

Lenovo R 500

00:00.0 Host bridge: Intel Corporation Mobile 4 Series Chipset Memory Controller Hub (rev 07)

Subsystem: Lenovo Device 20e0

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

Capabilities: [e0] Vendor Specific Information <?>

Kernel driver in use: agpgart-intel

Kernel modules: intel-agp

00:02.0 VGA compatible controller: Intel Corporation Mobile 4 Series Chipset Integrated Graphics Controller (rev 07)

Subsystem: Lenovo Device 20e5

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

Interrupt: pin A routed to IRQ 31

Region 0: Memory at f4400000 (64-bit, non-prefetchable) [size=4M]

Region 2: Memory at d0000000 (64-bit, prefetchable) [size=256M]

Region 4: I/O ports at 1800 [size=8]

Capabilities: [90] Message Signalled Interrupts: Mask- 64bit- Queue=0/0 Enable+

Address: fee0200c Data: 41c1

Capabilities: [d0] Power Management version 3

Flags: PMEClk- DSI+ D1- D2- AuxCurrent=0mA

PME(D0-,D1-,D2-,D3hot-,D3cold-)

Status: D0 PME-Enable- DSel=0 DScale=0 PME-

Kernel driver in use: i915

Kernel modules: i915

00:02.1 Display controller: Intel Corporation Mobile 4 Series Chipset Integrated Graphics Controller (rev 07)

Subsystem: Lenovo Device 20e5

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 f4200000 (64-bit, non-prefetchable) [size=1M]

Capabilities: [d0] Power Management version 3

Flags: PMEClk- DSI+ D1- D2- AuxCurrent=0mA

PME(D0-,D1-,D2-,D3hot-,D3cold-)

Status: D0 PME-Enable- DSel=0 DScale=0 PME-

00:03.0 Communication controller: Intel Corporation Mobile 4 Series Chipset MEI Controller (rev 07)
Subsystem: Lenovo Device 20e6
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
Interrupt: pin A routed to IRQ 11
Region 0: Memory at fc204800 (64-bit, non-prefetchable) [size=16]
Capabilities: [50] Power Management version 3
Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot+,D3cold+)
Status: D0 PME-Enable- DSel=0 DScale=0 PME-
Capabilities: [8c] Message Signalled Interrupts: Mask- 64bit+ Queue=0/0 Enable-
Address: 0000000000000000 Data: 0000

00:1a.0 USB Controller: Intel Corporation 82801I (ICH9 Family) USB UHCI Controller #4 (rev 03)
Subsystem: Lenovo Device 20f0
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 20
Region 4: I/O ports at 1820 [size=32]
Capabilities: [50] PCIe advanced features <?>
Kernel driver in use: uhci_hcd

00:1a.1 USB Controller: Intel Corporation 82801I (ICH9 Family) USB UHCI Controller #5 (rev 03)
Subsystem: Lenovo Device 20f0
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 21
Region 4: I/O ports at 1840 [size=32]
Capabilities: [50] PCIe advanced features <?>
Kernel driver in use: uhci_hcd

00:1a.2 USB Controller: Intel Corporation 82801I (ICH9 Family) USB UHCI Controller #6 (rev 03)
Subsystem: Lenovo Device 20f0
Control: I/O+ Mem- BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr- Stepping- SERR- FastB2B- DisINTx-
Status: Cap+ 66MHz- UDF- FastB2B+ ParErr- DEVSEL=medium >TAbort-

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<TAbort- <MAbort- >SERR- <PERR- INTx-
  Latency: 0
  Interrupt: pin C routed to IRQ 22
  Region 4: I/O ports at 1860 [size=32]
  Capabilities: [50] PCIe advanced features <?>
  Kernel driver in use: uhci_hcd

00:1a.7 USB Controller: Intel Corporation 82801I (ICH9 Family) USB2 EHCI
Controller #2 (rev 03) (prog-if 20)
  Subsystem: Lenovo Device 20f1
  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 fc204c00 (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 PME-Enable- DSel=0 DScale=0 PME-
  Capabilities: [58] Debug port: BAR=1 offset=00a0
  Capabilities: [98] PCIe advanced features <?>
  Kernel driver in use: ehci_hcd

00:1b.0 Audio device: Intel Corporation 82801I (ICH9 Family) HD Audio
Controller (rev 03)
  Subsystem: Lenovo Device 20f2
  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, Cache Line Size: 64 bytes
  Interrupt: pin B routed to IRQ 17
  Region 0: Memory at fc000000 (64-bit, non-prefetchable) [size=16K]
  Capabilities: [50] Power Management version 2
    Flags: PMEclk- DSI- D1- D2- AuxCurrent=55mA PME(D0+,D1-,D2-,D3hot
+,D3cold+)
    Status: D0 PME-Enable- DSel=0 DScale=0 PME-
  Capabilities: [60] Message Signalled Interrupts: Mask- 64bit+ Queue=0/0
Enable-
    Address: 0000000000000000 Data: 0000
  Capabilities: [70] Express (v1) Root Complex Integrated Endpoint, MSI
00
    DevCap:    MaxPayload 128 bytes, PhantFunc 0, Latency L0s <64ns, L1
<1us
    ExtTag- RBE- FLReset+
    DevCtl:    Report errors: Correctable- Non-Fatal- Fatal-
Unsupported-
    RlxdOrd- ExtTag- PhantFunc- AuxPwr- NoSnoop+
    MaxPayload 128 bytes, MaxReadReq 128 bytes

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DevSta:      CorrErr- UncorrErr- FatalErr- UnsuppReq- AuxPwr+
TransPend-
LnkCap:      Port #0, Speed unknown, Width x0, ASPM unknown, Latency
L0
<64ns, L1 <1us
      ClockPM- Suprise- LLActRep- BwNot-
LnkCtl:      ASPM Disabled; Disabled- Retrain- CommClk-
      ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
LnkSta:      Speed unknown, Width x0, TrErr- Train- SlotClk- DLActive-
BWMgmt- ABWMgmt-
Capabilities: [100] Virtual Channel <?>
Capabilities: [130] Root Complex Link <?>
Kernel driver in use: HDA Intel
Kernel modules: snd-hda-intel

00:1c.0 PCI bridge: Intel Corporation 82801I (ICH9 Family) PCI Express
Port 1 (rev 03)
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, Cache Line Size: 64 bytes
Bus: primary=00, secondary=02, subordinate=02, sec-latency=0
I/O behind bridge: 00008000-00008fff
Memory behind bridge: 7c000000-7c1fffff
Prefetchable memory behind bridge: 000000007c200000-000000007c3fffff
Secondary status: 66MHz- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- <SERR- <PERR-
BridgeCtl: Parity- SERR- NoISA+ VGA- MAbort- >Reset- FastB2B-
PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREN-
Capabilities: [40] Express (v1) Root Port (Slot+), MSI 00
DevCap:      MaxPayload 128 bytes, PhantFunc 0, Latency L0s <64ns, L1
<1us
      ExtTag- RBE+ FLReset-
DevCtl:      Report errors: Correctable- Non-Fatal- Fatal-
Unsupported-
      RlxdOrd- ExtTag- PhantFunc- AuxPwr- NoSnoop-
      MaxPayload 128 bytes, MaxReadReq 128 bytes
DevSta:      CorrErr- UncorrErr- FatalErr- UnsuppReq- AuxPwr+
TransPend-
LnkCap:      Port #1, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
<1us, L1 <4us
      ClockPM- Suprise- LLActRep+ BwNot-
LnkCtl:      ASPM Disabled; RCB 64 bytes Disabled- Retrain- CommClk-
      ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
LnkSta:      Speed 2.5GT/s, Width x0, TrErr- Train- SlotClk+ DLActive-
BWMgmt- ABWMgmt-
SltCap:      AttnBtn- PwrCtrl- MRL- AttnInd- PwrInd- HotPlug+ Surprise+
      Slot # 0, PowerLimit 6.500000; Interlock- NoCompl-
SltCtl:      Enable: AttnBtn- PwrFlt- MRL- PresDet+ CmdCplt+ HPirq+
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LinkChg-

Control: AttnInd Unknown, PwrInd Unknown, Power- Interlock-
 SltSta: Status: AttnBtn- PowerFlt- MRL- CmdCplt- PresDet-
 Interlock-
 Changed: MRL- PresDet- LinkState-
 RootCtl: ErrCorrectable- ErrNon-Fatal- ErrFatal- PMEIntEna-
 CRSVisible-
 RootCap: CRSVisible-
 RootSta: PME ReqID 0000, PMEStatus- PMEPending-
 Capabilities: [80] Message Signalled Interrupts: Mask- 64bit- Queue=0/0
 Enable+
 Address: fee0300c Data: 4171
 Capabilities: [90] Subsystem: Lenovo Device 20f3
 Capabilities: [a0] Power Management version 2
 Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot
 +,D3cold+)
 Status: D0 PME-Enable- DSel=0 DScale=0 PME-
 Capabilities: [100] Virtual Channel <?>
 Capabilities: [180] Root Complex Link <?>
 Kernel driver in use: pcieport
 Kernel modules: shpchp

00:1c.1 PCI bridge: Intel Corporation 82801I (ICH9 Family) PCI Express Port 2 (rev 03)

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, Cache Line Size: 64 bytes
 Bus: primary=00, secondary=03, subordinate=03, sec-latency=0
 I/O behind bridge: 00009000-00009fff
 Memory behind bridge: f4300000-f43fffff
 Prefetchable memory behind bridge: 000000007c400000-000000007c5fffff
 Secondary status: 66MHz- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort-
 <MAbort- <SERR- <PERR-
 BridgeCtl: Parity- SERR- NoISA+ VGA- MAbort- >Reset- FastB2B-
 PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERRen-
 Capabilities: [40] Express (v1) Root Port (Slot+), MSI 00
 DevCap: MaxPayload 128 bytes, PhantFunc 0, Latency L0s <64ns, L1
 <1us
 ExtTag- RBE+ FLReset-
 DevCtl: Report errors: Correctable- Non-Fatal- Fatal-
 Unsupported-
 RlxdOrd- ExtTag- PhantFunc- AuxPwr- NoSnoop-
 MaxPayload 128 bytes, MaxReadReq 128 bytes
 DevSta: CorrErr- UncorrErr- FatalErr- UnsuppReq- AuxPwr+
 TransPend-
 LnkCap: Port #2, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
 <256ns, L1 <4us
 ClockPM- Surprise- LLActRep+ BwNot-
 LnkCtl: ASPM L1 Enabled; RCB 64 bytes Disabled- Retrain- CommClk+

