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

Fujitsu

PRIMERGY BX920 S3, Intel Xeon E5-2450, 2.10 GHz

SPECint®_rate2006 = 556

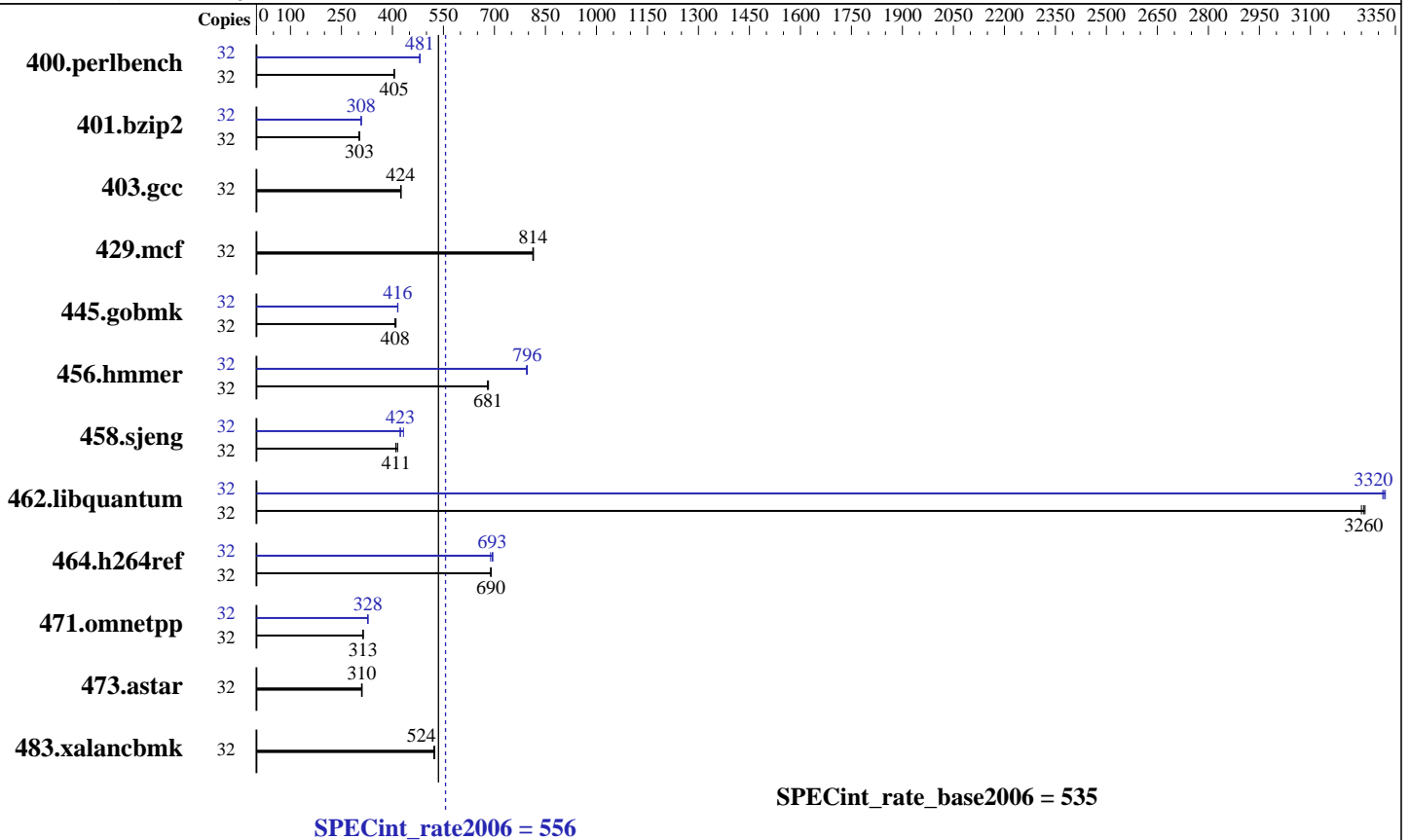SPECint_rate_base2006 = 535

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Apr-2012
Hardware Availability: May-2012
Software Availability: Feb-2012

SPECint_rate2006 = 556

SPECint_rate_base2006 = 535

Benchmark	Copies	Peak	Base
400.perlbench	32	481	405
401.bzip2	32	308	303
403.gcc	32		424
429.mcf	32		814
445.gobmk	32	416	408
456.hmmer	32	796	681
458.sjeng	32	423	411
462.libquantum	32	3320	3260
464.h264ref	32	693	690
471.omnetpp	32	328	313
473.astar	32		310
483.xalancbmk	32		524

Hardware

CPU Name: Intel Xeon E5-2450
CPU Characteristics: Intel Turbo Boost Technology up to 2.90 GHz
CPU MHz: 2100
FPU: Integrated
CPU(s) enabled: 16 cores, 2 chips, 8 cores/chip, 2 threads/core
CPU(s) orderable: 1,2 chips
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 256 KB I+D on chip per core
L3 Cache: 20 MB I+D on chip per chip
Other Cache: None
Memory: 96 GB (12 x 8 GB 2Rx4 PC3L-12800R-11, ECC)
Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM
Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.2 (Santiago)
2.6.32-220.el6.x86_64
Compiler: C/C++: Version 12.1.0.293 of Intel C++ Studio XE for Linux
Auto Parallel: No
File System: ext4
System State: Run level 3 (multi-user)
Base Pointers: 32-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V10.0

