



# CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

**Bull**  
NovaScale 6160 HPC 8 way (1600MHz)

SPECfp\_rate2000 = 189  
SPECfp\_rate\_base2000 = 189

SPEC license #: 20 | Tested by: Allaoua Ait Eldjoudi | Test date: Nov-2004 | Hardware Avail: Nov-2004 | Software Avail: Nov-2004

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	8	91.0	163	8	91.0	163
171.swim	8	146	197	8	146	197
172.mgrid	8	126	133	8	126	133
173.applu	8	58.5	333	8	58.5	333
177.mesa	8	109	119	8	109	119
178.galgel	8	40.7	660	8	40.7	660
179.art	8	20.7	1165	8	20.7	1165
183.equake	8	70.4	171	8	70.4	171
187.facerec	8	104	169	8	104	169
188.amp	8	170	120	8	170	120
189.lucas	8	163	114	8	163	114
191.fma3d	8	174	112	8	174	112
200.sixtrack	8	71.6	143	8	71.6	143
301.apsi	8	266	90.7	8	266	90.7

### Hardware

CPU: Itanium 2 processor 1600 MHz  
 CPU MHz: 1600  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 8 chips, 1 core/chip  
 CPU(s) orderable: 4 to 8  
 Parallel: No  
 Primary Cache: 16KBI + 16KBD on chip, per core  
 Secondary Cache: 256KB(I+D) on chip, per core  
 L3 Cache: 9.0MB (I+D) on chip, per core  
 Other Cache: N/A  
 Memory: 64 GB (4 \* 16 \* 1GB DIMMs)  
 Disk Subsystem: 1 SJ0812 Disk drawer with 2 15krpm 36GB SCSI disks  
 Other Hardware:

### Software

Operating System: Bull Advanced Server 2 V3 (linux kernel 2.6.4, glibc 2.2.4)  
 Compiler: Intel(R) Fortran Compiler for Linux 8.1 (Build 20041021)  
 Intel(R) C++ Compiler for Linux 8.1 (Build 20041021)  
 File System: ext3  
 System State: Multi User

## Notes/Tuning Information

+FDO: PASS1=-prof\_gen PASS2=-prof\_use

Baseline optimization flags:

C programs: -fast -ansi\_alias -IPF\_fp\_relaxed +FDO  
 Fortran programs: -fast -IPF\_fp\_relaxed + FDO

Portability Flags:

178.galgel: -FI

Peak optimization flags: basepeak=yes

16 CPU machine with only 8 CPU enabled

8 CPU disabled by service processor before booting

Processes were bound to CPUs using pexec