

# Corel® LINUX® OS Hardware Compatibility List

**Disclaimer:** *The information contained in this listing is a compilation of information that is generally available regarding Linux compatibility issues. The information has not been independently verified by Corel and is provided "as is" and without warranty of any kind, express or implied.*

## Computers/Motherboards/BIOS

ISA, VLB, EISA, and PCI buses are all supported. PS/2 and Microchannel (MCA) is supported in the standard kernel 2.0.7. There is support for MCA in kernel 2.1.16 and newer, but this code is still a little buggy. For more information you can always look at the Micro Channel Linux Home Page ( <http://glycerine.itsmm.uni.edu/mca/>)

## Specific systems

IBM PS/2 MCA systems  
<ftp://ftp.dcrl.nd.edu/pub/misc/linux/>

Many new PCI boards are causing a couple of failure messages during boot time when "Probing PCI Hardware". The procedure presents the following message

**Warning :** Unknown PCI device (8086:7100). Please read include/linux/pci.h  
It tells you to read the pci.h file. From this file is the following quote

## Procedure to report new PCI devices

We are trying to collect information on new PCI devices, using the standard PCI identification procedure. If some warning is displayed at boot time, please report

- /proc/pci
- your exact hardware description. Try to find out which device is unknown. It may be your mainboard chipset. PCI-CPU bridge or PCI-ISA bridge.
- If you can't find the actual information in your hardware booklet, try to read the references of the chip on the board.
- Send all that to [linux-pcisupport@cao-vlsi.ibp.fr](mailto:linux-pcisupport@cao-vlsi.ibp.fr), and I'll add your device to the list as soon as possible

**BEFORE** you send a mail, please check the latest linux releases to be sure it has not been recently added. Normally spoken, your motherboard and the unknown PCI devices will function correctly.

## Unsupported

- Supermicro P5MMA with BIOS versions 1.36, 1.37 and 1.4. Linux will not boot on this motherboard. A new (beta) release of the BIOS which makes Linux boot, is available at <ftp.supermicro.com/mma9051.zip>
- Supermicro P5MMA98. Linux will not boot on this motherboard. A new (beta) release of the BIOS which makes Linux boot, is available at <ftp.supermicro.com/a98905.zip>

DataExpert Corp. ExpertColor TX531 V1.0 motherboard with chipset ACER M1531 (Date: 9729, TS6) and ACER M1543 (Date: 9732 TS6) seems not reproducible segmentations faults, kernel oops and kernel hangs under heavy load and tape access. The problem seems to be the PCI-bus, respectively the ACER chipset.

## PCMCIA

\* PCMCIA

<http://hyper.stanford.edu/HyperNews/get/pcmcia/home.html>

PCMCIA drivers currently support all common PCMCIA controllers, including Databook TCIC/2, Intel i82365SL, Cirrus PD67xx, and Vadem VG-468 chipsets. Motorola 6AHC05GA controller used in some Hyundai laptops is not supported. See Appendix B for a list of supported PCMCIA cards.

## CPU/FPU

Intel/AMD/Cyrix 386SX/DX/SL/DXL/SLC, 486SX/DX/SL/SX2/DX2/DX4 are supported. Intel Pentium, Pentium Pro and Pentium II (basically it's a Pentium Pro with MMX) also work. AMD K5 and K6 work well, although older versions of K6 should be avoided as they are buggy. Setting "internal cache" disabled in bios setup can be a workaround.

Also IDT Winchip C6-PSME2006A processors are supported under Linux.

Linux has built-in FPU emulation if you don't have a math coprocessor.

Experimental SMP (multiple CPU) support is included in kernel 1.3.31 and newer. Check the Linux/SMP Project page for details and updates.

\* Linux/SMP Project

<http://www.linux.org.uk/SMP/title.html>

*ULSI Math\*Co series has a bug in the FSAVE and FRSTOR instructions that causes problems with all protected mode operating systems. Some older IIT and Cyrix chips may also have this problem.*

## Memory

All memory like DRAM, EDO and SDRAM can be used with Linux. There is one thing you have to look at: normally the kernel is not supporting more than 64 Mb of memory. When you add more than 64 Mb of memory you have to add the following line to your LILO configuration file.

**append="mem=<number of Mb>M"**

*So, when you have 96 Mb of memory this should become*

**append="mem=96M"**

*Don't type a number higher than the number Mb you really have.  
This can present unpredictable crashes.*

## Video cards

Linux will work with all video cards in text mode, VGA cards not listed below probably will still work with mono VGA and/or standard VGA drivers.

If you're looking into buying a cheap video card to run X, keep in mind that accelerated cards (ATI Mach, ET4000/W32p, S3) are MUCH faster than unaccelerated or partially accelerated (Cirrus, WD) cards.

"32 bpp" is actually 24 bit color aligned on 32 bit boundaries. It does NOT mean the cards are capable of 32 bit color, they still display 24 bit color (16,777,216 colors). 24 bit packed pixels modes are not supported in XFree86, so cards that can do 24 bit modes to get higher resolutions in other OS's are not able to do this in X using XFree86. These cards include Mach32, Cirrus 542x, S3 801/805/868/968, ET4000, and others.

AGP (Accelerated Graphics Port) support is growing fast. Most of the X-servers (both freely available and commercial versions) have more or less support for AGP.

### Diamond video cards

Most currently available Diamond cards ARE supported by the current release of XFree86. Early Diamond cards may not be officially supported by XFree86, but there are ways of getting them to work. Diamond is now actively supporting the XFree86 Project.

2 the Max MAXColor S3 Trio64V+ .....	XF86_S3
3DLabs Oxygen GMX .....	XF86_3DLabs
928Movie .....	XF86_S3
AGX (generic) .....	XF86_AGX
ALG-5434(E) .....	XF86_SVGA
ASUS 3Dexplorer .....	XF86_SVGA

ASUS PCI-AV264CT .....	XF86_Mach64
ASUS PCI-V264CT .....	XF86_Mach64
ASUS Video Magic PCI V864 .....	XF86_S3
ASUS Video Magic PCI VT64 .....	XF86_S3
AT25 .....	XF86_SVGA
AT3D .....	XF86_SVGA
ATI 3D Pro Turbo .....	XF86_Mach64
ATI 3D Pro Turbo PC2TV .....	XF86_Mach64
ATI 3D Xpression .....	XF86_Mach64
ATI 3D Xpression+ .....	XF86_Mach64
ATI 3D Xpression+ PC2TV .....	XF86_Mach64
ATI 8514 Ultra (no VGA) .....	XF86_Mach8
ATI All-in-Wonder .....	XF86_Mach64
ATI All-in-Wonder Pro .....	XF86_Mach64
ATI Graphics Pro Turbo .....	XF86_Mach64
ATI Graphics Pro Turbo 1600 .....	XF86_Mach64
ATI Graphics Pro Turbo with AT&T 20C408 RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with ATI68860 RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with ATI68860B RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with ATI68860C RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with ATI68875 RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with CH8398 RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with STG1702 RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with STG1703 RAMDAC .....	XF86_Mach64
ATI Graphics Pro Turbo with TLC34075 RAMDAC .....	XF86_Mach64
ATI Graphics Ultra .....	XF86_Mach8
ATI Graphics Ultra Pro .....	XF86_Mach32
ATI Graphics Xpression .....	XF86_Mach64
ATI Graphics Xpression w/ ATI68860 RAMDAC .....	XF86_Mach64
ATI Graphics Xpression w/ ATI68860B RAMDAC .....	XF86_Mach64
ATI Graphics Xpression w/ ATI68860C RAMDAC .....	XF86_Mach64
ATI Graphics Xpression w/ ATI68875 RAMDAC .....	XF86_Mach64
ATI Graphics Xpression w/ AT&T 20C408 RAMDAC .....	XF86_Mach64
ATI Graphics Xpression w/ CH8398 RAMDAC .....	XF86_Mach64
ATI Graphics Xpression w/ Mach64 CT (264CT) .....	XF86_Mach64
ATI Graphics Xpression w/ STG1702 RAMDAC .....	XF86_Mach64
ATI Graphics Xpression with STG1703 RAMDAC .....	XF86_Mach64
ATI Graphics Xpression with TLC34075 RAMDAC .....	XF86_Mach64
ATI Mach32 .....	XF86_Mach32
ATI Mach64 .....	XF86_Mach64
ATI Mach64 3D RAGE II .....	XF86_Mach64
ATI Mach64 3D RAGE II+DVD .....	XF86_Mach64
ATI Mach64 3D Rage IIC .....	XF86_Mach64
ATI Mach64 3D Rage Pro .....	XF86_Mach64
ATI Mach64 CT (264CT), Internal RAMDAC .....	XF86_Mach64

ATI Mach64 GT (264GT), aka 3D RAGE, Int. RAMDAC .....	XF86_Mach64
ATI Mach64 VT (264VT), Internal RAMDAC .....	XF86_Mach64
ATI Mach64 with AT&T 20C408 RAMDAC .... ..	XF86_Mach64
ATI Mach64 with ATI68860 RAMDAC .....	XF86_Mach64
ATI Mach64 with ATI68860B RAMDAC .....	XF86_Mach64
ATI Mach64 with ATI68860C RAMDAC .....	XF86_Mach64
ATI Mach64 with ATI68875 RAMDAC .....	XF86_Mach64
ATI Mach64 with CH8398 RAMDAC .....	XF86_Mach64
ATI Mach64 with IBM RGB514 RAMDAC .....	XF86_Mach64
ATI Mach64 with Internal RAMDAC .....	XF86_Mach64
ATI Mach64 with STG1702 RAMDAC .....	XF86_Mach64
ATI Mach64 with STG1703 RAMDAC .....	XF86_Mach64
ATI Mach64 with TLC34075 RAMDAC .....	XF86_Mach64
ATI Pro Turbo+PC2TV, 3D Rage II+DVD .....	XF86_Mach64
ATI Ultra Plus .....	XF86_Mach32
ATI Video Xpression .....	XF86_Mach64
ATI Video Xpression+ .....	XF86_Mach64
ATI WinBoost .....	XF86_Mach64
ATI Win Boost with AT&T 20C408 RAMDAC .....	XF86_Mach64
ATI WinBoost with ATI68860 RAMDAC .....	XF86_Mach64
ATI WinBoost with ATI68860B RAMDAC .....	XF86_Mach64
ATI WinBoost with ATI68860C RAMDAC .....	XF86_Mach64
ATI WinBoost with ATI68875 RAMDAC .....	XF86_Mach64
ATI WinBoost with CH8398 RAMDAC .....	XF86_Mach64
ATI WinBoost with Mach64 CT (264CT) .....	XF86_Mach64
ATI WinBoost with STG1702 RAMDAC .....	XF86_Mach64
ATI WinBoost with STG1703 RAMDAC .....	XF86_Mach64
ATI WinBoost with TLC34075 RAMDAC .....	XF86_Mach64
ATI WinCharger .....	XF86_Mach64
ATI WinCharger with AT&T 20C408 RAMDAC .....	XF86_Mach64
ATI WinCharger with ATI68860 RAMDAC .....	XF86_Mach64
ATI WinCharger with ATI68860B RAMDAC ....	XF86_Mach64
ATI WinCharger with ATI68860C RAMDAC .....	XF86_Mach64
ATI WinCharger with ATI68875 RAMDAC .....	XF86_Mach64
ATI WinCharger with CH8398 RAMDAC .....	XF86_Mach64
ATI WinCharger with Mach64 CT (264CT) ....	XF86_Mach64
ATI WinCharger with STG1702 RAMDAC .....	XF86_Mach64
ATI WinCharger with STG1703 RAMDAC .....	XF86_Mach64
ATI WinCharger with TLC34075 RAMDAC .....	XF86_Mach64
ATI Win Turbo .....	XF86_Mach64
ATI WinTurbo with AT&T 20C408 RAMDAC ..	XF86_Mach64
ATI WinTurbo with ATI68860 RAMDAC .....	XF86_Mach64
ATI WinTurbo with ATI68860B RAMDAC .....	XF86_Mach64
ATI WinTurbo with ATI68860C RAMDAC .....	XF86_Mach64
ATI WinTurbo with ATI68875 RAMDAC .....	XF86_Mach64

ATI WinTurbo with CH8398 RAMDAC .....	XF86_Mach64
ATI WinTurbo with Mach64 CT (264CT) .....	XF86_Mach64
ATI WinTurbo with STG1702 RAMDAC .....	XF86_Mach64
ATI WinTurbo with STG1703 RAMDAC .....	XF86_Mach64
ATI WinTurbo with TLC34075 RAMDAC .....	XF86_Mach64
ATI Wonder SVGA .....	XF86_SVGA
ATI Xpert 98 .....	XF86_Mach64
ATI Xpert XL .....	XF86_Mach64
ATI Xpert@Play PCI and AGP, 3D Rage Pro .....	XF86_Mach64
ATI Xpert@Play 98 .....	XF86_Mach64
ATI Xpert@Work, 3D Rage Pro .....	XF86_Mach64
ATI integrated on Intel Maui MU440EX motherboard .....	XF86_Mach64
ATrend ATC-2165A .....	XF86_SVGA
AccelStar Permedia II AGP .....	XF86_3DLabs
Actix GE32+ 2MB .....	XF86_S3
Actix GE32i .....	XF86_S3
Actix GE64 .....	XF86_S3
Actix ProStar .....	XF86_SVGA
Actix ProStar 64 .....	XF86_SVGA
Actix Ultra .....	XF86_S3
Acumos AVGA3 .....	XF86_SVGA
Alliance ProMotion 6422 .....	XF86_SVGA
Ark Logic ARK1000PV (generic) .....	XF86_SVGA
Ark Logic ARK1000VL (generic) .....	XF86_SVGA
Ark Logic ARK2000MT (generic) .....	XF86_SVGA
Ark Logic ARK2000PV (generic) .....	XF86_SVGA
Avance Logic 2101 .....	XF86_SVGA
Avance Logic 2228 .....	XF86_SVGA
Avance Logic 2301 .....	XF86_SVGA
Avance Logic 2302 .....	XF86_SVGA
Avance Logic 2308 .....	XF86_SVGA
Avance Logic 2401 .....	XF86_SVGA
Binar Graphics AnyView .....	XF86_SVGA
Boca Vortex (Sierra RAMDAC) .....	XF86_AGX
COMPAQ Armada 7380DMT .....	XF86_S3
COMPAQ Armada 7730MT .....	XF86_S3
California Graphics SunTracer 6000 .....	XF86_SVGA
Canopus Co. Power Window 3DV .....	XF86_SVGA
Canopus Total-3D .....	XF86_SVGA
Cardex Challenger (Pro) .....	XF86_SVGA
Cardex Cobra .....	XF86_SVGA
Cardex Trio64 .....	XF86_S3
Cardex Trio64Pro .....	XF86_S3
Chips & Technologies CT64200 .....	XF86_SVGA
Chips & Technologies CT64300 .....	XF86_SVGA