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ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
LnkSta:      Speed 2.5GT/s, Width x1, TrErr- Train- SlotClk+ DLActive+
BWMgmt- ABWMgmt-
SltCap:      AttnBtn- PwrCtrl- MRL- AttnInd- PwrInd- HotPlug+ Surprise+
              Slot # 1, PowerLimit 6.500000; Interlock- NoCompl-
SltCtl:      Enable: AttnBtn- PwrFlt- MRL- PresDet+ CmdCplt+ HPirq+
LinkChg-
              Control: AttnInd Unknown, PwrInd Unknown, Power- Interlock-
SltSta:      Status: AttnBtn- PowerFlt- MRL- CmdCplt- PresDet+
Interlock-
              Changed: MRL- PresDet- LinkState+
RootCtl: ErrCorrectable- ErrNon-Fatal- ErrFatal- PMEIntEna-
CRSVisible-
RootCap: CRSVisible-
RootSta: PME ReqID 0000, PMEStatus- PMEPending-
Capabilities: [80] Message Signalled Interrupts: Mask- 64bit- Queue=0/0
Enable+
              Address: fee0300c Data: 4179
Capabilities: [90] Subsystem: Lenovo Device 20f3
Capabilities: [a0] Power Management version 2
              Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot
+,D3cold+)
              Status: D0 PME-Enable- DSel=0 DScale=0 PME-
Capabilities: [100] Virtual Channel <?>
Capabilities: [180] Root Complex Link <?>
Kernel driver in use: pcieport
Kernel modules: shpchp

00:1c.3 PCI bridge: Intel Corporation 82801I (ICH9 Family) PCI Express
Port 4 (rev 03)
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, Cache Line Size: 64 bytes
Bus: primary=00, secondary=05, subordinate=0c, sec-latency=0
I/O behind bridge: 00002000-00002fff
Memory behind bridge: f8000000-f9ffffff
Prefetchable memory behind bridge: 00000000f4000000-00000000f40fffff
Secondary status: 66MHz- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- <SERR- <PERR-
BridgeCtl: Parity- SERR- NoISA+ VGA- MAbort- >Reset- FastB2B-
PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREn-
Capabilities: [40] Express (v1) Root Port (Slot+), MSI 00
DevCap:      MaxPayload 128 bytes, PhantFunc 0, Latency L0s <64ns, L1
<1us
              ExtTag- RBE+ FLReset-
DevCtl:      Report errors: Correctable- Non-Fatal- Fatal-
Unsupported-
              RlxdOrd- ExtTag- PhantFunc- AuxPwr- NoSnoop-
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MaxPayload 128 bytes, MaxReadReq 128 bytes
DevSta:    CorrErr- UncorrErr- FatalErr- UnsuppReq- AuxPwr+
TransPend-
LnkCap:    Port #4, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
<1us, L1 <4us
ClockPM- Suprise- LLActRep+ BwNot-
LnkCtl:    ASPM L0s L1 Enabled; RCB 64 bytes Disabled- Retrain-
CommClk-
ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
LnkSta:    Speed 2.5GT/s, Width x0, TrErr- Train- SlotClk+ DLActive-
BWMgmt- ABWMgmt-
SltCap:    AttnBtn- PwrCtrl- MRL- AttnInd- PwrInd- HotPlug+ Surprise+
Slot # 3, PowerLimit 6.500000; Interlock- NoCompl-
SltCtl:    Enable: AttnBtn- PwrFlt- MRL- PresDet+ CmdCplt+ HPirq+
LinkChg-
Control: AttnInd Unknown, PwrInd Unknown, Power- Interlock-
SltSta:    Status: AttnBtn- PowerFlt- MRL- CmdCplt- PresDet-
Interlock-
Changed: MRL- PresDet- LinkState-
RootCtl: ErrCorrectable- ErrNon-Fatal- ErrFatal- PMEIntEna-
CRSVisible-
RootCap: CRSVisible-
RootSta: PME ReqID 0000, PMEStatus- PMEPending-
Capabilities: [80] Message Signalled Interrupts: Mask- 64bit- Queue=0/0
Enable+
Address: fee0300c Data: 4181
Capabilities: [90] Subsystem: Lenovo Device 20f3
Capabilities: [a0] Power Management version 2
Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot
+,D3cold+)
Status: D0 PME-Enable- DSel=0 DScale=0 PME-
Capabilities: [100] Virtual Channel <?>
Capabilities: [180] Root Complex Link <?>
Kernel driver in use: pcieport
Kernel modules: shpchp

00:1c.4 PCI bridge: Intel Corporation 82801I (ICH9 Family) PCI Express
Port 5 (rev 03)
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, Cache Line Size: 64 bytes
Bus: primary=00, secondary=0d, subordinate=14, sec-latency=0
I/O behind bridge: 00003000-00003fff
Memory behind bridge: fa000000-fbffffff
Prefetchable memory behind bridge: 00000000f4100000-00000000f41fffff
Secondary status: 66MHz- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- <SERR- <PERR-
BridgeCtl: Parity- SERR- NoISA+ VGA- MAbort- >Reset- FastB2B-
PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREN-
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Capabilities: [40] Express (v1) Root Port (Slot+), MSI 00
  DevCap:    MaxPayload 128 bytes, PhantFunc 0, Latency L0s <64ns, L1
<1us
    ExtTag- RBE+ FLReset-
  DevCtl:    Report errors: Correctable- Non-Fatal- Fatal-
Unsupported-
    RlxdOrd- ExtTag- PhantFunc- AuxPwr- NoSnoop-
    MaxPayload 128 bytes, MaxReadReq 128 bytes
  DevSta:    CorrErr- UncorrErr- FatalErr- UnsuppReq- AuxPwr+
TransPend-
  LnkCap:    Port #5, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
<1us, L1 <4us
    ClockPM- Suprise- LLActRep+ BwNot-
  LnkCtl:    ASPM L0s L1 Enabled; RCB 64 bytes Disabled- Retrain-
CommClk-
    ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
  LnkSta:    Speed 2.5GT/s, Width x0, TrErr- Train- SlotClk+ DLActive-
BWMgmt- ABWMgmt-
  SltCap:    AttnBtn- PwrCtrl- MRL- AttnInd- PwrInd- HotPlug+ Surprise+
    Slot # 4, PowerLimit 6.500000; Interlock- NoCompl-
  SltCtl:    Enable: AttnBtn- PwrFlt- MRL- PresDet+ CmdCplt+ HPIrq+
LinkChg-
    Control: AttnInd Unknown, PwrInd Unknown, Power- Interlock-
  SltSta:    Status: AttnBtn- PowerFlt- MRL- CmdCplt- PresDet-
Interlock-
    Changed: MRL- PresDet- LinkState-
  RootCtl: ErrCorrectable- ErrNon-Fatal- ErrFatal- PMEIntEna-
CRSVisible-
  RootCap: CRSVisible-
  RootSta: PME ReqID 0000, PMEStatus- PMEPending-
Capabilities: [80] Message Signalled Interrupts: Mask- 64bit- Queue=0/0
Enable+
  Address: fee0300c Data: 4189
Capabilities: [90] Subsystem: Lenovo Device 20f3
Capabilities: [a0] Power Management version 2
  Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot
+,D3cold+)
  Status: D0 PME-Enable- DSel=0 DScale=0 PME-
Capabilities: [100] Virtual Channel <?>
Capabilities: [180] Root Complex Link <?>
Kernel driver in use: pcieport
Kernel modules: shpchp

00:1c.5 PCI bridge: Intel Corporation 82801I (ICH9 Family) PCI Express
Port 6 (rev 03)
  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, Cache Line Size: 64 bytes
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Bus: primary=00, secondary=04, subordinate=04, sec-latency=0
I/O behind bridge: 0000a000-0000afff
Memory behind bridge: f4800000-f48ffffff
Prefetchable memory behind bridge: 000000007c600000-000000007c7ffffff
Secondary status: 66MHz- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort-
<MAbort- <SERR- <PERR-
BridgeCtl: Parity- SERR- NoISA+ VGA- MAbort- >Reset- FastB2B-
PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREn-
Capabilities: [40] Express (v1) Root Port (Slot+), MSI 00
DevCap: MaxPayload 128 bytes, PhantFunc 0, Latency L0s <64ns, L1
<1us
ExtTag- RBE+ FLReset-
DevCtl: Report errors: Correctable- Non-Fatal- Fatal-
Unsupported-
RlxdOrd- ExtTag- PhantFunc- AuxPwr- NoSnoop-
MaxPayload 128 bytes, MaxReadReq 128 bytes
DevSta: CorrErr- UncorrErr- FatalErr- UnsuppReq- AuxPwr+
TransPend-
LnkCap: Port #6, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
<256ns, L1 <4us
ClockPM- Surprise- LLActRep+ BwNot-
LnkCtl: ASPM L0s L1 Enabled; RCB 64 bytes Disabled- Retrain-
CommClk+
ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
LnkSta: Speed 2.5GT/s, Width x1, TrErr- Train- SlotClk+ DLActive+
BWMgmt- ABWMgmt-
SltCap: AttnBtn- PwrCtrl- MRL- AttnInd- PwrInd- HotPlug+ Surprise+
Slot # 5, PowerLimit 6.500000; Interlock- NoCompl-
SltCtl: Enable: AttnBtn- PwrFlt- MRL- PresDet+ CmdCplt+ HPirq+
LinkChg-
Control: AttnInd Unknown, PwrInd Unknown, Power- Interlock-
SltSta: Status: AttnBtn- PowerFlt- MRL- CmdCplt- PresDet+
Interlock-
Changed: MRL- PresDet- LinkState-
RootCtl: ErrCorrectable- ErrNon-Fatal- ErrFatal- PMEIntEna-
CRSVisible-
RootCap: CRSVisible-
RootSta: PME ReqID 0000, PMEStatus- PMEPending-
Capabilities: [80] Message Signalled Interrupts: Mask- 64bit- Queue=0/0
Enable+
Address: fee0300c Data: 4191
Capabilities: [90] Subsystem: Lenovo Device 20f3
Capabilities: [a0] Power Management version 2
Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot
+,D3cold+)
Status: D0 PME-Enable- DSel=0 DScale=0 PME-
Capabilities: [100] Virtual Channel <?>
Capabilities: [180] Root Complex Link <?>
Kernel driver in use: pcieport
Kernel modules: shpchp
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00:1d.0 USB Controller: Intel Corporation 82801I (ICH9 Family) USB UHCI Controller #1 (rev 03)

Subsystem: Lenovo Device 20f0

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 1880 [size=32]

Capabilities: [50] PCIe advanced features <?>

Kernel driver in use: uhci_hcd

00:1d.1 USB Controller: Intel Corporation 82801I (ICH9 Family) USB UHCI Controller #2 (rev 03)

Subsystem: Lenovo Device 20f0

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 4: I/O ports at 18a0 [size=32]

Capabilities: [50] PCIe advanced features <?>

Kernel driver in use: uhci_hcd

00:1d.2 USB Controller: Intel Corporation 82801I (ICH9 Family) USB UHCI Controller #3 (rev 03)

Subsystem: Lenovo Device 20f0

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 18c0 [size=32]

Capabilities: [50] PCIe advanced features <?>

Kernel driver in use: uhci_hcd

00:1d.7 USB Controller: Intel Corporation 82801I (ICH9 Family) USB2 EHCI Controller #1 (rev 03) (prog-if 20)

Subsystem: Lenovo Device 20f1

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 19

Region 0: Memory at fc205000 (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 PME-Enable- DSel=0 DScale=0 PME-
Capabilities: [58] Debug port: BAR=1 offset=00a0
Capabilities: [98] PCIe advanced features <?>
Kernel driver in use: ehci_hcd