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY BX920 S3, Intel Xeon E5-2450, 2.10 GHz

SPECint_rate2006 = 556

SPECint_rate_base2006 = 535

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Apr-2012
Hardware Availability: May-2012
Software Availability: Feb-2012

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	32	**771**	**405**	772	405	771	405	32	**651**	**481**	651	480	650	481
401.bzip2	32	1018	303	**1020**	**303**	1025	301	32	1001	309	1004	308	**1003**	**308**
403.gcc	32	**607**	**424**	607	424	605	426	32	**607**	**424**	607	424	605	426
429.mcf	32	358	815	359	813	**358**	**814**	32	358	815	359	813	**358**	**814**
445.gobmk	32	824	407	**822**	**408**	818	411	32	**808**	**416**	808	415	807	416
456.hmmer	32	440	679	**438**	**681**	437	683	32	376	794	375	797	**375**	**796**
458.sjeng	32	932	415	944	410	**943**	**411**	32	916	423	896	432	**914**	**423**
462.libquantum	32	204	3250	203	3260	**204**	**3260**	32	200	3310	**200**	**3320**	200	3320
464.h264ref	32	1029	689	1025	691	**1026**	**690**	32	1028	689	**1021**	**693**	1018	695
471.omnetpp	32	**638**	**313**	637	314	638	313	32	610	328	611	328	**611**	**328**
473.astar	32	727	309	**725**	**310**	723	311	32	727	309	**725**	**310**	723	311
483.xalancbmk	32	421	524	**422**	**524**	423	522	32	421	524	**422**	**524**	423	522

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

Submit Notes

    The numactl mechanism was used to bind copies to processors. The config file option 'submit'
    was used to generate numactl commands to bind each copy to a specific processor.
    For details, please see the config file.

Operating System Notes

    Stack size set to unlimited using "ulimit -s unlimited"

General Notes

    Environment variables set by runspec before the start of the run:
    LD_LIBRARY_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64"

    Binaries compiled on a system with 2x E5-2650 CPU + 96 GB
    memory using RHEL6.2
    Transparent Huge Pages enabled with:
    echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
    runspec command invoked through numactl i.e.:
    numactl --interleave=all runspec <etc>
    For information about Fujitsu please visit: http://www.fujitsu.com

Base Compiler Invocation

C benchmarks:
        icc -m32

Fujitsu

PRIMERGY BX920 S3, Intel Xeon E5-2450, 2.10 GHz

SPECint_rate2006 =   556

SPECint_rate_base2006 = 535

CPU2006 license: 19		**Test date:**	Apr-2012
Test sponsor: Fujitsu		**Hardware Availability:**	May-2012
Tested by: Fujitsu		**Software Availability:**	Feb-2012

Base Compiler Invocation (Continued)

C++ benchmarks:
     `icpc -m32`

Base Portability Flags

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

Base Optimization Flags

C benchmarks:
     `-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3`

C++ benchmarks:
     `-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3`
     `-Wl,-z,muldefs -L/opt/SmartHeap/lib -lsmartheap`

Base Other Flags

C benchmarks:

     403.gcc: `-Dalloca=_alloca`

Peak Compiler Invocation

C benchmarks (except as noted below):
     `icc  -m32`

     400.perlbench: `icc -m64`

     401.bzip2: `icc -m64`

     456.hmmer: `icc -m64`

     458.sjeng: `icc -m64`

C++ benchmarks:
     `icpc -m32`

Fujitsu

PRIMERGY BX920 S3, Intel Xeon E5-2450, 2.10 GHz

SPECint_rate2006 =   556

SPECint_rate_base2006 =   535

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Apr-2012
Hardware Availability: May-2012
Software Availability: Feb-2012

Peak Portability Flags

```
400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
   401.bzip2: -DSPEC_CPU_LP64
   456.hmmer: -DSPEC_CPU_LP64
   458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

Peak Optimization Flags

C benchmarks:

```
400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
               -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
               -auto-ilp32

   401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
               -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
               -opt-prefetch -auto-ilp32 -ansi-alias

     403.gcc: basepeak = yes

     429.mcf: basepeak = yes

   445.gobmk: -xAVX(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
               -ansi-alias -opt-mem-layout-trans=3

   456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32

   458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
               -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
               -unroll4 -auto-ilp32

462.libquantum: -xAVX -ipo -O3 -no-prec-div -opt-prefetch
               -opt-mem-layout-trans=3

   464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
               -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
               -unroll2 -ansi-alias
```

C++ benchmarks:

```
   471.omnetpp: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
               -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
               -ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs
               -L/opt/SmartHeap/lib -lsmartheap

     473.astar: basepeak = yes
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY BX920 S3, Intel Xeon E5-2450, 2.10 GHz

SPECint_rate2006 = 556

SPECint_rate_base2006 = 535

CPU2006 license: 19	**Test date:** Apr-2012
Test sponsor: Fujitsu	**Hardware Availability:** May-2012
Tested by: Fujitsu	**Software Availability:** Feb-2012

Peak Optimization Flags (Continued)

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.html
http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml
http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20120320.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 v1.2.
Report generated on Thu Jul 24 08:27:59 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 19 June 2012.