



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Tyan

(Test Sponsor: Advanced Micro Devices)

SPECint®_rate2006 = 51.7

Tyan Thunder n4250QE (S4985) Opteron 2220

SPECint_rate_base2006 = 46.1

CPU2006 license: 49

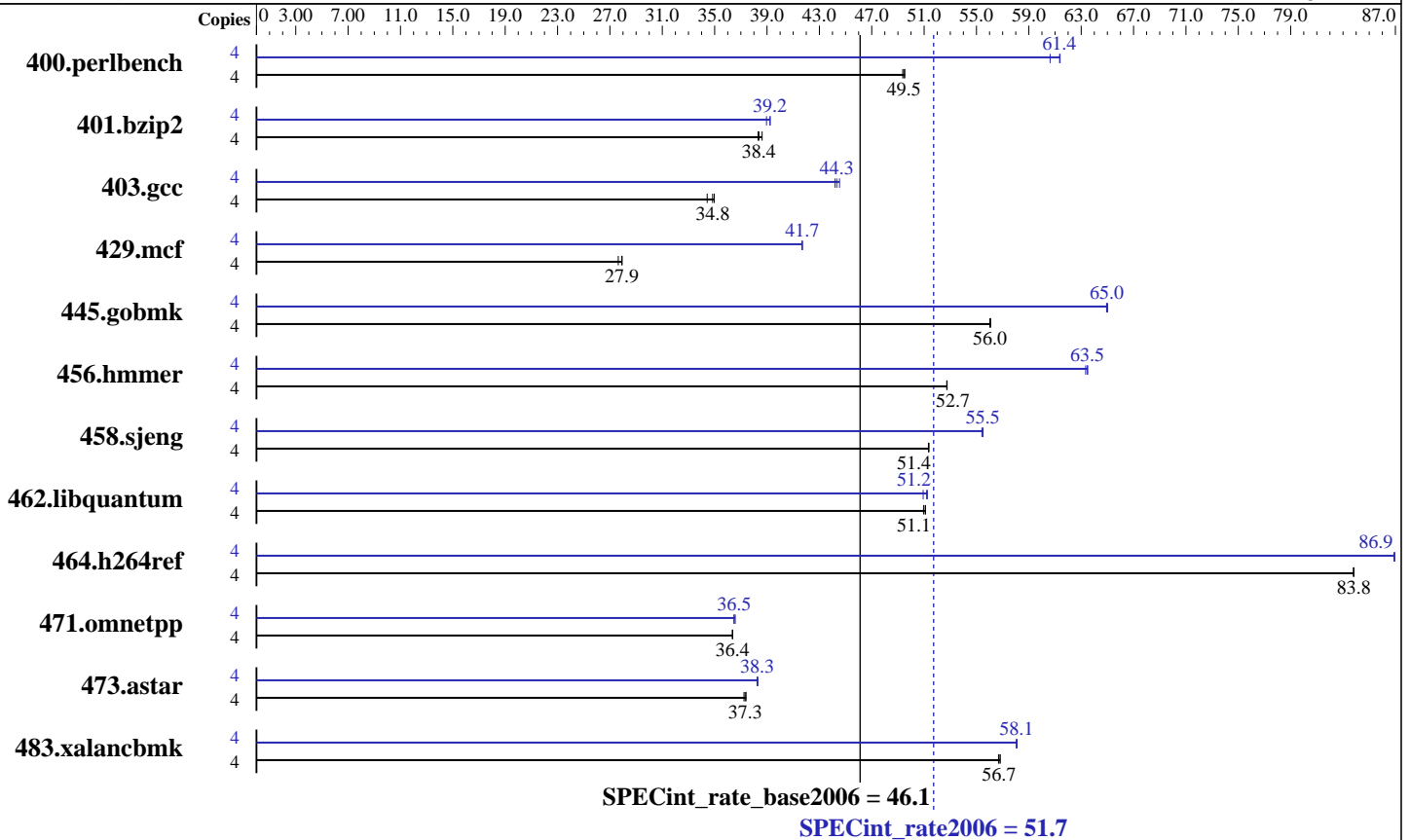
Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Jul-2006

Hardware Availability: Feb-2007

Software Availability: Aug-2006



Hardware

CPU Name: AMD Opteron 2220
 CPU Characteristics: 2800
 CPU MHz: Integrated
 FPU: Integrated
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
 CPU(s) orderable: 1,2 chips
 Primary Cache: 64 KB I + 64 KB D on chip per core
 Secondary Cache: 1 MB I+D on chip per core
 L3 Cache: None
 Other Cache: None
 Memory: 8 GB (8x1GB, DDR2-667 CL4 ECC Reg Dual Rank)
 Disk Subsystem: SATA, 74 GB
 Other Hardware: None

Software

Operating System: SuSE SLES9SP3 64-bit kernel
 Compiler: QLogic PathScale Compiler Suite, Release 2.5
 Auto Parallel: No
 File System: ext3
 System State: Multi-user, run level 3
 Base Pointers: 32/64-bit
 Peak Pointers: 32/64-bit
 Other Software: SmartHeap 8.0 32 bit Library for Linux