00:1e.0 PCI bridge: Intel Corporation 82801 Mobile PCI Bridge (rev 93)
(prog-if 01)
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=15, subordinate=18, sec-latency=32
I/O behind bridge: 00004000-00007fff
Memory behind bridge: f4900000-f7ffffff
Prefetchable memory behind bridge: 00000000f0000000-00000000f3ffffff
Secondary status: 66MHz- FastB2B+ ParErr- DEVSEL=medium >TAbort-
<TAbort- <MAbort+ <SERR- <PERR-
BridgeCtl: Parity- SERR- NoISA+ VGA- MAbort- >Reset- FastB2B-
PriDiscTmr- SecDiscTmr- DiscTmrStat- DiscTmrSERREn-
Capabilities: [50] Subsystem: Lenovo Device 20f4

00:1f.0 ISA bridge: Intel Corporation ICH9M LPC Interface Controller
(rev 03)
Subsystem: Lenovo Device 20f6
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
Capabilities: [e0] Vendor Specific Information <?>
Kernel modules: iTCO_wdt

00:1f.2 SATA controller: Intel Corporation ICH9M/M-E SATA AHCI
Controller (rev 03) (prog-if 01)
Subsystem: Lenovo Device 20f8
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 29
Region 0: I/O ports at 1818 [size=8]
Region 1: I/O ports at 180c [size=4]
Region 2: I/O ports at 1810 [size=8]
Region 3: I/O ports at 1808 [size=4]
Region 4: I/O ports at 18e0 [size=32]
Region 5: Memory at fc204000 (32-bit, non-prefetchable) [size=2K]
Capabilities: [80] Message Signalled Interrupts: Mask- 64bit- Queue=0/4
```

Enable+

Address: fee0200c Data: 41b1

Capabilities: [70] Power Management version 3

Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0-,D1-,D2-,D3hot+,D3cold-)

Status: D0 PME-Enable- DSel=0 DScale=0 PME-

Capabilities: [a8] SATA HBA <?>

Capabilities: [b0] PCIe advanced features <?>

Kernel driver in use: ahci

Kernel modules: ahci

00:1f.3 SMBus: Intel Corporation 82801I (ICH9 Family) SMBus Controller (rev 03)

Subsystem: Lenovo Device 20f9

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 A routed to IRQ 11

Region 0: Memory at fc205400 (64-bit, non-prefetchable) [size=256]

Region 4: I/O ports at 1c00 [size=32]

Kernel modules: i2c-i801

03:00.0 Network controller: Intel Corporation PRO/Wireless 5100 AGN [Shiloh] Network Connection

Subsystem: Intel Corporation Device 1211

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, Cache Line Size: 64 bytes

Interrupt: pin A routed to IRQ 30

Region 0: Memory at f4300000 (64-bit, non-prefetchable) [size=8K]

Capabilities: [c8] Power Management version 3

Flags: PMEClk- DSI+ D1- D2- AuxCurrent=0mA PME(D0+,D1-,D2-,D3hot+,D3cold+)

Status: D0 PME-Enable- DSel=0 DScale=0 PME-

Capabilities: [d0] Message Signalled Interrupts: Mask- 64bit+ Queue=0/0 Enable+

Address: 00000000fee0300c Data: 41b9

Capabilities: [e0] Express (v1) Endpoint, MSI 00

DevCap: MaxPayload 128 bytes, PhantFunc 0, Latency L0s <512ns, L1 unlimited

ExtTag- AttnBtn- AttnInd- PwrInd- RBE+ FLReset+

DevCtl: Report errors: Correctable- Non-Fatal- Fatal- Unsupported-

RlxdOrd+ ExtTag- PhantFunc- AuxPwr- NoSnoop+ FLReset-

MaxPayload 128 bytes, MaxReadReq 128 bytes

DevSta: CorrErr+ UncorrErr- FatalErr- UnsuppReq+ AuxPwr+ TransPend-

```
LnkCap:      Port #0, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
<128ns, L1 <32us
      ClockPM+ Suprise- LLActRep- BwNot-
LnkCtl:      ASPM L0s L1 Enabled; RCB 64 bytes Disabled- Retrain-
CommClk+
      ExtSynch- ClockPM+ AutWidDis- BWInt- AutBWInt-
LnkSta:      Speed 2.5GT/s, Width x1, TrErr- Train- SlotClk+ DLActive-
BWMgmt- ABWMgmt-
Capabilities: [100] Advanced Error Reporting <?>
Capabilities: [140] Device Serial Number ce-cf-c4-ff-ff-c6-26-00
Kernel driver in use: iwlgagn
Kernel modules: iwlgagn

04:00.0 Ethernet controller: Broadcom Corporation NetLink BCM5787M
Gigabit Ethernet PCI Express (rev 02)
  Subsystem: Lenovo Device 20d5
  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, Cache Line Size: 64 bytes
  Interrupt: pin A routed to IRQ 32
  Region 0: Memory at f4800000 (64-bit, non-prefetchable) [size=64K]
  Expansion ROM at <ignored> [disabled]
  Capabilities: [48] Power Management version 3
    Flags: PMEClk- DSI- D1- D2- AuxCurrent=0mA PME(D0-,D1-,D2-,D3hot
+,D3cold+)
    Status: D0 PME-Enable- DSel=0 DScale=1 PME-
  Capabilities: [50] Vital Product Data <?>
  Capabilities: [58] Vendor Specific Information <?>
  Capabilities: [e8] Message Signalled Interrupts: Mask- 64bit+ Queue=0/0
Enable+
    Address: 00000000fee0200c Data: 41c9
  Capabilities: [d0] Express (v1) Endpoint, MSI 00
    DevCap:      MaxPayload 128 bytes, PhantFunc 0, Latency L0s <4us, L1
unlimited
      ExtTag+ AttnBtn- AttnInd- PwrInd- RBE+ FLReset-
    DevCtl:      Report errors: Correctable- Non-Fatal- Fatal-
Unsupported-
      Rlxd0rd- ExtTag- PhantFunc- AuxPwr- NoSnoop-
      MaxPayload 128 bytes, MaxReadReq 4096 bytes
    DevSta:      CorrErr+ UncorrErr- FatalErr- UnsuppReq- AuxPwr+
TransPend-
    LnkCap:      Port #0, Speed 2.5GT/s, Width x1, ASPM L0s L1, Latency L0
<4us, L1 <64us
      ClockPM+ Suprise- LLActRep- BwNot-
    LnkCtl:      ASPM L0s L1 Enabled; RCB 64 bytes Disabled- Retrain-
CommClk+
      ExtSynch- ClockPM+ AutWidDis- BWInt- AutBWInt-
    LnkSta:      Speed 2.5GT/s, Width x1, TrErr- Train- SlotClk+ DLActive-
BWMgmt- ABWMgmt-
```

```
Capabilities: [100] Advanced Error Reporting <?>
Capabilities: [13c] Virtual Channel <?>
Capabilities: [160] Device Serial Number 11-59-1f-fe-ff-68-22-00
Capabilities: [16c] Power Budgeting <?>
Kernel driver in use: tg3
Kernel modules: tg3
```

```
15:00.0 CardBus bridge: Ricoh Co Ltd RL5c476 II (rev ba)
Subsystem: Lenovo Device 20c6
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: 168, Cache Line Size: 32 bytes
Interrupt: pin A routed to IRQ 16
Region 0: Memory at f4900000 (32-bit, non-prefetchable) [size=4K]
Bus: primary=15, secondary=16, subordinate=17, sec-latency=176
Memory window 0: f0000000-f3fff000 (prefetchable)
Memory window 1: 80000000-83fff000
I/O window 0: 00004000-000040ff
I/O window 1: 00004400-000044ff
BridgeCtl: Parity- SERR- ISA- VGA- MAbort- >Reset- 16bInt+ PostWrite+
16-bit legacy interface ports at 0001
Kernel driver in use: yenta_cardbus
Kernel modules: yenta_socket
```

```
15:00.1 FireWire (IEEE 1394): Ricoh Co Ltd R5C832 IEEE 1394 Controller
(rev 04) (prog-if 10)
Subsystem: Lenovo Device 20c7
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: 32 (500ns min, 1000ns max), Cache Line Size: 64 bytes
Interrupt: pin B routed to IRQ 17
Region 0: Memory at f4901000 (32-bit, non-prefetchable) [size=2K]
Capabilities: [dc] Power Management version 2
Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=0mA PME(D0+,D1+,D2+,D3hot
+,D3cold+)
Status: D0 PME-Enable- DSel=0 DScale=2 PME+
Kernel driver in use: ohci1394
Kernel modules: firewire-ohci, ohci1394
```

```
15:00.2 SD Host controller: Ricoh Co Ltd R5C822 SD/SDIO/MMC/MS/MSPro
Host Adapter (rev 21)
Subsystem: Lenovo Device 20c8
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: 32, Cache Line Size: 64 bytes

Interrupt: pin C routed to IRQ 18

Region 0: Memory at f4901800 (32-bit, non-prefetchable) [size=256]

Capabilities: [80] Power Management version 2

Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=0mA PME(D0+,D1+,D2+,D3hot+,D3cold+)

Status: D0 PME-Enable- DSel=0 DScale=2 PME-

Kernel driver in use: sdhci-pci

Kernel modules: sdhci-pci

15:00.3 System peripheral: Ricoh Co Ltd R5C843 MMC Host Controller (rev ff) (prog-if ff)

!!! Unknown header type 7f

Kernel driver in use: ricoh-mmc

Kernel modules: ricoh_mmc

15:00.4 System peripheral: Ricoh Co Ltd R5C592 Memory Stick Bus Host Adapter (rev 11)

Subsystem: Lenovo Device 20ca

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: 32, Cache Line Size: 64 bytes

Interrupt: pin C routed to IRQ 11

Region 0: Memory at f4902000 (32-bit, non-prefetchable) [size=256]

Capabilities: [80] Power Management version 2

Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=0mA PME(D0+,D1+,D2+,D3hot+,D3cold+)

Status: D0 PME-Enable- DSel=0 DScale=2 PME-

15:00.5 System peripheral: Ricoh Co Ltd xD-Picture Card Controller (rev 11)

Subsystem: Lenovo Device 20cb

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: 32, Cache Line Size: 64 bytes

Interrupt: pin C routed to IRQ 11

Region 0: Memory at f4902400 (32-bit, non-prefetchable) [size=256]

Capabilities: [80] Power Management version 2

Flags: PMEClk- DSI- D1+ D2+ AuxCurrent=0mA PME(D0+,D1+,D2+,D3hot+,D3cold+)

Status: D0 PME-Enable- DSel=0 DScale=2 PME-

Bus 008 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 2.6.32-24-generic 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 007 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 2.6.32-24-generic 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 006 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 2.6.32-24-generic 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 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 2.6.32-24-generic uhci_hcd
iProduct           2 UHCI Host Controller
iSerial            1 0000:00:1a.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 004 Device 003: ID 0a5c:2145 Broadcom Corp.

