



CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Hewlett-Packard Company
HP Integrity Server rx4640 (1500 MHz, Itanium 2)

SPECint_rate2000 = 64.2
SPECint_rate_base2000 = 63.4

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	149	43.6	4	149	43.6
175.vpr	4	121	53.8	4	120	54.2
176.gcc	4	70.5	72.4	4	70.5	72.4
181.mcf	4	75.6	110	4	75.6	110
186.crafty	4	81.0	57.3	4	81.0	57.3
197.parser	4	173	48.2	4	173	48.2
252.eon	4	72.0	83.7	4	70.0	86.2
253.perlbnk	4	142	58.7	4	132	63.5
254.gap	4	109	46.8	4	109	46.8
255.vortex	4	97.6	90.3	4	96.9	91.0
256.bzip2	4	112	62.4	4	112	62.4
300.twolf	4	220	63.2	4	215	64.6

Hardware

CPU: Intel Itanium 2
 CPU MHz: 1500
 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: 6.0MB (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.mfc : basepeak=true



CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Hewlett-Packard Company
HP Integrity Server rx4640 (1500 MHz, Itanium 2)

SPECint_rate2000 = 64.2
SPECint_rate_base2000 = 63.4

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
```