Chips & Technologies CT65520 .....	XF86_SVGA
Chips & Technologies CT65525 .....	XF86_SVGA
Chips & Technologies CT65530 .....	XF86_SVGA
Chips & Technologies CT65535 .....	XF86_SVGA
Chips & Technologies CT65540 .....	XF86_SVGA
Chips & Technologies CT65545 .....	XF86_SVGA
Chips & Technologies CT65546 .....	XF86_SVGA
Chips & Technologies CT65548 .....	XF86_SVGA
Chips & Technologies CT65550 .....	XF86_SVGA
Chips & Technologies CT65554 .....	XF86_SVGA
Chips & Technologies CT65555 .....	XF86_SVGA
Chips & Technologies CT68554 .....	XF86_SVGA
Chips & Technologies CT69000 .....	XF86_SVGA
Cirrus Logic GD542x .....	XF86_SVGA
Cirrus Logic GD543x .....	XF86_SVGA
Cirrus Logic GD5446 (noname card) 1MB upg. to 2MB .....	XF86_SVGA
Cirrus Logic GD544x .....	XF86_SVGA
Cirrus Logic GD5462 .....	XF86_SVGA
Cirrus Logic GD5464 .....	XF86_SVGA
Cirrus Logic GD5465 .....	XF86_SVGA
Cirrus Logic GD5480 .....	XF86_SVGA
Cirrus Logic GD62xx (laptop) .....	XF86_SVGA
Cirrus Logic GD64xx (laptop) .....	XF86_SVGA
Cirrus Logic GD754x (laptop) .....	XF86_SVGA
Colorgraphic Dual Lightning .....	XF86_SVGA
Creative Blaster Exxtreme .....	XF86_3DLabs
Creative Labs 3D Blaster PCI (Verite 1000) .....	XF86_SVGA
Creative Labs Graphics Blaster 3D .....	XF86_SVGA
Creative Labs Graphics Blaster Eclipse (OEM Model CT6510) .....	XF86_SVGA
Creative Labs Graphics Blaster MA201 .....	XF86_SVGA
Creative Labs Graphics Blaster MA202 .....	XF86_SVGA
Creative Labs Graphics Blaster MA302 .....	XF86_SVGA
Creative Labs Graphics Blaster MA334 .....	XF86_SVGA
DFI-WG1000 .....	XF86_SVGA
DFI-WG5000 .....	XF86_SVGA
DFI-WG6000 .....	XF86_SVGA
DSV3325 .....	XF86_SVGA
DSV3326 .....	XF86_S3
DataExpert DSV3325 .....	XF86_SVGA
DataExpert DSV3365 .....	XF86_S3
Dell S3 805 .....	XF86_S3
Dell onboard ET4000 .....	XF86_SVGA
Diamond Edge 3D .....	XF86_SVGA
Diamond Fire GL 1000 .....	XF86_3DLabs
Diamond Fire GL 1000 PRO .....	XF86_3DLabs

Diamond Fire GL 3000 .....	XF86_3DLabs
Diamond Multimedia Stealth 3D 2000 .....	XF86_SVGA
Diamond Multimedia Stealth 3D 2000 PRO .....	XF86_SVGA
Diamond SpeedStar (Plus) .....	XF86_SVGA
Diamond SpeedStar 24 .....	XF86_SVGA
Diamond SpeedStar 24X (not fully supported) .....	XF86_SVGA
Diamond SpeedStar 64 .....	XF86_SVGA
Diamond SpeedStar A50 .....	XF86_SVGA
Diamond SpeedStar HiColor .....	XF86_SVGA
Diamond SpeedStar Pro (not SE) .....	XF86_SVGA
Diamond SpeedStar Pro 1100 .....	XF86_SVGA
Diamond SpeedStar Pro SE (CL-GD5430/5434) .....	XF86_SVGA
Diamond SpeedStar64 Graphics 2000/2200 .....	XF86_SVGA
Diamond Stealth 24 .....	XF86_S3
Diamond Stealth 32 .....	XF86_SVGA
Diamond Stealth 3D 2000 .....	XF86_SVGA
Diamond Stealth 3D 2000 PRO .....	XF86_SVGA
Diamond Stealth 3D 3000 .....	XF86_SVGA
Diamond Stealth 3D 4000 .....	XF86_SVGA
Diamond Stealth 64 DRAM SE .....	XF86_S3
Diamond Stealth 64 DRAM with S3 SDAC .....	XF86_S3
Diamond Stealth 64 DRAM with S3 Trio64 .....	XF86_S3
Diamond Stealth 64 VRAM .....	XF86_S3
Diamond Stealth 64 Video VRAM (TI RAMDAC) .....	XF86_S3
Diamond Stealth II S220 .....	XF86_SVGA
Diamond Stealth Pro .....	XF86_S3
Diamond Stealth VRAM .....	XF86_S3
Diamond Stealth Video 2500 .....	XF86_SVGA
Diamond Stealth Video DRAM .....	XF86_S3
Diamond Stealth64 Graphics 2001 series .....	XF86_SVGA
Diamond Stealth64 Graphics 2xx0 series (864 + SDAC) ..	XF86_S3
Diamond Stealth64 Graphics 2xx0 series (Trio64) .....	XF86_S3
Diamond Stealth64 Video 2001 series (2121/2201) .....	XF86_S3
Diamond Stealth64 Video 2120/2200 .....	XF86_S3
Diamond Stealth64 Video 3200 .....	XF86_S3
Diamond Stealth64 Video 3240/3400 (IBM RAMDAC) ..	XF86_S3
Diamond Stealth64 Video 3240/3400 (TI RAMDAC) ...	XF86_S3
Diamond Viper 330 .....	XF86_SVGA
Diamond Viper 550 .....	XF86_SVGA
Diamond Viper PCI 2Mb .....	XF86_P9000
Diamond Viper Pro Video .....	XF86_SVGA
Diamond Viper VLB 2Mb .....	XF86_P9000
Digital 24-plane TGA (ZLXp-E2) .....	XF86_TGA
Digital 24-plane+3D TGA (ZLXp-E3) .....	XF86_TGA
Digital 8-plane TGA (UDB/Multia) .....	XF86_TGA



Digital 8-plane TGA (ZLXp-E1) .....	XF86_TGA
EIZO (VRAM) .....	XF86_AGX
ELSA ERAZOR II .....	XF86_SVGA
ELSA GLoria Synergy .....	XF86_3DLabs
ELSA GLoria-L .....	XF86_3DLabs
ELSA GLoria-L/MX .....	XF86_3DLabs
ELSA GLoria-S .....	XF86_3DLabs
ELSA GLoria-XL .....	XF86_3DLabs
ELSA Gloria-4 .....	XF86_S3
ELSA Gloria-8 .....	XF86_S3
ELSA VICTORY ERAZOR .....	XF86_SVGA
ELSA Victory 3D .....	XF86_SVGA
ELSA Victory 3DX .....	XF86_SVGA
ELSA WINNER 1000/T2D .....	XF86_S3
ELSA Winner 1000 R3D .....	XF86_SVGA
ELSA Winner 1000AVI (AT&T 20C409 version) ....	XF86_S3
ELSA Winner 1000AVI (SDAC version) .....	XF86_S3
ELSA Winner 1000ISA .....	XF86_S3
ELSA Winner 1000PRO with S3 SDAC .....	XF86_S3
ELSA Winner 1000PRO with STG1700 or AT&T RAMDAC ..	XF86_S3
ELSA Winner 1000PRO/X .....	XF86_S3
ELSA Winner 1000TRIO .....	XF86_S3
ELSA Winner 1000TRIO/V .....	XF86_S3
ELSA Winner 1000TwinBus .....	XF86_S3
ELSA Winner 1000VL .....	XF86_S3
ELSA Winner 2000 .....	XF86_S3
ELSA Winner 2000/Office .....	XF86_3DLabs
ELSA Winner 2000AVI .....	XF86_S3
ELSA Winner 2000AVI/3D .....	XF86_SVGA
ELSA Winner 2000PRO-2 .....	XF86_S3
ELSA Winner 2000PRO-4 .....	XF86_S3
ELSA Winner 2000PRO/X-2 .....	XF86_S3
ELSA Winner 2000PRO/X-4 .....	XF86_S3
ELSA Winner 2000PRO/X-8 .....	XF86_S3
ELSA Winner 3000 .....	XF86_SVGA
ELSA Winner 3000-L-42 .....	XF86_SVGA
ELSA Winner 3000-M-22 .....	XF86_SVGA
ELSA Winner 3000-S .....	XF86_SVGA
EPSON CardPC (onboard) .....	XF86_SVGA
ET3000 (generic) .....	XF86_SVGA
ET4000 (generic) .....	XF86_SVGA
ET4000 W32i, W32p (generic) .....	XF86_SVGA
ET4000/W32 (generic) .....	XF86_SVGA
ET6000 (generic) .....	XF86_SVGA
ET6100 (generic) .....	XF86_SVGA

ExpertColor DSV3325 .....	XF86_SVGA
ExpertColor DSV3365 .....	XF86_S3
Generic VGA compatible .....	XF86_VGA16
Genoa 5400 .....	XF86_SVGA
Genoa 8500VL(-28) .....	XF86_SVGA
Genoa 8900 Phantom 32i .....	XF86_SVGA
Genoa Phantom 64i with S3 SDAC .....	XF86_S3
Genoa VideoBlitz III AV .....	XF86_S3
Hercules Dynamite .....	XF86_SVGA
Hercules Dynamite 128/Video .....	XF86_SVGA
Hercules Dynamite Power .....	XF86_SVGA
Hercules Dynamite Pro .....	XF86_SVGA
Hercules Graphite HG210 .....	XF86_AGX
Hercules Graphite Power .....	XF86_AGX
Hercules Graphite Pro .....	XF86_AGX
Hercules Graphite Terminator 64 .....	XF86_S3
Hercules Graphite Terminator 64/DRAM .....	XF86_S3
Hercules Graphite Terminator Pro 64 .....	XF86_S3
Hercules Stingray .....	XF86_SVGA
Hercules Stingray 128 3D .....	XF86_SVGA
Hercules Stingray 64/V with ICS5342 .....	XF86_SVGA
Hercules Stingray 64/V with ZoomDAC .....	XF86_SVGA
Hercules Stingray Pro .....	XF86_SVGA
Hercules Stingray Pro/V .....	XF86_SVGA
Hercules Terminator 3D/DX .....	XF86_SVGA
Hercules Terminator 64/3D .....	XF86_SVGA
Hercules Terminator 64/Video .....	XF86_S3
Hercules Thriller3D .....	XF86_SVGA
Integral FlashPoint .....	XF86_SVGA
Intel 5430 .....	XF86_SVGA
Interay PMC Viper .....	XF86_SVGA
JAX 8241 .....	XF86_S3
Jaton Video-58P .....	XF86_SVGA
Jaton Video-70P .....	XF86_SVGA
Jazz Multimedia G-Force 128 .....	XF86_SVGA
LeadTek WinFast 3D S600 .....	XF86_SVGA
LeadTek WinFast 3D S680 .....	XF86_SVGA
LeadTek WinFast S200 .....	XF86_SVGA
LeadTek WinFast S430 .....	XF86_S3
LeadTek WinFast S510 .....	XF86_S3
Leadtek WinFast 2300 .....	XF86_3DLabs
MELCO WGP-VG4S .....	XF86_SVGA
MELCO WGP-VX8 .....	XF86_SVGA
MSI MS-4417 .....	XF86_SVGA
Matrox Comet .....	XF86_SVGA

Matrox Marvel II .....	XF86_SVGA
Matrox Millennium 2/4/8MB .....	XF86_SVGA
Matrox Millennium (MGA) .....	XF86_SVGA
Matrox Millennium G200 4/8/16MB .....	XF86_SVGA
Matrox Millennium G200 SD 4/8/16MB .....	XF86_SVGA
Matrox Millennium II 4/8/16MB .....	XF86_SVGA
Matrox Millennium II AGP .....	XF86_SVGA
Matrox Mystique .....	XF86_SVGA
Matrox Mystique G200 4/8/16MB .....	XF86_SVGA
Matrox Productiva G100 4/8MB .....	XF86_SVGA
MediaGX .....	XF86_SVGA
MediaVision Proaxcel 128 .....	XF86_SVGA
Mirage Z-128 .....	XF86_SVGA
Miro Crystal 10SD with GenDAC .....	XF86_S3
Miro Crystal 12SD .....	XF86_S3
Miro Crystal 16S .....	XF86_S3
Miro Crystal 20SD PCI with S3 SDAC .....	XF86_S3
Miro Crystal 20SD VLB with S3 SDAC (BIOS 3.xx) ...	XF86_S3
Miro Crystal 20SD with ICD2061A (BIOS 2.xx) ..	XF86_S3
Miro Crystal 20SD with ICS2494 (BIOS 1.xx) .....	XF86_S3
Miro Crystal 20SV .....	XF86_S3
Miro Crystal 22SD .....	XF86_S3
Miro Crystal 40SV .....	XF86_S3
Miro Crystal 80SV .....	XF86_S3
Miro Crystal 8S .....	XF86_S3
Miro Crystal DVD .....	XF86_SVGA
Miro miroCRYSTAL VRX .....	XF86_SVGA
Miro miroMedia 3D .....	XF86_SVGA
Miro MiroVideo 20TD .....	XF86_SVGA
Miro Video 20SV .....	XF86_S3
Neomagic .....	XF86_SVGA
Number Nine FX Motion 331 .....	XF86_S3
Number Nine FX Motion 332 .....	XF86_SVGA
Number Nine FX Motion 531 .....	XF86_S3
Number Nine FX Motion 771 .....	XF86_S3
Number Nine FX Vision 330 .....	XF86_S3
Number Nine GXE Level 10/11/12 .....	XF86_S3
Number Nine GXE Level 14/16 .....	XF86_S3
Number Nine GXE64 .....	XF86_S3
Number Nine GXE64 Pro .....	XF86_S3
Number Nine GXE64 with S3 Trio64 .....	XF86_S3
Number Nine Imagine I-128 (2-8MB) .....	XF86_I128
Number Nine Imagine I-128 Series 2 (2-4MB) .....	XF86_I128
Number Nine Imagine-128-T2R .....	XF86_I128
Number Nine Revolution 3D AGP (4-8MB SGRAM) .....	XF86_I128