Device Descriptor:

bLength	18
bDescriptorType	1
bcdUSB	2.00
bDeviceClass	224 Wireless
bDeviceSubClass	1 Radio Frequency
bDeviceProtocol	1 Bluetooth
bMaxPacketSize0	64
idVendor	0x0a5c Broadcom Corp.
idProduct	0x2145
bcdDevice	3.99
iManufacturer	1 Lenovo Computer Corp
iProduct	2 ThinkPad Bluetooth with Enhanced Data Rate

II

iSerial 0

bNumConfigurations 1

Configuration Descriptor:

bLength	9
bDescriptorType	2
wTotalLength	216
bNumInterfaces	4
bConfigurationValue	1
iConfiguration	0
bmAttributes	0xe0

Self Powered

Remote Wakeup

MaxPower 100mA

Interface Descriptor:

bLength	9
bDescriptorType	4
bInterfaceNumber	0
bAlternateSetting	0
bNumEndpoints	3
bInterfaceClass	224 Wireless
bInterfaceSubClass	1 Radio Frequency
bInterfaceProtocol	1 Bluetooth
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	0x0010 1x 16 bytes

```
bInterval          1
Endpoint Descriptor:
  bLength           7
  bDescriptorType    5
  bEndpointAddress   0x82  EP 2  IN
  bmAttributes       2
    Transfer Type      Bulk
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize     0x0040  1x 64 bytes
  bInterval          1
Endpoint Descriptor:
  bLength           7
  bDescriptorType    5
  bEndpointAddress   0x02  EP 2  OUT
  bmAttributes       2
    Transfer Type      Bulk
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize     0x0040  1x 64 bytes
  bInterval          1
Interface Descriptor:
  bLength           9
  bDescriptorType    4
  bInterfaceNumber   1
  bAlternateSetting   0
  bNumEndpoints      2
  bInterfaceClass    224 Wireless
  bInterfaceSubClass  1 Radio Frequency
  bInterfaceProtocol  1 Bluetooth
  iInterface         0
Endpoint Descriptor:
  bLength           7
  bDescriptorType    5
  bEndpointAddress   0x83  EP 3  IN
  bmAttributes       1
    Transfer Type      Isochronous
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize     0x0000  1x 0 bytes
  bInterval          1
Endpoint Descriptor:
  bLength           7
  bDescriptorType    5
  bEndpointAddress   0x03  EP 3  OUT
  bmAttributes       1
    Transfer Type      Isochronous
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize     0x0000  1x 0 bytes
```

```

    bInterval          1
Interface Descriptor:
  bLength              9
  bDescriptorType      4
  bInterfaceNumber     1
  bAlternateSetting    1
  bNumEndpoints        2
  bInterfaceClass      224 Wireless
  bInterfaceSubClass   1 Radio Frequency
  bInterfaceProtocol   1 Bluetooth
  iInterface           0
Endpoint Descriptor:
  bLength              7
  bDescriptorType      5
  bEndpointAddress     0x83 EP 3 IN
  bmAttributes         1
    Transfer Type      Isochronous
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize       0x0009 1x 9 bytes
  bInterval            1
Endpoint Descriptor:
  bLength              7
  bDescriptorType      5
  bEndpointAddress     0x03 EP 3 OUT
  bmAttributes         1
    Transfer Type      Isochronous
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize       0x0009 1x 9 bytes
  bInterval            1
Interface Descriptor:
  bLength              9
  bDescriptorType      4
  bInterfaceNumber     1
  bAlternateSetting    2
  bNumEndpoints        2
  bInterfaceClass      224 Wireless
  bInterfaceSubClass   1 Radio Frequency
  bInterfaceProtocol   1 Bluetooth
  iInterface           0
Endpoint Descriptor:
  bLength              7
  bDescriptorType      5
  bEndpointAddress     0x83 EP 3 IN
  bmAttributes         1
    Transfer Type      Isochronous
    Synch Type         None
    Usage Type         Data
  wMaxPacketSize       0x0011 1x 17 bytes
  bInterval            1

```

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x03	EP 3 OUT
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0011	1x 17 bytes
bInterval	1	

Interface Descriptor:

bLength	9	
bDescriptorType	4	
bInterfaceNumber	1	
bAlternateSetting	3	
bNumEndpoints	2	
bInterfaceClass	224	Wireless
bInterfaceSubClass	1	Radio Frequency
bInterfaceProtocol	1	Bluetooth
iInterface	0	

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x83	EP 3 IN
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0020	1x 32 bytes
bInterval	1	

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x03	EP 3 OUT
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0020	1x 32 bytes
bInterval	1	

Interface Descriptor:

bLength	9	
bDescriptorType	4	
bInterfaceNumber	1	
bAlternateSetting	4	
bNumEndpoints	2	
bInterfaceClass	224	Wireless
bInterfaceSubClass	1	Radio Frequency
bInterfaceProtocol	1	Bluetooth
iInterface	0	

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x83	EP 3 IN
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0040	1x 64 bytes
bInterval	1	

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x03	EP 3 OUT
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0040	1x 64 bytes
bInterval	1	

Interface Descriptor:

bLength	9	
bDescriptorType	4	
bInterfaceNumber	1	
bAlternateSetting	5	
bNumEndpoints	2	
bInterfaceClass	224	Wireless
bInterfaceSubClass	1	Radio Frequency
bInterfaceProtocol	1	Bluetooth
iInterface	0	

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x83	EP 3 IN
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0040	1x 64 bytes
bInterval	1	

Endpoint Descriptor:

bLength	7	
bDescriptorType	5	
bEndpointAddress	0x03	EP 3 OUT
bmAttributes	1	
Transfer Type		Isochronous
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0040	1x 64 bytes
bInterval	1	

Interface Descriptor:

```
bLength          9
bDescriptorType   4
bInterfaceNumber  2
bAlternateSetting 0
bNumEndpoints    2
bInterfaceClass   255 Vendor Specific Class
bInterfaceSubClass 255 Vendor Specific Subclass
bInterfaceProtocol 255 Vendor Specific Protocol
iInterface        0
Endpoint Descriptor:
  bLength          7
  bDescriptorType   5
  bEndpointAddress 0x84 EP 4 IN
  bmAttributes     2
    Transfer Type   Bulk
    Synch Type      None
    Usage Type      Data
  wMaxPacketSize   0x0020 1x 32 bytes
  bInterval        1
Endpoint Descriptor:
  bLength          7
  bDescriptorType   5
  bEndpointAddress 0x04 EP 4 OUT
  bmAttributes     2
    Transfer Type   Bulk
    Synch Type      None
    Usage Type      Data
  wMaxPacketSize   0x0020 1x 32 bytes
  bInterval        1
Interface Descriptor:
  bLength          9
  bDescriptorType   4
  bInterfaceNumber  3
  bAlternateSetting 0
  bNumEndpoints    0
  bInterfaceClass   254 Application Specific Interface
  bInterfaceSubClass 1 Device Firmware Update
  bInterfaceProtocol 0
  iInterface        0
Device Firmware Upgrade Interface Descriptor:
  bLength          7
  bDescriptorType   33
  bmAttributes     7
    Will Not Detach
    Manifestation Tolerant
    Upload Supported
    Download Supported
  wDetachTimeout    5000 milliseconds
  wTransferSize     64 bytes
Device Status:     0x0001
```

Self Powered

Bus 004 Device 002: ID 08ff:2810 AuthenTec, Inc.

Device Descriptor:

bLength	18
bDescriptorType	1
bcdUSB	2.00
bDeviceClass	255 Vendor Specific Class
bDeviceSubClass	255 Vendor Specific Subclass
bDeviceProtocol	255 Vendor Specific Protocol
bMaxPacketSize0	8
idVendor	0x08ff AuthenTec, Inc.
idProduct	0x2810
bcdDevice	17.03
iManufacturer	0
iProduct	1 Fingerprint Sensor
iSerial	0
bNumConfigurations	1

Configuration Descriptor:

bLength	9
bDescriptorType	2
wTotalLength	32
bNumInterfaces	1
bConfigurationValue	1
iConfiguration	0
bmAttributes	0xa0
(Bus Powered)	
Remote Wakeup	

MaxPower	100mA
----------	-------

Interface Descriptor:

bLength	9
bDescriptorType	4
bInterfaceNumber	0
bAlternateSetting	0
bNumEndpoints	2
bInterfaceClass	255 Vendor Specific Class
bInterfaceSubClass	255 Vendor Specific Subclass
bInterfaceProtocol	255 Vendor Specific Protocol
iInterface	0

Endpoint Descriptor:

bLength	7
bDescriptorType	5
bEndpointAddress	0x81 EP 1 IN
bmAttributes	2
Transfer Type	Bulk
Synch Type	None
Usage Type	Data
wMaxPacketSize	0x0040 1x 64 bytes
bInterval	0

Endpoint Descriptor:

bLength	7
---------	---

bDescriptorType	5	
bEndpointAddress	0x02	EP 2 OUT
bmAttributes	2	
Transfer Type		Bulk
Synch Type		None
Usage Type		Data
wMaxPacketSize	0x0008	1x 8 bytes
bInterval	0	

Device Status: 0x0000
(Bus Powered)

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 2.6.32-24-generic uhci_hcd
iProduct	2 UHCI Host Controller
iSerial	1 0000:00:1a.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: 0000.0103 power enable connect
Port 2: 0000.0103 power enable connect

```

```
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 2.6.32-24-generic uhci_hcd
iProduct              2 UHCI Host Controller
iSerial               1 0000:00:1a.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 002 Device 007: ID 045e:0750 Microsoft Corp.

```
Device Descriptor:
  bLength          18
  bDescriptorType   1
  bcdUSB           1.10
  bDeviceClass      0 (Defined at Interface level)
  bDeviceSubClass   0
  bDeviceProtocol    0
  bMaxPacketSize0    8
  idVendor          0x045e Microsoft Corp.
```

```
idProduct          0x0750
bcdDevice           1.10
iManufacturer       1 Microsoft
iProduct            2 Wired Keyboard 600
iSerial             0
bNumConfigurations  1
Configuration Descriptor:
  bLength           9
  bDescriptorType    2
  wTotalLength       59
  bNumInterfaces     2
  bConfigurationValue 1
  iConfiguration     0
  bmAttributes       0xa0
    (Bus Powered)
    Remote Wakeup
  MaxPower           100mA
Interface Descriptor:
  bLength           9
  bDescriptorType    4
  bInterfaceNumber   0
  bAlternateSetting   0
  bNumEndpoints      1
  bInterfaceClass     3 Human Interface Device
  bInterfaceSubClass  1 Boot Interface Subclass
  bInterfaceProtocol  1 Keyboard
  iInterface         0
    HID Device Descriptor:
      bLength        9
      bDescriptorType 33
      bcdHID          1.11
      bCountryCode    0 Not supported
      bNumDescriptors 1
      bDescriptorType 34 Report
      wDescriptorLength 65
    Report Descriptors:
      ** UNAVAILABLE **
  Endpoint Descriptor:
    bLength           7
    bDescriptorType    5
    bEndpointAddress   0x81 EP 1 IN
    bmAttributes       3
      Transfer Type     Interrupt
      Synch Type        None
      Usage Type        Data
    wMaxPacketSize     0x0008 1x 8 bytes
    bInterval         10
Interface Descriptor:
  bLength           9
  bDescriptorType    4
  bInterfaceNumber   1
```

```
bAlternateSetting      0
bNumEndpoints         1
bInterfaceClass        3 Human Interface Device
bInterfaceSubClass     0 No Subclass
bInterfaceProtocol     0 None
iInterface             0
```

HID Device Descriptor:

```
bLength              9
bDescriptorType      33
bcdHID               1.11
bCountryCode         0 Not supported
bNumDescriptors      1
bDescriptorType      34 Report
wDescriptorLength    106
```

Report Descriptors:

** UNAVAILABLE **

Endpoint Descriptor:

```
bLength              7
bDescriptorType      5
bEndpointAddress     0x82 EP 2 IN
bmAttributes         3
    Transfer Type      Interrupt
    Synch Type         None
    Usage Type         Data
wMaxPacketSize       0x0008 1x 8 bytes
bInterval            10
```

Device Status: 0x0000
(Bus Powered)

Bus 002 Device 006: ID 03f0:0211 Hewlett-Packard OfficeJet G85

Device Descriptor:

```
bLength              18
bDescriptorType      1
bcdUSB               1.00
bDeviceClass         0 (Defined at Interface level)
bDeviceSubClass      0
bDeviceProtocol      0
bMaxPacketSize0      8
idVendor             0x03f0 Hewlett-Packard
idProduct            0x0211 OfficeJet G85
bcdDevice            1.00
iManufacturer        1 Hewlett-Packa
iProduct             2 OfficeJet G85
iSerial              3 SGD0510Y6TVL
bNumConfigurations   1
```

Configuration Descriptor:

```
bLength              9
bDescriptorType      2
wTotalLength         39
bNumInterfaces       1
```

```
bConfigurationValue      1
iConfiguration            0
bmAttributes              0x00
    (Missing must-be-set bit!)
    (Bus Powered)
MaxPower                  2mA
Interface Descriptor:
    bLength                9
    bDescriptorType        4
    bInterfaceNumber       0
    bAlternateSetting       0
    bNumEndpoints          3
    bInterfaceClass        7 Printer
    bInterfaceSubClass     1 Printer
    bInterfaceProtocol     3 IEEE 1284.4 compatible bidirectional
    iInterface             0
    Endpoint Descriptor:
        bLength            7
        bDescriptorType    5
        bEndpointAddress   0x01 EP 1 OUT
        bmAttributes       2
            Transfer Type      Bulk
            Synch Type        None
            Usage Type        Data
        wMaxPacketSize     0x0040 1x 64 bytes
        bInterval          0
    Endpoint Descriptor:
        bLength            7
        bDescriptorType    5
        bEndpointAddress   0x81 EP 1 IN
        bmAttributes       2
            Transfer Type      Bulk
            Synch Type        None
            Usage Type        Data
        wMaxPacketSize     0x0040 1x 64 bytes
        bInterval          0
    Endpoint Descriptor:
        bLength            7
        bDescriptorType    5
        bEndpointAddress   0x82 EP 2 IN
        bmAttributes       3
            Transfer Type      Interrupt
            Synch Type        None
            Usage Type        Data
        wMaxPacketSize     0x0008 1x 8 bytes
        bInterval          255
Device Status:           0x0001
    Self Powered
```

Bus 002 Device 004: ID 04f3:0221 Elan Microelectronics Corp.
Device Descriptor:

```
bLength          18
bDescriptorType   1
bcdUSB           1.10
bDeviceClass      0 (Defined at Interface level)
bDeviceSubClass   0
bDeviceProtocol   0
bMaxPacketSize0   8
idVendor          0x04f3 Elan Microelectronics Corp.
idProduct         0x0221
bcdDevice         66.10
iManufacturer     0
iProduct          2 USB Mouse
iSerial           0
bNumConfigurations 1
Configuration Descriptor:
  bLength          9
  bDescriptorType   2
  wTotalLength     34
  bNumInterfaces    1
  bConfigurationValue 1
  iConfiguration   0
  bmAttributes     0xa0
    (Bus Powered)
    Remote Wakeup
  MaxPower         100mA
  Interface Descriptor:
    bLength          9
    bDescriptorType   4
    bInterfaceNumber  0
    bAlternateSetting 0
    bNumEndpoints     1
    bInterfaceClass    3 Human Interface Device
    bInterfaceSubClass 1 Boot Interface Subclass
    bInterfaceProtocol 2 Mouse
    iInterface        0
    HID Device Descriptor:
      bLength          9
      bDescriptorType  33
      bcdHID           1.11
      bCountryCode     0 Not supported
      bNumDescriptors   1
      bDescriptorType   34 Report
      wDescriptorLength 71
    Report Descriptors:
      ** UNAVAILABLE **
  Endpoint Descriptor:
    bLength          7
    bDescriptorType   5
    bEndpointAddress 0x81 EP 1 IN
    bmAttributes      3
```

Transfer Type	Interrupt
Synch Type	None
Usage Type	Data
wMaxPacketSize	0x0007 1x 7 bytes
bInterval	10
Device Status:	0x0000
(Bus Powered)	

Bus 002 Device 003: ID 05e3:0608 Genesys Logic, Inc. USB-2.0 4-Port HUB

Device Descriptor:

bLength	18
bDescriptorType	1
bcdUSB	2.00
bDeviceClass	9 Hub
bDeviceSubClass	0 Unused
bDeviceProtocol	1 Single TT
bMaxPacketSize0	64
idVendor	0x05e3 Genesys Logic, Inc.
idProduct	0x0608 USB-2.0 4-Port HUB
bcdDevice	9.01
iManufacturer	0
iProduct	1 USB2.0 Hub
iSerial	0
bNumConfigurations	1

Configuration Descriptor:

bLength	9
bDescriptorType	2
wTotalLength	25
bNumInterfaces	1
bConfigurationValue	1
iConfiguration	0
bmAttributes	0xe0
Self Powered	
Remote Wakeup	
MaxPower	100mA

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	0x0001	1x 1 bytes
bInterval	12	
Hub Descriptor:		
bLength	9	
bDescriptorType	41	
nNbrPorts	4	
wHubCharacteristic	0x00e9	
Per-port power switching		
Per-port overcurrent protection		
TT think time 32 FS bits		
Port indicators		
bPwrOn2PwrGood	50 * 2 milli seconds	
bHubContrCurrent	100 milli Ampere	
DeviceRemovable	0x00	
PortPwrCtrlMask	0xff	
Hub Port Status:		
Port 1: 0000.0100 power		
Port 2: 0000.0303 lowspeed power enable connect		
Port 3: 0000.0103 power enable connect		
Port 4: 0000.0303 lowspeed power enable connect		
Device Qualifier (for other device speed):		
bLength	10	
bDescriptorType	6	
bcdUSB	2.00	
bDeviceClass	9 Hub	
bDeviceSubClass	0 Unused	
bDeviceProtocol	0 Full speed (or root) hub	
bMaxPacketSize0	64	
bNumConfigurations	1	
Device Status:	0x0001	
Self Powered		
Bus 002 Device 002: ID 1058:1100 Western Digital Technologies, Inc.		
Device Descriptor:		
bLength	18	
bDescriptorType	1	
bcdUSB	2.00	
bDeviceClass	0 (Defined at Interface level)	
bDeviceSubClass	0	
bDeviceProtocol	0	
bMaxPacketSize0	64	
idVendor	0x1058	Western Digital Technologies, Inc.
idProduct	0x1100	
bcdDevice	1.75	
iManufacturer	1	Western Digital
iProduct	2	My Book
iSerial	3	57442D574341553436303037333037
bNumConfigurations	1	

Configuration Descriptor:

bLength 9
bDescriptorType 2
wTotalLength 32
bNumInterfaces 1
bConfigurationValue 1
iConfiguration 0
bmAttributes 0xc0
Self Powered
MaxPower 2mA

Interface Descriptor:

bLength 9
bDescriptorType 4
bInterfaceNumber 0
bAlternateSetting 0
bNumEndpoints 2
bInterfaceClass 8 Mass Storage
bInterfaceSubClass 6 SCSI
bInterfaceProtocol 80 Bulk (Zip)
iInterface 0

Endpoint Descriptor:

bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 2
Transfer Type Bulk
Synch Type None
Usage Type Data
wMaxPacketSize 0x0200 1x 512 bytes
bInterval 0

Endpoint Descriptor:

bLength 7
bDescriptorType 5
bEndpointAddress 0x02 EP 2 OUT
bmAttributes 2
Transfer Type Bulk
Synch Type None
Usage Type Data
wMaxPacketSize 0x0200 1x 512 bytes
bInterval 0

Device Qualifier (for other device speed):

bLength 10
bDescriptorType 6
bcdUSB 2.00
bDeviceClass 0 (Defined at Interface level)
bDeviceSubClass 0
bDeviceProtocol 0
bMaxPacketSize0 64
bNumConfigurations 1

Device Status: 0x0001
Self Powered

Bus 002 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 2.6.32-24-generic 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	9
bDescriptorType	41

```
nNbrPorts          6
wHubCharacteristic 0x000a
  No power switching (usb 1.0)
  Per-port overcurrent protection
bPwrOn2PwrGood      10 * 2 milli seconds
bHubContrCurrent     0 milli Ampere
DeviceRemovable      0x00
PortPwrCtrlMask      0xff
Hub Port Status:
  Port 1: 0000.0503 highspeed power enable connect
  Port 2: 0000.0503 highspeed power enable connect
  Port 3: 0000.0100 power
  Port 4: 0000.0100 power
  Port 5: 0000.0100 power
  Port 6: 0000.0100 power
Device Status:       0x0003
  Self Powered
  Remote Wakeup Enabled

Bus 001 Device 004: ID 17ef:1004 Lenovo
Device Descriptor:
  bLength                18
  bDescriptorType         1
  bcdUSB                  2.00
  bDeviceClass            239 Miscellaneous Device
  bDeviceSubClass         2 ?
  bDeviceProtocol         1 Interface Association
  bMaxPacketSize0         64
  idVendor                 0x17ef Lenovo
  idProduct               0x1004
  bcdDevice               3.20
  iManufacturer           2 Chicony Electronics Co., Ltd.
  iProduct                1 Integrated Camera
  iSerial                 3 SN0001
  bNumConfigurations      1
Configuration Descriptor:
  bLength                9
  bDescriptorType         2
  wTotalLength           588
  bNumInterfaces          2
  bConfigurationValue     1
  iConfiguration          0
  bmAttributes            0x80
    (Bus Powered)
  MaxPower                500mA
Interface Association:
  bLength                8
  bDescriptorType        11
  bFirstInterface        0
  bInterfaceCount        2
  bFunctionClass         14 Video
```

```
bFunctionSubClass      3 Video Interface Collection
bFunctionProtocol      0
iFunction              1 Integrated Camera
Interface Descriptor:
bLength                9
bDescriptorType        4
bInterfaceNumber       0
bAlternateSetting      0
bNumEndpoints          1
bInterfaceClass        14 Video
bInterfaceSubClass     1 Video Control
bInterfaceProtocol     0
iInterface              1 Integrated Camera
VideoControl Interface Descriptor:
bLength                13
bDescriptorType        36
bDescriptorSubtype     1 (HEADER)
bcdUVC                 1.00
wTotalLength           78
dwClockFrequency       15.000000MHz
bInCollection          1
baInterfaceNr( 0)      1
VideoControl Interface Descriptor:
bLength                9
bDescriptorType        36
bDescriptorSubtype     3 (OUTPUT_TERMINAL)
bTerminalID            2
wTerminalType           0x0101 USB Streaming
bAssocTerminal         0
bSourceID              3
iTerminal              0
VideoControl Interface Descriptor:
bLength                26
bDescriptorType        36
bDescriptorSubtype     6 (EXTENSION_UNIT)
bUnitID                4
guidExtensionCode      {7033f028-1163-2e4a-ba2c-6890eb334016}
bNumControl            1
bNrPins                1
baSourceID( 0)         1
bControlSize           1
bmControls( 0)         0x01
iExtension             0
VideoControl Interface Descriptor:
bLength                18
bDescriptorType        36
bDescriptorSubtype     2 (INPUT_TERMINAL)
bTerminalID            1
wTerminalType           0x0201 Camera Sensor
bAssocTerminal         0
```

```

    iTerminal          0
    wObjectiveFocalLengthMin    0
    wObjectiveFocalLengthMax    0
    wOcularFocalLength    0
    bControlSize        3
    bmControls          0x0004000e
        Auto-Exposure Mode
        Auto-Exposure Priority
        Exposure Time (Absolute)
        Privacy
VideoControl Interface Descriptor:
    bLength            12
    bDescriptorType     36
    bDescriptorSubtype  5 (PROCESSING_UNIT)
Warning: Descriptor too short
    bUnitID            3
    bSourceID          4
    wMaxMultiplier     0
    bControlSize        3
    bmControls          0x000027bf
        Brightness
        Contrast
        Hue
        Saturation
        Sharpness
        Gamma
        White Balance Component
        Backlight Compensation
        Gain
        Power Line Frequency
        White Balance Component, Auto
    iProcessing         0
    bmVideoStandards    0x 0
Endpoint Descriptor:
    bLength            7
    bDescriptorType     5
    bEndpointAddress    0x83  EP 3 IN
    bmAttributes        3
        Transfer Type        Interrupt
        Synch Type          None
        Usage Type          Data
    wMaxPacketSize      0x0010  1x 16 bytes
    bInterval           6
Interface Descriptor:
    bLength            9
    bDescriptorType     4
    bInterfaceNumber    1
    bAlternateSetting    0
    bNumEndpoints       0
    bInterfaceClass     14 Video
    bInterfaceSubClass  2 Video Streaming

