Asus P4C800

Wichtig: Zu unterscheiden sind die Mainboards P4C800 und P4C800-Deluxe, da diese unterschiedliche BIOS Versionen brauchen. Eine problemlose Installation ist erst nach einem BIOS Update auf die Version 1016 möglich - davor bringen die IDE und SATA Ports nur Probleme mit sich. Höhere BIOS Versionen sollen ebenfalls Probleme verursachen. Das Netz ist voller Blogbeiträge und Forenposts zum Thema.

Installation funktioniert unter:

- LMDE - eine Variation von Linux Mint 10 (Julia) für Debian: http://www.linuxmint.com/download_lmde.php

Hier die Daten zum Blech - allerdings müssen alle Angaben zur Grafikkarte ignoriert werden, weil für die Installation des Referenzblechs nicht die 3DLabs Karte genutzt wurde:

- P4 mit 2.8 Ghz und Hyperthreading
- Asus P4C800 Mainboard
- 1 GB RAM (2 Riegel a 512MB) - im Referenzblech wurden vier 512er Riegel verbaut
- 40GB IDE HD
- 3dLabs Wildcat VP990 AGP Grafikkarte mit 512MB und zwei DVI Ausgängen (siehe oben)

Damit es einfach geht, die restlichen Bleche zu flashen hier die ISO: boot.tar.gz

```
00:00.0 Host bridge: Intel Corporation 82875P/E7210 Memory Controller Hub
(rev 02)
    Subsystem: ASUSTeK Computer Inc. Device 80f6
    Control: I/O- Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR+ FastB2B- DisINTx-
    Status: Cap+ 66MHz- UDF- FastB2B+ ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort+ >SERR- <PERR- INTx-
    Latency: 0
    Region 0: Memory at f4000000 (32-bit, prefetchable) [size=64M]
    Capabilities: [e4] Vendor Specific Information: Len=06 <?>
    Capabilities: [a0] AGP version 3.0
        Status: RQ=32 Iso- ArqSz=2 Cal=0 SBA+ ITACoh- GART64- HTrans- 64bit-
FW+ AGP3- Rate=x1,x2,x4
        Command: RQ=1 ArqSz=0 Cal=0 SBA+ AGP+ GART64- 64bit- FW+ Rate=x4
    Kernel driver in use: agpgart-intel
    Kernel modules: i82875p_edac, intel-agp

00:01.0 PCI bridge: Intel Corporation 82875P Processor to AGP Controller
(rev 02) (prog-if 00 [Normal decode])
    Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR+ FastB2B- DisINTx-
    Status: Cap- 66MHz+ UDF- FastB2B+ ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- >SERR- <PERR- INTx-
    Latency: 64
    Bus: primary=00, secondary=01, subordinate=01, sec-latency=64
    Memory behind bridge: fc900000-fe9fffff
```

```
    Prefetchable memory behind bridge: e7e00000-efefffff
    Secondary status: 66MHz+ FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort+ <SERR- <PERR-
    BridgeCtl: Parity- SERR- NoISA- VGA+ MAbort- >Reset- FastB2B-
        PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREn-
    Kernel modules: shpchp

00:06.0 System peripheral: Intel Corporation 82875P/E7210 Processor to I/O
Memory Interface (rev 02)
    Control: I/O- Mem+ BusMaster- SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- >SERR- <PERR- INTx-
    Region 0: Memory at fecf0000 (32-bit, non-prefetchable) [size=4K]

00:1d.0 USB Controller: Intel Corporation 82801EB/ER (ICH5/ICH5R) USB UHCI
Controller #1 (rev 02) (prog-if 00 [UHCI])
    Subsystem: ASUSTeK Computer Inc. P4P800/P5P800 series motherboard
    Control: I/O+ Mem- BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin A routed to IRQ 16
    Region 4: I/O ports at eec0 [size=32]
    Kernel driver in use: uhci_hcd

00:1d.1 USB Controller: Intel Corporation 82801EB/ER (ICH5/ICH5R) USB UHCI
Controller #2 (rev 02) (prog-if 00 [UHCI])
    Subsystem: ASUSTeK Computer Inc. P4P800/P5P800 series motherboard
    Control: I/O+ Mem- BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin B routed to IRQ 19
    Region 4: I/O ports at ef00 [size=32]
    Kernel driver in use: uhci_hcd

00:1d.2 USB Controller: Intel Corporation 82801EB/ER (ICH5/ICH5R) USB UHCI
Controller #3 (rev 02) (prog-if 00 [UHCI])
    Subsystem: ASUSTeK Computer Inc. P4P800/P5P800 series motherboard
    Control: I/O+ Mem- BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin C routed to IRQ 18
    Region 4: I/O ports at ef20 [size=32]
    Kernel driver in use: uhci_hcd
```

```
00:1d.3 USB Controller: Intel Corporation 82801EB/ER (ICH5/ICH5R) USB UHCI
Controller #4 (rev 02) (prog-if 00 [UHCI])
    Subsystem: ASUSTeK Computer Inc. P4P800/P5P800 series motherboard
    Control: I/O+ Mem- BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin A routed to IRQ 16
