SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

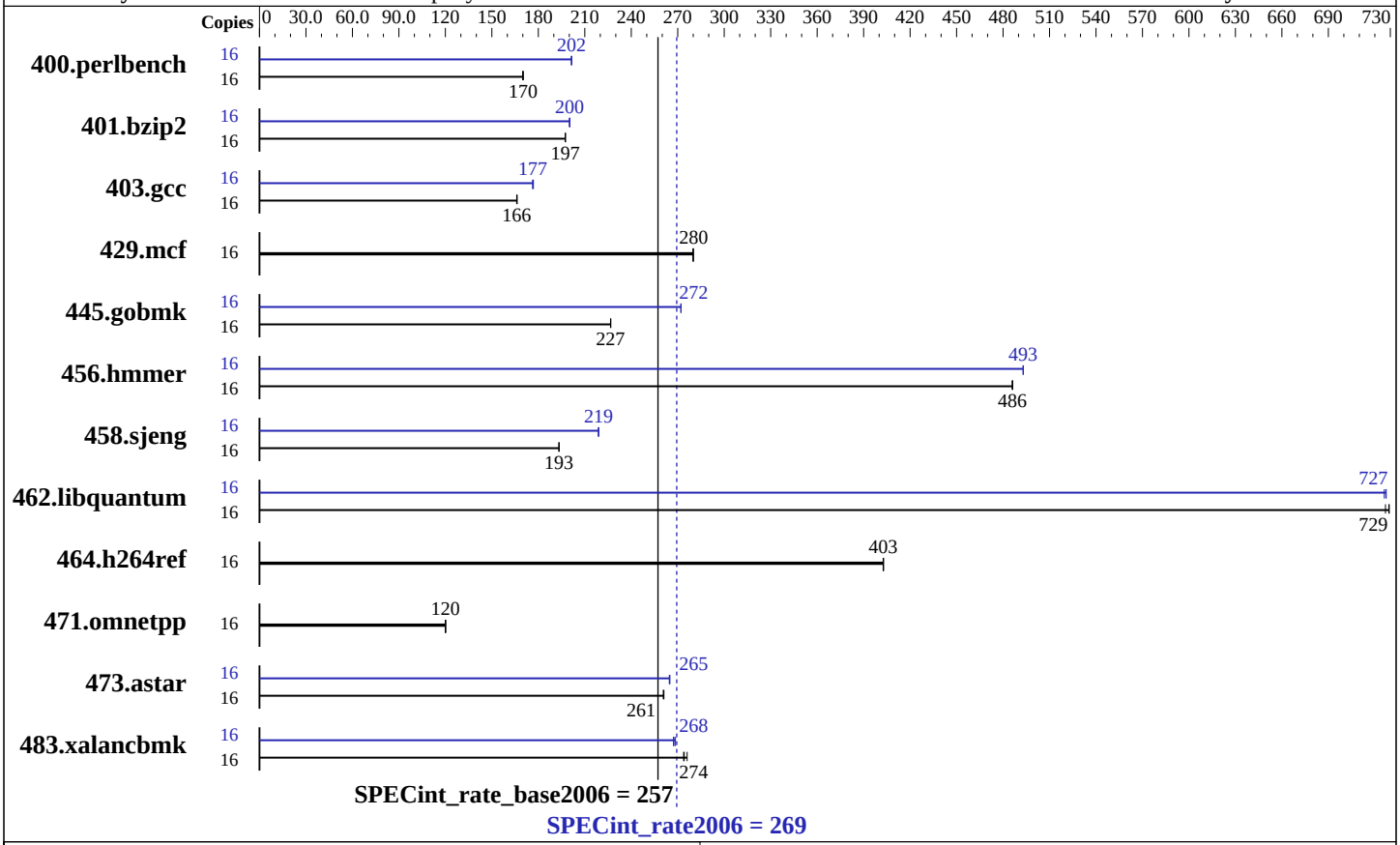
HP Integrity BL870c i2
(1.73 GHz/24MB Quad-Core Intel Itanium 9350)

SPECint®_rate2006 = 269

SPECint_rate_base2006 = 257

CPU2006 license: 03
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2010
Hardware Availability: Jul-2010
Software Availability: Mar-2010



Hardware

CPU Name:	Intel Itanium 9350
CPU Characteristics:	Intel Turbo Boost Technology up to 1.86 GHz
CPU MHz:	1730
FPU:	Integrated
CPU(s) enabled:	16 cores, 4 chips, 4 cores/chip, 2 threads/core
CPU(s) orderable:	2-4 chips
Primary Cache:	16 KB I + 16 KB D on chip per core
Secondary Cache:	512 KB I + 256 KB D on chip per core
L3 Cache:	6 MB I+D on chip per core
Other Cache:	None
Memory:	256 GB (32 x 8GB 2Rx4 PC3-10600R)
Disk Subsystem:	4 x 73 GB 15K RPM SAS (1 OS, 3 SPEC)
Other Hardware:	None

Software

Operating System:	HP-UX 11i v3 Data Center Operating Environment B.11.31.1003
Compiler:	HP C/aC++ Developer's Bundle C.11.31.05
Auto Parallel:	No
File System:	vxfs
System State:	Multi-user
Base Pointers:	32-bit
Peak Pointers:	32-bit
Other Software:	MallocNextGen B.11.31.0903.02

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

HP Integrity BL870c i2
(1.73 GHz/24MB Quad-Core Intel Itanium 9350)

