Supermicro
Motherboard X7DB3

### SPECint®2006 = 16.4
SPECint_base2006 = 15.7

**CPU2006 license:** 001176
**Test date:** Apr-2007
**Test sponsor:** Supermicro
**Hardware Availability:** May-2007
**Tested by:** Supermicro
**Software Availability:** Apr-2007

### Hardware
- **CPU Name:** Intel Xeon X5355
- **CPU Characteristics:** 2.66GHz, 1333 MHz bus
- **CPU MHZ:** 2660
- **FPU:** Integrated
- **CPU(s) enabled:** 8 cores, 2 chips, 4 cores/chip
- **CPU(s) orderable:** 1, 2 chips
- **Primary Cache:** 32 KB I + 32 KB D on chip per core
- **Secondary Cache:** 8 MB I+D on chip per chip, 4 MB shared / 2 cores
- **L3 Cache:** None
- **Other Cache:** None
- **Memory:** 8 GB (8 X 1GB ECC PC2-5300, CL5, FB-DIMM)
- **Disk Subsystem:** WD2500YS-01SHB1 250GB SATA II, 7200RPM, 4 * ST316081160GB SATA RAID-10
- **Other Hardware:** None

### Software
- **Operating System:** Windows Server 2003 Enterprise Edition W/ SP1
- **Compiler:** Intel C++ Compiler for IA32 version 9.1 Build no 20070322Z
- **Microsoft Visual Studio .Net 2003** (for libraries)
- **Auto Parallel:** No
- **File System:** NTFS
- **System State:** Default
- **Base Pointers:** 32-bit
- **Peak Pointers:** 32-bit
- **Other Software:** SmartHeap Library Version 8.0 from http://www.microquill.com/
**Results Table**

<table>
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<tr>
<th>Benchmark</th>
<th>Seconds</th>
<th>Ratio</th>
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<td>19.7</td>
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</tbody>
</table>

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

### General Notes

Tested systems can be used with CSE-825TQ-R700LPV case, To ensure system stability, a 500W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required] Product description located as of http://www.supermicro.com/products/motherboard/Xeon1333/5000P/X7DB3.cfm The system bus runs at 1333 MHz

### Base Compiler Invocation

C benchmarks:

icl -Qvc7.1 -Qc99

C++ benchmarks:

icl -Qvc7.1

### Base Portability Flags

403.gcc: -DSPEC_CPU_WIN32
464.h264ref: -DSPEC_CPU_NO_INTTYPES -DWIN32

### Base Optimization Flags

C benchmarks:

-fast /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

Continued on next page
## Base Optimization Flags (Continued)

C++ benchmarks:
- `fast -Qcxx_features /F512000000 shlw32m.lib`
- `link /FORCE:MULTIPLE`

## Base Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

## Peak Compiler Invocation

C benchmarks:

`icl -Qvc7.1 -Qc99`

C++ benchmarks:

`icl -Qvc7.1`

## Peak Portability Flags

403.gcc: `-DSPEC_CPU_WIN32`
464.h264ref: `-DSPEC_CPU_NO_INTTYPES -DWIN32`

## Peak Optimization Flags

C benchmarks:

400.perlbench: `-Qprof_gen(pass 1) -Qprof_use(pass 2) -fast /F512000000 shlw32m.lib`
- `link /FORCE:MULTIPLE`

401.bzip2: Same as 400.perlbench

403.gcc: Same as 400.perlbench

429.mcf: basepeak = yes

445.gobmk: Same as 400.perlbench

456.hmmer: Same as 400.perlbench

458.sjeng: Same as 400.perlbench

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Continued on next page
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### Peak Optimization Flags (Continued)

462.libquantum: Same as 400.perlbench

464.h264ref: Same as 400.perlbench

**C++ benchmarks:**

- 471.omnetpp: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx_features  
  /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

- 473.astar: -Qprof_gen(pass 1) -Qprof_use(pass 2) -QxF -O2 -Qipo  
  -Qprec-div -Qunroll4 -Qsalign16 -Qcxx_features  
  /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

- 483.xalancbmk: Same as 471.omnetpp

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### Peak Other Flags

**C benchmarks:**

- 403.gcc: -Dalloca=_alloca

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The flags file that was used to format this result can be browsed at 
http://www.spec.org/cpu2006/flags/Intel-ic91-ia32-flags.html

You can also download the XML flags source by saving the following link:  
http://www.spec.org/cpu2006/flags/Intel-ic91-ia32-flags.xml

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For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.  
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