```

```
bInterfaceProtocol      0
iInterface              0
VideoStreaming Interface Descriptor:
  bLength                14
  bDescriptorType        36
  bDescriptorSubtype     1 (INPUT_HEADER)
  bNumFormats            1
  wTotalLength           367
  bEndPointAddress       129
  bmInfo                 0
  bTerminalLink          2
  bStillCaptureMethod     0
  bTriggerSupport        1
  bTriggerUsage          0
  bControlSize           1
  bmaControls( 0)        27
VideoStreaming Interface Descriptor:
  bLength                27
  bDescriptorType        36
  bDescriptorSubtype     4 (FORMAT_UNCOMPRESSED)
  bFormatIndex           1
  bNumFrameDescriptors   7
  guidFormat
{59555932-0000-1000-8000-00aa00389b71}
  bBitsPerPixel          16
  bDefaultFrameIndex     1
  bAspectRatioX          0
  bAspectRatioY          0
  bmInterlaceFlags       0x00
    Interlaced stream or variable: No
    Fields per frame: 1 fields
    Field 1 first: No
    Field pattern: Field 1 only
  bCopyProtect           0
VideoStreaming Interface Descriptor:
  bLength                50
  bDescriptorType        36
  bDescriptorSubtype     5 (FRAME_UNCOMPRESSED)
  bFrameIndex            1
  bmCapabilities          0x00
    Still image unsupported
  wWidth                 640
  wHeight                480
  dwMinBitRate           614400
  dwMaxBitRate           18432000
  dwMaxVideoFrameBufferSize 614400
  dwDefaultFrameInterval 333333
  bFrameIntervalType     6
  dwFrameInterval( 0)    333333
  dwFrameInterval( 1)    500000
```

```
dwFrameInterval( 2)          666666
dwFrameInterval( 3)          1000000
dwFrameInterval( 4)          2000000
dwFrameInterval( 5)          10000000
VideoStreaming Interface Descriptor:
  bLength                      50
  bDescriptorType               36
  bDescriptorSubtype            5 (FRAME_UNCOMPRESSED)
  bFrameIndex                   2
  bmCapabilities                 0x00
    Still image unsupported
  wWidth                        352
  wHeight                       288
  dwMinBitRate                  202752
  dwMaxBitRate                  6082560
  dwMaxVideoFrameBufferSize     202752
  dwDefaultFrameInterval       333333
  bFrameIntervalType            6
  dwFrameInterval( 0)          333333
  dwFrameInterval( 1)          500000
  dwFrameInterval( 2)          666666
  dwFrameInterval( 3)          1000000
  dwFrameInterval( 4)          2000000
  dwFrameInterval( 5)          10000000
VideoStreaming Interface Descriptor:
  bLength                      50
  bDescriptorType               36
  bDescriptorSubtype            5 (FRAME_UNCOMPRESSED)
  bFrameIndex                   3
  bmCapabilities                 0x00
    Still image unsupported
  wWidth                        320
  wHeight                       240
  dwMinBitRate                  153600
  dwMaxBitRate                  4608000
  dwMaxVideoFrameBufferSize     153600
  dwDefaultFrameInterval       333333
  bFrameIntervalType            6
  dwFrameInterval( 0)          333333
  dwFrameInterval( 1)          500000
  dwFrameInterval( 2)          666666
  dwFrameInterval( 3)          1000000
  dwFrameInterval( 4)          2000000
  dwFrameInterval( 5)          10000000
VideoStreaming Interface Descriptor:
  bLength                      50
  bDescriptorType               36
  bDescriptorSubtype            5 (FRAME_UNCOMPRESSED)
  bFrameIndex                   4
  bmCapabilities                 0x00
    Still image unsupported
```

```
wWidth          176
wHeight         144
dwMinBitRate    50688
dwMaxBitRate    1520640
dwMaxVideoFrameBufferSize  50688
dwDefaultFrameInterval  333333
bFrameIntervalType  6
dwFrameInterval( 0)  333333
dwFrameInterval( 1)  500000
dwFrameInterval( 2)  666666
dwFrameInterval( 3)  1000000
dwFrameInterval( 4)  2000000
dwFrameInterval( 5)  10000000
VideoStreaming Interface Descriptor:
bLength         50
bDescriptorType  36
bDescriptorSubtype  5 (FRAME_UNCOMPRESSED)
bFrameIndex     5
bmCapabilities   0x00
    Still image unsupported
wWidth          160
wHeight         120
dwMinBitRate    38400
dwMaxBitRate    1152000
dwMaxVideoFrameBufferSize  38400
dwDefaultFrameInterval  333333
bFrameIntervalType  6
dwFrameInterval( 0)  333333
dwFrameInterval( 1)  500000
dwFrameInterval( 2)  666666
dwFrameInterval( 3)  1000000
dwFrameInterval( 4)  2000000
dwFrameInterval( 5)  10000000
VideoStreaming Interface Descriptor:
bLength         38
bDescriptorType  36
bDescriptorSubtype  5 (FRAME_UNCOMPRESSED)
bFrameIndex     6
bmCapabilities   0x00
    Still image unsupported
wWidth          1280
wHeight         960
dwMinBitRate    2457600
dwMaxBitRate    22118400
dwMaxVideoFrameBufferSize  2457600
dwDefaultFrameInterval  1111111
bFrameIntervalType  3
dwFrameInterval( 0)  1111111
dwFrameInterval( 1)  2000000
dwFrameInterval( 2)  10000000
```

VideoStreaming Interface Descriptor:

bLength	38
bDescriptorType	36
bDescriptorSubtype	5 (FRAME_UNCOMPRESSED)
bFrameIndex	7
bmCapabilities	0x00
Still image unsupported	
wWidth	1280
wHeight	1024
dwMinBitRate	2621440
dwMaxBitRate	23592960
dwMaxVideoFrameBufferSize	2621440
dwDefaultFrameInterval	1111111
bFrameIntervalType	3
dwFrameInterval(0)	1111111
dwFrameInterval(1)	2000000
dwFrameInterval(2)	10000000

Interface Descriptor:

bLength	9
bDescriptorType	4
bInterfaceNumber	1
bAlternateSetting	1
bNumEndpoints	1
bInterfaceClass	14 Video
bInterfaceSubClass	2 Video Streaming
bInterfaceProtocol	0
iInterface	0

Endpoint Descriptor:

bLength	7
bDescriptorType	5
bEndpointAddress	0x81 EP 1 IN
bmAttributes	5
Transfer Type	Isochronous
Synch Type	Asynchronous
Usage Type	Data
wMaxPacketSize	0x0080 1x 128 bytes
bInterval	1

Interface Descriptor:

bLength	9
bDescriptorType	4
bInterfaceNumber	1
bAlternateSetting	2
bNumEndpoints	1
bInterfaceClass	14 Video
bInterfaceSubClass	2 Video Streaming
bInterfaceProtocol	0
iInterface	0

Endpoint Descriptor:

bLength	7
bDescriptorType	5
bEndpointAddress	0x81 EP 1 IN

```
    bmAttributes          5
      Transfer Type      Isochronous
      Synch Type         Asynchronous
      Usage Type         Data
    wMaxPacketSize      0x0100 1x 256 bytes
    bInterval           1
Interface Descriptor:
  bLength                9
  bDescriptorType        4
  bInterfaceNumber       1
  bAlternateSetting      3
  bNumEndpoints          1
  bInterfaceClass        14 Video
  bInterfaceSubClass     2 Video Streaming
  bInterfaceProtocol     0
  iInterface             0
Endpoint Descriptor:
  bLength                7
  bDescriptorType        5
  bEndpointAddress       0x81 EP 1 IN
  bmAttributes           5
    Transfer Type      Isochronous
    Synch Type         Asynchronous
    Usage Type         Data
  wMaxPacketSize      0x0320 1x 800 bytes
  bInterval           1
Interface Descriptor:
  bLength                9
  bDescriptorType        4
  bInterfaceNumber       1
  bAlternateSetting      4
  bNumEndpoints          1
  bInterfaceClass        14 Video
  bInterfaceSubClass     2 Video Streaming
  bInterfaceProtocol     0
  iInterface             0
Endpoint Descriptor:
  bLength                7
  bDescriptorType        5
  bEndpointAddress       0x81 EP 1 IN
  bmAttributes           5
    Transfer Type      Isochronous
    Synch Type         Asynchronous
    Usage Type         Data
  wMaxPacketSize      0x0b20 2x 800 bytes
  bInterval           1
Interface Descriptor:
  bLength                9
  bDescriptorType        4
  bInterfaceNumber       1
```

```

bAlternateSetting      5
bNumEndpoints          1
bInterfaceClass        14 Video
bInterfaceSubClass     2 Video Streaming
bInterfaceProtocol     0
iInterface             0

```

Endpoint Descriptor:

```

bLength                7
bDescriptorType         5
bEndpointAddress       0x81 EP 1 IN
bmAttributes           5
    Transfer Type       Isochronous
    Synch Type          Asynchronous
    Usage Type          Data
wMaxPacketSize         0x1320 3x 800 bytes
bInterval              1

```

Interface Descriptor:

```

bLength                9
bDescriptorType         4
bInterfaceNumber       1
bAlternateSetting      6
bNumEndpoints          1
bInterfaceClass        14 Video
bInterfaceSubClass     2 Video Streaming
bInterfaceProtocol     0
iInterface             0

```

Endpoint Descriptor:

```

bLength                7
bDescriptorType         5
bEndpointAddress       0x81 EP 1 IN
bmAttributes           5
    Transfer Type       Isochronous
    Synch Type          Asynchronous
    Usage Type          Data
wMaxPacketSize         0x13e8 3x 1000 bytes
bInterval              1

