## Hewlett-Packard Company
### ProLiant DL385 G2 (AMD Opteron (TM) 2220SE)

**SPECint_rate2000 = 90.4**  
**SPECint_rate_base2000 = 82.5**

### Hardware
- **CPU:** AMD Opteron (TM) 2220SE
- **CPU MHz:** 2800
- **FPU:** Integrated
- **CPU(s) enabled:** 4 cores, 2 chips, 2 cores/chip
- **CPU(s) orderable:** 1, 2 chips
- **Primary Cache:** 64 KB I + 64 KB D on chip per core
- **Secondary Cache:** 1 MB I+D on chip per core
- **L3 Cache:** N/A
- **Other Cache:** N/A
- **Memory:** 16 GB (8x2 GB PC2-5300P CL5.0)
- **Disk Subsystem:** 1x36 GB 10 K SAS
- **Other Hardware:**

### Software
- **Operating System:** Windows Server 2003 Enterprise SP1
- **Compiler:**  
  - Intel C++ Compiler for 32-bit applications, (version 9.1 Build 20060816Z)
  - Microsoft Visual Studio .NET 7.0.9466 (for libraries)
  - MicroQuill Smartheap Library 8.0
- **File System:** NTFS
- **System State:** Default

### Notes/Tuning Information

```
+FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use  
Base tuning for C programs:   -fast -arch:SSE2 -Oi- +FDO ONESTEP=yes  
Base tuning for C++ programs: -fast -Qcxx_features -arch:SSE2 +FDO ONESTEP=yes  
Portability flags:  
  176.gcc:   -Dalloca=_alloca /F10000000  
  186.crafty:  -DNT_i386  
  253.perlbmk: -DSPEC_CPU2000_NTOS -DPERLDLL /MT  
  254.gap:    -DSYS_HAS_CALLOC_PROTO -DSYS_HAS_MALLOC_PROTO  
Peak tuning:  
  164.gzip:    basepeak=yes  
  175.vpr:     -fast -arch:SSE2 -Qoption,c,-ip_ninl_max_stats=2000  
                -Qoption,c,-ip_ninl_max_total_stats=4500 +FDO ONESTEP=yes  
  176.gcc:     -fast -arch:SSE2 -Oi- -Qunroll3          +FDO  
  181.mcf:     -O3 -Qoption,c,-ip_ninl_max_stats=2000  
                -Qoption,c,-ip_ninl_max_total_stats=4500 +FDO ONESTEP=yes  
  186.crafty:  -fast -arch:SSE2                         +FDO ONESTEP=yes  
  197.parser:  -arch:SSE2 -Oi- -Qipo                    +FDO ONESTEP=yes  
  252.eon:     -fast -arch:SSE2 -Qansi_alias -Qoption,c,-ip_ninl_max_stats=2000  
                -Qoption,c,-ip_ninl_max_total_stats=4500 +FDO ONESTEP=yes  
  253.perlbmk: basepeak=yes  
  254.gap:     basepeak=yes
```

### Table

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<tr>
<th>Benchmark</th>
<th>Base Copies</th>
<th>Base Runtime</th>
<th>Base</th>
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**Notes/Tuning Information (Continued)**

255.vortex:  -fast -arch:SSE2 -Oi -Qoption,c,-ip_ninl_max_stats=2000  
-Qoption,c,-ip_ninl_max_total_stats=4500 +FDO ONESTEP=yes shlw32M.lib  
256.bzip2: -O3 -Oi -QaxN -Qunroll12  
300.twolf: -fast -arch:SSE2 -Qansi_alias +FDO ONESTEP=yes shlw32M.lib

**BIOS Configuration Notes**

Node Interleaving Disabled

**Other Configuration Notes**

The `start /b /wait /affinity` command is used to bind CPU(s) to processes.