



SPEC[®] CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International

(Test Sponsor: Advanced Micro Devices)

SPECint[®]_rate2006 = **NC**

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = **NC**

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Sep-2007

Hardware Availability: Dec-2007

Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

	Copies
400.perlbench	
401.bzip2	
403.gcc	
429.mcf	
445.gobmk	
456.hmmer	
458.sjeng	
462.libquantum	
464.h264ref	
471.omnetpp	
473.astar	
483	

Non-Compliant

Hardware

CPU Name: AMD Opteron 2360 SE
 CPU Characteristics:
 CPU MHz: 2500
 FPU: Integrated
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
 CPU(s) orderable: 2 chips
 Primary Cache: 64 KB I + 64 KB D on chip per core

Continued on next page

Software

Operating System: Red Hat Enterprise Linux AS Release 5 Update 1
 64-bit kernel
 Compiler: The Portland Group (PGI)
 PGI pgcc 7.1-0 C Compiler
 PGI pgCC 7.1-0 C++ Compiler
 The PathScale Compiler v3.0
 PathScale pathcc 3.0 C Compiler
 PathScale pathCC 3.0 C++ Compiler

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = **NC**

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = **NC**

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Sep-2007

Hardware Availability: Dec-2007

Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

Secondary Cache: 512 KB I+D on chip per core
L3 Cache: 2 MB I+D on chip per chip
Other Cache: None
Memory: 16 GB (8x2GB, DDR2-667 CL5 Reg Dual Rank)
Disk Subsystem: 1x250GB SATA, 7200 RPM
Other Hardware: None

Auto Parallel: No
File System: ext3
System State: Multi-user, run level 3
Base Printers: 32/64-bit
Peak Printers: 32/64-bit
Other Software: SmartHeap 8.0 32-bit Library for Linux

Result Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
400.perlbench	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
401.bzip2	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
403.gcc	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
429.mcf	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
445.gobmk	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
456.hmmer	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
458.sjeng	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
462.libquantum	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
464.h264ref	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
471.omnetpp	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
473.astar	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		
483.xal	8	NC	NC	NC	NC	NC	NC	8	NC	NC	NC	NC	NC	NC		

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

Operating System Notes

'ulimit -s unlimited' used to set environment stack size
'ulimit -l 2457600' was used to set environment lock pages quantity
'numactl' was used to bind copies to the cores
Set vm/nr_hugepages=1200 in /etc/sysctl.conf
mount -t hugetlbfs nodev /mnt/hugepages
Environment variable PGI_HUGE_PAGES set to 150



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = NC

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = NC

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Sep-2007

Hardware Availability: Dec-2007

Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

General Notes

The test system can be assembled using an Antec TRUE550 550W 12V power supply.

Base Compiler Invocation

C benchmarks:

pgcc

C++ benchmarks:

pgcpp

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.gobmp: -DSPEC_CPU_LP64
466.hmm: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
483.lbm: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:

-fast -Mipa=fast -Mipa=inline -Mipa=noarg -Mfprelaxed
-Msmartalloc=huge:840 -tp barcelona-64 -Bstatic_pgi

C++ benchmarks:

-fastsse -Mipa=fast -Mipa=inline -Mfprelaxed -Msmartalloc=huge:448
--zc_eh -tp barcelona -Bstatic_pgi



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = **NC**

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = **NC**

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Sep-2007

Hardware Availability: Dec-2007

Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

Base Other Flags

C benchmarks:

-w

C++ benchmarks:

-w

Peak Compiler Invocation

C benchmarks (except as noted below):

pgcc

400.perlbench: pathcc

403.gcc: pathcc

445.gobmk: pathcc

464.h264ref: pathcc

C++ benchmarks (except as noted below):

pgcpp

483.xalancbmk: pathCC

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64

401.bzip2: -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

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org/



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = **NC**

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = **NC**

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Sep-2007

Hardware Availability: Dec-2007

Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

Peak Portability Flags (Continued)

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

Peak Optimization Flags

C benchmarks:

400.perlbench: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
-LNO:opt=0

401.bzip2: -Mphi(pass 1) -Mphi(pass 2) -fast -O4
-Msmartalloc=huge:448 -tp barcelona-64 -Bstatic_pgi

403.gcc: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -m32 -O3
-OPT:fast

429.mcf: -fastsse -Mipa=fast -Mipa=inline:1 -Msmartalloc=huge:420
-tp barcelona -Bstatic_pgi

45.gobmk: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3
-OPT:alias=disjoint -LNO:simd=0 -LNO:minvariant=off
-Mipi:retype_expr=on

-fast -Msmartalloc=huge:448 -Mfprelaxed -Msafeptr
-Mipa=const -Mipa=ptr -Mipa=arg -tp barcelona-64
-Bstatic_pgi

442.fjeng: -Mphi(pass 1) -Mipa=fast(pass 2) -Mipa=inline:1(pass 2)
-Mipa=noarg(pass 2) -Mphi(pass 2) -fast
-Msmartalloc=huge:448 -Mfprelaxed -tp barcelona-64
-Bstatic_pgi

462.libquantum: -fast -Mfprelaxed -Msmartalloc=huge:448 -Munroll=m:4
-Mipa=fast -Mipa=inline -Mipa=noarg -Bstatic_pgi

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International

(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = **NC**

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = **NC**

CPU2006 license: 49

Test sponsor: Advanced Micro Devices

Tested by: Advanced Micro Devices

Test date: Sep-2007

Hardware Availability: Dec-2007

Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

Peak Optimization Flags (Continued)

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: basepeak = yes

473.astar: basepeak = yes

483.xalanbmk: -Ofast -m32 -O3 -funroll-times_max=8
-L/cpu2006/workdir/2007/SmartHeap -lsmartheap

Peak Other Flags

C benchmarks (except as noted below):
-w

400.perlbench: No flags used

403.gcc: No flags used

445.gcbmk: No flags used

445.gcc: No flags used

C++ benchmarks (except as noted below):

-w

483.xalanbmk: No flags used

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

<http://www.spec.org/cpu2006/flags/amd814GH-flags.20090714.html>



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUS Computer International
(Test Sponsor: Advanced Micro Devices)

SPECint_rate2006 = NC

ASUS KFSN4-DRE, AMD Opteron 2360 SE

SPECint_rate_base2006 = NC

CPU2006 license: 49
Test sponsor: Advanced Micro Devices
Tested by: Advanced Micro Devices

Test date: Sep-2007
Hardware Availability: Dec-2007
Software Availability: Nov-2007

SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the processor.

You can also download the XML flags source by saving the following link:
<http://www.spec.org/cpu2006/flags/amd814GH-flags.20090714.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 14:03:37 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 October 2007.