Number Nine Visual 9FX Reality 332 .....	XF86_SVGA
Oak 87 ISA (generic) .....	XF86_SVGA
Oak 87 VLB (generic) .....	XF86_SVGA
Oak ISA Card (generic) .....	XF86_SVGA
Ocean (octek) VL-VGA-1000 .....	XF86_SVGA
Octek AVGA-20 .....	XF86_SVGA
Octek Combo-26 .....	XF86_SVGA
Octek Combo-28 .....	XF86_SVGA
Octek VL-VGA-26 .....	XF86_SVGA
Octek VL-VGA-28 .....	XF86_SVGA
Orchid Celsius (AT&T RAMDAC) .....	XF86_AGX
Orchid Celsius (Sierra RAMDAC) .....	XF86_AGX
Orchid Fahrenheit 1280 .....	XF86_S3
Orchid Fahrenheit VA .....	XF86_S3
Orchid Fahrenheit-1280+ .....	XF86_S3
Orchid Kelvin 64 .....	XF86_SVGA
Orchid Kelvin 64 VLB Rev A .....	XF86_SVGA
Orchid Kelvin 64 VLB Rev B .....	XF86_SVGA
Orchid P9000 VLB .....	XF86_P9000
Orchid Technology Fahrenheit Video 3D .....	XF86_SVGA
PC-Chips M567 Mainboard .....	XF86_SVGA
Paradise Accelerator Value .....	XF86_SVGA
Paradise/WD 90CXX .....	XF86_SVGA
PixelView Combo TV 3D AGP (Prolink) .....	XF86_SVGA
PixelView Combo TV Pro (Prolink) .....	XF86_SVGA
RIVA TNT .....	XF86_SVGA
RIVA128 .....	XF86_SVGA
Rendition Verite 1000 .....	XF86_SVGA
Rendition Verite 2x00 .....	XF86_SVGA
Revolution 3D (T2R) .....	XF86_I128
S3 801/805 (generic) .....	XF86_S3
S3 801/805 with ATT20c490 RAMDAC .....	XF86_S3
S3 801/805 with ATT20c490 RAMDAC and ICD2061A .....	XF86_S3
S3 801/805 with Chrontel 8391 .....	XF86_S3
S3 801/805 with S3 GenDAC .....	XF86_S3
S3 801/805 with SC1148{2,3,4} RAMDAC .....	XF86_S3
S3 801/805 with SC1148{5,7,9} RAMDAC .....	XF86_S3
S3 864 (generic) .....	XF86_S3
S3 864 with ATT 20C498 or 21C498 .....	XF86_S3
S3 864 with SDAC (86C716) .....	XF86_S3
S3 864 with STG1703 .....	XF86_S3
S3 868 (generic) .....	XF86_S3
S3 868 with ATT 20C409 .....	XF86_S3
S3 868 with ATT 20C498 or 21C498 .....	XF86_S3
S3 868 with SDAC (86C716) .....	XF86_S3

S3 86C260 (generic) .....	XF86_SVGA
S3 86C280 (generic) .....	XF86_SVGA
S3 86C325 (generic) .....	XF86_SVGA
S3 86C357 (generic) .....	XF86_SVGA
S3 86C365 (Trio3D) .....	XF86_VGA16
S3 86C375 (generic) .....	XF86_SVGA
S3 86C385 (generic) .....	XF86_SVGA
S3 86C391 (Savage3D) .....	XF86_VGA16
S3 86C764 (generic) .....	XF86_S3
S3 86C765 (generic) .....	XF86_S3
S3 86C775 (generic) .....	XF86_S3
S3 86C785 (generic) .....	XF86_S3
S3 86C801 (generic) .....	XF86_S3
S3 86C805 (generic) .....	XF86_S3
S3 86C864 (generic) .....	XF86_S3
S3 86C868 (generic) .....	XF86_S3
S3 86C911 (generic) .....	XF86_S3
S3 86C924 (generic) .....	XF86_S3
S3 86C928 (generic) .....	XF86_S3
S3 86C964 (generic) .....	XF86_S3
S3 86C968 (generic) .....	XF86_S3
S3 86C988 (generic) .....	XF86_SVGA
S3 86CM65 .....	XF86_S3
S3 911/924 (generic) .....	XF86_S3
S3 924 with SC1148 DAC .....	XF86_S3
S3 928 (generic) .....	XF86_S3
S3 964 (generic) .....	XF86_S3
S3 968 (generic) .....	XF86_S3
S3 Aurora64V+ (generic) .....	XF86_S3
S3 Savage3D .....	XF86_VGA16
S3 Trio32 (generic) .....	XF86_S3
S3 Trio3D .....	XF86_VGA16
S3 Trio64 (generic) .....	XF86_S3
S3 Trio64V+ (generic) .....	XF86_S3
S3 Trio64V2 (generic) .....	XF86_S3
S3 Trio64V2/DX (generic) .....	XF86_S3
S3 Trio64V2/GX (generic) .....	XF86_S3
S3 ViRGE (generic) .....	XF86_SVGA
S3 ViRGE (old S3V server) .....	XF86_SVGA
S3 ViRGE/DX (generic) .....	XF86_SVGA
S3 ViRGE/GX (generic) .....	XF86_SVGA
S3 ViRGE/GX2 (generic) .....	XF86_SVGA
S3 ViRGE/MX (generic) .....	XF86_SVGA
S3 ViRGE/MX+ (generic) .....	XF86_SVGA
S3 ViRGE/VX (generic) .....	XF86_SVGA

S3 Vision864 (generic) .....	XF86_S3
S3 Vision868 (generic) .....	XF86_S3
S3 Vision964 (generic) .....	XF86_S3
S3 Vision968 (generic) .....	XF86_S3
SHARP 9080 .....	XF86_S3
SHARP 9090 .....	XF86_S3
SNI PC5H W32 .....	XF86_SVGA
SNI Scenic W32 .....	XF86_SVGA
SPEA Mercury 64 .....	XF86_S3
SPEA Mirage .....	XF86_S3
SPEA/V7 Mercury .....	XF86_S3
SPEA/V7 Mirage P64 .....	XF86_S3
SPEA/V7 Mirage P64 with S3 Trio64 .....	XF86_S3
SPEA/V7 Mirage VEGA Plus .....	XF86_SVGA
SPEA/V7 ShowTime Plus .....	XF86_SVGA
STB Horizon .....	XF86_SVGA
STB Horizon Video .....	XF86_SVGA
STB LightSpeed .....	XF86_SVGA
STB LightSpeed 128 .....	XF86_SVGA
STB MVP-2 .....	XF86_SVGA
STB MVP-2 PCI .....	XF86_SVGA
STB MVP-2X .....	XF86_SVGA
STB MVP-4 PCI .....	XF86_SVGA
STB MVP-4X .....	XF86_SVGA
STB Nitro (64) .....	XF86_SVGA
STB Nitro 3D .....	XF86_SVGA
STB Nitro 64 Video .....	XF86_SVGA
STB Pegasus .....	XF86_S3
STB Powergraph 64 .....	XF86_S3
STB Powergraph 64 Video .....	XF86_S3
STB Powergraph X-24 .....	XF86_S3
STB Systems Powergraph 3D .....	XF86_SVGA
STB Systems Velocity 3D .....	XF86_SVGA
STB Velocity 128 .....	XF86_SVGA
STB Velocity 64 Video .....	XF86_S3
STB nvidia 128 .....	XF86_SVGA
SiS 3D PRO AGP .....	XF86_SVGA
SiS 5597 .....	XF86_SVGA
SiS 5598 .....	XF86_SVGA
SiS 6326 .....	XF86_SVGA
SiS SG86C201 .....	XF86_SVGA
SiS SG86C205 .....	XF86_SVGA
SiS SG86C215 .....	XF86_SVGA
SiS SG86C225 .....	XF86_SVGA
Sierra Screaming 3D .....	XF86_SVGA

Sigma Concorde .....	XF86_SVGA
Sigma Legend .....	XF86_SVGA
Spider Black Widow .....	XF86_AGX
Spider Black Widow Plus .....	XF86_AGX
Spider Tarantula 64 .....	XF86_S3
Spider VLB Plus .....	XF86_SVGA
TechWorks Thunderbolt .....	XF86_SVGA
Techworks Ultimate 3D .....	XF86_SVGA
Toshiba Tecra 540CDT .....	XF86_SVGA
Toshiba Tecra 550CDT .....	XF86_SVGA
Toshiba Tecra 750CDT .....	XF86_SVGA
Toshiba Tecra 750DVD .....	XF86_SVGA
Trident 3DImage975 (generic) .....	XF86_SVGA
Trident 3DImage975 AGP (generic) .....	XF86_SVGA
Trident 3DImage985 (generic) .....	XF86_SVGA
Trident 8900/9000 (generic) .....	XF86_SVGA
Trident 8900D (generic) .....	XF86_SVGA
Trident Cyber 9382 (generic) .....	XF86_SVGA
Trident Cyber 9385 (generic) .....	XF86_SVGA
Trident Cyber 9388 (generic) .....	XF86_SVGA
Trident Cyber 9397 (generic) .....	XF86_SVGA
Trident TGUI9400CXi (generic) .....	XF86_SVGA
Trident TGUI9420DGi (generic) .....	XF86_SVGA
Trident TGUI9430DGi (generic) .....	XF86_SVGA
Trident TGUI9440 (generic) .....	XF86_SVGA
Trident TGUI9660 (generic) .....	XF86_SVGA
Trident TGUI9680 (generic) .....	XF86_SVGA
Trident TGUI9682 (generic) .....	XF86_SVGA
Trident TGUI9685 (generic) .....	XF86_SVGA
Trident TVGA 8800BR .....	XF86_VGA16
Trident TVGA 8800CS .....	XF86_VGA16
Trident TVGA9200CXr (generic) .....	XF86_SVGA
Unsupported VGA compatible .....	XF86_VGA16
VI720 .....	XF86_SVGA
VL-41 .....	XF86_S3
VidTech FastMax P20 .....	XF86_S3
VideoLogic GraftixStar 300 .....	XF86_S3
VideoLogic GraftixStar 400 .....	XF86_S3
VideoLogic GraftixStar 500 .....	XF86_S3
VideoLogic GraftixStar 550 .....	XF86_SVGA
VideoLogic GraftixStar 560 (PCI/AGP) .....	XF86_SVGA
VideoLogic GraftixStar 600 .....	XF86_SVGA
VideoLogic GraftixStar 700 .....	XF86_S3
ViewTop PCI .....	XF86_SVGA
WD 90C24 (laptop) .....	XF86_SVGA

WD 90C24A or 90C24A2 (laptop) .....	XF86_SVGA
Weitek P9100 (generic) .....	XF86_SVGA
WinFast 3D S600 .....	XF86_SVGA
WinFast 3D S600 .....	XF86_SVGA
WinFast S200 .....	XF86_SVGA
WinFast S430 .....	XF86_S3
WinFast S510 .....	XF86_S3
XGA-1 (ISA bus) .....	XF86_AGX
XGA-2 (ISA bus) .....	XF86_AGX

## Commercial X servers

Commercial X servers provide support for cards not supported by XFree86, and might give better performances for cards that are supported by XFree86. In general they support many more cards than XFree86, so I'll only list cards that aren't supported by XFree86 here. Contact the vendors directly or check the Commercial HOWTO for more info.

## Xi Graphics, Inc

Xi Graphics, Inc <http://www.xig.com> (formerly known as X Inside, Inc) is selling three X server products (cards supported are sorted by manufacturer):

- \* Accelerated-X Display Server
  - o 3Dlabs
    - + 300SX
    - + 500TX Glint
    - + 500MX Glint
    - + Permedia 4MB/8MB
    - + Permedia II 4MB/8MB
  - o Actix
    - + GE32plus 1MB/2MB
    - + GE32ultra 2MB
    - + GraphicsENGINE 64 1MB/2MB
    - + ProSTAR 64 1MB/2MB
  - o Alliance
    - + ProMotion-3210 1MB/2MB
    - + ProMotion-6410 1MB/2MB
    - + ProMotion-6422 1MB/2MB
  - o ARK Logic
    - + ARK1000PV 1MB/2MB
    - + ARK1000VL 1MB/2MB
    - + ARK2000PV 1MB/2MB
  - o AST



- + Manhattan 5090P (GD5424) 512KB
- o ATI
  - + 3D Xpression 1MB/2MB
  - + 3D Pro Turbo PC2TV 4MB/8MB
  - + 3D Pro Turbo PC2TV 6144
  - + 3D Xpression+ PC2TV 2MB/4MB
  - + 3D Xpression+ 2MB/4MB
  - + ALL-IN-WONDER 4MB/8MB
  - + ALL-IN-WONDER PRO 4MB/8MB
  - + Graphics Ultra (Mach8) 1MB
  - + Graphics Pro Turbo (Mach64/VRAM) 2MB/4MB
  - + Graphics Pro Turbo 1600 (Mach64/VRAM) 2MB/4MB
  - + Graphics Ultra Plus (Mach32) 2MB
  - + 8514/Ultra (Mach8) 1MB
  - + Graphics Ultra Pro (Mach32) 1MB/2MB
  - + Graphics Vantage (Mach8) 1MB
  - + VGA Wonder Plus 512KB
  - + VGA Wonder XL 1MB
  - + Video Xpression 1MB
  - + XPERT@Play 4MB/6MB/8MB
  - + XPERT@Work 4MB/6MB/8MB
  - + Video Xpression 2MB
  - + WinBoost (Mach64/DRAM) 2MB
  - + WinTurbo (Mach64/VRAM) 2MB
  - + Graphics Wonder (Mach32) 1MB
  - + Graphics Xpression 1MB/2MB
  - + Rage II (SGRAM) 2MB/4MB/8MB
  - + Rage II+ (SGRAM) 2MB/4MB/8MB
  - + Rage Pro 2MB/4MB/8MB
- o Avance Logic
  - + ALG2101 1MB
  - + ALG2228 1MB/2MB
  - + ALG2301 1MB/2MB
- o Boca
  - + Voyager 1MB/2MB
  - + Vortek-VL 1MB/2MB
- o Colorgraphic
  - + Dual Lightning 2MB
  - + Pro Lightning Accelerator 2MB
  - + Quad Pro Lightning Accelerator 2MB
  - + Twin Turbo Accelerator 1MB/2MB
- o Chips & Technology
  - + 64300 1MB/2MB
  - + 64310 1MB/2MB
  - + 65510 512KB