    Region 4: I/O ports at ef40 [size=32]
    Kernel driver in use: uhci_hcd

00:1d.7 USB Controller: Intel Corporation 82801EB/ER (ICH5/ICH5R) USB2 EHCI
Controller (rev 02) (prog-if 20 [EHCI])
    Subsystem: ASUSTeK Computer Inc. P4P800/P5P800 series motherboard
    Control: I/O- Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR+ FastB2B- DisINTx-
    Status: Cap+ 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin D routed to IRQ 23
    Region 0: Memory at febff800 (32-bit, non-prefetchable) [size=1K]
    Capabilities: [50] Power Management version 2
        Flags: PMEClk- DSI- D1- D2- AuxCurrent=375mA PME(D0+,D1-,D2-
,D3hot+,D3cold+)
        Status: D0 NoSoftRst- PME-Enable- DSel=0 DScale=0 PME-
    Capabilities: [58] Debug port: BAR=1 offset=00a0
    Kernel driver in use: ehci_hcd

00:1e.0 PCI bridge: Intel Corporation 82801 PCI Bridge (rev c2) (prog-if 00
[Normal decode])
    Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR+ FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Bus: primary=00, secondary=02, subordinate=02, sec-latency=64
    I/O behind bridge: 0000d000-0000dfff
    Memory behind bridge: fea00000-feafffff
    Secondary status: 66MHz- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- <SERR- <PERR-
    BridgeCtl: Parity- SERR+ NoISA- VGA- MAbort- >Reset- FastB2B-
        PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREn-
    Kernel modules: shpchp

00:1f.0 ISA bridge: Intel Corporation 82801EB/ER (ICH5/ICH5R) LPC Interface
Bridge (rev 02)
    Control: I/O+ Mem+ BusMaster+ SpecCycle+ MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
```

```
    Latency: 0
    Kernel modules: iTCO_wdt, intel-rng

00:1f.1 IDE interface: Intel Corporation 82801EB/ER (ICH5/ICH5R) IDE
Controller (rev 02) (prog-if 8a [Master SecP PriP])
    Subsystem: ASUSTeK Computer Inc. P4P800/P5P800 series motherboard
    Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin A routed to IRQ 18
    Region 0: I/O ports at 01f0 [size=8]
    Region 1: I/O ports at 03f4 [size=1]
    Region 2: I/O ports at 0170 [size=8]
    Region 3: I/O ports at 0374 [size=1]
    Region 4: I/O ports at fc00 [size=16]
    Region 5: Memory at 80000000 (32-bit, non-prefetchable) [size=1K]
    Kernel driver in use: ata_piix

00:1f.3 SMBus: Intel Corporation 82801EB/ER (ICH5/ICH5R) SMBus Controller
(rev 02)
    Subsystem: ASUSTeK Computer Inc. P4P800 Mainboard
    Control: I/O+ Mem- BusMaster- SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap- 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Interrupt: pin B routed to IRQ 5
    Region 4: I/O ports at 0400 [size=32]
    Kernel modules: i2c-i801

00:1f.5 Multimedia audio controller: Intel Corporation 82801EB/ER
(ICH5/ICH5R) AC'97 Audio Controller (rev 02)
    Subsystem: ASUSTeK Computer Inc. P4P800 Mainboard
    Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap+ 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 0
    Interrupt: pin B routed to IRQ 17
    Region 0: I/O ports at e800 [size=256]
    Region 1: I/O ports at ee80 [size=64]
    Region 2: Memory at febff400 (32-bit, non-prefetchable) [size=512]
    Region 3: Memory at febff000 (32-bit, non-prefetchable) [size=256]
    Capabilities: [50] Power Management version 2
        Flags: PMEClk- DSI- D1- D2- AuxCurrent=375mA PME(D0+,D1-,D2-
,D3hot+,D3cold+)
        Status: D0 NoSoftRst- PME-Enable- DSel=0 DScale=0 PME-
    Kernel driver in use: Intel ICH
    Kernel modules: snd-intel8x0
```

```
01:00.0 VGA compatible controller: nVidia Corporation NV25 [GeForce4 Ti
4200] (rev a3) (prog-if 00 [VGA controller])
    Subsystem: ASUSTeK Computer Inc. Device 804f
    Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr-
Stepping- SERR- FastB2B- DisINTx-
    Status: Cap+ 66MHz+ UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 64 (1250ns min, 250ns max)
    Interrupt: pin A routed to IRQ 16
    Region 0: Memory at fd000000 (32-bit, non-prefetchable) [size=16M]
    Region 1: Memory at e8000000 (32-bit, prefetchable) [size=64M]
    Region 2: Memory at efe80000 (32-bit, prefetchable) [size=512K]
    Expansion ROM at fe9e0000 [disabled] [size=128K]
    Capabilities: [60] Power Management version 2
        Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0-,D1-,D2-,D3hot-
