```
1 Bochs x86 Emulator 2.4.6
0000000000i[
                     Build from CVS snapshot, on February 22, 2011
0000000000i[
0000000000i[
                   Compiled at Jun 8 2013, 05:16:04
0000000000i[
                 ] System configuration
0000000000i[
                     processors: 1 (cores=1, HT threads=1)
0000000000i[
                     A20 line support: yes
0000000000i[
                   CPU configuration
00000000000i[
                     level: 6
0000000000i[
                     SMP support: no
0000000000i[
                     APIC support: yes
0000000000i[
                     FPU support: yes
00000000000i[
                     MMX support: yes
                     3dnow! support: no
00000000000i[
0000000000i[
                     SEP support: yes
0000000000i[
                     SSE support: sse2
0000000000i[
                     XSAVE support: no
0000000000i[
                     AES support: no
0000000000i[
                     MOVBE support: no
00000000000i[
                     x86-64 support: yes
0000000000i[
                     1G paging support: no
00000000001
                     VMX support: no
                 ] Optimization configuration
00000000001
00000000000i[
                     RepeatSpeedups support: yes
00000000000i[
                     Trace cache support: yes
00000000000i[
                     Fast function calls: yes
00000000000i[
                 ] Devices configuration
00000000000i[
                     ACPI support: yes
0000000000i[
                     NE2000 support: yes
0000000000i[
                     PCI support: yes, enabled=yes
00000000000i[
                     SB16 support: yes
                     USB support: yes
00000000000i[
00000000000i[
                     VGA extension support: vbe
00000000000i[MEM0] allocated memory at 0x2b42f0aeb010. after alignment, vector=0x2b42f0aec000
00000000000i[MEM0 ] 32.00MB
00000000000i[MEM0] mem block size = 0x00100000, blocks=32
0000000000i[MEM0 ] rom at 0xfffe0000/131072 ('/usr/share/bochs/BIOS-bochs-latest')
0000000000i[MEM0 ] rom at 0xc0000/41472 ('/usr/share/bochs/VGABIOS-lgpl-latest')
0000000000i[VTIME] using 'realtime pit' synchronization method
00000000001[
                 ] lt_dlhandle is 0x36b7b10
0000000000i[PLGIN] loaded plugin libbx_cmos.so
               ] lt_dlhandle is 0x36b8530
0000000000i[
0000000000i[PLGIN] loaded plugin libbx_dma.so
               ] lt_dlhandle is 0x36b8f90
0000000000i[
00000000000i[PLGIN] loaded plugin libbx_pic.so
                ] lt_dlhandle is 0x36b97d0
0000000000i[
00000000000i[PLGIN] loaded plugin libbx_pit.so
               ] lt_dlhandle is 0x36ba140
00000000000i[
0000000000i[PLGIN] loaded plugin libbx_vga.so
                ] lt_dlhandle is 0x36ba8a0
00000000000i[
0000000000i[PLGIN] loaded plugin libbx hdimage.so
                 ] lt dlhandle is 0x36bb1a0
00000000000i[
0000000000i[PLGIN] loaded plugin libbx floppy.so
                 ] lt dlhandle is 0x36bbd60
00000000000i[
0000000000i[PLGIN] loaded plugin libbx soundmod.so
                ] lt dlhandle is 0x36bc610
00000000000i[
00000000000i[PLGIN] loaded plugin libbx_pci.so
                ] lt_dlhandle is 0x36bd1d0
00000000000i[
0000000000i[PLGIN] loaded plugin libbx_pci2isa.so
                ] lt_dlhandle is 0x36bdb10
00000000000i[
0000000000i[PLGIN] loaded plugin libbx_usb_common.so
                ] lt_dlhandle is 0x36be3b0
00000000000i[
0000000000i[PLGIN] loaded plugin libbx unmapped.so
0000000000i[
                ] lt dlhandle is 0x36bec30
0000000000i[PLGIN] loaded plugin libbx biosdev.so
               ] lt dlhandle is 0x36bf600
0000000000i[
0000000000i[PLGIN] loaded plugin libbx speaker.so
               ] lt_dlhandle is 0x36bfd90
0000000000i[
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0000000000i[PLGIN] loaded plugin libbx extfpuirq.so
00000000000i[
                      ] lt dlhandle is 0 \times 36\overline{c}0610
0000000000i[PLGIN] loaded plugin libbx gameport.so
                     ] lt_dlhandle is 0x36c0fa0
0000000000i[
0000000000i[PLGIN] loaded plugin libbx_pci_ide.so
                     ] lt_dlhandle is 0x36c1980