- + 65520 1MB
- + 65530 1MB
- + 65535 1MB
- + 65540 1MB
- + 65545 1MB
- + 65550 2MB
- + 82C450 512KB
- + 82C451 256KB
- + 82C452 512KB
- + 82C453 1MB
- + 82C480 1MB/2MB
- + 82C481 1MB/2MB
- o Cirrus Logic
  - + GD5402 512KB
  - + GD5420 1MB
  - + GD5422 1MB
  - + GD5424 1MB
  - + GD5426 1MB/2MB
  - + GD5428 1MB/2MB
  - + GD5429 1MB/2MB
  - + GD5430 1MB/2MB
  - + GD5434 1MB/2MB
  - + GD5436 1MB/2MB
  - + GD5440 1MB/2MB
  - + GD5446 1MB/2MB
  - + GD5462 2MB/4MB PCI and AGP
  - + GD5464 2MB/4MB PCI and AGP
  - + GD5465 2MB/4MB PCI and AGP
  - + GD54M30 1MB/2MB
  - + GD54M40 1MB/2MB
- o Compaq
  - + ProLiant Series 512KB
  - + ProSignia Series 512KB
  - + QVision 1024 1MB
  - + QVision 1280 1MB/2MB
  - + QVision 2000+ 2MB
  - + QVision 2000 2MB
- o DEC
  - + DECpc XL 590 (GD5428) 512KB
- o Dell
  - + 466/M & 466/ME (S3 805) 1MB
  - + OnBoard ET4000 1MB
  - + DGX (JAWS) 2MB
  - + OptiPlex XMT 590 (Vision864) 2MB
- o Diamond

- + Fire GL 1000 Pro 4MB/8MB
- + Fire GL 1000 4MB/8Mb
- + Stealth 3D 2000 2MB/4MB
- + Stealth 3D 3000XL 2MB/4MB
- + Stealth 64 Graphics 2001 1MB/2MB
- + Stealth 64 Graphics 2121XL 1MB/2MB
- + Stealth 64 Graphics 2201XL 2MB
- + SpeedStar 1MB
- + SpeedStar 64 Graphics 2000 1MB/2MB
- + SpeedStar 24 1MB
- + SpeedStar 24X 1MB
- + SpeedStar 64 1MB/2MB
- + SpeedStar Hicolor 1MB
- + SpeedStar PCI 1MB
- + SpeedStar Pro 1MB
- + SpeedStar Pro SE 1MB/2MB
- + Stealth 1MB
- + Stealth 24 1MB
- + Stealth 32 1MB/2MB
- + Stealth 64 VRAM 2MB/4MB
- + Stealth 64 DRAM 1MB/2MB
- + Stealth 64 Video VRAM (175MHz) 2MB/4MB
- + Stealth 64 Video DRAM 1MB/2MB
- + Stealth 64 Video VRAM (220MHz) 2MB/4MB
- + Stealth Hicolor 1MB
- + Stealth Pro 1MB/2MB
- + Stealth SE 1MB/2MB
- + Stealth 64 Video 2001TV 2MB
- + Stealth 64 Video 2121 1MB/2MB
- + Stealth 64 Video 2121TV 1MB/2MB
- + Stealth 64 Video 2201 2MB
- + Stealth 64 Video 2201TV 2MB
- + Stealth 64 Video 3200 2MB
- + Stealth 64 Video 3240 2MB/4MB
- + Stealth 64 Video 3400 4MB
- + Viper 1MB/2MB
- + Viper Pro 2MB
- + Viper Pro Video 2MB/4MB
- + Viper SE 2MB/4MB
- o ELSA
  - + VICTORY 3D 2MB/4MB
  - + WINNER 1000 1MB/2MB
  - + WINNER 1000AVI 1MB/2MB
  - + WINNER 1000ISA 1MB/2MB
  - + WINNER 1000PRO 1MB/2MB

- + WINNER 1000TRIO 1MB/2MB
- + WINNER 1000TRIO/V 1MB/2MB
- + WINNER 100VL 1MB
- + WINNER 2000 2MB/4MB
- + WINNER 2000AVI 2MB/4MB
- + WINNER 2000AVI/3D 2MB/4MB
- + WINNER 2000PRO 2MB/4MB
- + WINNER 2000PRO/X 2MB/4MB/8MB
- + WINNER3000-L 4MB
- + WINNER3000-M 2MB
- + WINNER3000-S 2MB
- + WINNER 1024 1MB
- + WINNER 1280, TLC34075 Palette 2MB
- + WINNER 1280, TLC34076 Palette 2MB
- + Gloria-XL
- + Gloria-MX
- + Gloria-L
- + Synergy
- o Everex
  - + ViewPoint 64P 1MB/2MB
  - + VGA Trio 64P 1MB/2MB
- o Gateway
  - + Mach64 Accelerator (Mach64/VRAM) 2MB
- o Genoa
  - + 5400 512KB
  - + 8500/8500VL 1MB
  - + Phantom 32i 8900 2MB
  - + Phantom 64 2MB
- o Hercules
  - + Dynamite 1MB
  - + Dynamite Pro 1MB/2MB
  - + Dynamite Power 2MB
  - + Dynamite 3D / GL
  - + Graphite 1MB
  - + Stingray 64 1MB/2MB
  - + Stingray Pro 1MB/2MB
  - + Stringray 1MB
  - + Terminator 3D 2MB/4MB
  - + Terminator 64/Video 2MB
  - + Graphite Terminator Pro 2MB/4MB
- o HP
  - + NetServer LF/LC/LE (TVGA9000i) 512KB
  - + Vectra VL2 (GD5428) 1MB
  - + Vectra XM2i (Vision864) 1MB/2MB
  - + Vectra XU (Vision864) 1MB/2MB

- o IBM
  - + 8514/A 1MB
  - + PC 300 Series (GD5430) 1MB
  - + PC 300 Series (Vision864) 1MB/2MB
  - + PC 700 Series (Vision864) 1MB/2MB
  - + PS/ValuePoint Performance Series (Vision864) 1MB/2MB
  - + VC550 1MB
  - + VGA 256KB
  - + XGA-NI 1MB
  - + XGA 1MB
- o IIT
  - + AGX014 1MB
  - + AGX015 1MB/2MB
- o Integral
  - + FlashPoint 1MB/2MB
- o Leadtek
  - + WinFast L2300 4MB/8MB
- o Matrox
  - + Comet 2MB
  - + Marvel II 2MB
  - + Impression (MGA-IMP/3/A/H, MGA-IMP/3/V/H, MGA-IMP/3/M/H) 3MB
  - + Impression Lite (MGA-IMP+/LTE/P) 2MB
  - + Impression Plus Lite (MGA-IMP+/LTE/V) 2MB
  - + Millennium (MGA-MIL) 2MB/4MB/8MB
  - + Millennium 220 (MGA-MIL) 2MB/4Mb/8MB
  - + Millennium PowerDoc (WRAM) 2MB/4MB/8MB
  - + Millennium II (WRAM) 2MB/4MB/8MB PCI and AGP
  - + Mystique (MGA-MYS) 2MB/4MB
  - + Mystique 220
  - + Matrox (con.t)
  - + Impression Plus (MGA-IMP+/P, MGA-IMP+/A) 2MB/4MB
  - + Impression Plus 220 (MGA-IMP+/P/H, MGA-IMP+/A/H) 2MB/4MB
  - + Impression Pro (MGA-PRO/4.5/V) 4.5MB
  - + Ultima Plus (MGA-PCI/2+, MGA-VLB/2+) 2MB/4MB
  - + Ultima (MGA-ULT/2/A, MGA-PCI/2, MGA-VLB/2) 2MB
  - + Ultima (MGA-ULT/2/A/H, MGA-ULT\_2/M/H) 2MB
  - + Ultima Plus 200 (MGA-PCI/4/200, MGA-VLB/4/200) 4MB
- o MaxVision
  - + VideoMax 2000 2MB/4MB
- o Metheus
  - + Premier 801 1MB
  - + Premier 928-1M 1MB
  - + Premier 928-2M 2MB
  - + Premier 928-4M 4MB
- o Micronics

- + Mpower 4 Plus (Mach64) 1MB
- o MIRO
  - + miroCRYSTAL 10AD 1MB
  - + miroCRYSTAL 12SD 1MB
  - + miroCRYSTAL 12SD 2MB
  - + miroCRYSTAL 20PV 2MB
  - + miroCRYSTAL 20SD 2MB
  - + miroCRYSTAL 20SV 2MB
  - + miroCRYSTAL 22SD 2MB
  - + miroCRYSTAL 40SV 4MB
  - + miroCRYSTAL VR2000 2MB/4MB
  - + miroMAGIC 40PV 4MB
  - + miroMAGIC plus 2MB
  - + miroVIDEO 12PD 1MB/2MB
  - + miroVIDEO 20SD 2MB
  - + miroVIDEO 20SV 2MB
  - + miroVIDEO 20TD 2MB
  - + miroVIDEO 22SD 2MB
  - + miroVIDEO 40SV 4MB
- o NEC
  - + Versa P Series 1MB
- o Nth Graphics
  - + Engine/150 2MB
  - + Engine/250 2MB
- o Number Nine
  - + GXE Level 10, AT&T 20C491 Palette 1MB
  - + GXE Level 10, Bt485 or AT&T20C505 Palette 1MB
  - + GXE Level 11 2MB
  - + GXE Level 12 3MB
  - + GXE Level 14 4MB
  - + GXE Level 16 4MB
  - + GXE64 1MB/2MB
  - + GXE64pro 2MB/4Mb
  - + GXE64pro (-1600) 2MB/4MB
  - + Imagine 128 2MB
  - + Image 128 (-1280) 4MB
  - + Image 128 Series 2 (DRAM) 2MB/4Mb
  - + Image 128 Pro (-1600) 4MB/8MB
  - + Image 128 Series 2 (VRAM) 2MB/4MB/8MB
  - + Image 128 Series III (Revolution 3D) (WRAM) 8MB/16MB PCI and AGP
  - + Revolution 3D "Ticket to Ride" (WRAM) 8MB/16MB PCI and AGP
  - + 9FX Motion331 1MB/2MB
  - + 9FX Motion531 1MB/2MB
  - + 9FX Motion771 2MB/4MB

- + 9FX Reality332 2MB
- + 9FX Reality772 2MB/4MB
- + 9FX Reality 334 PCI and AGP
- + 9FX Vision330 1MB/2MB
- o Oak Technology
  - + OTI-067 512KB
  - + OTI-077 1MB
  - + OTI-087 1MB
  - + OTI-107 1MB/2MB
  - + OTI-111 1MB/2MB
- o Orchid
  - + Fahrenheit 1280 Plus, ATT20C491 Palette 1MB
  - + Fahrenheit 1280 1MB
  - + Fahrenheit 1280 Plus, SC15025 Palette 1MB
  - + Fahrenheit ProVideo 64 2MB/4MB
  - + Fahrenheit Video 3D 2MB
  - + Kelvin 64 1MB/2MB
  - + Kelvin Video64 1MB/2MB
  - + P9000 2MB
- o Packard Bell
  - + Series 5000 Motherboard 1 MB
- o Paradise
  - + 8514/A 1MB
  - + Accelerator 24 1MB
  - + Accelerator Value card 1MB
  - + Bahamas 64 1MB/2MB
  - + Bali 32 1MB/2MB
  - + VGA 1024 512KB
  - + VGA Professional 512KB
- o Pixelworks
  - + WhirlWIN WL1280 (110MHz) 2MB
  - + WhirlWIN WL1280 (135MHz) 2MB
  - + WhirlWIN WW1280 (110MHz) 2MB
  - + WhirlWIN WW1280 (135MHz) 2MB
  - + WhirlWIN WW1600 1MB
- Radius
  - + XGA-2 1MB
- o Reveal
  - + VC200 1MB
  - + VC300 1MB
  - + VC700 1MB
- o S3
  - + ViRGE 2MB/4MB
  - + ViRGE/DX 2MB/4MB
  - + ViRGE/GX 2MB/4MB

- + ViRGE/GX /2 2MB/4MB
- + ViRGE/VX 2MB/4MB
- + Trio32 1MB/2MB
- + Trio64 1MB/2MB
- + Trio64V+ 1MB/2MB
- + Trio64V2/DX 1MB/2MB
- + Trio64V2/GX 1MB/2MB
- + 801 1MB/2MB
- + 805 1MB/2MB
- + Vision864 1MB/2MB
- + Vision866 1MB/2MB
- + Vision868 1MB/2MB
- + 911 1MB
- + 924 1MB
- + 928 1MB
- + 928 2MB/4MB
- o Sierra
  - + Falcon/64 1MB/2MB
- o Sigma
  - + Legend 1MB
- o SPEA/V7
  - + Mercury P64 2MB
  - + Storm Pro 4MB
  - + ShowTime Plus 2MB
  - + STB
  - + Evolution VGA 1MB
  - + Horizon Plus 1MB
  - + Horizon VGA 1MB
  - + Horizon 64 1MB/2MB
  - + Horizon 64 Video 1MB/2MB
  - + Horizon Video 1MB
  - + LightSpeed 2MB
  - + LightSpeed 128 2MB
  - + Nitro 3D 2MB/4MB
  - + Nitro 64 1MB/2MB
  - + Nitro 64 Video 1MB/2MB
  - + PowerGraph VL-24 1MB
  - + PowerGraph X-24 1MB
  - + PowerGraph 64 3D 2MB
  - + PowerGraph 64 1MB/2MB
  - + PowerGraph 64 Video 1MB/2MB
  - + PowerGraph Pro 2MB
  - + Velocity 3D 4MB
  - + Velocity 64V 2MB/4MB
- o Toshiba



- + T4900CT 1MB
- o Trident
  - + TGUI9400CXi 1MB/2MB
  - + TGUI9420DGi 1MB/2MB
  - + TGUI9440 1MB/2MB
  - + TGUI9660 1MB/2MB
  - + TGUI9680 1MB/2MB
  - + TVGA8900B 1MB
  - + TVGA8900C 1MB
  - + TVGA8900CL 1MB
  - + TVGA8900D 1MB
  - + TVGA9000 512KB
  - + TVGA9000i 512KB
  - + TVGA9200CXr 1MB/2MB
- o Tseng Labs
  - + ET3000 512KB
  - + ET4000 1MB
  - + ET6000 2MB/4MB
  - + VGA/16 (ISA) 1MB
  - + VGA/16 (VLB) 1MB/2MB
  - + VGA/32 1MB/2MB
  - + ET4000/W32 1MB
  - + ET4000/W32i 1MB/2MB
  - + ET4000/W32p 1MB/2MB
- o VLSI
  - + VL82C975 (AT&T RAMDAC) 2MB
  - + VL82C975 (BrookTree RAMDAC) 2MB
  - + VL82C976 (Internal RAMDAC) 2MB
- o Western Digital
  - + WD90C00 512KB
  - + WD90C11 512KB
  - + WD90C24 1MB
  - + WD90C26 512KB
  - + WD90C30 1MB
  - + WD90C31 1MB
  - + WD90C33 1MB
  - + WD9510-AT 1MB
- o Weitek
  - + P9100 2MB
  - + P9000 2MB
  - + W5186 1MB
  - + W5286 1MB
- \* Laptop Accelerated-X Display Server
  - o Broadax
    - + NP8700 (Cyber 9385)