,D3cold-)
        Status: D0 NoSoftRst- PME-Enable- DSel=0 DScale=0 PME-
    Capabilities: [44] AGP version 2.0
        Status: RQ=32 Iso- ArqSz=0 Cal=0 SBA+ ITACoh- GART64- HTrans- 64bit-
FW+ AGP3- Rate=x1,x2,x4
        Command: RQ=32 ArqSz=0 Cal=0 SBA+ AGP+ GART64- 64bit- FW+ Rate=x4
    Kernel driver in use: nouveau
    Kernel modules: nouveau, nvidiafb, rivafb

02:05.0 Ethernet controller: 3Com Corporation 3c940 10/100/1000Base-T
[Marvell] (rev 12)
    Subsystem: ASUSTeK Computer Inc. A7V600/P4P800/K8V motherboard
    Control: I/O+ Mem+ BusMaster+ SpecCycle- MemWINV+ VGASnoop- ParErr-
Stepping- SERR+ FastB2B- DisINTx-
    Status: Cap+ 66MHz+ UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort- >SERR- <PERR- INTx-
    Latency: 64 (5750ns min, 7750ns max), Cache Line Size: 16 bytes
    Interrupt: pin A routed to IRQ 22
    Region 0: Memory at feafc000 (32-bit, non-prefetchable) [size=16K]
    Region 1: I/O ports at d800 [size=256]
    Capabilities: [48] Power Management version 2
        Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=0mA
PME(D0+,D1+,D2+,D3hot+,D3cold+)
        Status: D0 NoSoftRst- PME-Enable- DSel=0 DScale=1 PME-
    Capabilities: [50] Vital Product Data
        Product Name: 3Com Gigabit LOM (3C940)
        Read-only fields:
            [PN] Part number: 40-0779-000
            [EC] Engineering changes: Rev. 1.2
            [MN] Manufacture ID: 33 43 6f 6d
            [SN] Serial number: HFSR9B01E8
            [CP] Extended capability: 01 10 cc 03
            [RV] Reserved: checksum good, 41 byte(s) reserved
        Read/write fields:
            [MC] Unknown: 01 04 00 00 00 00 01 00
            [RW] Read-write area: 110 byte(s) free
```

```
        End
    Kernel driver in use: skge
    Kernel modules: skge


Bus 005 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Device Descriptor:
  bLength                18
  bDescriptorType         1
  bcdUSB               1.10
  bDeviceClass            9 Hub
  bDeviceSubClass         0 Unused
  bDeviceProtocol         0 Full speed (or root) hub
  bMaxPacketSize0        64
  idVendor           0x1d6b Linux Foundation
  idProduct          0x0001 1.1 root hub
  bcdDevice            2.06
  iManufacturer           3 Linux 2.6.35-22-generic-pae uhci_hcd
  iProduct                2 UHCI Host Controller
  iSerial                 1 0000:00:1d.3
  bNumConfigurations      1
  Configuration Descriptor:
    bLength                 9
    bDescriptorType         2
    wTotalLength           25
    bNumInterfaces          1
    bConfigurationValue     1
    iConfiguration          0
    bmAttributes         0xe0
      Self Powered
      Remote Wakeup
    MaxPower                0mA
    Interface Descriptor:
      bLength                 9
      bDescriptorType         4
      bInterfaceNumber        0
      bAlternateSetting       0
      bNumEndpoints           1
      bInterfaceClass         9 Hub
      bInterfaceSubClass      0 Unused
      bInterfaceProtocol      0 Full speed (or root) hub
      iInterface              0
      Endpoint Descriptor:
        bLength                 7
        bDescriptorType         5
        bEndpointAddress     0x81  EP 1 IN
        bmAttributes            3
          Transfer Type            Interrupt
          Synch Type               None
          Usage Type               Data
```

```
        wMaxPacketSize     0x0002  1x 2 bytes
        bInterval             255
Hub Descriptor:
  bLength               9
  bDescriptorType      41
  nNbrPorts             2
  wHubCharacteristic 0x000a
    No power switching (usb 1.0)
    Per-port overcurrent protection
  bPwrOn2PwrGood        1 * 2 milli seconds
  bHubContrCurrent      0 milli Ampere
  DeviceRemovable    0x00
  PortPwrCtrlMask    0xff
 Hub Port Status:
   Port 1: 0000.0100 power
   Port 2: 0000.0100 power
Device Status:     0x0003
  Self Powered
  Remote Wakeup Enabled

Bus 004 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Device Descriptor:
  bLength                18
  bDescriptorType         1
  bcdUSB               1.10
  bDeviceClass            9 Hub
  bDeviceSubClass         0 Unused
  bDeviceProtocol         0 Full speed (or root) hub
  bMaxPacketSize0        64
