

# FreeBSD on Acer Aspire One

This section is about FreeBSD Installation and Configuration on Acer Aspire One.

## Network adapter

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Network Card: is detected automaticaly as re0 device.

## Wifi adapter

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Wifi can be installed easely by using a patch to ath driver.

Current ath HAL driver does not have support for PCIE so you will need to download patched driver from here: [Wifi Hal Driver](#) or get latest version from:

<http://snapshots.madwifi-project.org/madwifi-hal-0.10.5.6/>

After that unarchive it and copy only the content of folder hal (from the directory where you've unarchived) to `/usr/src/sys/contrib/dev/ath`.

Then recompile the kernel install it and reboot.

Then your network card will be detected and will aork as ath0 device.

Here is a configuration line from rc.conf for ath0 device:

```
ifconfig_ath0="authmode shared ssid wifi wepmode on weptxkey 1 wepkey 1:0xaffff5343753473271354655aa 10.0.0.2
netmask 255.255.255.0"
```

Of course you should replace SSID, WEP Key and IP/Subnet with your values.

You must also add the following lines to

```
/boot/loader.conf:/boot/loader.confwlan_scan_ap_load="YES"wlan_scan_sta_load="YES"wlan_wep_load="YES"
```

## X.org Configuration

```
-----xorg.configSection "ServerFlags" Option "DontZap" "yes" Option "DontVTSwitch" "yes"EndSection Section
"ServerLayout" Identifier "Default Layout" Screen 0 "Screen0" 0 0 InputDevice "Synaptics_Touchpad" "CorePointer"
InputDevice "Keyboard0" "CoreKeyboard"EndSection Section "InputDevice" Identifier "Keyboard0" Driver "kbd" Option
"XkbModel" "pc105" Option "XkbLayout" "us(euro),gb" Option "XkbOptions"
"grp:alt_shift_toggle"EndSection Section "InputDevice" Option "Protocol" "Auto" # Auto detect Option "Device"
"/dev/sysmouse" Identifier "Synaptics_Touchpad" # "Mouse0" Driver "synaptics" # "mouse" Option
"Protocol" "psm" # "auto" Option "Device" "/dev/psm0" # "/dev/sysmouse"EndSection Section "Monitor" Identifier
"Monitor0" Modeline "1024x600" 48.96 1024 1064 1168 1312 600 601 604 622 -HSync +VSync DisplaySize 250
120EndSection Section "Device" Identifier "Videocard0" Driver "intel" Option "Clone" "true" Option "MonitorLayout"
"LVDS,VGA" BusID "PCI:0:2:0" Option "NoDDC" Option "AccelMethod" "exa" Option "MigrationHeuristic" "greedy"
EndSection Section "Screen" Identifier "Screen0" Device "Videocard0" Monitor "Monitor0" DefaultDepth 24 SubSection
"Display" Viewport 0 0 Depth 24 Modes "1024x600" "800x600" "640x480" Virtual 1024 768
EndSubSectionEndSection
```

## Mouse Configuration

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```
rc.confmoused_enable="YES"moused_flags="-3"moused_port="/dev/psm0"moused_type="auto"moused_enable="YES"
```

## TouchPad Configuration

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To add support for your touch pad (if you don't it will be very annoying in x.org, some things will not work properly like double tapping) you must do the following:

```
Install synaptics port/package
cd /usr/ports/x11-drivers/synaptics
make install clean
```

```
cd /usr/ports/sysutils/ksynaptics
make install clean
```

Add the following line to /boot/loader.conf:

```
hw.psm.synaptics_support=1
```

After reboot you should have the following line at dmesg messages (dmesg | grep psm):

```
psm0: model Synaptics Touchpad, device ID 0
```

Also look at previous settings for x.org (xorg.conf), some config must be done there too.

## Sound

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Add the following line to /boot/loader.conf:

```
snd_hda_load="YES"
```

## ACPI

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Is partially working. When you boot and you have a 10 seconds countdown do not press enter but wait for countdown to finish. If you press enter sometimes it locks up and you must power off/on from the power button.

For power management you could use the following

```
settings:/boot/loader.confdebug.cpufreq.lowest=600dev.cpu.0.cx_lowest=C3dev.cpu.1.cx_lowest=C2
```

```
and/etc/rc.confpowerd_enable="YES"powerd_flags="-a maximum -b adaptive -i 85 -r 60 -p 100"
```

When you close the lid it does not go to standby.

## Card Reader

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Card reader was not tested yet.