```

Device Qualifier (for other device speed):

```

bLength                10
bDescriptorType         6
bcdUSB                 2.00
bDeviceClass           239 Miscellaneous Device
bDeviceSubClass        2 ?
bDeviceProtocol        1 Interface Association
bMaxPacketSize0        64
bNumConfigurations     1

```

Device Status: 0x0000
(Bus Powered)

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 2.6.32-24-generic ehci_hcd
iProduct             2 EHCI Host Controller
iSerial              1 0000:00:1a.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             9
  bDescriptorType     41
  nNbrPorts           6
  wHubCharacteristic 0x000a
    No power switching (usb 1.0)
```

```
Per-port overcurrent protection
bPwrOn2PwrGood      10 * 2 milli seconds
bHubContrCurrent     0 milli Ampere
DeviceRemovable      0x00
PortPwrCtrlMask      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: 0000.0503 highspeed power enable connect
Device Status:       0x0003
Self Powered
Remote Wakeup Enabled
dani-laptop
description: Notebook
product: 2714A9G
vendor: LENOVO
version: ThinkPad R500
serial: R871FDR
width: 32 bits
capabilities: smbios-2.4 dmi-2.4 smp-1.4 smp
configuration: administrator_password=disabled boot=normal
chassis=notebook cpus=2 frontpanel_password=unknown
keyboard_password=disabled power-on_password=disabled
uuid=9EC2F481-507A-11CB-9767-D91E456553DA
*-core
description: Motherboard
product: 2714A9G
vendor: LENOVO
physical id: 0
version: Not Available
serial: VQ1FG03N2A3
*-firmware
description: BIOS
vendor: LENOVO
physical id: 0
version: 7YET79WW (3.09 ) (11/19/2009)
size: 128KiB
capacity: 4032KiB
capabilities: pci pcmcia pnp upgrade shadowing escd cdboot
bootselect socketedrom edd acpi usb biosbootspecification
*-cpu:0
description: CPU
product: Intel(R) Core(TM)2 Duo CPU      T6670  @ 2.20GHz
vendor: Intel Corp.
physical id: 6
bus info: cpu@0
version: 6.7.10
serial: 0001-067A-0000-0000-0000-0000
```

```
slot: None
size: 1200MHz
capacity: 1200MHz
width: 64 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 nx x86-64 constant_tsc arch_perfmon pebs bts
aperfmpperf pni dtes64 monitor ds_cpl vmx est tm2 ssse3 cx16 xtpr pdcm
sse4_1 xsave lahf_lm ida tpr_shadow vnmi flexpriority cpufreq
configuration: id=0
*-cache:0
  description: L1 cache
  physical id: a
  slot: Internal L1 Cache
  size: 64KiB
  capacity: 64KiB
  capabilities: synchronous internal write-back instruction
*-cache:1
  description: L2 cache
  physical id: c
  slot: Internal L2 Cache
  size: 2MiB
  capacity: 2MiB
  capabilities: burst internal write-back unified
*-logicalcpu:0
  description: Logical CPU
  physical id: 0.1
  width: 64 bits
  capabilities: logical
*-logicalcpu:1
  description: Logical CPU
  physical id: 0.2
  width: 64 bits
  capabilities: logical
*-cache
  description: L1 cache
  physical id: b
  slot: Internal L1 Cache
  size: 64KiB
  capacity: 64KiB
  capabilities: synchronous internal write-back data
*-memory
  description: System Memory
  physical id: 2b
  slot: System board or motherboard
  size: 2GiB
*-bank:0
  description: SODIMM Synchronous 800 MHz (1.2 ns)
  product: NT2GC64B8HA1NS-BE
```

```
    vendor: 830B
    physical id: 0
    serial: 981A146F
    slot: DIMM 1
    size: 2GiB
    width: 64 bits
    clock: 800MHz (1.2ns)
*-bank:1
    description: SODIMM DDR2 Synchronous 800 MHz (1.2 ns)
[empty]
    physical id: 1
    slot: DIMM 2
    clock: 800MHz (1.2ns)
*-cpu:1
    physical id: 1
    bus info: cpu@1
    version: 6.7.10
    serial: 0001-067A-0000-0000-0000-0000
    size: 1200MHz
    capacity: 1200MHz
    capabilities: vmx ht cpufreq
    configuration: id=0
*-logicalcpu:0
    description: Logical CPU
    physical id: 0.1
    capabilities: logical
*-logicalcpu:1
    description: Logical CPU
    physical id: 0.2
    capabilities: logical
*-pci
    description: Host bridge
    product: Mobile 4 Series Chipset Memory Controller Hub
    vendor: Intel Corporation
    physical id: 100
    bus info: pci@0000:00:00.0
    version: 07
    width: 32 bits
    clock: 33MHz
    configuration: driver=agpgart-intel
    resources: irq:0
*-display:0
    description: VGA compatible controller
    product: Mobile 4 Series Chipset Integrated Graphics
Controller
    vendor: Intel Corporation
    physical id: 2
    bus info: pci@0000:00:02.0
    version: 07
    width: 64 bits
    clock: 33MHz
```

```
capabilities: msi pm bus_master cap_list rom
configuration: driver=i915 latency=0
resources: irq:31 memory:f4400000-f47fffff
memory:d0000000-dfffffff(prefetchable) ioport:1800(size=8)
*-display:1 UNCLAIMED
description: Display controller
product: Mobile 4 Series Chipset Integrated Graphics
Controller
vendor: Intel Corporation
physical id: 2.1
bus info: pci@0000:00:02.1
version: 07
width: 64 bits
clock: 33MHz
capabilities: pm bus_master cap_list
configuration: latency=0
resources: memory:f4200000-f42fffff
*-communication UNCLAIMED
description: Communication controller
product: Mobile 4 Series Chipset MEI Controller
vendor: Intel Corporation
physical id: 3
bus info: pci@0000:00:03.0
version: 07
width: 64 bits
clock: 33MHz
capabilities: pm msi bus_master cap_list
configuration: latency=0
resources: memory:fc204800-fc20480f
*-usb:0
description: USB Controller
product: 82801I (ICH9 Family) USB UHCI Controller #4
vendor: Intel Corporation
physical id: 1a
bus info: pci@0000:00:1a.0
version: 03
width: 32 bits
clock: 33MHz
capabilities: bus_master cap_list
configuration: driver=uhci_hcd latency=0
resources: irq:20 ioport:1820(size=32)
*-usb:1
description: USB Controller
product: 82801I (ICH9 Family) USB UHCI Controller #5
vendor: Intel Corporation
physical id: 1a.1
bus info: pci@0000:00:1a.1
version: 03
width: 32 bits
clock: 33MHz
```

```
capabilities: bus_master cap_list
configuration: driver=uhci_hcd latency=0
resources: irq:21 ioport:1840(size=32)
*-usb:2
description: USB Controller
product: 82801I (ICH9 Family) USB UHCI Controller #6
vendor: Intel Corporation
physical id: 1a.2
bus info: pci@0000:00:1a.2
version: 03
width: 32 bits
clock: 33MHz
capabilities: bus_master cap_list
configuration: driver=uhci_hcd latency=0
resources: irq:22 ioport:1860(size=32)
*-usb:3
description: USB Controller
product: 82801I (ICH9 Family) USB2 EHCI Controller #2
vendor: Intel Corporation
physical id: 1a.7
bus info: pci@0000:00:1a.7
version: 03
width: 32 bits
clock: 33MHz
capabilities: pm debug bus_master cap_list
configuration: driver=ehci_hcd latency=0
resources: irq:23 memory:fc204c00-fc204fff
*-multimedia
description: Audio device
product: 82801I (ICH9 Family) HD Audio Controller
vendor: Intel Corporation
physical id: 1b
bus info: pci@0000:00:1b.0
version: 03
width: 64 bits
clock: 33MHz
capabilities: pm msi pciexpress bus_master cap_list
configuration: driver=HDA Intel latency=0
resources: irq:17 memory:fc000000-fc003fff
*-pci:0
description: PCI bridge
product: 82801I (ICH9 Family) PCI Express Port 1
vendor: Intel Corporation
physical id: 1c
bus info: pci@0000:00:1c.0
version: 03
width: 32 bits
clock: 33MHz
capabilities: pci pciexpress msi pm bus_master cap_list
configuration: driver=pcieport
resources: irq:24 ioport:8000(size=4096)
```

```
memory:7c000000-7c1fffff memory:7c200000-7c3fffff(prefetchable)
  *-pci:1
    description: PCI bridge
    product: 82801I (ICH9 Family) PCI Express Port 2
    vendor: Intel Corporation
    physical id: 1c.1
    bus info: pci@0000:00:1c.1
    version: 03
    width: 32 bits
    clock: 33MHz
    capabilities: pci pciexpress msi pm bus_master cap_list
    configuration: driver=pcieport
    resources: irq:25 ioport:9000(size=4096)
memory:f4300000-f43ffffff memory:7c400000-7c5fffff(prefetchable)
  *-network
    description: Wireless interface
    product: PRO/Wireless 5100 AGN [Shiloh] Network
Connection
    vendor: Intel Corporation
    physical id: 0
    bus info: pci@0000:03:00.0
    logical name: wlan0
    version: 00
    serial: 00:26:c6:c4:cf:ce
    width: 64 bits
    clock: 33MHz
    capabilities: pm msi pciexpress bus_master cap_list
ethernet physical wireless
    configuration: broadcast=yes driver=iwlagm
ip=192.168.178.22 latency=0 multicast=yes wireless=IEEE 802.11abgn
    resources: irq:30 memory:f4300000-f4301fff
  *-pci:2
    description: PCI bridge
    product: 82801I (ICH9 Family) PCI Express Port 4
    vendor: Intel Corporation
    physical id: 1c.3
    bus info: pci@0000:00:1c.3
    version: 03
    width: 32 bits
    clock: 33MHz
    capabilities: pci pciexpress msi pm bus_master cap_list
    configuration: driver=pcieport
    resources: irq:26 ioport:2000(size=4096)
memory:f8000000-f9ffffff ioport:f4000000(size=1048576)
  *-pci:3
    description: PCI bridge
    product: 82801I (ICH9 Family) PCI Express Port 5
    vendor: Intel Corporation
    physical id: 1c.4
    bus info: pci@0000:00:1c.4
```