  idVendor           0x1d6b Linux Foundation
  idProduct          0x0001 1.1 root hub
  bcdDevice            2.06
  iManufacturer           3 Linux 2.6.35-22-generic-pae uhci_hcd
  iProduct                2 UHCI Host Controller
  iSerial                 1 0000:00:1d.2
  bNumConfigurations      1
  Configuration Descriptor:
    bLength                 9
    bDescriptorType         2
    wTotalLength           25
    bNumInterfaces          1
    bConfigurationValue     1
    iConfiguration          0
    bmAttributes         0xe0
      Self Powered
      Remote Wakeup
    MaxPower                0mA
    Interface Descriptor:
      bLength                 9
      bDescriptorType         4
      bInterfaceNumber        0
```

```
      bAlternateSetting       0
      bNumEndpoints           1
      bInterfaceClass         9 Hub
      bInterfaceSubClass      0 Unused
      bInterfaceProtocol      0 Full speed (or root) hub
      iInterface              0
      Endpoint Descriptor:
        bLength                 7
        bDescriptorType         5
        bEndpointAddress     0x81  EP 1 IN
        bmAttributes            3
          Transfer Type            Interrupt
          Synch Type               None
          Usage Type               Data
        wMaxPacketSize     0x0002  1x 2 bytes
        bInterval             255
Hub Descriptor:
  bLength               9
  bDescriptorType      41
  nNbrPorts             2
  wHubCharacteristic 0x000a
    No power switching (usb 1.0)
    Per-port overcurrent protection
  bPwrOn2PwrGood        1 * 2 milli seconds
  bHubContrCurrent      0 milli Ampere
  DeviceRemovable    0x00
  PortPwrCtrlMask    0xff
 Hub Port Status:
   Port 1: 0000.0100 power
   Port 2: 0000.0100 power
Device Status:     0x0003
  Self Powered
  Remote Wakeup Enabled

Bus 003 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Device Descriptor:
  bLength                18
  bDescriptorType         1
  bcdUSB               1.10
  bDeviceClass            9 Hub
  bDeviceSubClass         0 Unused
  bDeviceProtocol         0 Full speed (or root) hub
  bMaxPacketSize0        64
  idVendor           0x1d6b Linux Foundation
  idProduct          0x0001 1.1 root hub
  bcdDevice            2.06
  iManufacturer           3 Linux 2.6.35-22-generic-pae uhci_hcd
  iProduct                2 UHCI Host Controller
  iSerial                 1 0000:00:1d.1
  bNumConfigurations      1
```

```
  Configuration Descriptor:
    bLength                 9
    bDescriptorType         2
    wTotalLength           25
    bNumInterfaces          1
    bConfigurationValue     1
    iConfiguration          0
    bmAttributes         0xe0
      Self Powered
      Remote Wakeup
    MaxPower                0mA
    Interface Descriptor:
      bLength                 9
      bDescriptorType         4
      bInterfaceNumber        0
      bAlternateSetting       0
      bNumEndpoints           1
      bInterfaceClass         9 Hub
      bInterfaceSubClass      0 Unused
      bInterfaceProtocol      0 Full speed (or root) hub
      iInterface              0
      Endpoint Descriptor:
        bLength                 7
        bDescriptorType         5
        bEndpointAddress     0x81  EP 1 IN
        bmAttributes            3
          Transfer Type            Interrupt
          Synch Type               None
          Usage Type               Data
        wMaxPacketSize     0x0002  1x 2 bytes
        bInterval             255
Hub Descriptor:
  bLength               9
  bDescriptorType      41
  nNbrPorts             2
  wHubCharacteristic 0x000a
    No power switching (usb 1.0)
    Per-port overcurrent protection
  bPwrOn2PwrGood        1 * 2 milli seconds
  bHubContrCurrent      0 milli Ampere
  DeviceRemovable    0x00
  PortPwrCtrlMask    0xff
 Hub Port Status:
   Port 1: 0000.0100 power
   Port 2: 0000.0100 power
Device Status:     0x0003
  Self Powered
  Remote Wakeup Enabled

Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
Device Descriptor:
```

```
  bLength                18
  bDescriptorType         1
  bcdUSB               1.10
  bDeviceClass            9 Hub
  bDeviceSubClass         0 Unused
  bDeviceProtocol         0 Full speed (or root) hub
  bMaxPacketSize0        64
