CFP2000 Result

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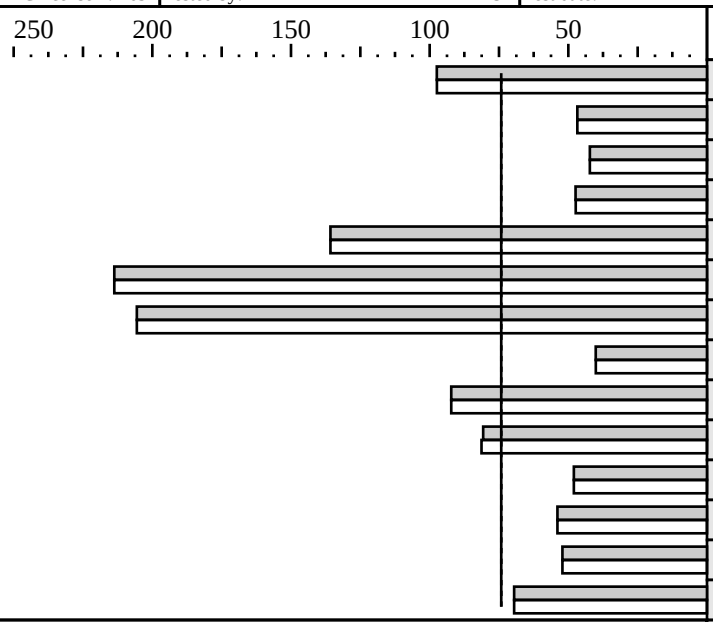
ION

A20 (Intel Xeon processor 5160, 3.0GHz)

SPECfp_rate2000 = 74.2

SPECfp_rate_base2000 = 74.2

SPEC license #: 2697 | Tested by: ION | Test date: Jun-2006 | Hardware Avail: Jul-2006 | Software Avail: May-2006



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	76.2	97.4	4	76.2	97.4
171.swim	4	308	46.8	4	308	46.8
172.mgrid	4	198	42.2	4	198	42.2
173.applu	4	206	47.4	4	206	47.3
177.mesa	4	47.8	136	4	47.8	136
178.galgel	4	63.0	214	4	63.0	214
179.art	4	58.7	206	4	58.7	206
183.equake	4	150	40.1	4	150	40.1
187.facerec	4	95.6	92.2	4	95.6	92.2
188.ammp	4	126	80.7	4	126	81.3
189.lucas	4	193	48.0	4	193	48.0
191.fma3d	4	181	53.9	4	181	53.9
200.sixtrack	4	97.9	52.1	4	97.9	52.1
301.apsi	4	173	69.5	4	173	69.5

Hardware

CPU:	Intel Xeon Processor 5160 (1333Mhz System Bus)
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1-2
Parallel:	No
Primary Cache:	32KB(I) + 32KB(D) on chip, per core
Secondary Cache:	4MB (I+D) on chip, per chip
L3 Cache:	None
Other Cache:	None
Memory:	8 GB (8*1GB PC2 5300 FB-DIMMs)
Disk Subsystem:	1 x 80GB SATA (Seagate Barracuda 7200rpm)
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux ES 4 Update 2 for AMD64/EM64T
Compiler:	Intel(R) Fortran Compiler 9.1 for EM64T (Build 20060323) Intel(R) C Compiler 9.1 for EM64T (Build 20060323)
File System:	ext3
System State:	Multi-user

Notes/Tuning Information

```
Tested by ION Computer Systems
 BIOS 01.00.0043
   Enhanced SpeedStep Disabled in BIOS
   Hardware Prefetcher Enabled in BIOS
   Adjacent Cache Line Prefetch Enabled in BIOS
 kernel 2.6.9-22.ELsmp
 +FDO: PASS1=-prof_gen  PASS2=-prof_use

    SPEC CFP2000 Baseline optimization flags
          C programs: -fast -ansi_alias +FDO
    Fortran programs: -fast +FDO
 +FDO: PASS1=-prof_gen  PASS2=-prof_use
 SPEC CFP2000 Peak optimization flags:
        168.wupwise: -fast -align all +FDO
           171.swim: -fast -align all +FDO
           72.mgrid: -fast -align all +FDO
          173.applu: -fast -align all +FDO
```

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Notes/Tuning Information (Continued)

```
            177.mesa: basepeak=yes
          178.galgel: basepeak=yes
             179.art: basepeak=yes
          183.equake: -xW -O3 -ipo -no-prec-div -static +FDO
         187.facerec: basepeak=yes
            188.ammp: -xW -O3 -ipo -no-prec-div -static +FDO
           189.lucas: basepeak=yes
           191.fma3d: basepeak=yes
       200.sixtrack: basepeak=yes
            301.apsi: basepeak=yes

  Portability Flags:
    178.galgel:  -FI
```