```
version: 03
width: 32 bits
clock: 33MHz
capabilities: pci pciexpress msi pm bus_master cap_list
configuration: driver=pcieport
resources: irq:27 ioport:3000(size=4096)
memory:fa000000-fbffffff ioport:f4100000(size=1048576)
*-pci:4
description: PCI bridge
product: 82801I (ICH9 Family) PCI Express Port 6
vendor: Intel Corporation
physical id: 1c.5
bus info: pci@0000:00:1c.5
version: 03
width: 32 bits
clock: 33MHz
capabilities: pci pciexpress msi pm bus_master cap_list
configuration: driver=pcieport
resources: irq:28 ioport:a000(size=4096)
memory:f4800000-f48ffffff memory:7c600000-7c7ffffff(prefetchable)
*-network
description: Ethernet interface
product: NetLink BCM5787M Gigabit Ethernet PCI Express
vendor: Broadcom Corporation
physical id: 0
bus info: pci@0000:04:00.0
logical name: eth0
version: 02
serial: 00:22:68:1f:59:11
size: 100MB/s
capacity: 1GB/s
width: 64 bits
clock: 33MHz
capabilities: pm vpd msi pciexpress bus_master cap_list
ethernet physical tp 10bt 10bt-fd 100bt 100bt-fd 1000bt 1000bt-fd
autonegotiation
configuration: autonegotiation=on broadcast=yes
driver=tg3 driverversion=3.102 duplex=full firmware=sb v2.13
ip=192.168.178.21 latency=0 link=yes multicast=yes port=twisted pair
speed=100MB/s
resources: irq:32 memory:f4800000-f480ffff
*-usb:4
description: USB Controller
product: 82801I (ICH9 Family) USB UHCI Controller #1
vendor: Intel Corporation
physical id: 1d
bus info: pci@0000:00:1d.0
version: 03
width: 32 bits
clock: 33MHz
capabilities: bus_master cap_list
```

```
configuration: driver=uhci_hcd latency=0
resources: irq:16 ioport:1880(size=32)
*-usb:5
description: USB Controller
product: 82801I (ICH9 Family) USB UHCI Controller #2
vendor: Intel Corporation
physical id: 1d.1
bus info: pci@0000:00:1d.1
version: 03
width: 32 bits
clock: 33MHz
capabilities: bus_master cap_list
configuration: driver=uhci_hcd latency=0
resources: irq:17 ioport:18a0(size=32)
*-usb:6
description: USB Controller
product: 82801I (ICH9 Family) USB UHCI Controller #3
vendor: Intel Corporation
physical id: 1d.2
bus info: pci@0000:00:1d.2
version: 03
width: 32 bits
clock: 33MHz
capabilities: bus_master cap_list
configuration: driver=uhci_hcd latency=0
resources: irq:18 ioport:18c0(size=32)
*-usb:7
description: USB Controller
product: 82801I (ICH9 Family) USB2 EHCI Controller #1
vendor: Intel Corporation
physical id: 1d.7
bus info: pci@0000:00:1d.7
version: 03
width: 32 bits
clock: 33MHz
capabilities: pm debug bus_master cap_list
configuration: driver=ehci_hcd latency=0
resources: irq:19 memory:fc205000-fc2053ff
*-pci:5
description: PCI bridge
product: 82801 Mobile PCI Bridge
vendor: Intel Corporation
physical id: 1e
bus info: pci@0000:00:1e.0
version: 93
width: 32 bits
clock: 33MHz
capabilities: pci bus_master cap_list
resources: ioport:4000(size=16384) memory:f4900000-f7ffffff
ioport:f0000000(size=67108864)
```

```
*-pcmcia
  description: CardBus bridge
  product: RL5c476 II
  vendor: Ricoh Co Ltd
  physical id: 0
  bus info: pci@0000:15:00.0
  version: ba
  width: 64 bits
  clock: 33MHz
  capabilities: pcmcia bus_master cap_list
  configuration: driver=yenta_cardbus latency=176
maxlatency=5 mingnt=128
  resources: iomemory:b01716150-b0171614f irq:16
memory:f4900000-f4900fff ioport:4000(size=256) ioport:4400(size=256)
memory:f0000000-f3ffffff(prefetchable) memory:80000000-83ffffff
*-firewire
  description: FireWire (IEEE 1394)
  product: R5C832 IEEE 1394 Controller
  vendor: Ricoh Co Ltd
  physical id: 0.1
  bus info: pci@0000:15:00.1
  version: 04
  width: 32 bits
  clock: 33MHz
  capabilities: pm bus_master cap_list
  configuration: driver=ohci1394 latency=32 maxlatency=4
mingnt=2
  resources: irq:17 memory:f4901000-f49017ff
*-generic:0
  description: SD Host controller
  product: R5C822 SD/SDIO/MMC/MS/MSPPro Host Adapter
  vendor: Ricoh Co Ltd
  physical id: 0.2
  bus info: pci@0000:15:00.2
  version: 21
  width: 32 bits
  clock: 33MHz
  capabilities: pm bus_master cap_list
  configuration: driver=sdhci-pci latency=32
  resources: irq:18 memory:f4901800-f49018ff
*-generic:1
  product: Illegal Vendor ID
  vendor: Illegal Vendor ID
  physical id: 0.3
  bus info: pci@0000:15:00.3
  version: ff
  width: 32 bits
  clock: 66MHz
  capabilities: bus_master vga_palette cap_list
  configuration: driver=ricoh-mmc latency=255
maxlatency=255 mingnt=255
```

```
resources: irq:11 memory:f4901c00-f4901cff
*-generic:2 UNCLAIMED
  description: System peripheral
  product: R5C592 Memory Stick Bus Host Adapter
  vendor: Ricoh Co Ltd
  physical id: 0.4
  bus info: pci@0000:15:00.4
  version: 11
  width: 32 bits
  clock: 33MHz
  capabilities: pm bus_master cap_list
  configuration: latency=32
  resources: memory:f4902000-f49020ff
*-generic:3 UNCLAIMED
  description: System peripheral
  product: xD-Picture Card Controller
  vendor: Ricoh Co Ltd
  physical id: 0.5
  bus info: pci@0000:15:00.5
  version: 11
  width: 32 bits
  clock: 33MHz
  capabilities: pm bus_master cap_list
  configuration: latency=32
  resources: memory:f4902400-f49024ff
*-isa
  description: ISA bridge
  product: ICH9M LPC Interface Controller
  vendor: Intel Corporation
  physical id: 1f
  bus info: pci@0000:00:1f.0
  version: 03
  width: 32 bits
  clock: 33MHz
  capabilities: isa bus_master cap_list
  configuration: latency=0
*-storage
  description: SATA controller
  product: ICH9M/M-E SATA AHCI Controller
  vendor: Intel Corporation
  physical id: 1f.2
  bus info: pci@0000:00:1f.2
  logical name: scsi0
  logical name: scsi1
  version: 03
  width: 32 bits
  clock: 66MHz
  capabilities: storage msi pm bus_master cap_list emulated
  configuration: driver=ahci latency=0
  resources: irq:29 ioport:1818(size=8) ioport:180c(size=4)
```

```
ioport:1810(size=8) ioport:1808(size=4) ioport:18e0(size=32)
memory:fc204000-fc2047ff
  *-disk
    description: ATA Disk
    product: HITACHI HTS54502
    vendor: Hitachi
    physical id: 0
    bus info: scsi@0:0.0.0
    logical name: /dev/sda
    version: PB2Z
    serial: 100414PBN204ASJ1ZGEL
    size: 232GiB (250GB)
    capabilities: partitioned partitioned:dos
    configuration: ansiversion=5 signature=0008040b
  *-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: c7724ae6-bc66-4e46-bfee-820fd82de62b
    size: 13GiB
    capacity: 13GiB
    capabilities: primary bootable journaled
    extended_attributes large_files huge_files dir_nlink recover extents
    ext4 ext2 initialized
    configuration: created=2010-07-15 22:25:07
    filesystem=ext4 lastmountpoint=/kruscht modified=2010-07-15 21:35:21
    mount.fstype=ext4
    mount.options=rw,relatime,errors=remount-ro,barrier=1,data=ordered
    mounted=2010-08-06 15:13:11 state=mounted
  *-volume:1
    description: Linux swap volume
    physical id: 2
    bus info: scsi@0:0.0.0,2
    logical name: /dev/sda2
    version: 1
    serial: 9b8b5533-06fe-4fa7-8875-db46c174811d
    size: 3815MiB
    capacity: 3815MiB
    capabilities: primary nofs swap initialized
    configuration: filesystem=swap pagesize=4096
  *-volume:2
    description: EXT4 volume
    vendor: Linux
    physical id: 3
    bus info: scsi@0:0.0.0,3
    logical name: /dev/sda3
    logical name: /home
```

```
version: 1.0
serial: 5c8dd399-0f40-4718-82d7-347d13382974
size: 215GiB
capacity: 215GiB
capabilities: primary journaled extended_attributes
large_files huge_files dir_nlink recover extents ext4 ext2 initialized
configuration: created=2010-07-15 22:25:13
filesystem=ext4 lastmountpoint=/kruscht modified=2010-08-06 15:13:11
mount.fstype=ext4 mount.options=rw,relatime,barrier=1,data=ordered
mounted=2010-08-06 15:13:11 state=mounted
```

```
*-cdrom
```

```
description: DVD-RAM writer
product: DVD RW AD-7700H
vendor: Optiarc
physical id: 1
bus info: scsi@1:0.0.0
logical name: /dev/cdrom
logical name: /dev/cdrw
logical name: /dev/dvd
logical name: /dev/dvdrw
logical name: /dev/scd0
logical name: /dev/sr0
version: 1.FA
capabilities: removable audio cd-r cd-rw dvd dvd-r
```

```
dvd-ram
```

```
configuration: ansiversion=5 status=nodisc
```

```
*-serial UNCLAIMED
```

```
description: SMBus
product: 82801I (ICH9 Family) SMBus Controller
vendor: Intel Corporation
physical id: 1f.3
bus info: pci@0000:00:1f.3
version: 03
width: 64 bits
clock: 33MHz
configuration: latency=0
resources: memory:fc205400-fc2054ff ioport:1c00(size=32)
```

```
*-scsi
```

```
physical id: 2
bus info: usb@2:1
logical name: scsi4
capabilities: emulated scsi-host
configuration: driver=usb-storage
```

```
*-disk
```

```
description: SCSI Disk
product: 10EAVS External
vendor: WD
physical id: 0.0.0
bus info: scsi@4:0.0.0
logical name: /dev/sdb
```

```
version: 1.75
serial: WD-WCAU46007307
size: 931GiB (1TB)
capabilities: partitioned partitioned:dos
configuration: ansiversion=4 signature=e8900690
*-volume:0
  description: EXT3 volume
  vendor: Linux
  physical id: 1
  bus info: scsi@4:0.0.0,1
  logical name: /dev/sdb1
  logical name: /media/usbbbackup
  version: 1.0
  serial: 31342c69-clf1-4245-8db7-87d754b09e67
  size: 693GiB
  capacity: 693GiB
  capabilities: primary journaled extended_attributes
large_files recover ext3 ext2 initialized
  configuration: created=2009-03-30 12:39:38
filesystem=ext3 label=usbbbackup modified=2010-08-06 16:17:02
mount.fstype=ext3
mount.options=rw,nosuid,nodev,relatime,errors=continue,data=ordered
mounted=2010-08-06 16:17:02 state=mounted
*-volume:1
  description: Windows FAT volume
  vendor: mkdosfs
  physical id: 2
  bus info: scsi@4:0.0.0,2
  logical name: /dev/sdb2
  logical name: /media/TAUSCH
  version: FAT32
  serial: 49d2-224b
  size: 238GiB
  capacity: 238GiB
  capabilities: primary fat initialized
  configuration: FATs=2 filesystem=fat label=TAUSCH
mount.fstype=vfat
mount.options=rw,nosuid,nodev,relatime,uid=1000,gid=1000,fmask=0022,dmask=00
77,codepage=cp437,iocharset=iso8859-1,shortname=mixed,utf8,flush,errors=remo
unt-ro state=mounted
```

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