  idVendor           0x1d6b Linux Foundation
  idProduct          0x0001 1.1 root hub
  bcdDevice            2.06
  iManufacturer           3 Linux 2.6.35-22-generic-pae uhci_hcd
  iProduct                2 UHCI Host Controller
  iSerial                 1 0000:00:1d.0
  bNumConfigurations      1
  Configuration Descriptor:
    bLength                 9
    bDescriptorType         2
    wTotalLength           25
    bNumInterfaces          1
    bConfigurationValue     1
    iConfiguration          0
    bmAttributes         0xe0
      Self Powered
      Remote Wakeup
    MaxPower                0mA
    Interface Descriptor:
      bLength                 9
      bDescriptorType         4
      bInterfaceNumber        0
      bAlternateSetting       0
      bNumEndpoints           1
      bInterfaceClass         9 Hub
      bInterfaceSubClass      0 Unused
      bInterfaceProtocol      0 Full speed (or root) hub
      iInterface              0
      Endpoint Descriptor:
        bLength                 7
        bDescriptorType         5
        bEndpointAddress     0x81  EP 1 IN
        bmAttributes            3
          Transfer Type            Interrupt
          Synch Type               None
          Usage Type               Data
        wMaxPacketSize     0x0002  1x 2 bytes
        bInterval             255
Hub Descriptor:
  bLength               9
  bDescriptorType      41
  nNbrPorts             2
  wHubCharacteristic 0x000a
```

```
    No power switching (usb 1.0)
    Per-port overcurrent protection
  bPwrOn2PwrGood        1 * 2 milli seconds
  bHubContrCurrent      0 milli Ampere
  DeviceRemovable    0x00
  PortPwrCtrlMask    0xff
 Hub Port Status:
   Port 1: 0000.0100 power
   Port 2: 0000.0100 power
Device Status:     0x0003
  Self Powered
  Remote Wakeup Enabled

Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Device Descriptor:
  bLength                18
  bDescriptorType         1
  bcdUSB               2.00
  bDeviceClass            9 Hub
  bDeviceSubClass         0 Unused
  bDeviceProtocol         0 Full speed (or root) hub
  bMaxPacketSize0        64
  idVendor           0x1d6b Linux Foundation
  idProduct          0x0002 2.0 root hub
  bcdDevice            2.06
  iManufacturer           3 Linux 2.6.35-22-generic-pae ehci_hcd
  iProduct                2 EHCI Host Controller
  iSerial                 1 0000:00:1d.7
  bNumConfigurations      1
  Configuration Descriptor:
    bLength                 9
    bDescriptorType         2
    wTotalLength           25
    bNumInterfaces          1
    bConfigurationValue     1
    iConfiguration          0
    bmAttributes         0xe0
      Self Powered
      Remote Wakeup
    MaxPower                0mA
    Interface Descriptor:
      bLength                 9
      bDescriptorType         4
      bInterfaceNumber        0
      bAlternateSetting       0
      bNumEndpoints           1
      bInterfaceClass         9 Hub
      bInterfaceSubClass      0 Unused
      bInterfaceProtocol      0 Full speed (or root) hub
      iInterface              0
      Endpoint Descriptor:
```

```
        bLength                 7
        bDescriptorType         5
        bEndpointAddress     0x81  EP 1 IN
        bmAttributes            3
          Transfer Type            Interrupt
          Synch Type               None
          Usage Type               Data
        wMaxPacketSize     0x0004  1x 4 bytes
        bInterval              12
Hub Descriptor:
  bLength              11
  bDescriptorType      41
  nNbrPorts             8
  wHubCharacteristic 0x000a
    No power switching (usb 1.0)
    Per-port overcurrent protection
  bPwrOn2PwrGood       10 * 2 milli seconds
  bHubContrCurrent      0 milli Ampere
  DeviceRemovable    0x00 0x00
  PortPwrCtrlMask    0xff 0xff
 Hub Port Status:
   Port 1: 0000.0100 power
   Port 2: 0000.0100 power
   Port 3: 0000.0100 power
   Port 4: 0000.0100 power
   Port 5: 0000.0100 power
   Port 6: 0000.0100 power
   Port 7: 0000.0100 power
   Port 8: 0000.0100 power
Device Status:     0x0003
  Self Powered
  Remote Wakeup Enabled
blech
    description: Desktop Computer
    product: To Be Filled By O.E.M.
    vendor: To Be Filled By O.E.M.
    version: To Be Filled By O.E.M.
    serial: To Be Filled By O.E.M.
