



Hardware Reference Guide

SMB/CIFS, AFP and HTTP

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Revision History

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Before using this reference, it is important to understand that the following indices list chipsets used in various devices and not necessarily specific device models. It is also important to note that this reference is compiled using information automatically derived from the associated kernel driver sources as well as information contained in the **PCI ID Repository** maintained by Martin Mares at <http://pciids.sourceforge.net>.

Overview

The following reference provides a comprehensive list of device chipsets supported by NanoNAS. This reference attempts to list all supported network and storage interface devices by type and manufacturer. It is also possible that NanoNAS will work well with other devices not explicitly identified by this reference.

This reference covers the following device types:

- Network Interface Devices
- IDE Controller Devices

How to Use This Reference

NanoNAS supports a wide array of PCI devices. Many computers utilize a motherboard with a built-in or on-board PCI network and storage interface adapters while others can use separate add-on interface cards. NanoNAS will work well with most PCI interfaces provided a supported chipset is used.

Each driver included with NanoNAS supports one or more associated device chipsets. There are many unique device makes and models that may use the same chipset. To verify if a particular device is supported by NanoNAS, make sure to reference the associated chipset and not the unique device make or model.

Network Interface Devices

NanoNAS supports a wide array of PCI network interfaces. Many computers utilize a motherboard with a built-in or on-board PCI network interface while others can use separate add-on network interface cards. NanoNAS will work well with most

PCI network interfaces provided a supported chipset is used. Below is a general list of chipset drivers included in the NanoNAS kernel:



3Com Corporation

• 3Com 3c59x/3c9xx Ethernet Driver

- 3c450 HomePNA [Tornado]
- 3c555 Laptop Hurricane
- 3c556 Hurricane CardBus [Cyclone]
- 3c556B CardBus [Tornado]
- 3c575 Megahertz 10/100 LAN CardBus [Boomerang]
- 3c590 10BaseT [Vortex]
- 3c592 EISA 10Mbps Demon/Vortex
- 3c595 100Base-MII [Vortex]
- 3c595 100BaseT4 [Vortex]
- 3c595 100BaseTX [Vortex]
- 3c595 Megahertz 10/100 LAN CardBus [Boomerang]
- 3c597 EISA Fast Demon/Vortex
- 3c900 10BaseT [Boomerang]
- 3c900 10Mbps Combo [Boomerang]
- 3c900B-Combo Etherlink XL [Cyclone]
- 3c900B-FL 10base-FL [Cyclone]
- 3c900B-TPC Etherlink XL [Cyclone]
- 3c900B-TPO Etherlink XL [Cyclone]
- 3c905 100BaseT4 [Boomerang]
- 3c905 100BaseTX [Boomerang]
- 3c905B 100BaseTX [Cyclone]
- 3c905B Deluxe Etherlink 10/100/BNC [Cyclone]
- 3c905B-FX Fast Etherlink XL FX 100baseFx [Cyclone]
- 3c905B-T4 Fast EtherLink XL [Cyclone]
- 3c905C-TX/TX-M [Tornado]
- 3C920B-EMB Integrated Fast Ethernet Controller [Tornado]
- 3C920B-EMB-WNM Integrated Fast Ethernet Controller
- 3c980-C 10/100baseTX NIC [Python-T]
- 3c980-TX Fast Etherlink XL Server Adapter [Cyclone]
- 3c982-TXM 10/100baseTX Dual Port A [Hydra]
- 3c982-TXM 10/100baseTX Dual Port B [Hydra]
- 3cCFE575BT Megahertz 10/100 LAN CardBus

[Cyclone]

- 3cCFE575CT CardBus [Cyclone]
- 3cCFE656 CardBus [Cyclone]
- 3cCFEM656B 10/100 LAN+Winmodem CardBus [Cyclone]
- 3Com 3C920B-EMB-WNM Integrated Fast Ethernet Controller
- 3cSOHO100-TX Hurricane
- 3cXFEM656C 10/100 LAN+Winmodem CardBus [Tornado]

• **3Com Typhoon Family Ethernet Driver**

- 3C990B-TX-M/3C990BSVR [Typhoon2]
- 3C990SVR [Typhoon Server]
- 3C990-TX [Typhoon]
- 3CR990-FX-95/97/95 [Typhon Fiber]
- 3CR990SVR95 [Typhoon Server 56-bit]
- 3CR990SVR97 [Typhoon Server 168-bit]
- 3CR990-TX-95 [Typhoon 56-bit]
- 3CR990-TX-97 [Typhoon 168-bit]

