



# CINT2000 Result

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## Advanced Micro Devices

Tyan Thunder K8QS Pro (S4882), AMD Opteron (TM) 850

SPECint\_rate2000 = 37.8

SPECint\_rate\_base2000 = 35.8

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	106	30.5	2	106	30.5
175.vpr	2	109	29.8	2	106	30.8
176.gcc	2	64.1	39.8	2	64.1	39.8
181.mcf	2	163	25.6	2	135	31.0
186.crafty	2	65.1	35.7	2	59.1	39.3
197.parser	2	131	31.9	2	131	31.9
252.eon	2	59.4	50.8	2	50.7	59.4
253.perlbnk	2	115	36.3	2	115	36.3
254.gap	2	67.1	38.1	2	67.1	38.1
255.vortex	2	81.0	54.4	2	81.0	54.4
256.bzip2	2	118	29.4	2	115	30.1
300.twolf	2	186	37.4	2	158	44.0

### Hardware

CPU: AMD Opteron (TM) 850  
 CPU MHz: 2400  
 FPU: Integrated  
 CPU(s) enabled: 2 cores, 2 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: 8x512 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: basepeak=yes

181.mcf: -fast -QaxN +FDO

186.crafty: -fast -arch:SSE2 +FDO

197.parser: basepeak=yes

252.eon: -fast -arch:SSE2 +FDO -Qansi\_alias

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<http://www.spec.org>



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## Notes/Tuning Information (Continued)

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-Qoption,c,-ip_ninl_max_stats=2000,-ip_ninl_max_total_stats=4500
253.perlbnk: basepeak=yes
254.gap: basepeak=yes
255.vortex: 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 CPU0 and CPU1
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

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