0000000000i[
00000000000i[PLGIN] loaded plugin libbx_acpi.so
00000000000i[
                      ] lt_dlhandle is 0x36c22c0
0000000000i[PLGIN] loaded plugin libbx_ioapic.so
0000000000i[
                      ] lt dlhandle is 0x36c2c70
0000000000i[PLGIN] loaded plugin libbx keyboard.so
                      ] lt dlhandle is 0x36\overline{c}3480
0000000000i[
0000000000i[PLGIN] loaded plugin libbx harddrv.so
                      ] lt dlhandle is 0x36d5560
00000000000i[
00000000000i[PLGIN] loaded plugin libbx_serial.so
00000000000i[
                       ] lt dlhandle is 0x36d63e0
0000000000i[PLGIN] loaded plugin libbx_parallel.so
0000000000i[CMOS ] Using local time for initial clock
00000000000i[CMOS ] Setting initial clock to: Thu Feb 5 15:37:29 2015 (time0=1423179449)
0000000000i[DMA ] channel 4 used by cascade
                      ] channel 2 used by Floppy Drive
00000000000i[DMA
00000000000i[PCI
                      ] 440FX Host bridge present at device 0, function 0
00000000000i[PCI
                      ] PIIX3 PCI-to-ISA bridge present at device 1, function 0
00000000000i[VGA ] interval=50000
00000000000i[MEM0 ] Register memory access handlers: 0x000000000000000 - 0x0000000000bffff
0000000000i[MEM0 ] Register memory access handlers: 0x000000000000 - 0x00000000e0ffffff
0000000000i[VGA ] VBE Bochs Display Extension Enabled
00000000000i[PLGIN] init_dev of 'unmapped' plugin device by virtual method
00000000000i[PLGIN] init_dev of 'biosdev' plugin device by virtual method
0000000000i[PLGIN] init dev of 'speaker' plugin device by virtual method
0000000000i[SPEAK] Failed to open /dev/console: Resource temporarily unavailable
0000000000i[SPEAK] Deactivating beep on console
00000000000i[PLGIN] init_dev of 'extfpuirq' plugin device by virtual method
0000000000i[PLGIN] init_dev of 'gameport' plugin device by virtual method
0000000000i[PLGIN] init_dev of 'pci_ide' plugin device by virtual method
00000000000i[PCI] PIIX\overline{3} PCI IDE controller present at device 1, function 1
0000000000i[PLGIN] init_dev of 'acpi' plugin device by virtual method
0000000000i[PCI ] ACPI Controller present at device 1, function 3
0000000000i[PLGIN] init_dev of 'ioapic' plugin device by virtual method
00000000000i[IOAP ] initializing I/O APIC
00000000000i[MEM0 ] Register memory access handlers: 0x00000000fec00000 - 0x00000000fec00fff
0000000000i[PLGIN] init_dev of 'keyboard' plugin device by virtual method
0000000000i[KBD ] will paste characters every 1000 keyboard ticks
0000000000i[PLGIN] init_dev of 'harddrv' plugin device by virtual method
                      ] CD \overline{on} ata0-0: 'os.iso
0000000000i[HD
                      ] load cdrom with path=os.iso
00000000000i[CD1
00000000000i[CD1
                      ] Opening image file as a cd.
00000000001[HD
                       ] Media present in CD-ROM drive
00000000001[HD
                       ] Capacity is 237 sectors (0.46 MB)
0000000000i[HD
                       ] Using boot sequence cdrom, none, none
0000000000i[HD ] Floppy boot signature check is enabled 0000000000i[PLGIN] init_dev of 'serial' plugin device by virtual method
00000000000i[SER ] com1 at 0x03f8 irg 4
0000000000i[PLGIN] init_dev of 'parallel' plugin device by virtual method
00000000000i[PAR ] parallel port 1 at 0x0378 irq 7
000000000001[PLGIN] register state of 'unmapped' plugin device by virtual method 000000000001[PLGIN] register state of 'biosdev' plugin device by virtual method 0000000000001[PLGIN] register state of 'speaker' plugin device by virtual method 000000000001[PLGIN] register state of 'extfpuirq' plugin device by virtual method 000000000001[PLGIN] register state of 'gameport' plugin device by virtual method 000000000001[PLGIN] register state of 'pci_ide' plugin device by virtual method 000000000001[PLGIN] register state of 'acpi' plugin device by virtual method 000000000001[PLGIN] register state of 'ioapic' plugin device by virtual method 00000000001[PLGIN] register state of 'ioapic' plugin device by virtual method 00000000001[PLGIN] register state of 'keyboard' plugin device by virtual method