• **Digital 21*4* Tulip Ethernet Driver**

- 3CSOHO100B-TX 910-A01 [tulip]

Abocom Systems Inc

• **Digital 21*4* Tulip Ethernet Driver**

- 21x4x DEC-Tulip compatible 10/100 Ethernet
- ADMtek Centaur-C rev 17 [D-Link DFE-680TX] CardBus Fast Ethernet Adapter

• **RealTek RTL-8139 Ethernet Driver**

- RTL8139 [FE2000VX] CardBus Fast Ethernet Attached Port Adapter

Accton Technology Corporation

• **Digital 21*4* Tulip Ethernet Driver**

- 21x4x DEC-Tulip compatible Fast Ethernet
- EN-1216 Ethernet Adapter
- EN-1217 Ethernet Adapter

• **RealTek RTL-8139 Ethernet Driver**

- SMC2-1211TX

Adaptec

• **Adaptec Starfire Ethernet Driver**

- ANA620xx/ANA69011A

Addtron Technology Co, Inc.

• **RealTek RTL-8139 Ethernet Driver**

- RTL8139 Ethernet

ADMtek

• **Digital 21*4* Tulip Ethernet Driver**

- 21x4x DEC-Tulip compatible 10/100 Ethernet
- NC100 Network Everywhere Fast Ethernet 10/100

Advanced Micro Devices [AMD]

• **PCnet32 and PCnetPCI Ethernet Driver**

- 79c970 [PCnet32 LANCE]
- 79c978 [HomePNA]

ALi Corporation

• **Davicom DM910X Ethernet Driver**

- M5261 Ethernet Controller

• **Digital 21*4* Tulip Ethernet Driver**

- M5261 Ethernet Controller

Allied Telesyn International

• **Digital 21*4* Tulip Ethernet Driver**

- 21x4x DEC-Tulip compatible 10/100 Ethernet

• **RealTek RTL-8139 Ethernet Driver**

- RTL81xx Fast Ethernet

Asix Electronics Corporation

• **Digital 21*4* Tulip Ethernet Driver**

- ALFA GFC2204 Fast Ethernet

AT&T GIS (NCR)

• **HP CASCADE Ethernet Driver**

- 100VG ethernet

Broadcom Corporation

• **Broadcom 4400 10/100 Ethernet Driver**

- BCM4401 100Base-T
- BCM4401-B0 100Base-TX
- BCM4402 Integrated 10/100BaseT

Compaq Computer Corporation

- **RealTek RTL-8139 Ethernet Driver**
 - HNE-300 (RealTek RTL8139c) [iPaq Networking]
- **TI ThunderLAN Ethernet Driver**
 - Integrated NetFlex-3/P
 - Netelligent 10 T PCI UTP
 - Netelligent 10 T/2 PCI UTP/Coax
 - Netelligent 10/100 TX Embedded UTP
 - Netelligent 10/100 TX PCI UTP
 - Netelligent 10/100 TX UTP
 - Netelligent Dual 10/100 TX PCI UTP
 - Netelligent Integrated 10/100 TX UTP
 - NetFlex-3/P ThunderLAN 1.0
 - NetFlex-3/P ThunderLAN 2.3

Compex

- **Digital 21*4* Tulip Ethernet Driver**
 - RL100TX Fast Ethernet
- **HP CASCADE Ethernet Driver**
 - ENet100VG4
- **NE2000 Ethernet Driver**
 - ReadyLink 2000
- **Winbond W89c840 Ethernet Driver**
 - RL100-ATX 10/100

Davicom Semiconductor, Inc.

- **Davicom DM910X Ethernet Driver**
 - 21x4x DEC-Tulip compatible 10/100 Ethernet
 - Ethernet 100/10 MBit
- **Digital 21*4* Tulip Ethernet Driver**
 - 21x4x DEC-Tulip compatible 10/100 Ethernet

DELTA Electronics, Inc.

- **RealTek RTL-8139 Ethernet Driver**
 - RTL81xx RealTek Ethernet

Digi International

- **Digi Ethernet Driver**
 - RightSwitch SE-6

Digital Equipment Corporation

- **Digital 21*4* Tulip Ethernet Driver**
 - DECchip 21040 [Tulip]
 - DECchip 21041 [Tulip Pass 3]
 - DECchip 21140 [FasterNet]
 - DECchip 21142/43

D-Link System Inc

- **Digital 21*4* Tulip Ethernet Driver**
 - DFE-680TXD CardBus PC Card
 - DRP-32TXD Cardbus PC Card
- **RealTek RTL-8139 Ethernet Driver**
 - DFE-690TXD CardBus PC Card
 - RTL8139 Ethernet
- **Sundance Alta Ethernet Driver**
 - DL10050 Sundance Ethernet

Edimax Computer Co.