SPECint_rate2006 = 269

SPECint_rate_base2006 = 257

CPU2006 license: 03
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2010
Hardware Availability: Jul-2010
Software Availability: Mar-2010

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	16	920	170	**919**	**170**	918	170	16	**776**	**202**	777	201	775	202
401.bzip2	16	782	197	**782**	**197**	782	197	16	770	200	**771**	**200**	772	200
403.gcc	16	**775**	**166**	776	166	774	166	16	728	177	731	176	**730**	**177**
429.mcf	16	**521**	**280**	521	280	521	280	16	**521**	**280**	521	280	521	280
445.gobmk	16	**740**	**227**	740	227	741	227	16	**617**	**272**	617	272	617	272
456.hmmer	16	307	486	**307**	**486**	307	486	16	303	493	**303**	**493**	303	493
458.sjeng	16	1001	193	1001	193	**1001**	**193**	16	**885**	**219**	885	219	884	219
462.libquantum	16	**455**	**729**	456	727	455	729	16	457	726	456	727	**456**	**727**
464.h264ref	16	879	403	**879**	**403**	879	403	16	879	403	**879**	**403**	879	403
471.omnetpp	16	834	120	**833**	**120**	831	120	16	834	120	**833**	**120**	831	120
473.astar	16	**431**	**261**	430	261	431	261	16	424	265	**424**	**265**	425	265
483.xalancbmk	16	403	274	**403**	**274**	400	276	16	**413**	**268**	411	269	413	267

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.
 The following config file entry was used to bind
 processes to cores using the HP-UX "mpsched" utility:
 submit = let "MYCPU=\$SPECCOPYNUM*2" ;mpsched -c \$MYCPU $command
```

Operating System Notes

```
The following kernel tunables were set, in addition to the
defaults set by the Base Operating Environment:

filecache_max=25%
filecache_min=25%
maxdsiz=3221225472
fcache_fb_policy=1
base_pagesize=64
pagezero_daemon_enabled=0
vxfs_ifree_timelag=-1
maxssiz=0x17f00000
lcpu_attr=0
numa_policy=4
```

Platform Notes

```
Use of Hardware Threading by the OS was disabled via kctune
```

Base Compiler Invocation

C benchmarks:
```
/opt/ansic/bin/cc -AC99
```

C++ benchmarks:
```
/opt/aCC/bin/aCC -Aa
```

Base Portability Flags

400.perlbench: -DSPEC_CPU_HPUX_IA64
403.gcc: -DSPEC_CPU_HPUX
462.libquantum: -DSPEC_CPU_HPUX
483.xalancbmk: -DSPEC_CPU_HPUX_IA64

Base Optimization Flags

C benchmarks:
```
+Ofaster +Otype_safety=ansi -Wl,-aarchive_shared -Wl,+pd,64M
-Wl,+pi,64K -Wl,-N
```

C++ benchmarks:
```
+Ofaster +Otype_safety=ansi -Wl,-aarchive_shared -Wl,+pd,64M
-Wl,+pi,64K -Wl,-N -lmallocng
```

Peak Compiler Invocation

C benchmarks:
```
/opt/ansic/bin/cc -AC99
```

C++ benchmarks:
```
/opt/aCC/bin/aCC -Aa
```

Peak Portability Flags

400.perlbench: -DSPEC_CPU_HPUX_IA64
403.gcc: -DSPEC_CPU_HPUX
462.libquantum: -DSPEC_CPU_HPUX
483.xalancbmk: -DSPEC_CPU_HPUX_IA64

Peak Optimization Flags

C benchmarks:

400.perlbench: +Oprofile=collect:all(pass 1) +Oprofile=use(pass 2)
+Ofaster +Otype_safety=ansi -Wl,-a,archive_shared
-Wl,+pd,64M -Wl,+pi,64M -Wl,-N

401.bzip2: Same as 400.perlbench

403.gcc: Same as 400.perlbench

429.mcf: basepeak = yes

445.gobmk: +Oprofile=collect:all(pass 1) +Oprofile=use(pass 2)
+Ofaster +Otype_safety=ansi -Wl,-a,archive_shared
-Wl,+pd,64M -Wl,+pi,64M +Odataprefetch=direct -Wl,-N

456.hmmer: Same as 400.perlbench

458.sjeng: Same as 445.gobmk

462.libquantum: Same as 400.perlbench

464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: basepeak = yes

473.astar: +Ofaster +Otype_safety=ansi -Wl,-a,archive_shared
-Wl,+pd,64M -Wl,+pi,64M +Onoparmsoverlap -Wl,-N
-lmallocng

483.xalancbmk: +Oprofile=collect:all(pass 1) +Oprofile=use(pass 2)
+Ofaster +Otype_safety=ansi -Wl,-a,archive_shared
-Wl,+pd,64M -Wl,+pi,64M +Onoparmsoverlap -Wl,-N
-lmallocng

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Itanium-HPUX-1003-flags.20100511.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Itanium-HPUX-1003-flags.20100511.xml

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

HP Integrity BL870c i2
(1.73 GHz/24MB Quad-Core Intel Itanium 9350)

SPECint_rate2006 = 269

SPECint_rate_base2006 = 257

CPU2006 license: 03
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Apr-2010
Hardware Availability: Jul-2010
Software Availability: Mar-2010

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 v1.1.
Report generated on Wed Jul 23 06:53:48 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 May 2010.