00000000000[[PLGIN] register state of 'keyboard' plugin device by virtual method 000000000000[PLGIN] register state of 'harddrv' plugin device by virtual method 000000000000[PLGIN] register state of 'serial' plugin device by virtual method
0000000000i[PLGIN] register state of 'parallel' plugin device by virtual method
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0000000000i[SYS ] bx_pc_system_c::Reset(HARDWARE) called
00000000000i[CPU0 ] cpu hardware reset
0000000000i[APIC0] allocate APIC id=0 (MMIO enabled) to 0x00000000fee00000
0000000000i[CPU0 ] CPUID[0x00000000]: 00000003 756e6547 6c65746e 49656e69
0000000000i[CPU0 ] CPUID[0x00000001]: 00000f23 00000800 00002000 07cbfbff
0000000000i[CPU0 ] CPUID[0x00000002]: 00410601 00000000 00000000 00000000
0000000000i[CPU0 ] CPUID[0x00000003]: 00000000 00000000 00000000 00000000
0000000000i[CPU0 ] CPUID[0x00000004]: 00000000 00000000 00000000 00000000
0000000000i[CPU0 ] CPUID[0x00000007]: 00000000 00000000 00000000 00000000
0000000000i[CPU0 ] CPUID[0x80000000]: 80000008 00000000 00000000 00000000
00000000000i[CPU0 ] CPUID[0x80000001]: 00000000 00000000 00000001 2a100800
00000000000i[CPU0 ] CPUID[0x80000002]: 20202020 20202020 20202020 6e492020
0000000000i[CPU0 ] CPUID[0x80000003]: 286c6574 50202952 69746e65 52286d75
00000000000i[CPU0] CPUID[0x80000004]: 20342029 20555043 20202020 00202020
00000000000i[CPU0 ] CPUID[0x80000006]: 00000000 42004200 02008140 00000000
0000000000i[CPU0 ] CPUID[0x80000007]: 00000000 00000000 00000000 00000000
0000000000i[CPU0 ] CPUID[0x80000008]: 00003028 00000000 00000000 00000000
0000000000i[PLGIN] reset of 'unmapped' plugin device by virtual method
0000000000i[PLGIN] reset of 'biosdev' plugin device by virtual method
0000000000i[PLGIN] reset of 'speaker' plugin device by virtual method
0000000000i[PLGIN] reset of 'extfpuirq' plugin device by virtual method
0000000000i[PLGIN] reset of 'gameport' plugin device by virtual method
0000000000i[PLGIN] reset of 'pci ide' plugin device by virtual method
0000000000i[PLGIN] reset of 'acpi' plugin device by virtual method
0000000000i[PLGIN] reset of 'ioapic' plugin device by virtual method
0000000000i[PLGIN] reset of 'keyboard' plugin device by virtual method
0000000000i[PLGIN] reset of 'harddrv' plugin device by virtual method
0000000000i[PLGIN] reset of 'serial' plugin device by virtual method
0000000000i[PLGIN] reset of 'parallel' plugin device by virtual method
00000003305i[BIOS ] $Revision: 1.257 $ $Date: 2011/01/26 09:52:02 $
00000316560i[KBD ] reset-disable command received
00000444870i[VBIOS] VGABios $Id: vgabios.c,v 1.75 2011/10/15 14:07:21 vruppert Exp $
00000444941i[VGA ] VBE known Display Interface b0c0 00000444973i[VGA ] VBE known Display Interface b0c5
00000447898i[VBIOS] VBE Bios $Id: vbe.c,v 1.64 2011/07/19 18:25:05 vruppert Exp $
00000768014i[BIOS ] Starting rombios32
00000768452i[BIOS ] Shutdown flag 0
00000769036i[BIOS ] ram_size=0x02000000
00000769457i[BIOS ] ram_end=32MB
00000784087i[BIOS ] Found 1 cpu(s)
00000799935i[BIOS ] bios_table_addr: 0x000fb928 end=0x000fcc00
00000800029i[PCI ] 440FX PMC write to PAM register 59 (TLB Flush)
00001127726i[PCI ] 440FX PMC write to PAM register 59 (TLB Flush)
00001455654i[P2I ] PCI IRQ routing: PIRQA# set to 0x0b
00001455673i[P2I ] PCI IRQ routing: PIRQB# set to 0x09
00001455692i[P2I ] PCI IRQ routing: PIRQC# set to 0x0b
00001455711i[P2I ] PCI IRQ routing: PIRQD# set to 0x09
                    ] PCI IRQ routing: PIRQD# set to 0x09
00001455711i[P2I
00001455721i[P2I ] write: ELCR2 = 0x0a
00001456492i[BIOS ] PIIX3/PIIX4 init: elcr=00 0a
00001464164i[BIOS] PCI: bus=0 devfn=0x00: vendor_id=0x8086 device_id=0x1237 class=0x0600 00001466439i[BIOS] PCI: bus=0 devfn=0x08: vendor_id=0x8086 device_id=0x7000 class=0x0601 00001468553i[BIOS] PCI: bus=0 devfn=0x09: vendor_id=0x8086 device_id=0x7010 class=0x0101
00001468777i[PIDE ] new BM-DMA address: 0xc000
00001469392i[BIOS ] region 4: 0x0000c000
00001471419i[BIOS ] PCI: bus=0 devfn=0x0b: vendor id=0x8086 device id=0x7113 class=0x0680
00001471648i[ACPI ] new irq line = 11
00001471660i[ACPI] new irq line = 9