- **RealTek RTL-8139 Ethernet Driver**
 - RTL81xx Fast Ethernet

Hawking Technologies

- **Digital 21*4* Tulip Ethernet Driver**
 - PN672TX 10/100 Ethernet

Hewlett-Packard Company

- **HP CASCADE Ethernet Driver**
 - J2585A DeskDirect 10/100VG NIC
 - J2585B HP 10/100VG PCI LAN Adapter

Holtek Microelectronics Inc.

- **NE2000 Ethernet Driver**
 - PCI NE2K Ethernet

Intel Corporation

- **Digital 21*4* Tulip Ethernet Driver**
 - 21145 Fast Ethernet
- **Intel(R) PRO/100 Ethernet Driver**
 - 82551QM Ethernet Controller
 - 82557/8/9 [Ethernet Pro 100]
 - 82559 Ethernet Controller
 - 82559 InBusiness 10/100
 - 8255xER/82551IT Fast Ethernet Controller
 - 82562 EM/EX/GX - PRO/100 VM (LOM) Ethernet Controller
 - 82562 EM/EX/GX - PRO/100 VM Ethernet Controller
 - 82562EM/EX/GX - PRO/100 VM (LOM) Ethernet Controller Mobile
 - 82562ET/EZ/GT/GZ - PRO/100 VE (LOM) Ethernet Controller
 - 82562ET/EZ/GT/GZ - PRO/100 VE (LOM) Ethernet Controller Mobile
 - 82562ET/EZ/GT/GZ - PRO/100 VE Ethernet Controller
 - 82562EZ 10/100 Ethernet Controller
 - 82562G - PRO/100 VE (LOM) Ethernet Controller
 - 82562G - PRO/100 VE Ethernet Controller Mobile
 - 82801BA/BAM/CA/CAM Ethernet Controller
 - 82801CAM (ICH3) PRO/100 VE (LOM) Ethernet Controller
 - 82801CAM (ICH3) PRO/100 VE Ethernet Controller
 - 82801CAM (ICH3) PRO/100 VM (KM) Ethernet Controller
 - 82801CAM (ICH3) PRO/100 VM (LOM) Ethernet Controller
 - 82801CAM (ICH3) PRO/100 VM Ethernet Controller
 - 82801DB PRO/100 VE (CNR) Ethernet Controller
 - 82801DB PRO/100 VE (LOM) Ethernet Controller
 - 82801DB PRO/100 VE (MOB) Ethernet Controller
 - 82801DB PRO/100 VM (CNR) Ethernet Controller
 - 82801DB PRO/100 VM (LOM) Ethernet Controller
 - 82801DB PRO/100 VM (MOB) Ethernet Controller
 - 82801E Ethernet Controller 0
 - 82801E Ethernet Controller 1
 - 82801EB/ER (ICH5/ICH5R) integrated LAN Controller
 - PRO/100 VM Network Connection

KTI

- **NE2000 Ethernet Driver**
 - ET32P2

LevelOne

- **RealTek RTL-8139 Ethernet Driver**
 - FPC-0106TX misprogrammed [RTL81xx]

Linksys

- **Digital 21*4* Tulip Ethernet Driver**
 - 21x4x DEC-Tulip compatible 10/100 Ethernet

Lite-On Communications Inc.

- **Digital 21*4* Tulip Ethernet Driver**
 - LNE100TX
 - LNE100TX [Linksys EtherFast 10/100]

Macronix, Inc. [MXIC]

- **Digital 21*4* Tulip Ethernet Driver**
 - MX98713
 - MX987x5

MYSON Technology Inc.

- **Myson MTD-8xx Ethernet Driver**
 - MTD-8xx 100/10M Ethernet PCI Adapter
 - SURECOM EP-320X-S 100/10M Ethernet PCI Adapter

National Semiconductor Corporation

- **National Semiconductor DP8381x Ethernet Driver**
 - DP83815 (MacPhyter) Ethernet Controller

NetVin

- **NE2000 Ethernet Driver**
 - NV5000SC

Northern Telecom

- **RealTek RTL-8139 Ethernet Driver**
 - 10/100BaseTX [RTL81xx]

nVidia Corporation

- **Reverse Engineered nForce Ethernet Driver**
 - CK804 Ethernet Controller
 - CK8S Ethernet Controller
 - MCP04 Ethernet Controller
 - MCP2A Ethernet Controller
 - nForce Ethernet Controller
 - nForce2 Ethernet Controller
 - nForce3 Ethernet

Olicom

- **TI ThunderLAN Ethernet Driver**
 - OC-2183/2185
 - OC-2325
 - OC-2326

Peppercon AG

- **RealTek RTL-8139 Ethernet Driver**
 - ROL/F-100 Fast Ethernet Adapter with ROL

Planex Communications, Inc.

