CFP2000 Result

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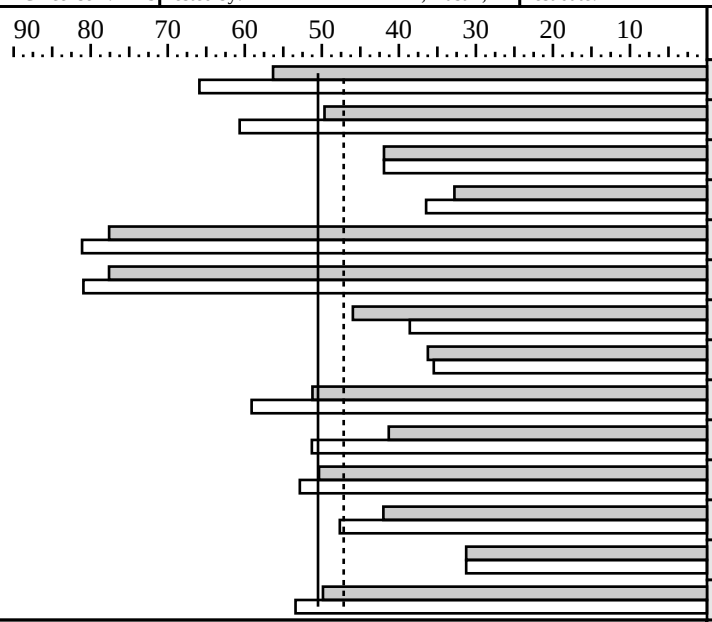
Verari Systems

QuatreX-64 (TM), AMD Opteron (TM) 850

SPECfp_rate2000 = 50.5

SPECfp_rate_base2000 = 47.2

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Apr-2004 | Hardware Avail: Jun-2004 | Software Avail: Apr-2004



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	132	56.3	4	113	65.9
171.swim	4	290	49.7	4	237	60.7
172.mgrid	4	199	41.9	4	199	41.9
173.applu	4	297	32.8	4	267	36.5
177.mesa	4	83.7	77.6	4	80.1	81.1
178.galgel	4	173	77.6	4	166	80.9
179.art	4	262	46.0	4	313	38.6
183.equake	4	166	36.2	4	170	35.5
187.facerec	4	172	51.2	4	149	59.1
188.ammp	4	247	41.3	4	199	51.3
189.lucas	4	184	50.4	4	176	52.9
191.fma3d	4	232	42.0	4	204	47.7
200.sixtrack	4	163	31.3	4	163	31.3
301.apsi	4	242	49.9	4	226	53.4

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:	8x512 MB PC3200 DDR SDRAM CL3.0
Disk Subsystem:	SCSI, Ultra 320, 10k rpm
Other Hardware:	None

Software

Operating System:	Microsoft Windows Server 2003 Enterprise Edition
Compiler:	Intel C++ 8.0 build 20031229Z, Intel Fortran 8.0 build 20031017Z, PGI Fortran compiler 5.1-3 for Windows XP, AMD Core Math library Version 2.0 (ACML), Microsoft Visual Studio .NET 7.0.9466 (libraries), MicroQuill Smartheap Library 6.0
File System:	NTFS
System State:	Default

Notes/Tuning Information

```
Tested by AMD
  +FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use
  +ACML is the AMD Core Math Library V2.0
  ONESTEP is set for all peak runs.
  ifort is the Intel Fortran compiler, icl is the Intel C++ compiler and
  pgf90 is the PGI Fortran compiler.
  Portability:
    178.galgel: -Mfixed
  Baseline: C      : icl   -fast -arch:SSE2 -QaxW +FDO
  Baseline: Fortran: pgf90 -fastsse -Mipa=fast
  168.wupwise:       pgf90 -fastsse -Mipa=fast    -Minline=levels:2
  171.swim:          ifort       -O3        -QxW  +FDO
  172.mgrid:         pgf90 basepeak=yes
  177.mesa:          icl   -Qipo -arch:SSE2       +FDO -Qunroll1 -Qansi_alias
                       -Qoption,f,-ip_ninl_max_stats=1500 -Qoption,f,-ip_ninl_max_total_stats=4500
  178.galgel:        pgf90 -fastsse -O3     RM_SOURCES=lapak.f90 -Munix +ACML
  179.art:           icl   -Qipo            -Zp4  +FDO
```

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Notes/Tuning Information (Continued)

```
    183.equake:        icl   -fast -arch:SSE2 -QaxW +FDO -Qansi_alias
    187.facerec:       ifort -fast            -QxW  +FDO
    188.ammp:          icl   -Oa   -arch:SSE2 -Zp4       -Qansi_alias
    189.lucas:         ifort                  -QxW       -Qunroll1
    191.fma3d:         ifort -fast            -QxW  +FDO -Qscalar_rep-
                       -Qoption,f,-ip_ninl_max_stats=1000 -Qoption,f,-ip_ninl_max_total_stats=3500
    200.sixtrack:      pgf90 basepeak=yes
    301.apsi:          ifort -fast            -QxW  +FDO
  BIOS rev.: PQTDX0-C
```