    width: 32 bits
    capabilities: smbios-2.3 dmi-2.3 smp-1.1 smp
    configuration: boot=normal chassis=desktop cpus=1
uuid=00020003-0004-0005-0006-000700080009
  *-core
       description: Motherboard
       product: P4C800
       vendor: ASUSTeK Computer Inc.
       physical id: 0
       version: Rev 1.xx
       serial: MB-1234567890
     *-firmware
```

```
          description: BIOS
          vendor: American Megatrends Inc.
          physical id: 0
          version: 1016.001 (02/23/2004)
          size: 64KiB
          capacity: 448KiB
          capabilities: isa pci pnp apm upgrade shadowing escd cdboot
bootselect socketedrom edd int13floppy1200 int13floppy720 int13floppy2880
int5printscreen int9keyboard int14serial int17printer int10video acpi usb
agp ls120boot zipboot biosbootspecification
     *-cpu
          description: CPU
          product: Intel(R) Pentium(R) 4 CPU 2.80GHz
          vendor: Intel Corp.
          physical id: 4
          bus info: cpu@0
          version: 15.2.9
          slot: CPU 1
          size: 2800MHz
          capacity: 3600MHz
          width: 32 bits
          clock: 200MHz
          capabilities: boot fpu fpu_exception wp vme de pse tsc msr pae mce
cx8 apic mtrr pge mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss
ht tm pbe pebs bts cid xtpr
          configuration: id=0
        *-cache:0
             description: L1 cache
             physical id: 5
             slot: L1-Cache
             size: 8KiB
             capacity: 8KiB
             capabilities: pipeline-burst internal varies data
        *-cache:1
             description: L2 cache
             physical id: 6
             slot: L2-Cache
             size: 512KiB
             capacity: 512KiB
             capabilities: pipeline-burst internal varies unified
        *-logicalcpu:0
             description: Logical CPU
             physical id: 0.1
             width: 32 bits
             capabilities: logical
        *-logicalcpu:1
             description: Logical CPU
             physical id: 0.2
             width: 32 bits
             capabilities: logical
     *-memory
```

```
          description: System Memory
          physical id: 38
          slot: System board or motherboard
          size: 2GiB
        *-bank:0
             description: DIMM DDR Synchronous
             product: PartNum0
             vendor: Manufacturer0
             physical id: 0
             serial: SerNum0
             slot: DIMM0
             size: 512MiB
             width: 64 bits
        *-bank:1
             description: DIMM DDR Synchronous
             product: PartNum1
             vendor: Manufacturer1
             physical id: 1
             serial: SerNum1
             slot: DIMM1
             size: 512MiB
             width: 64 bits
        *-bank:2
             description: DIMM DDR Synchronous
             product: PartNum2
             vendor: Manufacturer2
             physical id: 2
             serial: SerNum2
             slot: DIMM2
             size: 512MiB
             width: 64 bits
        *-bank:3
             description: DIMM DDR Synchronous
             product: PartNum3
             vendor: Manufacturer3
             physical id: 3
             serial: SerNum3
             slot: DIMM3
             size: 512MiB
             width: 64 bits
     *-pci
          description: Host bridge
          product: 82875P/E7210 Memory Controller Hub
          vendor: Intel Corporation
          physical id: 100
          bus info: pci@0000:00:00.0
          version: 02
          width: 32 bits
          clock: 33MHz
          configuration: driver=agpgart-intel
```

```
          resources: irq:0 memory:f4000000-f7ffffff
        *-pci:0
             description: PCI bridge
             product: 82875P Processor to AGP Controller
             vendor: Intel Corporation
             physical id: 1
             bus info: pci@0000:00:01.0
             version: 02
             width: 32 bits
             clock: 66MHz
             capabilities: pci normal_decode bus_master
             resources: memory:fc900000-fe9fffff memory:e7e00000-efefffff
           *-display
                description: VGA compatible controller
                product: NV25 [GeForce4 Ti 4200]