- **RealTek RTL-8139 Ethernet Driver**
 - FNW-3603-TX CardBus Fast Ethernet
 - RTL81xx RealTek Ethernet

Realtek Semiconductor Co., Ltd.

- **NE2000 Ethernet Driver**
 - RTL-8029(AS)
- **RealTek RTL-8139 Ethernet Driver**
 - RT8139 (B/C) Cardbus Fast Ethernet Adapter
 - RTL-8129
 - RTL-8139/8139C/8139C+
- **RealTek RTL-8139C+ Ethernet Driver**
 - RTL-8139/8139C/8139C+

Silicon Integrated Systems [SiS]

- **SiS 900 PCI Ethernet Driver**
 - SiS7016 PCI Fast Ethernet Adapter
 - SiS900 PCI Fast Ethernet

SpeedStream

- **RealTek RTL-8139 Ethernet Driver**
 - 1012 PCMCIA 10/100 Ethernet Card [RTL81xx]

Standard Microsystems Corp [SMC]

- **SMC 83c170 EPIC Ethernet Driver**
 - 83c170 EPIC/100 Fast Ethernet Adapter
 - 83c175 EPIC/100 Fast Ethernet Adapter

STMicroelectronics

- **Digital 21*4* Tulip Ethernet Driver**
 - 21x4x DEC-Tulip compatible 10/100 Ethernet

Sundance Technology Inc / IC Plus Corporation

- **Sundance Alta Ethernet Driver**
 - ST201 Sundance Ethernet

Surecom Technology

- **NE2000 Ethernet Driver**
 - NE-34

TDK Semiconductor Corporation

- **Digital 21*4* Tulip Ethernet Driver**
 - RTL81xx Fast Ethernet

Trident Microsystems

- **PCnet32 and PCnetPCI Ethernet Driver**
 - 4DWave DX

TTTech AG

- **RealTek RTL-8139C+ Ethernet Driver**
 - TTP-Monitoring Card V2.0

VIA Technologies, Inc.

- **NE2000 Ethernet Driver**
 - VT82C926 [Amazon]

- **VIA Rhine Ethernet Driver**

- VT6102 [Rhine-II]
- VT6105 [Rhine-III]
- VT6105M [Rhine-III]
- VT86C100A [Rhine]

Winbond Electronics Corporation

- **NE2000 Ethernet Driver**

- W89C940
- W89C940F

- **Winbond W89c840 Ethernet Driver**

- W89C840

IDE Controller Devices

NanoNAS supports almost all IDE controller chipsets commonly found on commodity PC hardware. Optimized, chipset-specific drivers for most common devices are provided. In addition to IDE, many SATA chipsets can be driven in "Legacy Mode" using the appropriate IDE driver. Other more obscure devices are also likely to be supported by the included generic IDE driver. NanoNAS includes support for the following IDE controller chipsets:



Advanced Micro Devices [AMD]

- **AMD PCI IDE Driver**

- AMD-755 [Cobra] IDE
- AMD-756 [Viper] IDE
- AMD-766 [ViperPlus] IDE
- AMD-768 [Opus] IDE
- AMD-8111 IDE

ALi Corporation

- **ALi 15x3 IDE Driver**

- M5229 IDE

Artop Electronic Corp

- **ARTOP AEC62xx IDE Driver**

- ATP850UF
- ATP860
- ATP860 NO-BIOS
- ATP865
- ATP865 NO-ROM

ATI Technologies Inc

- **ATI IXP IDE Driver**

- ATI Dual Channel Bus Master PCI IDE Controller

Broadcom

- **Serverworks OSB4/CSB5/CSB6 IDE Driver**

- CSB5 IDE Controller
- CSB6 IDE Controller
- CSB6 RAID/IDE Controller
- OSB4 IDE Controller

Compaq Computer Corporation

- **Compaq Triflex IDE Driver**

- Triflex Dual EIDE Controller

Contaq Microsystems

- **Cypress CY82C693 IDE Driver**

- 82c693

Cyrix Corporation

- **Cyrix/NS 5530 IDE Driver**

- 5530 IDE [Kahlua]

