



# CINT2000 Result

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**Advanced Micro Devices**  
Tyan Thunder K8QS Pro (S4882), AMD Opteron (TM) 850

SPECint\_rate2000 = **71.8**  
SPECint\_rate\_base2000 = **67.7**

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Sep-2004 | Hardware Avail: May-2004 | Software Avail: Aug-2004

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	108	60.2	4	108	60.2
175.vpr	4	118	55.1	4	114	57.2
176.gcc	4	67.3	75.9	4	67.4	75.7
181.mcf	4	199	42.0	4	165	50.5
186.crafty	4	65.4	71.0	4	59.2	78.4
197.parser	4	135	61.9	4	136	61.5
252.eon	4	59.6	101	4	50.6	119
253.perlbnk	4	119	70.3	4	119	70.3
254.gap	4	71.2	71.7	4	71.2	71.7
255.vortex	4	87.6	101	4	87.6	101
256.bzip2	4	129	54.2	4	125	55.7
300.twolf	4	195	71.3	4	158	87.9

**Hardware**

CPU: AMD Opteron (TM) 850  
CPU MHz: 2400  
FPU: Integrated  
CPU(s) enabled: 4 cores, 4 chips, 1 core/chip  
CPU(s) orderable: 4  
Parallel: No  
Primary Cache: 64KBI + 64KBD on chip  
Secondary Cache: 1024KB(I+D) on chip  
L3 Cache: N/A  
Other Cache: N/A  
Memory: 16x512 MB PC3200 CL3.0 ECC Registered  
Disk Subsystem: SCSI, Seagate Cheetah ST336753LW  
Ultra 320, 15K rpm  
Other Hardware: None

**Software**

Operating System: Microsoft Windows Server 2003, Enterprise Edition  
Compiler: Intel C++ 8.0 build 20040611Z  
Microsoft Visual Studio .NET 7.0.9466 (libraries)  
MicroQuill Smartheap Library 7.0  
File System: NTFS  
System State: Default

## Notes/Tuning Information

Tested by Advanced Micro Devices  
shlW32M7.lib is the SmartHeap library V7.0 from MicroQuill [www.microquill.com](http://www.microquill.com)  
+FDO: PASS1=-Qprof\_gen PASS2=-Qprof\_use  
Portability:  
176.gcc: -Dalloca=\_alloca /F10000000  
186.crafty: -DNT\_i386  
253.perlbnk: -DSPEC\_CPU2000\_NTOS -DPERLDLL /MT  
254.gap: -DSYS\_HAS\_CALLOC\_PROTO -DSYS\_HAS\_MALLOC\_PROTO  
Baseline C: -fast -arch:SSE2 -Oi- +FDO  
Baseline C++: -fast -arch:SSE2 -GX -GR  
Peak Tuning:  
164.gzip: basepeak=yes  
175.vpr: -fast -arch:SSE2 +FDO  
-Qoption,c,-ip\_ninl\_max\_stats=2000,-ip\_ninl\_max\_total\_stats=4500  
176.gcc: -fast -arch:SSE2 +FDO -Oi- -Qunroll3  
181.mcf: -fast -QaxN +FDO  
186.crafty: -fast -arch:SSE2 +FDO  
197.parser: -arch:SSE2 +FDO -Oi- -Qipo  
252.eon: -fast -arch:SSE2 +FDO -Qansi\_alias



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## Notes/Tuning Information (Continued)

```
-Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
253.perlbnk: basepeak=yes
254.gap: basepeak=yes
255.vortex: -fast -arch:SSE +FDO -Oi- shlw32M7.lib
-Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500: basepeak=yes
256.bzip2: -fast -Qunroll2
300.twolf: -fast -arch:SSE2 +FDO -Qunroll3 shlw32M7.lib -Qansi_alias
BIOS rev. 1.02
All memory slots populated on all CPU(s)
The tested system can be assembled using an SSI MEB footprint case, such as the CCSI RC0352 3U
rackmount case, and a Tyan recommended 650W EPS-12V power supply, such as the Enermax
660W power supply (PEG851AX-VH)
Physical Address Extension (PAE) enabled
```