                vendor: nVidia Corporation
                physical id: 0
                bus info: pci@0000:01:00.0
                version: a3
                width: 32 bits
                clock: 66MHz
                capabilities: pm agp agp-2.0 vga_controller bus_master
cap_list rom
                configuration: driver=nouveau latency=64 maxlatency=1
mingnt=5
                resources: irq:16 memory:fd000000-fdffffff memory:e8000000-
ebffffff memory:efe80000-efefffff memory:fe9e0000-fe9fffff
        *-generic UNCLAIMED
             description: System peripheral
             product: 82875P/E7210 Processor to I/O Memory Interface
             vendor: Intel Corporation
             physical id: 6
             bus info: pci@0000:00:06.0
             version: 02
             width: 32 bits
             clock: 33MHz
             configuration: latency=0
             resources: memory:fecf0000-fecf0fff
        *-usb:0
             description: USB Controller
             product: 82801EB/ER (ICH5/ICH5R) USB UHCI Controller #1
             vendor: Intel Corporation
             physical id: 1d
             bus info: pci@0000:00:1d.0
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: uhci bus_master
             configuration: driver=uhci_hcd latency=0
             resources: irq:16 ioport:eec0(size=32)
        *-usb:1
```

```
             description: USB Controller
             product: 82801EB/ER (ICH5/ICH5R) USB UHCI Controller #2
             vendor: Intel Corporation
             physical id: 1d.1
             bus info: pci@0000:00:1d.1
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: uhci bus_master
             configuration: driver=uhci_hcd latency=0
             resources: irq:19 ioport:ef00(size=32)
        *-usb:2
             description: USB Controller
             product: 82801EB/ER (ICH5/ICH5R) USB UHCI Controller #3
             vendor: Intel Corporation
             physical id: 1d.2
             bus info: pci@0000:00:1d.2
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: uhci bus_master
             configuration: driver=uhci_hcd latency=0
             resources: irq:18 ioport:ef20(size=32)
        *-usb:3
             description: USB Controller
             product: 82801EB/ER (ICH5/ICH5R) USB UHCI Controller #4
             vendor: Intel Corporation
             physical id: 1d.3
             bus info: pci@0000:00:1d.3
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: uhci bus_master
             configuration: driver=uhci_hcd latency=0
             resources: irq:16 ioport:ef40(size=32)
        *-usb:4
             description: USB Controller
             product: 82801EB/ER (ICH5/ICH5R) USB2 EHCI Controller
             vendor: Intel Corporation
             physical id: 1d.7
             bus info: pci@0000:00:1d.7
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: pm debug ehci bus_master cap_list
             configuration: driver=ehci_hcd latency=0
             resources: irq:23 memory:febff800-febffbff
        *-pci:1
             description: PCI bridge
             product: 82801 PCI Bridge
```

```
             vendor: Intel Corporation
             physical id: 1e
             bus info: pci@0000:00:1e.0
             version: c2
             width: 32 bits
             clock: 33MHz
             capabilities: pci normal_decode bus_master
             resources: ioport:d000(size=4096) memory:fea00000-feafffff
           *-network
                description: Ethernet interface
                product: 3c940 10/100/1000Base-T [Marvell]
                vendor: 3Com Corporation
                physical id: 5
                bus info: pci@0000:02:05.0
                logical name: eth0
                version: 12
                serial: 00:0c:6e:52:fe:38
                size: 1GB/s
                capacity: 1GB/s
                width: 32 bits
                clock: 66MHz
                capabilities: pm vpd bus_master cap_list ethernet physical
tp 10bt 10bt-fd 100bt 100bt-fd 1000bt-fd autonegotiation
                configuration: autonegotiation=on broadcast=yes driver=skge
driverversion=1.13 duplex=full firmware=N/A ip=192.168.0.135 latency=64
link=yes maxlatency=31 mingnt=23 multicast=yes port=twisted pair speed=1GB/s