Efar Microsystems

- **SLC90E66 IDE Driver**

- SLC90E66 [Victory66] IDE

Intel Corporation

- **Intel PIIX IDE**
 - 430MX - 82371MX Mobile PCI I/O IDE Xcelerator (MPIIX)
 - 450NX - 82451NX Memory & I/O Controller
 - 6300ESB PATA Storage Controller
 - 82371AB/EB/MB PIIX4 IDE
 - 82371FB PIIX IDE [Triton I]
 - 82371FB PIIX ISA [Triton I]
 - 82371SB PIIX3 IDE [Natoma/Triton II]
 - 82372FB PIIX5 IDE
 - 82440MX EIDE Controller
 - 82801AA IDE
 - 82801AB IDE
 - 82801BA IDE U100
 - 82801BAM IDE U100
 - 82801CA Ultra ATA Storage Controller
 - 82801CAM IDE U100
 - 82801DB (ICH4) IDE Controller
 - 82801DBM (ICH4-M) IDE Controller
 - 82801E IDE U100
 - 82801EB (ICH5) SATA Controller
 - 82801EB/ER (ICH5/ICH5R) IDE Controller
 - 82801FB/FBM/FR/FW/FRW (ICH6 Family) IDE Controller

Micron

- **RZ1000 IDE Driver**
 - PC Tech RZ1000
 - PC Tech RZ1001

National Semiconductor Corporation

- **NS SC1200 IDE**
 - SCx200 IDE
- **NS87415 IDE Driver**
 - 87415/87560 IDE

nVidia Corporation

- **AMD PCI IDE Driver**
 - CK804 IDE
 - CK8S Parallel ATA Controller (v2.5)
 - CK8S Serial ATA Controller (v2.5)
 - MCP04 IDE
 - MCP2A IDE
 - nForce IDE
 - nForce2 IDE
 - nForce2 Serial ATA Controller
 - nForce3 IDE

OPTi Inc.

- **Opti621 IDE Driver**
 - 82C621 [Viper-M/N+]

Pacific Digital Corp

- **ADMA100 IDE Driver (Basic PIO Support)**
 - ADMA-100 DiscStaQ ATA Controller

Promise Technology, Inc.

- **Older Promise IDE Driver**
 - 20246
 - PDC20262 (FastTrak66/Ultra66)
 - PDC20265 (FastTrak100 Lite/Ultra100)
 - PDC20267 (FastTrak100/Ultra100)
- **Promise PDC20268 and Newer IDE Driver**
 - 20269
 - 20275
 - PDC20268 (Ultra100 TX2)
 - PDC20270 (FastTrak100 LP/TX2/TX4)
 - PDC20271 (FastTrak TX2000)
 - PDC20277 (SBFastTrak133 Lite)

Silicon Image, Inc.

- **CMD64x IDE Driver**
 - PCI0643
 - PCI0646
 - PCI0648
 - Sil 0649 Ultra ATA/100 PCI to ATA Host Controller
- **Sil IDE Driver**
 - Adaptec AAR-1210SA SATA HostRAID Controller
 - PCI0680 Ultra ATA-133 Host Controller
 - Sil 3112 [SATALink/SATARaid] Serial ATA Controller

Silicon Integrated Systems [SiS]

- **SIS IDE Driver**
 - 5513 [IDE]

Tekram Technology Co.,Ltd.

- **Tekram TRM290 IDE Driver**
 - DC290

Triones Technologies, Inc.

- **Highpoint 34x IDE Driver**
 - HPT343/345/346/363
- **Highpoint HPT366 IDE Driver**
 - HPT302/302N
 - HPT366/368/370/370A/372/372N
 - HPT371/371N
 - HPT372A/372N
 - HPT372N
 - HPT374

VIA Technologies, Inc.

- **VIA IDE Driver**
 - VT82C576M/VT82C586
 - VT82C586A/B/VT82C686/A/B/VT823x/A/C PIPC Bus Master IDE

Other

- **Generic IDE Driver**
 - Other PCI IDE Controllers

Getting NanoNAS

NanoNAS FDU (Floppy Disk Utility) CD-ROM or a downloadable CD-ROM ISO image is available for purchase directly from the Server Elements website (www.serverelements.com).

NOTE: *NanoNAS is a commercial product and is not freely distributable. Please do not make or distribute illegal copies. Doing so is not only illegal, but undermines our efforts and further impedes our ability to develop the product.*

Internet Resources

Additional information, the latest releases, as well as well-mediated user forums covering NanoNAS and related OS products can be found on the Server Elements (www.serverelements.com) website. In addition to this manual, the user forums are the best place for information regarding the use, administration and maintenance of your NanoNAS file server.

Disclaimer

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