trademarks of the Standard Performance
Evaluation Corporation. All other brand and product names appearing in
this result are trademarks or registered trademarks of their respective
holders.

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 14:46:06 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 13 November 2007.