**CFP2000 Result**

**Einux**

**A4800**

<table>
<thead>
<tr>
<th>SPEC license #: 49</th>
<th>Tested by:</th>
<th>AMD Austin TX</th>
<th>Test date:</th>
<th>Apr-2003</th>
<th>Hardware Avail:</th>
<th>Jul-2003</th>
<th>Software Avail:</th>
<th>May-2003</th>
</tr>
</thead>
</table>

**SPECfp_rate2000 = 13.4**

**SPECfp_rate_base2000 = 12.4**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Base Copies</th>
<th>Base Runtime</th>
<th>Base Ratio</th>
<th>Copies</th>
<th>Runtime</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>168.wupwise</td>
<td>1</td>
<td>159</td>
<td>11.7</td>
<td>1</td>
<td>120</td>
<td>15.5</td>
</tr>
<tr>
<td>171.swim</td>
<td>1</td>
<td>180</td>
<td>20.0</td>
<td>1</td>
<td>179</td>
<td>20.1</td>
</tr>
<tr>
<td>172.mgrid</td>
<td>1</td>
<td>185</td>
<td>11.3</td>
<td>1</td>
<td>179</td>
<td>11.7</td>
</tr>
<tr>
<td>173.applu</td>
<td>1</td>
<td>223</td>
<td>10.9</td>
<td>1</td>
<td>205</td>
<td>11.9</td>
</tr>
<tr>
<td>177.mesa</td>
<td>1</td>
<td>104</td>
<td>15.6</td>
<td>1</td>
<td>97.9</td>
<td>16.6</td>
</tr>
<tr>
<td>178.galgel</td>
<td>1</td>
<td>193</td>
<td>17.4</td>
<td>1</td>
<td>191</td>
<td>17.6</td>
</tr>
<tr>
<td>179.art</td>
<td>1</td>
<td>208</td>
<td>14.5</td>
<td>1</td>
<td>182</td>
<td>16.6</td>
</tr>
<tr>
<td>183.equake</td>
<td>1</td>
<td>127</td>
<td>11.9</td>
<td>1</td>
<td>112</td>
<td>13.4</td>
</tr>
<tr>
<td>187.facerec</td>
<td>1</td>
<td>152</td>
<td>14.5</td>
<td>1</td>
<td>150</td>
<td>14.7</td>
</tr>
<tr>
<td>188.ammp</td>
<td>1</td>
<td>232</td>
<td>11.0</td>
<td>1</td>
<td>215</td>
<td>11.9</td>
</tr>
<tr>
<td>189.lucas</td>
<td>1</td>
<td>167</td>
<td>13.9</td>
<td>1</td>
<td>153</td>
<td>15.2</td>
</tr>
<tr>
<td>191.fma3d</td>
<td>1</td>
<td>195</td>
<td>12.5</td>
<td>1</td>
<td>190</td>
<td>12.8</td>
</tr>
<tr>
<td>200.sixtrack</td>
<td>1</td>
<td>250</td>
<td>5.11</td>
<td>1</td>
<td>225</td>
<td>5.67</td>
</tr>
<tr>
<td>301.apsi</td>
<td>1</td>
<td>275</td>
<td>10.9</td>
<td>1</td>
<td>274</td>
<td>11.0</td>
</tr>
</tbody>
</table>

**Hardware**

- **CPU:** AMD Opteron 144, 1.8 GHz
- **CPU MHz:** 1800
- **FPU:** Integrated
- **CPU(s) enabled:** 1 core, 1 chip, 1 core/chip
- **CPU(s) orderable:** 1,2,4
- **Parallel:** No
- **Primary Cache:** 64KBI + 64KBD on chip
- **Secondary Cache:** 1024KBI+(I+D) on chip
- **L3 Cache:** N/A
- **Other Cache:** N/A
- **Memory:** 4x512MB PC2700 DDR ECC Registered SDRAM CL2.5
- **Disk Subsystem:** IDE 7200 RPM
- **Other Hardware:** None

**Software**

- **Operating System:** SuSE Linux Enterprise Server 8 for x86
- **Compiler:** Intel C/C++ 7.0 build 20021212Z and Intel Fortran 7.0 build 20021212Z
- **File System:** ext2
- **System State:** Run level 3

**Notes/Tuning Information**

[FDO: PASS1=--prof_gen PASS2=--prof_use

icc and ifc are the Intel C/C++ and Fortran compilers

Portability:

178.galgel: -FI

Baseline: C

icc +FDO -O3 -xW -ipo

Baseline: Fortran

ifc +FDO -O3 -xW -ipo

Peak tuning:

168.wupwise: ifc -xK -axW -ipo -fno-alias -Qoption,f,-ip_ninl_max_stats=2000,

-Qoption,f,-ip_ninl_max_total_stats=4500

171.swim: ifc +FDO -O3 -xK -ipo -unroll2 -prefetch-

172.mgrid: ifc +FDO -O3 -axW -ipo -fno-alias

173.applu: ifc +FDO -O3 -xK -ipo -scalar_rep-

177.mesa: ifc +FDO -O3 -xW -ipo -fno-alias -Qoption,c,-ip_ninl_max_stats=1500

-Qoption,c,-ip_ninl_max_total_stats=3500 -static

178.galgel: ifc +FDO -O3 -xW -ipo -unroll1

179.art: ifc -xW -ipo -fno-alias -nolib_inline

183.equake: ifc -O3 -xK -ipo -fno-alias

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org
Einux
A4800

SPECfp_rate2000 = 13.4
SPECfp_rate_base2000 = 12.4

Notes/Tuning Information (Continued)

187.facerec:  ifc +FDO -O3 -xW -ipo -unroll1
188.ammp:     icc -O3 -xW -fno-alias -prefetch-
189.lucas:    ifc +FDO -xW -ipo -static -auto
191.fma3d:    ifc +FDO -O3 -xW -ipo -static -Zp8
200.sixtrack: ifc -ipo -fno-alias -align
301.apsi:     ifc +FDO -xW -ipo -fno-alias -ansi_alias-

ONESTEP is used for all base and peak runs