```
Here is a complete dmesg output:/var/run/dmesg.bootCopyright (c) 1992-2008 The FreeBSD Project.Copyright (c) 1979,
1980, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994 The Regents of the University of California. All rights
reserved.FreeBSD is a registered trademark of The FreeBSD Foundation.FreeBSD 7.1-PRERELEASE #1: Sat Nov 22
18:54:11 EET 2008 :/usr/src/sys/i386/compile/MOBILETimecounter "i8254" frequency 1193182 Hz quality 0CPU:
Intel(R) Atom(TM) CPU N270 @ 1.60GHz (1599.21-MHz 686-class CPU) Origin = "GenuineIntel" Id = 0x106c2 Stepping
= 2
Features=0xbfe9fbff<FPU,VME,DE,PSE,TSC,MSR,PAE,MCE,CX8,APIC,SEP,MTRR,PGE,MCA,CMOV,PAT,CLFLUSH,
DTS,ACPI,MMX,FXSR,SSE,SSE2,SS,HTT,TM,PBE>
Features2=0x40c39d<SSE3,DTES64,MON,DS_CPL,EST,TM2,SSSE3,xTPR,PDCM,<b22>> AMD
Features2=0x1<LAHF> Logical CPUs per core: 2real memory = 1062141952 (1012 MB)avail memory = 1025052672
(977 MB)ACPI APIC Table: <INTEL Napa >FreeBSD/SMP: Multiprocessor System Detected: 2 CPUs cpu0 (BSP): APIC
ID: 0 cpu1 (AP): APIC ID: 1ioapic0: Changing APIC ID to 4ioapic0 <Version 2.0> irq0 0-23 on motherboardkbd1 at
kbdmux0ath_hal: 0.10.5.6 (AR5210, AR5211, AR5212, AR5416, RF5111, RF5112, RF2413, RF5413, RF2133, RF2425,
RF2417)cryptosoft0: <software crypto> on motherboardacpi0: <INTEL Napa> on motherboardacpi0: [ITHREAD]acpi0:
Power Button (fixed)Timecounter "ACPI-fast" frequency 3579545 Hz quality 1000acpi_timer0: <24-bit timer at
```

3.579545MHz> port 0x408-0x40b on acpi0acpi\_ec0: <Embedded Controller: GPE 0x17> port 0x62,0x66 on acpi0acpi\_hpet0: <High Precision Event Timer> iomem 0xfed00000-0xfed003ff on acpi0Timecounter "HPET" frequency 14318180 Hz quality 900acpi\_button0: <Power Button> on acpi0acpi\_lid0: <Control Method Lid Switch> on acpi0acpi\_button1: <Sleep Button> on acpi0battery0: <ACPI Control Method Battery> on acpi0acpi\_acad0: <AC Adapter> on acpi0pci0: <ACPI Host-PCI bridge> port 0xcf8-0xcff on acpi0pci0: <ACPI PCI bus> on pci0vgapci0: <VGA-compatible display> port 0x60c0-0x60c7 mem 0x58480000-0x584ffff,0x40000000-0x4ffffff,0x58500000-0x5853ffff irq 16 at device 2.0 on pci0agp0: <Intel 945GME SVGA controller> on vgapci0agp0: detected 7932k stolen memoryagp0: aperture size is 256Mvgapci1: <VGA-compatible display> mem 0x58400000-0x5847ffff at device 2.1 on pci0pci0: <multimedia> at device 27.0 (no driver attached)pci1: <ACPI PCI-PCI bridge> at device 28.0 on pci0pci1: <ACPI PCI bus> on pci1pci2: <ACPI PCI-PCI bridge> at device 28.1 on pci0pci2: <ACPI PCI bus> on pci2re0: <RealTek 8101E/8102E/8102EL PCIe 10/100baseTX> port 0x3000-0x30ff mem 0x51010000-0x51010fff,0x51000000-0x5100ffff irq 17 at device 0.0 on pci2re0: turning off MSI enable bit.re0: Chip rev. 0x2480000re0: MAC rev. 0x00200000miibus0: <MII bus> on re0rphy0: <RTL8201L 10/100 media interface> PHY 1 on miibus0rphy0: 10baseT, 10baseT-FDX, 100baseTX, 100baseTX-FDX, autore0: Ethernet address: 00:23:8b:0f:ba:e8re0: [FILTER]pci3: <ACPI PCI-PCI bridge> at device 28.2 on pci0pci3: <ACPI PCI bus> on pci3ath0: <Atheros 5424/2424> mem 0x55200000-0x5520ffff irq 18 at device 0.0 on pci3ath0: [ITHREAD]ath0: WARNING: using obsolete if\_watchdog interfaceath0: Ethernet address: 00:23:4d:d4:1c:1dath0: mac 14.2 phy 7.0 radio 10.2pci4: <ACPI PCI-PCI bridge> at device 28.3 on pci0pci4: <ACPI PCI bus> on pci4uhci0: <UHCI (generic) USB controller> port 0x6080-0x609f irq 16 at device 29.0 on pci0uhci0: [GIANT-LOCKED]uhci0: [ITHREAD]usb0: <UHCI (generic) USB controller> on uhci0usb0: USB revision 1.0uhub0: <Intel UHCI root hub, class 9/0, rev 1.00/1.00, addr 1> on usb0uhub0: 2 ports with 2 removable, self powereduhci1: <UHCI (generic) USB controller> port 0x6060-0x607f irq 17 at device 29.1 on pci0uhci1: [GIANT-LOCKED]uhci1: [ITHREAD]usb1: <UHCI (generic) USB controller> on uhci1usb1: USB revision 1.0uhub1: <Intel UHCI root hub, class 9/0, rev 1.00/1.00, addr 1> on usb1uhub1: 2 ports with 2 removable, self powereduhci2: <UHCI (generic) USB controller> port 0x6040-0x605f irq 18 at device 29.2 on pci0uhci2: [GIANT-LOCKED]uhci2: [ITHREAD]usb2: <UHCI (generic) USB controller> on uhci2usb2: USB revision 1.0uhub2: <Intel UHCI root hub, class 9/0, rev 1.00/1.00, addr 1> on usb2uhub2: 2 ports with 2 removable, self powereduhci3: <UHCI (generic) USB controller> port 0x6020-0x603f irq 19 at device 29.3 on pci0uhci3: [GIANT-LOCKED]uhci3: [ITHREAD]usb3: <UHCI (generic) USB controller> on uhci3usb3: USB revision 1.0uhub3: <Intel UHCI root hub, class 9/0, rev 1.00/1.00, addr 1> on usb3uhub3: 2 ports with 2 removable, self poweredehci0: <Intel 82801GB/R (ICH7) USB 2.0 controller> mem 0x58544400-0x585447ffff irq 16 at device 29.7 on pci0ehci0: [GIANT-LOCKED]ehci0: [ITHREAD]usb4: EHCI version 1.0usb4: companion controllers, 2 ports each: usb0 usb1 usb2 usb3usb4: <Intel 82801GB/R (ICH7) USB 2.0 controller> on ehci0usb4: USB revision 2.0uhub4: <Intel EHCI root hub, class 9/0, rev 2.00/1.00, addr 1> on usb4uhub4: 8 ports with 8 removable, self poweredugen0: <SuYin Acer Crystal Eye webcam, class 239/2, rev 2.00/0.01, addr 2> on uhub4pci5: <ACPI PCI-PCI bridge> at device 30.0 on pci0pci5: <ACPI PCI bus> on pci5isab0: <PCI-ISA bridge> at device 31.0 on pci0isa0: <ISA bus> on isab0atapci0: <Intel ICH7M SATA300 controller> port 0x1f0-0x1f7,0x3f6,0x170-0x177,0x376,0x60a0-0x60af irq 17 at device 31.2 on pci0ata0: <ATA channel 0> on atapci0ata0: [ITHREAD]ata1: <ATA channel 1> on atapci0ata1: [ITHREAD]pci0: <serial bus, SMBus> at device 31.3 (no driver attached)atkbd0: <Keyboard controller (i8042)> port 0x60,0x64 irq 1 on acpi0atkbd0: <AT Keyboard> irq 1 on atkbd0atkbd0: [GIANT-LOCKED]atkbd0: [ITHREAD]psm0: <PS/2 Mouse> irq 12 on atkbd0psm0: [GIANT-LOCKED]psm0: [ITHREAD]psm0: model Synaptics Touchpad, device ID 0cpu0: <ACPI CPU> on acpi0est0: <Enhanced SpeedStep Frequency Control> on cpu0p4tcc0: <CPU Frequency Thermal Control> on cpu0cpu1: <ACPI CPU> on acpi0est1: <Enhanced SpeedStep Frequency Control> on cpu1p4tcc1: <CPU Frequency Thermal Control> on cpu1pmtimer0 on isa0orm0: <ISA Option ROM> at iomem 0xcf000-0xcffff npnid ORM0000 on isa0ppc0: parallel port not found.sc0: <System console> at flags 0x100 on isa0sc0: VGA <16 virtual consoles, flags=0x300>:sio0: configured irq 4 not in bitmap of probed irqs 0sio0: port may not be enabledsio0: configured irq 4 not in bitmap of probed irqs 0sio0: port may not be enabledsio0 at port 0x3f8-0x3ff irq 4 flags 0x10 on isa0sio0: type 8250 or not respondingsio0: [FILTER]sio1: configured irq 3 not in bitmap of probed irqs 0sio1: port may not be enabledvga0: <Generic ISA VGA> at port 0x3c0-0x3df iomem 0xa0000-0xbffff on isa0ums0: <A4Tech PS/2+USB Mouse, class 0/0, rev 1.10/0.01, addr 2> on uhub0ums0: 8 buttons and Z dir.Timecounters tick every 1.000 msecad0: 152627MB <WDC WD1600BEVT-22ZCT0 11.01A11> at ata0-master SATA150SMP: AP CPU #1 Launched!Trying to mount root from ufs:/dev/ad0s1a