



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

**Hewlett-Packard Company**  
HP Integrity Server rx4640 (1300 MHz, Itanium 2)

SPECint\_rate2000 = 51.4  
SPECint\_rate\_base2000 = 50.7

SPEC license #: 3 | Tested by: HP Richardson | Test date: Jan-2004 | Hardware Avail: Jan-2004 | Software Avail: Mar-2004

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	4	172	37.8	4	172	37.8
175.vpr	4	153	42.5	4	150	43.3
176.gcc	4	84.2	60.6	4	84.2	60.6
181.mcf	4	178	47.0	4	178	47.0
186.crafty	4	93.5	49.6	4	93.5	49.6
197.parser	4	209	39.9	4	209	39.9
252.eon	4	82.8	72.9	4	80.8	74.7
253.perlbnk	4	165	50.5	4	154	54.3
254.gap	4	121	42.3	4	121	42.3
255.vortex	4	118	74.5	4	117	75.2
256.bzip2	4	138	50.6	4	138	50.6
300.twolf	4	254	54.8	4	249	55.9

### Hardware

CPU: Intel Itanium 2  
 CPU MHz: 1300  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 4 chips, 1 core/chip  
 CPU(s) orderable: 1-4  
 Parallel: no  
 Primary Cache: 16KBI + 16KBD (on chip) per CPU  
 Secondary Cache: 256KB (on chip) per CPU  
 L3 Cache: 3.0MB (on chip) per CPU  
 Other Cache: N/A  
 Memory: 32GB (16 \* 2GB DIMMs)  
 Disk Subsystem: 1x36GB 10k RPM SCSI disk  
 Other Hardware: N/A

### Software

Operating System: HPUX11i-TCOE B.11.23  
 Compiler: HP C/ANSI C Compiler C.05.55  
 HP aC++ Compiler C.05.55  
 File System: VxFS  
 System State: Multi-user

## Notes/Tuning Information

### Portability Flags

176.gcc : -DHOST\_WORDS\_BIG\_ENDIAN  
 186.crafty : -DHP  
 252.eon : -DFMAX\_IS\_DOUBLE  
 253.perlbnk: -DSPEC\_CPU2000\_HP  
 254.gap : -DSPEC\_CPU2000\_HP -DSYS\_IS\_USG -DSYS\_HAS\_IOCTL\_PROTO  
 -DSYS\_HAS\_TIME\_PROTO -DSYS\_HAS\_CALLOC\_PROTO

### Base Flags

PBO : +Oprofile=collect:all/+Oprofile=use  
 C : PBO +Ofaster -exec +Odatalayout  
 C++ : PBO +Ofaster +inline\_level 2 -minshared

### Peak Flags

164.gzip : basepeak=true  
 175.vpr : PBO +Ofaster +Odatalayout +Onorecovery  
 +Onoptrs\_to\_globals -exec  
 LIBS = -Wl,-aarchive\_shared -Bprotected  
 176.gcc : basepeak=true  
 181.mcf : basepeak=true



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Hewlett-Packard Company  
HP Integrity Server rx4640 (1300 MHz, Itanium 2)

SPECint\_rate2000 = 51.4  
SPECint\_rate\_base2000 = 50.7

SPEC license #: 3 | Tested by: HP Richardson | Test date: Jan-2004 | Hardware Avail: Jan-2004 | Software Avail: Mar-2004

## Notes/Tuning Information (Continued)

```

186.crafty : basepeak=true
197.parser : basepeak=true
252.eon     : PBO +Ofaster +Odatalayout +Otype_safety=ansi
             +inline_level 2 -minshared
253.perlbnk: PBO +Ofaster +Odatalayout +Onoptrs_to_globals -exec
             LIBS = -Wl,-aarchive_shared -Bprotected_def fastmem.o
254.gap     : basepeak=true
255.vortex  : PBO +Ofaster +Odatalayout +Onorecovery
             +Onoptrs_to_globals -exec
             LIBS = -Wl,-aarchive_shared -Bprotected
256.bzip2   : basepeak=true
300.twolf   : PBO +Ofaster +Odatalayout +Onoptrs_to_globals -exec
             LIBS = -Wl,-aarchive_shared -Bprotected_data effmem.o

```

### Kernel Tunables:

```

maxssiz      268435456
vps_ceiling  16384
vps_pagesize 4096
swapmem_on   1
dbc_max_pct  20
dbc_min_pct  20

```

### Note:

```

EFI shell utility 'cpuconfig' used
to deconfigure processors if necessary

```