- o Chips & Technology
  - + 65510 512KB
  - + 65520 1MB
  - + 65530 1MB
  - + 65535 1MB
  - + 65540 1MB
  - + 65545 1MB
  - + 65554 2MB/4MB
  - + 65555 2MB
- o Cirrus Logic
  - + GD7541 1MB/2MB
  - + GD7543 1MB/2MB
  - + GD7548 2MB
- o Compaq
  - + LTE 5400 (Cirrus Logic CL5478)
  - + Presario 1090ES (NM 2093)
- o Dell
  - + Latitude XPi 896 (NeoMagic 2070)
  - + Latitude XPi (NM 2070)
  - + Latitude XPi CD 1MB (NM 2090)
  - + Latitude LM (NM 2160)
  - + Latitude CP (NM 2160)
  - + Inspiron 3000 (NM 2160)
- o Digital (DEC)
  - + HiNote VP (NeoMagic 2090)
  - + Fujitsu
  - + Lifebook 435DX (NeoMagic 2093)
- o Gateway 2000
  - + Solo 2300 (NeoMagic 2160)
  - + Solo 2300 SE (NM 2160)
  - + Solo 9100 (C&T 65554)
  - + Solo 9100XL (C&T 65555)
- o Hewlett Packard
  - + OmniBook 800 (NM 2093)
- o Hitachi
  - + Notebook E133T (NeoMagic 2070)
- o IBM
  - + VGA 256KB
  - + Thinkpad 380D (NeoMagic 2090)\*
  - + Thinkpad 385ED (NeoMagic 2090)\*
  - + Thinkpad 560E (Cyber 9382)
  - + Thinkpad 760XD (Cyber 9385)
  - + Thinkpad 770 (Cyber 9397)
- o Micron
  - + TransPort XKE (NeoMagic 2160)

- + Millenia Transport (Cirrus Logic GD7548)
- o NEC
  - + Versa P Series 1MB
  - + Versa 6230 2MB (NeoMagic 2160)
- o NeoMagic
  - + MagicGraph128 / NM2070 896
  - + MagicGraph128 / NM2070
  - + MagicGraph128V / NM2090
  - + MagicGraph128V+ / NM2097
  - + MagicGraph128ZV / NM2093
  - + MagicGraph128XD / NM2160
- o Sony
  - + VAIO PCG-505 (NeoMagic 2097)
- o Toshiba
  - + T4900CT 1MB
  - + Tecra 740CDT (C&T 65554)
- o Trident
  - + Cyber 9397
  - + Cyber 9385
  - + Cyber 9382
- o Twinhead
  - + Slimnote 9166TH (Cyber 9385)
- \* Numerous XiG customers have confirmed support.
- \* Multi-head Accelerated-X Display Server

Metro-X 4.3

Metro Link < [sales@metrolink.com](mailto:sales@metrolink.com) >

Supported Cards:

Graphics	Card Chipset
ATI 3D RAGE .....	3D RAGE
ATI 3D RAGE II .....	3D RAGE II
ATI ALL-IN-WONDER PRO AGP .....	3D RAGE PRO
ATI ALL-IN-WONDER PRO PCI .....	3D RAGE PRO
ATI Graphics Pro Turbo .....	Mach64
ATI Graphics Ultra .....	Mach8
ATI Graphics Xpression .....	Mach64
ATI Mach32 .....	Mach32
ATI Mach64 .....	Mach64
ATI VGA STEREO-F/X .....	ATI 28800
ATI Winturbo PCI .....	Mach64
ATI XPERT&commat;Play .....	3D RAGE PRO

ATI XPERT&commat;Play AGP .....	3D RAGE PRO
ATI XPERT&commat;Work .....	3D RAGE PRO
ATI XPERT&commat;Work AGP .....	3D RAGE PRO
Diamond Fire GL 1000Pro .....	PERMEDIA 2
Diamond SpeedStar 24X .....	Western Digital 90C31
Diamond SpeedStar Pro SE .....	Cirrus 5430
Diamond Stealth 24 .....	S3 801
Diamond Stealth 32 .....	ET4000/W32p
Diamond Stealth 3D 2000 .....	S3 ViRGE
Diamond Stealth 64 .....	S3 964, Bt485KPJ135
Diamond Stealth 64 DRAM .....	S3 Trio64
Diamond Stealth 64 DRAM (SDAC) .....	S3 864, S3 SDAC
Diamond Stealth 64 Graphics 2000 Series .....	S3 864, S3 SDAC
Diamond Stealth 64 Graphics 2200 .....	S3 Trio64
Diamond Stealth 64 VRAM .....	S3 968, IBM
RGB526CF22	
Diamond Stealth 64 Video 3000 Series .....	S3 968, TI
3026-175	
Diamond Stealth 64 Video VRAM .....	S3 968, TI
3026-175	
Diamond Stealth Video (SDAC) .....	S3 868, S3 SDAC
Diamond Stealth Video 2000 Series .....	S3 868, S3 SDAC
Diamond Viper (110 MHz RAMDAC) .....	P9000
Diamond Viper (135 MHz RAMDAC) .....	P9000
ELSA GLoria Synergy .....	PERMEDIA 2
ELSA Victory 3D .....	S3 ViRGE
ELSA WINNER 2000 Office AGP .....	PERMEDIA 2
ELSA Winner 1000 TRIO/V .....	S3 Trio64V+
ELSA Winner 2000 AVI .....	S3 968, TI
3026-175	
ELSA Winner 2000 PRO/X-2, -4 .....	S3 968, TI
3026-220	
ELSA Winner 2000 PRO/X-8 .....	S3 968, IBM
RGB528CF25	
EPS Apex L-200 .....	C&T 65550
Generic .....	ATI 28800
Generic .....	Alliance ProMotion
Generic .....	Ark 2000
Generic .....	Avance Logic
22xx/23xx/24xx	
Generic .....	Chips & Technologies
Generic .....	Cirrus 5420
Generic .....	Cirrus 5422/5424
Generic .....	Cirrus 5426/5428
Generic .....	Cirrus 5429
Generic .....	Cirrus 5430

Generic .....	Cirrus 5434
Generic .....	Cirrus 5436
Generic .....	Cirrus 5446
Generic .....	Cirrus 5462
Generic .....	Cirrus 5462/5465
Generic .....	Cirrus 5480
Generic .....	Cirrus 62x5
Generic .....	Cirrus
6410/6412/6420/6440	
Generic .....	Cirrus 754x
Generic .....	ET3000
Generic .....	ET4000/W32P
Generic .....	ET4000AX
Generic .....	ET6000
Generic .....	Mach32
Generic .....	Mach64
Generic .....	Mach8
Generic .....	P9000
Generic .....	PERMEDIA 2
Generic .....	S3
864/868/924/928/964	
Generic .....	S3 968
Generic .....	S3 Trio64
Generic .....	S3 Trio64V+
Generic .....	S3 ViRGE
Generic .....	S3 ViRGE/GX/DX
Generic .....	SiS
86c201/86c202/86c205	
Generic Trident .....	TGUI9440
Generic Trident .....	TGUI96xx
Generic .....	Trident8900
Generic .....	VGA
Generic .....	Western Digital SVGA
Genoa Phantom 64 .....	S3 Trio64V+
Genoa WindowsVGA 8500VL .....	Cirrus 5426
Hercules Dynamite 128/Video .....	ET6000
Hercules Dynamite 3D/GL .....	PERMEDIA 2
Hercules Dynamite 3D/GL AGP .....	PERMEDIA 2
Hercules Stingray .....	Avance Logic 2301
Hercules Stingray 128/3D .....	Alliance ProMotion
.....	AT3D
Hercules Stingray 64 .....	Ark 2000
Hercules Terminator 3D .....	S3 ViRGE/DX
.....	IBM VGA
Matrox Marvel .....	ET4000
Matrox Marvel II .....	ET4000

Matrox Millennium .....	MGA Storm
Matrox Millennium II AGP .....	MGA 2164,
.....	TI 3026-250
Matrox Millennium II PCI (220 MHz) .....	MGA 2164,
.....	TI 3026-220
Matrox Millennium II PCI (250 MHz) .....	MGA 2164,
.....	TI 3026-250
Matrox Mystique .....	MGA 1064
Matrox Mystique 220 .....	MGA 1164
Number Nine GXE64 .....	S3 864
Number Nine Imagine 128 .....	Imagine 128
Number Nine Imagine 128 Series 2 .....	Imagine 128 Series 2
Number Nine Motion 531 .....	S3 868
Number Nine Motion 771 .....	S3 968
Number Nine Revolution 3D .....	Ticket to Ride
Number Nine Vision 330 .....	S3 Trio64
Orchid Kelvin 64 .....	Cirrus 5434
SPEA Mirage Video .....	S3 Trio64V+
STB NITRO 3D .....	S3 ViRGE/GX
STB/Symmetric GLydeR MAX-2 .....	PERMEDIA 2
Sigma Designs VGA Legend .....	ET4000
Tech Source Raptor .....	Imagine 128 Series 2
Trident 64-Bit Providia .....	9685
Trident 8900 .....	Trident 8900
Trident 9440 .....	TGUI9440-2
V PCI-53 .....	Cirrus 5434

## Controllers (hard drive)

Linux will work with standard IDE, MFM and RLL controllers. When using MFM/RLL controllers it is important to use ext2fs and the bad block checking options when formatting the disk.

Enhanced IDE (EIDE) interfaces are supported. With up to two IDE interfaces and up to four hard drives and/or CD-ROM drives. Linux will detect these EIDE interfaces:

- \* CMD-640
- \* DTC 2278D
- \* FGI/Holtek HT-6560B
- \* RZ1000
- \* Triton I (82371FB) (with busmaster DMA)
- \* Triton II (82371SB) (with busmaster DMA)

ESDI controllers that emulate the ST-506 (MFM/RLL/IDE) interface will also work. The bad

block checking comment also applies to these controllers.

Generic 8 bit XT controllers also work.

Starting with pre-patch-2.0.31-3 IDE/ATAPI is provided.

#### *Other Controllers Supported:*

- \* Tekram D690CD IDE PCI Cache Controller (with RAID level 1 Mirroring and caching)

## **Controllers (SCSI)**

It is important to pick a SCSI controller carefully. Many cheap ISA SCSI controllers are designed to drive CD-ROM's rather than anything else. Such low end SCSI controllers are no better than IDE. See the SCSI HOWTO and look at performance figures before buying a SCSI card.

### **Supported**

- \* AMI Fast Disk VLB/EISA (BusLogic compatible)
- \* Adaptec AVA-1502E (ISA/VLB) (AIC-6360). Use the AHA-152x driver
- \* Adaptec AVA-1505/1515 (ISA) (Adaptec AHA-152x compatible)
- \* Adaptec AHA-1510/152x (ISA/VLB) (AIC-6260/6360)
- \* Adaptec AHA-154x (ISA) (all models)
- \* Adaptec AHA-174x (EISA) (in enhanced mode)
- \* Adaptec AHA-274x (EISA) (AIC-7771)
- \* Adaptec AHA-284x (VLB) (AIC-7770)
- \* Adaptec AHA-2920 (PCI). Use the Future Domain driver. LILO parameters are needed when used for hard disks.
- \* Adaptec AHA-2940AU (PCI) (AIC-7861)
- \* Adaptec AHA-294x/U/W/UW/D/WD (AIC-7871, AIC-7844, AIC-7881, AIC-7884)
- \* Adaptec AHA-3940/U/W (PCI) (AIC-7872, AIC-7882) (since 1.3.6)
- \* Adaptec AHA-398x/U/W (PCI) (AIC-7873, AIC-7883)
- \* Adaptec PCI controllers with AIC-7850, AIC-7855, AIC-7860
- \* Adaptec on board controllers with AIC-777x (EISA), AIC-785x, AIC-787x (PCI), AIC-788x (PCI)
- \* Advansys 5140 (ISA)  
<http://advansys.com/5140o.htm> for information.
- \* Always IN2000
- \* BusLogic (ISA/EISA/VLB/PCI) (all models)
- \* DPT PM2001, PM2012A (EATA-PIO)
- \* DPT Smartcache/SmartRAID Plus,III,IV families (ISA/EISA/PCI)  
Take a look at [http://www.uni-mainz.de/~neuffer/scsi/dpt/\(EATA-DMA\)](http://www.uni-mainz.de/~neuffer/scsi/dpt/(EATA-DMA))

Cards in these families are PM2011, PM2021, PM2041, PM3021, PM2012B, PM2022, PM2122, PM2322, PM2042, PM3122, PM3222, PM3332, PM2024, PM2124, PM2044, PM2144, PM3224, PM3334

- \* DTC 329x (EISA) (Adaptec 154x compatible)
- \* Future Domain TMC-16x0, TMC-3260 (PCI)
- \* Future Domain TMC-8xx, TMC-950
- \* Future Domain chips TMC-1800, TMC-18C50, TMC-18C30, TMC-36C70
- \* ICP-Vortex PCI-SCSI Disk Array Controllers (many RAID levels supported)  
Patches for Linux 1.2.13 and 2.0.29 are available at <http://icp-vortex.com/download/linux/>. The controllers GDT6111RP, GDT6121RP, GDT6117RP, GDT6127RP, GDT6511RP, GDT6521RP, GDT6517RP, GDT6527RP, GDT6537RP and GDT6557RP are supported. You can also use pre-patch-2.0.31-4 to pre-patch-2.0.31-9.
- \* ICP-Vortex EISA-SCSI Controllers (many RAID levels supported)  
Patches for Linux 1.2.13 and 2.0.29 are available at <http://icp-vortex.com/download/linux/>. The controllers GDT3000B, GDT3000A, GDT3010A, GDT3020A and GDT3050A are supported. You can also use pre-patch-2.0.31-4 to pre-patch-2.0.31-9.
- \* Media Vision Pro Audio Spectrum 16 SCSI (ISA)
- \* NCR 5380 generic cards
- \* NCR 53C400 (Trantor T130B) (use generic NCR 5380 SCSI support)
- \* NCR 53C406a (Acculogic ISApport / Media Vision Premium 3D SCSI)
- \* NCR chips 53C7x0
- \* NCR chips 53C810, 53C815, 53C820, 53C825, 53C860, 53C875, 53C895
- \* Qlogic / Control Concepts SCSI/IDE (FAS408) (ISA/VLB)
- \* Quantum ISA-200S, ISA-250MG
- \* Seagate ST-01/ST-02 (ISA)
- \* SoundBlaster 16 SCSI-2 (Adaptec 152x compatible) (ISA)
- \* Tekram DC-390, DC-390W/U/F
- \* Trantor T128/T128F/T228 (ISA)
- \* UltraStor 14F (ISA), 24F (EISA), 34F (VLB)
- \* Western Digital WD7000 SCSI

## Others

- \* AMD AM53C974, AM79C974 (PCI) (Compaq, HP, Zeos onboard SCSI)  
<http://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/AM53C974-0.3.tgz>
- \* Adaptec ACB-40xx SCSI-MFM/RLL bridgeboard  
<http://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/adaptec-40XX.tar.gz>
- \* Always Technologies AL-500  
<http://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/al500-0.2.tar.gz>
- \* BusLogic (ISA/EISA/VLB/PCI) (new beta driver)  
<http://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/BusLogic-1.3.0.tar.gz>
- \* Iomega PC2/2B  
[http://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/iomega\\_pc2-1.1.x.tar.gz](http://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/iomega_pc2-1.1.x.tar.gz)



- \* Qlogic (ISP1020) (PCI)  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/scsi/isp1020-0.5.gz>
- \* Ricoh GSI-8  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scsi/gsi8.tar.gz>

## Unsupported

- \* Parallel port SCSI adapters
- \* Non Adaptec compatible DTC boards (327x, 328x) .....