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Tyan

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = 51.7

Tyan Thunder n4250QE (S4985) Opteron 2220

SPECint_rate_base2006 = 46.1

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Jul-2006

Hardware Availability: Feb-2007

Software Availability: Aug-2006

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	792	49.4	790	49.5	789	49.5	4	645	60.6	637	61.4	637	61.4
401.bzip2	4	1006	38.4	999	38.6	1007	38.3	4	991	39.0	984	39.2	984	39.2
403.gcc	4	921	35.0	935	34.4	924	34.8	4	726	44.3	729	44.2	723	44.5
429.mcf	4	1306	27.9	1320	27.6	1307	27.9	4	875	41.7	875	41.7	875	41.7
445.gobmk	4	749	56.0	748	56.1	749	56.0	4	646	65.0	645	65.0	646	64.9
456.hmmer	4	707	52.8	708	52.7	708	52.7	4	588	63.5	589	63.3	588	63.5
458.sjeng	4	943	51.3	943	51.4	942	51.4	4	873	55.4	872	55.5	872	55.5
462.libquantum	4	1623	51.1	1627	51.0	1622	51.1	4	1627	50.9	1619	51.2	1617	51.2
464.h264ref	4	1056	83.8	1056	83.8	1056	83.8	4	1019	86.9	1018	86.9	1018	86.9
471.omnetpp	4	687	36.4	687	36.4	687	36.4	4	684	36.6	685	36.5	685	36.5
473.astar	4	754	37.2	751	37.4	752	37.3	4	734	38.2	734	38.3	733	38.3
483.xalancbmk	4	487	56.7	487	56.7	486	56.8	4	475	58.1	475	58.1	475	58.1

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

General Notes

taskset utility used to bind CPU(s) to processes
All memory slots filled on all used CPU sockets
The tested system can be assembled using any SSI-MEB case and
a Silverstone Zeus 650 watt ST65ZF ATX 12V Power Supply.

Base Compiler Invocation

C benchmarks:
pathcc

C++ benchmarks:
pathCC

Base 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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Tyan

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = 51.7

Tyan Thunder n4250QE (S4985) Opteron 2220

SPECint_rate_base2006 = 46.1

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Jul-2006

Hardware Availability: Feb-2007

Software Availability: Aug-2006

Base Portability Flags (Continued)

464.h264ref: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:

-Ofast

C++ benchmarks:

-Ofast -m32

-L/spec/mpaton/6v1.0/amd512K8.lib/microquill/lib -lsmartheap

Base Other Flags

C benchmarks:

-IPA:max_jobs=2

C++ benchmarks:

-IPA:max_jobs=2

Peak Compiler Invocation

C benchmarks:

pathcc

C++ benchmarks:

pathCC

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Tyan

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = 51.7

Tyan Thunder n4250QE (S4985) Opteron 2220

SPECint_rate_base2006 = 46.1

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Jul-2006

Hardware Availability: Feb-2007

Software Availability: Aug-2006

Peak Optimization Flags

C benchmarks:

```

400.perlbench: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
401.bzip2: -O3 -LNO:ou_prod_max=10 -OPT:Ofast -OPT:alias=disjoint
403.gcc: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -m32 -O3
        -OPT:Ofast
429.mcf: -m32 -O2 -ipa
        -L/spec/mpaton/6v1.0/amd512K8.lib/microquill/lib -lsmartheap
445.gobmk: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
        -OPT:alias=disjoint -LNO:simd=0 -LNO:minvariant=off
        -WOPT:retype_expr=on
456.hmmmer: -O2 -OPT:alias=disjoint -WOPT:aggstr=0 -CG:cflow=0
458.sjeng: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
        -IPA:plimit=50000 -IPA:pu_reorder=2
462.libquantum: -O3 -ipa -CG:local_fwd_sched=on -IPA:space=1000
464.h264ref: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
        -IPA:plimit=20000 -OPT:alias=disjoint -LNO:prefetch=0

```

C++ benchmarks:

```

471.omnetpp: -Ofast -IPA:pu_reorder=2 -CG:gcm=off -m32
        -L/spec/mpaton/6v1.0/amd512K8.lib/microquill/lib -lsmartheap
473.astar: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
        -m32
        -L/spec/mpaton/6v1.0/amd512K8.lib/microquill/lib -lsmartheap
483.xalancbmk: -Ofast -m32 -OPT:unroll_times_max=8
        -L/spec/mpaton/6v1.0/amd512K8.lib/microquill/lib -lsmartheap

```

Peak Other Flags

C benchmarks:

-IPA:max_jobs=2

C++ benchmarks:

-IPA:max_jobs=2



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Tyan

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = 51.7

Tyan Thunder n4250QE (S4985) Opteron 2220

SPECint_rate_base2006 = 46.1

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Jul-2006

Hardware Availability: Feb-2007

Software Availability: Aug-2006

The flags file that was used to format this result can be browsed at

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.25.html

You can also download the XML flags source by saving the following link:

http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.25.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 10:19:59 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 6 February 2007.