                resources: irq:22 memory:feafc000-feafffff
ioport:d800(size=256)
        *-isa
             description: ISA bridge
             product: 82801EB/ER (ICH5/ICH5R) LPC Interface Bridge
             vendor: Intel Corporation
             physical id: 1f
             bus info: pci@0000:00:1f.0
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: isa bus_master
             configuration: latency=0
        *-ide
             description: IDE interface
             product: 82801EB/ER (ICH5/ICH5R) IDE Controller
             vendor: Intel Corporation
             physical id: 1f.1
             bus info: pci@0000:00:1f.1
             logical name: scsi0
             logical name: scsi1
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: ide bus_master emulated
```

```
              configuration: driver=ata_piix latency=0
              resources: irq:18 ioport:1f0(size=8) ioport:3f6
ioport:170(size=8) ioport:376 ioport:fc00(size=16) memory:80000000-800003ff
           *-disk
                description: ATA Disk
                product: WDC WD400JB-00EN
                vendor: Western Digital
                physical id: 0
                bus info: scsi@0:0.0.0
                logical name: /dev/sda
                version: 05.0
                serial: WD-WCAD1A252039
                size: 37GiB (40GB)
                capabilities: partitioned partitioned:dos
                configuration: ansiversion=5 signature=000af1c5
              *-volume:0
                   description: EXT4 volume
                   vendor: Linux
                   physical id: 1
                   bus info: scsi@0:0.0.0,1
                   logical name: /dev/sda1
                   logical name: /
                   version: 1.0
                   serial: 05243e2d-a300-406f-a62d-91e864028794
                   size: 35GiB
                   capacity: 35GiB
                   capabilities: primary bootable journaled
extended_attributes large_files huge_files dir_nlink recover extents ext4
ext2 initialized
                   configuration: created=2011-03-18 16:19:08
filesystem=ext4 lastmountpoint=/��;����,��w������"���,����H�8�H�8;��
�4����"� modified=2011-03-18 16:45:24 mount.fstype=ext4
mount.options=rw,relatime,errors=remount-ro,barrier=1,data=ordered
mounted=2011-03-18 16:47:47 state=mounted
              *-volume:1
                   description: Extended partition
                   physical id: 2
                   bus info: scsi@0:0.0.0,2
                   logical name: /dev/sda2
                   size: 1610MiB
                   capacity: 1610MiB
                   capabilities: primary extended partitioned
partitioned:extended
                 *-logicalvolume
                      description: Linux swap / Solaris partition
                      physical id: 5
                      logical name: /dev/sda5
                      capacity: 1610MiB
                      capabilities: nofs
           *-cdrom
```

```
                description: SCSI CD-ROM
                physical id: 1
                bus info: scsi@1:0.0.0
                logical name: /dev/cdrom
                logical name: /dev/scd0
                logical name: /dev/sr0
                capabilities: audio
                configuration: status=nodisc
        *-serial UNCLAIMED
             description: SMBus
             product: 82801EB/ER (ICH5/ICH5R) SMBus Controller
             vendor: Intel Corporation
             physical id: 1f.3
             bus info: pci@0000:00:1f.3
             version: 02
             width: 32 bits
             clock: 33MHz
             configuration: latency=0
             resources: ioport:400(size=32)
        *-multimedia
             description: Multimedia audio controller
             product: 82801EB/ER (ICH5/ICH5R) AC'97 Audio Controller
             vendor: Intel Corporation
             physical id: 1f.5
             bus info: pci@0000:00:1f.5
             version: 02
             width: 32 bits
             clock: 33MHz
             capabilities: pm bus_master cap_list
             configuration: driver=Intel ICH latency=0
             resources: irq:17 ioport:e800(size=256) ioport:ee80(size=64)
memory:febff400-febff5ff memory:febff000-febff0ff
```