## Controllers (I/O)

Any standard serial/parallel/joystick/combo cards. Linux supports 8250, 16450, 16550, and 16550A UART's. Cards that support non-standard IRQ's (IRQ > 9) can be used.

See National Semiconductor's ``Application Note AN-493" by Martin S. Michael. Section 5.0 describes in detail the differences between the NS16550 and NS16550A. Briefly, the NS16550 had bugs in the FIFO circuits, but the NS16550A (and later) chips fixed those. However, there were very few NS16550's produced by National, long ago, so these should be very rare. And many of the ``16550" parts in actual modern boards are from the many manufacturers of compatible parts, which may not use the National ``A" suffix. Also, some multiport boards will use 16552 or 16554 or various other multiport or multifunction chips from National or other suppliers (generally in a dense package soldered to the board, not a 40 pin DIP). Mostly, don't worry about it unless you encounter a very old 40 pin DIP National ``NS16550" (no A) chip loose or in an old board, in which case treat it as a 16450 (no FIFO) rather than a 16550A. - Zhahai Stewart <[zstewart@hisys.com](mailto:zstewart@hisys.com)>

## Controllers (multiport)

### Non-intelligent cards

### Supported

- \* AST FourPort and clones (4 port)
- \* Accent Async-4 (4 port)
- \* Amet Multiport-8 (8 port)
- \* Bell Technologies HUB6 (6 port)
- \* Boca BB-1004, 1008 (4, 8 port) - no DTR, DSR, and CD
- \* Boca BB-2016 (16 port)
- \* Boca IO/AT66 (6 port)

- \* Boca IO 2by4 (4 serial / 2 parallel, uses 5 IRQ's)
- \* Computone ValuePort (4, 6, 8 port) (AST FourPort compatible)
- \* DigiBoard PC/X, PC/Xem, PCI/Xem, EISA/Xem, PCI/Xr (4, 8, 16 port)
- \* Control Hostess 550 (4, 8 port)
- \* PC-COMM 4-port (4 port)
- \* SIIG I/O Expander 4S (4 port, uses 4 IRQ's)
- \* STB 4-COM (4 port)
- \* Twincom ACI/550
- \* Usenet Serial Board II (4 port)

Non-intelligent cards usually come in two varieties, one using standard com port addresses and use 4 IRQ's, and another that's AST FourPort compatible and uses a selectable block of addresses and a single IRQ. (Addresses and IRQ's are set using setserial.) If you're getting one of these cards, be sure to check which standard it conforms to, prices are no indication.

## Intelligent cards

### Supported

- \* Computone IntelliPort II (4/8/16 port)  
<ftp://ftp.computone.com/pub/bbs/beta/ip2linux-1.0.2.tar.gz>
- \* Cyclades Cyclom-8Y/16Y (8, 16 port) (ISA/PCI)
- \* DigiBoard PC/Xe (ISA), PC/Xi (EISA) and PC/Xeve  
<ftp://ftp.digibd.com/drivers/linux/>
- \* Equinox SST Intelligent serial I/O cards  
<http://www.equinox.com>
- \* Hayes ESP 1, 2 and 8 port versions  
Included in kernel since 2.1.15. The driver for kernel versions 2.0.x can be found at <http://www.nyx.net/~arobinso>
- \* Stallion EasyIO (ISA) / EasyConnection 8/32 (ISA/MCA) / EasyConnection 8/64 (PCI)  
For DIP switch settings and configuration files check <http://www.stallion.com>
- \* Stallion EasyConnection 8/64 (ISA/EISA) / ONboard (ISA/EISA/MCA) / Brumby (ISA)  
The latest driver can be found at <ftp://ftp.stallion.com/drivers/ata5/Linux/v544.tar.gz>

### Others

- \* Control RocketPort (8/16/32 port)  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/serial/omtrol-1.04.tar.gz>
- \* DigiBoard COM/Xi  
Contact Simon Park ( [si@wimpol.demon.co.uk](mailto:si@wimpol.demon.co.uk)) or Mark Hatle ( [fray@krypton.mankato.msus.edu](mailto:fray@krypton.mankato.msus.edu)). NOTE: both email addresses seem not to exist any longer.

- \* Moxa C102, C104, C168, C218 (8 port), C320 (8/16/24/32 expandable) and C320T  
<ftp://ftp.moxa.com.tw/drivers/linux/>
- \* RISCOm/8
- \* Specialix SIO/XIO (modular, 4 to 32 ports)  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/serial/sidrv.taz>
- \* Specialix IO8+  
 Contact [devices@BitWizard.nl](mailto:devices@BitWizard.nl)

## Network adapters

Ethernet adapters vary greatly in performance. In general the newer the design the better. Some very old cards like the 3Com 3C501 are only useful because they can be found in junk heaps for \$5 a time. Be careful with clones, not all are good clones and bad clones often cause erratic lockups under Linux. Read the Ethernet HOWTO, <http://sunsite.unc.edu/LDP/HOWTO/>, for detailed descriptions of various cards.

## Supported

### Ethernet

For ethernet cards with the DECchip DC21x4x family the "Tulip" driver is available. More information on this driver can be found at <http://cesdis.gsfc.nasa.gov/linux/drivers/tulip.html>.

- \* 3Com 3C501 - "avoid like the plague"
- \* 3Com 3C503, 3C505, 3C507, 3C509/3C509B (ISA) / 3C579 (EISA)
- \* 3Com Etherlink III Vortex Ethercards (3C590, 3c592, 3C595, 3c597) (PCI), 3Com Etherlink XL Boomerang Ethercards (3c900, 3c905) (PCI) and 3Com Fast EtherLink Ethercard (3c515) (ISA)  
 Newer versions of this driver are available at  
<http://cesdis.gsfc.nasa.gov/linux/drivers/vortex.html>  
 Avoid the 3c900 card when possible as the driver is not functioning well for this card.
- \* AMD LANCE (79C960) / PCnet-ISA/PCI (AT1500, HP J2405A, NE1500/NE2100)
- \* AT&T GIS WaveLAN
- \* Allied Telesis AT1700
- \* Allied Telesis LA100PCI-T
- \* Ansel Communications AC3200 EISA
- \* Apricot Xen-II / 82596
- \* Cabletron E21xx

- \* Cogent EM110
- \* Crystal Lan CS8920, Cs8900  
<http://www.cirrus.com/private/drivers/ethernet/edrivers.html>
- \* Danpex EN-9400
- \* DEC DE425 (EISA) / DE434/DE435 (PCI) / DE450/DE500 (DE4x5 driver)
- \* DEC DE450/DE500-XA (Tulip driver)
- \* DEC DEPCA and EtherWORKS
- \* DEC EtherWORKS 3
- \* DEC QSilver's (Tulip driver)
- \* Fujitsu FMV-181/182/183/184
- \* HP PCLAN (27245 and 27xxx series)
- \* HP PCLAN PLUS (27247B and 27252A)
- \* HP 10/100VG PCLAN (J2577, J2573, 27248B, J2585) (ISA/EISA/PCI)  
More information at <http://cesdis1.gsfc.nasa.gov:80/linux/drivers/100vg.html>
- \* ICL EtherTeam 16i / 32 EISA
- \* Intel EtherExpress
- \* Intel EtherExpress Pro
- \* KTI ET16/P-D2, ET16/P-DC ISA (work jumperless and with hardware-configuration options)
- \* NE2000/NE1000 (be careful with clones)
- \* Netgear FA-310TX (Tulip chip)
- \* New Media Ethernet
- \* PureData PDUC8028, PDI8023
- \* SEEQ 8005
- \* SMC Ultra / EtherEZ (ISA)
- \* SMC 9000 series
- \* SMC PCI EtherPower 10/100 (Tulip driver)
- \* SMC EtherPower II (epic100.c driver)
- \* Schneider & Koch G16
- \* Western Digital WD80x3
- \* Zenith Z-Note / IBM ThinkPad 300 built-in adapter
- \* Znyx 312 etherarray (Tulip driver)

## ISDN

- \* Linux ISDN WWW page  
CHECKEN LINK !! <http://www.ix.de/ix/linux/linux-isdn.html>
- \* ISDN4Linux tools are available from  
<ftp://ftp.franken.de/pub/isdn4linux/v2.0>
- \* 3Com Sonix Arpeggio  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/network/sonix.tgz>
- \* ASUSCOM Network Inc. ISDNLink 128K PC adapter (HiSax)
- \* AVM A1 (HiSax)
- \* Combinet EVERYWARE 1000 ISDN

<http://sunsite.unc.edu/pub/Linux/kernel/patches/network/combined1000/isdn-1.02.tar.gz>

- \* Compaq ISDN S0 (ISA) (HiSax)
- \* Creatix PnP S0 (HiSax)
- \* Dr. Neuhaus Niccy PnP/PCI (HiSax)
- \* Dynalink IS64PH (HiSax)
- \* Eicon.Diehl Diva 2.0 ISA and PCI (S0 and U interface, no PRO version) (HiSax)
- \* Eicon.Diehl Diva Piccola (HiSax)
- \* Elsa Microlink PCC-16, PCF, PCF-Pro, PCC-8 (HiSax)
- \* ELSA QuickStep 1000/1000PCI/3000 (HiSax)
- \* HFC-2BS0 based cards (HiSax)
- \* IBM Active 2000 (ISA) (act2000)
- \* ICN ISDN cards (icn)
- \* Ith Kommunikationstechnik GmbH MIC 16 (ISA) (HiSax)
- \* ITK ix1-micro Rev.2 (HiSax)
- \* Octal PCBIT (pcbit)
- \* Sedlbauer Speed Card (HiSax)
- \* Teles 8.0/16.0/16.3 and compatible ones (HiSax)
- \* Teles 16.3c (HiSax)
- \* Teles S0 (HiSax)
- \* Traverse Technologie NETjet PCI S0 (HiSax)
- \* USR Sportster internal TA (HiSax)

*ISDN cards that emulate standard modems or common Ethernet adapters don't need any special drivers to work.*

### **Pocket and portable adapters**

For more information on Linux and use of the parallel port, go to the Linux Parallel Port Home Page <http://www.torque.net/linux-pp.html>

- \* Accton parallel port ethernet adapter  
<http://paradigm.uor.edu/~harshman/linux/accton.html>
- \* AT-Lan-Tec/RealTek parallel port adapter
- \* D-Link DE600/DE620 parallel port adapter

### **Slotless**

- \* SLIP/CSLIP/PPP (serial port)
- \* EQL (serial IP load balancing)
- \* PLIP (parallel port) - using ``LapLink cable'' or bi-directional cable

### **ARCnet**

- \* Works with all ARCnet cards

## **TokenRing**

- \* Any IBM tokenring card not using DMA
- \* IBM Tropic chipset cards
- \* Madge TokenRing OCI 16/4 Mk2

## **FDDI**

- \* DEC DEFEA (EISA) / DEFPA (PCI) (kernel 2.0.24 and later)

## **Amateur radio (AX.25)**

- \* Gracilis PackeTwin
- \* Ottawa PI/PI2
- \* Most generic 8530 based HDLC boards

## **Others**

### **Ethernet**

- \* Racal-Interlan NI5210 (i82586 Ethernet chip). Avoid this card. It is not functioning properly with the current driver.
- \* Racal-Interlan NI6510 (am7990 lance chip). Starting with kernel 1.3.66 more than 16Mb Ram is supported.
- \* Racal-Interlan PCI card (AMD PC net chip 97c970) ??

### **ISDN**

- \* SpellCaster's Datacomute/BRI, Telecomute/BRI (ISA) (sc)

### **ATM**

- \* Efficient Networks ENI155P-MF 155 Mbps ATM adapter (PCI)  
<http://lrcwww.epfl.ch/linux-atm/>

### **Frame Relay**

- \* Sangoma S502 56K Frame Relay card  
<ftp://ftp.sovereign.org/pub/wan/fr/>

### **Wireless**

- \* Proxim RangeLan2 7100 (ISA) / 630x (OEM mini-ISA)  
<http://www.komacke.com/distribution.html>

## Unsupported

- \* Xircom adapters (PCMCIA and parallel port)
- \* IBM PCI Token Ring cards (all of them)
- \* Sysconnect / Schneider & Koch Token Ring cards (all of them)

## Sound cards

### Supported

- \* 6850 UART MIDI
- \* Adlib (OPL2)
- \* Audio Excell DSP16
- \* Aztech Sound Galaxy NX Pro
- \* Crystal CS4232/CS4236 (PnP) based cards
- \* ECHO-PSS cards (Orchid SoundWave32, Cardinal DSP16)
- \* Ensoniq SoundScape
- \* Gravis Ultrasound
- \* Gravis Ultrasound 16-bit sampling daughterboard
- \* Gravis Ultrasound MAX
- \* Gravis Ultrasound ACE (No MIDI port and audio recording)
- \* Gravis Ultrasound PnP (with RAM)
- \* Logitech SoundMan Games (SBPro, 44kHz stereo support)
- \* Logitech SoundMan Wave (Jazz16/OPL4)
- \* Logitech SoundMan 16 (PAS-16 compatible)
- \* MediaTriX AudioTriX Pro
- \* Media Vision Premium 3D (Jazz16)
- \* Media Vision Pro Sonic 16 (Jazz)
- \* Media Vision Pro Audio Spectrum 16
- \* Media Vision Pro Audio Studio 16
- \* Microsoft Sound System (AD1848)
- \* OAK OTI-601D cards (Mozart)
- \* OPTi 82C924/82C925 cards. Use the MSS driver and the isapnp tools
- \* OPTi 82C928/82C929 cards (MAD16/MAD16 Pro/ISP16/Mozart)
- \* OPTi 82C931 cards. See <http://oto.dyn.ml.org/~drees/opti931.html>
- \* Sound Blaster
- \* Sound Blaster Pro
- \* Sound Blaster 16

- \* Sound Blaster 32/64/AWE (Configure like Sound Blaster 16)
- \* Sound Blaster AWE63/Gold and 16/32/AWE PnP cards need to be activated using isapnptools
- \* Turtle Beach Wavefront cards (Maui, Tropez)
- \* Wave Blaster (and other daughterboards)
- \* Cards based on the ESS Technologies AudioDrive chips (688, 1688)
- \* AWE32/64 supports is started in kernel series 2.1.x (check the SoundBlaster AWE mini-HOWTO by Marcus Brinkmann for installation details)
- \* MPU-401 MIDI

## **Others**

- \* MPU-401 MIDI (intelligent mode)  
<ftp://sunsite.unc.edu/pub/Linux/kernel/sound/mpu401-0.2.tar.gz>
- \* PC speaker / Parallel port DAC  
<ftp://ftp.informatik.hu-berlin.de/pub/os/linux/hu-sound>
- \* Turtle Beach MultiSound/Tahiti/Monterey  
<ftp://ftp.cs.colorado.edu/users/mccreary/archive/tbeach/multisound/>

## **Unsupported**

The ASP chip on Sound Blaster 16 series is not supported. AWE32's onboard E-mu MIDI synthesizer is not supported.