00001471685i[ACPI ] new PM base address: 0xb000
00001471699i[ACPI ] new SM base address: 0xb100
00001471727i[PCI
                    ] setting SMRAM control register to 0x4a
00001635820i[CPU0 ] Enter to System Management Mode
00001635830i[CPU0 ] RSM: Resuming from System Management Mode
00001799851i[PCI ] setting SMRAM control register to 0x0a
00001808601i[BIOS ] MP table addr=0x000fba00 MPC table addr=0x000fb930 size=0xd0
00001810415i[BIOS ] SMBIOS table addr=0x000fba10
00001813570i[BIOS ] Firmware waking vector 0x1ff00cc
00001818494i[BIOS ] ACPI tables: RSDP addr=0x000fbb30 ACPI DATA addr=0x01ff0000 size=0x1f18
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] 440FX PMC write to PAM register 59 (TLB Flush)
00001818530i[PCI
00001819254i[BIOS ] bios table cur addr: 0x000fbb54
00005700573i[BIOS ] IDE time out
00149621044i[BIOS ] Booting from 07c0:0000
00149724268i[BIOS ] int13_harddisk: function 41, unmapped device for ELDL=80
00149729044i[BIOS ] int13 harddisk: function 08, unmapped device for ELDL=80
00149733698i[BIOS ] *** int 15h function AX=00c0, BX=0000 not yet supported!
                  ] >>PANIC<< POWER button turned off.
03911750000p[SDL
03911750000i[CPU0 ] CPU is in protected mode (active)
03911750000i[CPU0] CS.d b = 32 bit
03911750000i[CPU0] SS.db = 32 bit
03911750000i[CPU0 ] EFER
                          = 0 \times 000000000
03911750000i[CPU0 ]
                     RAX=00000000000000000
                                           RBX=000000000002cd80
03911750000i[CPU0 ]
                     RCX=00000000000000008
                                           RDX=0000000000b03d5
03911750000i[CPU0 ]
                     RSP=000000000103000
                                           RBP=0000000000067ee0
03911750000i[CPU0 ]
                     RSI=000000000002cef0
                                           RDI=000000000002cef1
03911750000i[CPU0 ]
                      R8=0000000000000000
                                            R9=00000000000000000
03911750000i[CPU0 ]
                     R10=00000000000000000
                                           R11=00000000000000000
03911750000i[CPU0 ]
                     R12=00000000000000000
                                           R13=00000000000000000
03911750000i[CPU0 ]
                     03911750000i[CPU0 ]
                     IOPL=0 id vip vif ac vm rf nt of df if tf sf ZF af PF cf
03911750000i[CPU0 ]
                     SEG selector
                                              limit G D
                                      base
03911750000i[CPU0 ]
                     SEG sltr(index|ti|rpl)
                                                 base
                                                         limit G D
03911750000i[CPU0 ]
                      CS:0008( 0001| 0|
                                         0) 00000000 ffffffff 1 1
                      DS:0010( 0002| 0|
                                         0) 00000000 ffffffff 1 1
03911750000i[CPU0 ]
                      SS:0010( 0002| 0|
                                         0) 00000000 ffffffff 1 1
03911750000i[CPU0 ]
                      ES:0010( 0002| 0|
                                         0) 00000000 ffffffff 1 1
03911750000i[CPU0 ]
03911750000i[CPU0 ]
                      FS:0010( 0002| 0|
                                         0) 00000000 ffffffff 1 1
03911750000i[CPU0 ]
                      GS:0010( 0002| 0|
                                         0) 00000000 ffffffff 1 1
                      MSR_FS_BASE:00000000000000000
03911750000i[CPU0 ]
03911750000i[CPU0 ]
                      MSR GS BASE:00000000000000000
03911750000i[CPU0 ] |
                     RIP=000000000010001b (00000000010001b)
03911750000i[CPU0 ] | CR0=0x60000011 CR2=0x0000000000000000
03911750000i[CPU0 ] | CR3=0x00000000 CR4=0x00000000
03911750000i[CPU0 ] 0x00000000010001b>> jmp .-2 (0x0010001b) : EBFE
03911750000i[CMOS ] Last time is 1423183360 (Thu Feb 5 16:42:40 2015)
                 ] restoring default signal behavior
03911750000i[
03911750000i[CTRL ] quit_sim called with exit code 1
```