Nathan Laredo <[laredo@gnu.ai.mit.edu](mailto:laredo@gnu.ai.mit.edu)> is willing to write AWE32 drivers if you send him a complimentary card. He is also willing to write drivers for almost any hardware if you send him free samples of your hardware.

Sound Blaster 16's with DSP 4.11 and 4.12 have a hardware bug that causes hung/stuck notes when playing MIDI and digital audio at the same time. The problem can happen with either Wave Blaster daughterboards or MIDI devices attached to the MIDI port. There is no known fix.

## **Hard drives**

All hard drives should work if the controller is supported.

(From the SCSI HOWTO) All direct access SCSI devices with a block size of 256, 512, or 1024 bytes should work. Other block sizes will not work (Note that this can often be fixed by changing the block and/or sector sizes using the MODE SELECT SCSI command).

Large IDE (EIDE) drives work fine with newer kernels. The boot partition must lie in the first 1024 cylinders due to PC BIOS limitations.

Some Conner CFP1060S drives may have problems with Linux and ext2fs. The symptoms are inode errors during e2fsck and corrupt file systems. Conner has released a firmware upgrade to fix



this problem, contact Conner at 1-800-4CONNER (US) or +44-1294-315333 (Europe). Have the microcode version (found on the drive label, 9WA1.6x) handy when you call.

Certain Micropolis drives have problems with Adaptec and BusLogic cards, contact the drive manufacturers for firmware upgrades if you suspect problems.

\* Multiple device driver (RAID-0, RAID-1)

<ftp://sweet-smoke.ufr-info-p7.ibp.fr/public/Linux/>

## Unsupported

The following hard drives are mentioned as not supported by Linux. Read the bug report available.

\* NEC D3817, D3827, D3847

"These drives are slightly non-SCSI-2 compliant in the values reported in Mode Sense Page 3. In Mode Sense Page 3 all NEC D38x7 drives report their sector size as zero. The NEC drives are the first brand of drive we have ever encountered that reported the sector size as zero. Unfortunately, that field in Mode Sense Page 3 is not modifiable and there is no way to update the firmware on the D38x7 drives to correct this problem."

## Tape drives

### Supported

\* SCSI tape drives

(From the SCSI HOWTO) Drives using both fixed and variable length blocks smaller than the driver buffer length (set to 32k in the distribution sources) are supported. Virtually all drives should work.

(Send mail if you know of any incompatible drives.)

o Seagate Sidewinder 50 AIT (on ICP 6527 RAID-controller)

\* QIC-02 drives

\* Iomega DITTO internal (ftape 3.04c and newer)

### Others

\* QIC-117, QIC-40/80, QIC-3010/3020 (QIC-WIDE) drives

Most tape drives using the floppy controller should work. Various

dedicated controllers (Colorado FC-10/FC-20, Mountain Mach-2, Iomega Tape Controller II) are also supported  
<ftp://sunsite.unc.edu/pub/Linux/kernel/tapes>

**\* ATAPI tape drives**

For these an alpha driver (ide-tape.c) is available in the kernel.

ATAPI tape drives supported are

- o Seagate TapeStor 8000
- o Conner CTMA 4000 IDE ATAPI Streaming tape drive

## **Unsupported**

- \* Emerald and Tecmar QIC-02 tape controller cards - Chris Ulrich <[insom@math.ucr.edu](mailto:insom@math.ucr.edu)>
- \* Drives that connect to the parallel port (eg: Colorado Trakker)
- \* Some high speed tape controllers (Colorado TC-15)
- \* Irwin AX250L/Accutrak 250 (not QIC-80)
- \* IBM Internal Tape Backup Unit (not QIC-80)
- \* COREtape Light

## **CD-ROM drives**

For more information on CD-ROM drives check the CDROM-HOWTO at  
<http://sunsite.unc.edu/LDP/HOWTO/>

## **Supported**

Common CD-ROM drives

- \* SCSI CD-ROM drives  
(From the CD-ROM HOWTO) Any SCSI CD-ROM drive with a block size of 512 or 2048 bytes should work under Linux; this includes the vast majority of CD-ROM drives on the market.
- \* EIDE (ATAPI) CD-ROM drives (IDECD)  
Almost all double, quad and six speed drives are supported, including
  - o Mitsumi FX400
  - o Nec-260
  - o Sony 55E

## **Proprietary CD-ROM drives**

- \* Aztech CDA268-01A, Orchid CDS-3110, Okano/Wearnes CDD-110, Conrad TXC, CyCDROM CR520ie/CR540ie/CR940ie (AZTCD)
- \* Creative Labs CD-200(F) (SBPCD)
- \* Funai E2550UA/MK4015 (SBPCD)
- \* GoldStar R420 (GSCD)
- \* IBM External ISA (SBPCD)
- \* Kotobuki (SBPCD)
- \* Lasermate CR328A (OPTCD)
- \* LMS Philips CM 206 (CM206)
- \* Longshine LCS-7260 (SBPCD)
- \* Matsushita/Panasonic CR-521/522/523/562/563 (SBPCD)
- \* MicroSolutions Backpack parallel port drive (BPCD)
- \* Mitsumi CR DC LU05S (MCD/MCDX)
- \* Mitsumi FX001D/F (MCD/MCDX)
- \* Optics Storage Dolphin 8000AT (OPTCD)
- \* Sanyo CDR-H94A (SJCD)
- \* Sony CDU31A/CDU33A (CDU31A)
- \* Sony CDU-510/CDU-515 (SOMYCD535)
- \* Sony CDU-535/CDU-531 (SONYCD535)
- \* Teac CD-55A SuperQuad (SBPCD)

## **Others**

- \* LMS/Philips CM 205/225/202  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/cdrom/lmscd0.4.tar.gz>
- \* NEC CDR-35D (old)  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/cdrom/linux-neccdr35d.patch>
- \* Sony SCSI multisession CD-XA  
<ftp://tsx-11.mit.edu/pub/linux/patches/sony-multi-0.00.tar.gz>
- \* Parallel Port Driver  
<http://www.torque.net/linux-pp.html>

## **Notes**

All CD-ROM drives should work similarly for reading data. There are various compatibility problems with audio CD playing utilities. (Especially with newer low-end NEC drives.) Some alpha drivers may not have audio support yet.

Early (single speed) NEC CD-ROM drives may have trouble with currently available SCSI controllers.

PhotoCD (XA) is supported. The `hpcdto ppm` program by Hadmut Danisch converts PhotoCD

files to the portable pixmap format.

The program can be obtained from <ftp://ftp.gwdg.de/pub/linux/hpcdtoppm> or as part of the PBM utilities.

Also, reading video CD is supported in kernel series 2.1.3x and later.

A patch is available for kernel 2.0.30.

Finally, most IDE CD-ROM Changers are supported.

## CD-Writers

Many CD-Writers are supported by Linux now. For an up to date list of CD-Writers supported check the CD-Writing mini-HOWTO at

<http://sunsite.unc.edu/LDP/HOWTO/mini/CD-Writing>, check

<http://www.shop.de/cgi-bin/winni/lsc.pl> or check <http://www.guug.de/cgi-bin/winni/lsc.pl>.

Cdwrite <ftp://sunsite.unc.edu/pub/Linux/utls/disk-management/> and cdrecord

<http://www.fokus.gmd.de/nthp/employees/schilling/cdrecord.html> can be used for writing CD's.

The X-CD-Roast package for Linux is a graphical front-end for using CD writers. The package can be found at <ftp://sunsite.unc.edu/pub/Linux/utls/disk-management/>xcdroast-0.96b.tar.gz.

- \* Grundig CDR 100 IPW
- \* HP CD-Writer+ 7100
- \* HP SureStore 4020i
- \* HP SureStore 6020es/i
- \* JVC XR-W2010
- \* Mitsubishi CDRW-225
- \* Mitsumi CR-2600TE
- \* Olympus CDS 620E
- \* Philips CDD-522/2000/2600/3610
- \* Pinnacle Micro RCD-5020/5040
- \* Plextor CDR PX-24CS
- \* Ricoh MP 1420C
- \* Ricoh MP 6200S/6201S
- \* Sanyo CRD-R24S
- \* Smart and Friendly Internal 2006 Plus 2.05
- \* Sony CDU 920S/924/926S
- \* Taiyo Yuden EW-50
- \* TEAC CD-R50S
- \* WPI(Wearnes) CDR-632P
- \* WPI(Wearnes) CDRW-622
- \* Yamaha CDR-100

- \* Yamaha CDR-200/200t/200tx
- \* Yamaha CDR-400t/400tx

## Removable drives

All SCSI drives should work if the controller is supported, including optical (MO), WORM, floptical, Bernoulli, Zip, Jaz, SyQuest, PD, and others.

- \* Panasonic MO (combines a CD-ROM drive and an optical removable disk).  
You have to set a switch when configuring the kernel to get both part work at the same time.
- \* Parallel port Zip drives  
<ftp://gear.torque.net/pub/>
- \* Parallel port Avatar Shark-250  
<http://www.torque.net/shark.html>

Removable drives work like hard disks and floppies, just fdisk/mkfs and mount the disks. Linux provides drive locking if your drives support it. mtools can also be used if the disks are in MS-DOS format.

CD-R drives require special software to work. Read the CD-R Mini-HOWTO.

Linux supports both 512 and 1024 bytes/sector disks. Starting with kernel 2.1.32 Linux also supports 2048 bytes/sector. A patch to kernel 2.0.30 is available at <http://liniere.gen.u-tokyo.ac.jp/2048.html>.

The 2048 bytes/sector support is needed for

- \* Fujitsu magneto-optical disk drives M2513

Starting with pre-patch-2.0.31-3 IDE/ATAPI internal Zip drives, flopticals and PD's are supported.

- \* LS-120 floptical
- \* PD-CD

## Mice

### Supported

- \* Microsoft serial mouse
- \* Mouse Systems serial mouse
- \* Logitech Mouseman serial mouse

- \* Logitech serial mouse
- \* ATI XL Inport busmouse
- \* C&T 82C710 (QuickPort) (Toshiba, TI Travelmate)
- \* Microsoft busmouse
- \* Logitech busmouse
- \* PS/2 (auxiliary device) mouse

## Others

- \* Sejin J-mouse  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/console/jmouse.1.1.70-jmouse.tar.gz>
- \* MultiMouse - use multiple mouse devices as single mouse  
<ftp://sunsite.unc.edu/pub/Linux/system/misc/MultiMouse-1.0.tgz>
- \* Microsoft Intellimouse

## Notes

Touchpad devices like Alps Glidepoint also work, so long they're compatible with another mouse protocol.

Newer Logitech mice (except the Mouseman) use the Microsoft protocol and all three buttons do work. Eventhough Microsoft's mice have only two buttons, the protocol allows three buttons.

The mouse port on the ATI Graphics Ultra and Ultra Pro use the Logitech busmouse protocol. (See the Busmouse HOWTO for details.) .....

## Modems

All internal modems or external modems connected to the serial port should work. Alas, some manufactures have created Windows 95 only modems. Check Appendix D for Linux incompatible hardware.

A small number of modems come with DOS software that downloads the control program at runtime. These can normally be used by loading the program under DOS and doing a warm boot. Such modems are probably best avoided as you won't be able to use them with non PC hardware in the future.

All PCMCIA modems should work with the PCMCIA drivers.

Fax modems need appropriated fax software to operate. Also be sure that the fax part of the modem supports Class 2 or Class 2.0. It seems to be generally true for any fax software on unix that support for Class 1.0 is not available.

- \* Digicom Connection 96+/14.4+ - DSP code downloading program  
<ftp://sunsite.unc.edu/pub/Linux/apps/serialcomm/smdl-linux.1.02.tar.gz>
- \* Motorola ModemSURFR internal 56K. Add a couple of line to RC.SERIAL to account for IRQ and ports if they are non-standard.
- \* ZyXEL U-1496 series - ZyXEL 1.4, modem/fax/voice control program  
<http://www.pe1chl.demon.nl/ZyXEL/ZyXEL-1.6.tar.gz>
- \* ZyXEL Elite 2864 series - modem/fax/voice control program  
<http://www.pe1chl.demon.nl/ZyXEL/ZyXEL-1.6.tar.gz>
- \* ZyXEL Omni TA 128 - modem/fax/voice control program  
<http://www.pe1chl.demon.nl/ZyXEL/ZyXEL-1.6.tar.gz>

Also multimodem cards are supported by Linux.

- \* Moreton Bay RAS tel multimodem card  
Check <http://www.moreton.com.au/linux.htm> for Linux drivers. ....

## Printers/Plotters

All printers and plotters connected to the parallel or serial port should work. Alas, some manufacturers have created Windows 95 only printers. Check Appendix D for Linux incompatible hardware.

- \* HP LaserJet 4 series - free-lj4, printing modes control program  
<ftp://sunsite.unc.edu/pub/Linux/system/printing/free-lj4-1.1p1.tar.gz>
- \* BiTronics parallel port interface  
<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/misc/bt-ALPHA-0.0.1.module.patch.gz>

## Ghostscript

Many Linux programs output PostScript files. Non-PostScript printers can emulate PostScript Level 2 using Ghostscript.

- \* Ghostscript  
<ftp://ftp.cs.wisc.edu/pub/ghost/aladdin/>

Ghostscript supported printers

- \* Apple Imagewriter
- \* C. Itoh M8510
- \* Canon BubbleJet BJ10e (bj10e)
- \* Canon BubbleJet BJ200, BJC-210 (B/W only), BJC-240 (B/W only) (bj200)

- \* Canon BubbleJet BJC-600, BJC-610, BJC-4000, BJC-4100, BJC-450, MultiPASS C2500, BJC-240, BJC-70 (bjc600)
- \* Canon BubbleJet BJC-800 (bjc800)
- \* Canon LBP-8II, LIPS III
- \* DEC LA50/70/75/75plus
- \* DEC LN03, LJ250
- \* Epson 9 pin, 24 pin, LQ series, AP3250
- \* Epson Stylus Color/Color II/500/800 (stcolor)
- \* HP 2563B
- \* HP DesignJet 650C
- \* HP DeskJet, Deskjet Plus (deskjet)
- \* HP Deskjet 500, Deskjet Portable (djet500)
- \* HP DeskJet 400/500C/540C/690C/693C (cdj500)
- \* HP DeskJet 550C/560C/600/660C/682C/683C/693C/850/870Cse (cdj550)
- \* HP DeskJet 850/870Cse/870Cxi/680 (cdj850)
- \* HP DeskJet 500C/510/520/5540C/693C printing black only (cdjmono)
- \* HP DeskJet 600 (lj4dith)
- \* HP DeskJet 600/870Cse, LaserJet 5/5L (ljet4)
- \* HP Deskjet 500/500C/510/520/540/550C/560C/850C/855C  
ftp:ftp.pdb.sni.de/pub/utilities/misc/hpdj-2.1.tar.gz
- \* HP Deskjet 720, 820 and 1000 series  
http://www.rpi.edu/~normat/technical/ppa
- \* HP PaintJet XL300, Deskjet 600/1200C/1600C (pjxl300)
- \* HP LaserJet/Plus/II/III/4
- \* HP PaintJet/XL
- \* IBM Jetprinter color
- \* IBM Proprinter
- \* Imagen ImPress
- \* Mitsubishi CP50 color
- \* NEC P6/P6+/P60
- \* Oki OL410ex LED (ljet4)
- \* Okidata MicroLine 182
- \* Ricoh 4081/6000 (r4081)
- \* SPARCprinter
- \* StarJet 48 inkjet printer
- \* Tektronix 4693d color 2/4/8 bit
- \* Tektronix 4695/4696 inkjet plotter
- \* Xerox XES printers (2700, 3700, 4045, etc.)

## **Others**

- \* Canon BJC600/800 color printers  
<http://petole.imag.fr/pub/postscript/ghostscript/bjc600/>

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## Scanners

For scanner support there is the package SANE (Scanner Access Now Easy). Information can be found at <http://www.mostang.com/sane/>. It can be downloaded from <ftp://ftp.mostang.com/pub/sane/>. This is a universal scanner interface. It comes complete with documentation and several frontends and backends.

More information on handheld scanners can be found at <http://swt-www.informatik.uni-hamburg.de/~lwillamo/scanner.html>

## Supported

- \* A4 Tech AC 4096 / AS 8000P  
<ftp://ftp.informatik.hu-berlin.de/pub/local/linux/a4scan/a4scan.tgz>
- \* Adara Image Star I  
<http://fb4-1112.uni-muenster.de/ffwd/>  
<ftp://fb4-1112.uni-muenster.de/pub/ffwd/mtekscan-0.2.tar.gz>
- \* Conrad Personal Scanner 64, P105 handheld scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/scan-driver-0.1.8.tar.gz>
- \* Epson GT6000  
<ftp://sunsite.unc.edu/pub/Linux/apps/graphics/capture/ppic0.5.tar.gz>
- \* Fujitsu SCSI-2 scanners  
contact Dr. G.W. Wettstein < [greg%wind.UUCP@plains.nodak.edu](mailto:greg%wind.UUCP@plains.nodak.edu) >
- \* Genius ColorPage-SP2  
<http://fb4-1112.uni-muenster.de/ffwd/>  
<ftp://fb4-1112.uni-muenster.de/pub/ffwd/mtekscan-0.2.tar.gz>
- \* Genius GS-B105G handheld scanner  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/gsl05-0.0.1.tar.gz>
- \* Genius GeniScan GS4500, GS4500A handheld scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/gs4500-2.0.tar.gz>
- \* HighScreen Greyscan 256 handheld scanner  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/gs4500-2.0.tar.gz>

- \* HP ScanJet II series SCSI  
<ftp://sunsite.unc.edu/pub/Linux/apps/graphics/capture/hpscanpbm-0.3a.tar.gz>
- \* HP ScanJet IIc, IIcx, IIP, 3c, 4c, 5p, 5pse, plus  
<http://www.tummy.com/xvscan/>
- \* Logitech Scanman+, Scanman 32, Scanman 256 handheld scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/logiscan-0.0.4.tar.gz>
- \* Microtek ScanMaker E3, E6, II, IIXE, III and 35t models  
<http://fb4-1112.uni-muenster.de/ffwd/>  
<ftp://fb4-1112.uni-muenster.de/pub/ffwd/mtekscan-0.2.tar.gz>
- \* Mustek M105 handheld scanner  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/scan-driver-0.1.8.tar.gz>
- \* Mustek HT800 Turbo, Matador 105, Matador 256 handheld scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/scan-driver-0.1.8.tar.gz>
- \* Mustek Paragon 6000CX  
<ftp://sunsite.unc.edu/pub/Linux/apps/graphics/capture/muscan-2.0.6.taz>
- \* Nikon Coolscan SCSI 35mm film scanner  
<ftp://sunsite.unc.edu/pub/Linux/apps/graphics/capture/coolscan-0.2.tgz>
- \* Pearl 256 handheld scanner  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/scan-driver-0.1.8.tar.gz>
- \* UMAX SCSI scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/umax-0.5.5.tar.gz>

The Mustek drivers work only with GI1904 interface cards. Eric Chang [eric.chang@chrysalis.org](mailto:eric.chang@chrysalis.org) has created a patch to use them with IF960 interface cards.

## Others

- \* Genius GS-4000, ScanMate/32, ScanMate/GS handheld scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/gs4500-2.0.tar.gz>
- \* Mustek HT105, M800 handheld scanners  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/scan-driver-0.1.8.tar.gz>
- \* Voelkner Personal Scanner 64 handheld scanner  
<ftp://tsx-11.mit.edu/pub/linux/ALPHA/scanner/scan-driver-0.1.8.tar.gz>

## Unsupported

- \* Acer scanners. Acer is not releasing any programming information.
- \* Escom 256 (Primax Lector Premier 256) handheld scanner
- \* Genius ScanMate/256, EasyScan handheld scanners
- \* Mustek CG8000 handheld scanner
- \* Trust Ami Scan handheld scanner

## **Other hardware**

### **Amateur Radio**

The following cards etc. are supported:

- \* KISS based Terminal Node Controllers
- \* Ottawa PI card
- \* Gracilis PacketTwin card
- \* Other Z8530 SCC based cards
- \* Parallel and serial port Baycom modems
- \* Soundblaster cards
- \* Soundcards based on the Crystal chipset

### **VESA Power Savings Protocol (DPMS) monitors**

Support for power savings is included in the Linux kernel. Just use setterm to enable support.

### **Touch screens**

The Metro-X X-server is supporting the following touch screen controllers:

- \* Carrol Touch serial touch screen  
<http://www.carrolltouch.com>
- \* EloGraphics
- \* Lucas Deeco
- \* MicroTouch

### **Terminals on serial port**

Old terminals can easily be used under Linux by connecting them to the serial port of your system. At least the following terminals will be supported:

- \* VT52
- \* VT100
- \* VT220
- \* VT320
- \* VT420

### **Joysticks**

Joystick support is in the latest XFree86 distributions (3.3.x) and in kernel versions 2.1.xx. For older kernels the links below are usefull.

- \* Joystick driver

<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/console/joystick-1.0.6.tar.gz>

\* Joystick driver (module)

<ftp://sunsite.unc.edu/pub/Linux/kernel/patches/console/joyfixed.tgz>

## **Video capture boards / Frame Grabbers / TV tuner**

A couple of programs are available that support TV tuners. These are:

\* BTTV <http://www.thp.uni-koeln.de/~rjkm/linux/bttv.html>

\* Xawtv

\* Xtvscreen

\* CMOS Video Conferencing Kit. The video capture card has a BT849 chipset. It comes with a CCD camera.

\* Data Translation DT2803

\* Data Translation DT2851 Frame Grabber

<ftp://sunsite.unc.edu/pub/Linux/apps/video/dt2851-2.01.tar.gz>

\* Data Translation DT3155

<http://krusty.eecs.umich.edu/people/ncowan/linux/welcome.html>

\* Diamond DTV2000 (based on BT848)

\* Dipix XPG1000/FPG/PPMAPA (based on TI C40 DSP). Most add-on cards are supported.

<http://www.thp.uni-koeln.de/~rjkm/linux/bttv.html>

\* Epix SVM

\* Epix Silicon Video MUX series of video frame grabbing boards

<http://www.ssc.com/lj/issue13/npc13c.html>

\* FAST Screen Machine II

<ftp://sunsite.unc.edu/pub/Linux/apps/video/ScreenMachineII.2.0.tgz>

\* Hauppauge Wincast TV PCI (based on BT848)

<http://www.thp.uni-koeln.de/~rjkm/linux/bttv.html>

\* Imaging Technology ITI/IC-PCI

<ftp://ftp.gom-online.de/pub/IC-PCI/icpci-0.3.2.tar.gz>

\* ImageNation Cortex I

<ftp://sunsite.unc.edu/pub/Linux/apps/video/cortex.drv.1.1.tgz>

\* ImageNation CX100

<ftp://sunsite.unc.edu/pub/Linux/apps/video/cxdrv-0.86.tar.gz>

\* ImageNation PX500 (being worked on). Ask for current status

[rubini@linux.it](mailto:rubini@linux.it)

\* Imaging Technology Inc. IC-PCI frame grabber board

<ftp://gandalf.expmech.ing.tu-bs.de/pub/driver/icpci-0.2.0.tar.gz>

\* Matrox Meteor

<ftp://sunsite.unc.edu/pub/Linux/apps/video/meteor-1.4a.tgz>

\* Matrox PIP-1024

<http://www.powerup.com.au/~sobey/pip.tar.gz>

\* MaxiTV/PCI (based on ZR36120)

<ftp://sunsite.unc.edu/pub/Linux/kernel/misc-cards/zr36120-971127.tgz> ...

- \* Miro PCTV (based on BT848)  
<http://www.thp.Uni-Koeln.DE/~rjkm/linux/bttv.html>
- \* MuTech MV1000 PCI  
<ftp://sunsite.unc.edu/pub/Linux/apps/video/mv1000drv-0.33.tgz>
- \* MuTech MV200  
[http://www.powerup.com.au/~sobey/mu\\_tar.gz](http://www.powerup.com.au/~sobey/mu_tar.gz)
- \* Philips PCA10TV (not in production anymore)  
<ftp://ftp.il.fhse.nl/pub/tv1000/pctv1000.02.tgz>
- \* Pro Movie Studio  
<ftp://sunsite.unc.edu/pub/Linux/apps/video/PMS-grabber.3.0.tgz>
- \* Quanta WinVision B&W video capture card  
<ftp://sunsite.unc.edu/pub/Linux/apps/video/fgrabber-1.0.tgz>
- \* Quickcam  
<ftp://sunsite.unc.edu/pub/Linux/apps/video/qcam-0.7c-5.tar.gz>
- \* Sensus 700  
<http://www.robots.com/s700.htm>
- \* Smart Video Recoder III (based on BT848)  
<http://www.thp.Uni-Koeln.DE/~rjkm/linux/bttv.html>
- \* STB TV PCI Television Tuner (based on BT848)  
<http://www.thp.Uni-Koeln.DE/~rjkm/linux/bttv.html>
- \* Tekram C210 (based on ZR36120)  
<ftp://sunsite.unc.edu/pub/Linux/kernel/misc-cards/zr36120-971127.tgz>
- \* Video Blaster, Rombo Media Pro+  
[ftp://sunsite.unc.edu/pub/Linux/apps/video/vid\\_src-0.6.tgz](ftp://sunsite.unc.edu/pub/Linux/apps/video/vid_src-0.6.tgz)
- \* VT1500 TV cards  
<ftp://sunsite.unc.edu/pub/Linux/apps/video/vt1500-1.0.9.tar.gz>

## Digital Camera

- \* HP Photo Smart Digital Camera ??  
<ftp://ftp.itojun.org/pub/digi-cam/>

## UPS

Various other UPS's are supported, read the UPS HOWTO

- \* APC SmartUPS  
<http://www.dyer.vanderbilt.edu/server/apcupsd>
- \* APC-BackUPS 400/600, APC-SmartUPS SU700/1400RM  
<http://www.dyer.vanderbilt.edu/server/apcupsd>
- \* UPS's with RS-232 monitoring port (genpower package)  
<ftp://sunsite.unc.edu/pub/Linux/system/ups/genpower-1.0.1.tgz>
- \* MGE UPS's  
<http://www.mgeups.com/download/softlib.htm> and

<http://www.mgeups.com/download/software/linux/upsp.tgz>

- \* A daemon to shut down and up computers connected to ups's. It's network aware and allows server- and client-mode

<ftp://sunsite.unc.edu/pub/Linux/system/ups/powerd-2.0.tar.gz>

## **Multifunction boards**

- \* Pro Audio Spectrum 16 SCSI / Sound interface card

## **Data acquisition**

The Linux Lab Project site collects drivers for hardware dealing with data acquisition, they also maintain some mailing lists dealing with the subject. I have no experience with data acquisition so please check the site for more details.

- \* Linux Lab Project

<http://www.llp.fu-berlin.de/>

- \* CED 1401
- \* DBCC CAMAC
- \* IEEE-488 (GPIB, HPIB) boards
- \* Keithley DAS-1200
- \* National Instruments AT-MIO-16F / Lab-PC+
- \* Analog Devices RTI-800/815 ADC/DAC board  
contact Paul Gortmaker <[gpg109@anu.edu.au](mailto:gpg109@anu.edu.au)>

## **Watchdog timer interfaces**

- \* Berkshire Products PC Watchdog Card (ISA cards rev. A and C)  
Check <ftp://ftp.bitgate.com/pub/bitgate/pcwd> for the PC Watchdog program. A driver is included in recent kernels. More information on this product can be found at <http://www.berkprod.com/wdog.htm>
- \* ICS WDT500-P (  
<http://www.indcomp.src.com/products/data/html/wdt500-p.html>)
- \* ICS WDT501-P (with and without fan tachometer) (  
<http://www.indcomp.src.com/products/data/html/wdt500-p.html>)

## Miscellaneous

- \* Mattel Powerglove
- \* AIMS Labs RadioTrack FM radio card  
<ftp://sunsite.unc.edu/pub/Linux/apps/sound/radio/radiotrack-1.1.tgz>
- \* Reveal FM Radio card  
<ftp://magoo.uwsuper.edu/docs/radio.html>
- \* Videotext cards  
<ftp://sunsite.unc.edu/pub/Linux/apps/video/videoteXt-0.6.tar.gz>