3c589.device Manual

Neil Cafferkey

COLLABORATORS

	TITLE : 3c589.device Manual		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY	Neil Cafferkey	November 18, 2024	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

3c589.device Manual

1.1   3c589.device Manual

```
3c589.device 1.3 - A 3Com Etherlink III PC Card driver


   Introduction

   Installation and Usage
   Performance

   Author and Legal~Information

   History
```

1.2   Introduction

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Introduction
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```
3c589.device is a SANA-II network driver for 3Com Etherlink III PC Cards.
These are sold by several companies under a variety of model names; see
below for (potential) compatibility.
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```
The following ethernet and ethernet/modem cards should work:
```

```
   Company                    Model

   3Com                       3c562
                              3c562B
                              3c562C
                              3c562D
                              3c563B
                              3c563C
                              3c563D
                              3c589
                              3c589B
                              3c589C
                              3c589D
```

```
     3Com Megahertz              3C3FEM556C
                                 3CCE589EC
                                 3CCE589ET
                                 3CCEM556
                                 3CCEM556B [tested]
                                 3CXE589D
                                 3CXE589EC
                                 3CXEM556


     Farallon                    EtherMac *
                                 EtherWave *


     Hitachi                     HT-4840-13


     Motorola                    Marquis *
```

* These cards will not currently work with 3c589.device, because I need more information about how to identify them. If you have one of these cards, you can provide me with the necessary details using ModemTest ("comm/misc/ModemTest.lha" on Aminet). Just run it in a shell and send me the file "pcmcia.attr" that it produces (compressing the file with LhA or similar will make it much smaller).

1.3   Installation and Usage

Requirements

3c589.device needs an A600 or A1200 and OS 3.0 or greater.

Installation

To install 3c589.device, run the 'Install' script. In your networking software, set the SANA-II device name to networks/3c589.device and the unit number to 0.

Cable types

Your Etherlink III card will have been programmed to use a certain cable type. If you need to change this setting, I believe there is 3Com software available for Windows to change this and other settings. Check their web site.

In the future there may be a utility provided to change this setting on an Amiga.

3c589.device has so far only been tested with 10baseT cabling. 10base2 cabling should also work. I'm not sure if there was ever an Etherlink III PC Card with an AUI connection, but if there was, it should work.

Multifunction cards

Although 3c589.device works with some multifunction ethernet/modem cards, only one of these functions can be used at a time. This is due to

limitations in AmigaOS's card.resource.

A1200 hardware bug

The A1200 (but not the A600) has a hardware bug which prevents a card being reset except on insertion or removal. There are both hardware and software remedies for this problem. The software solution is CardReset (util/boot/CardReset.lha on Aminet). There are several different types of hardware fixes, some of which are available commercially.

Problems

With some A1200 motherboards, hot insertion or removal of a 3c589-compatible card may cause the system to reset.

Miami will cause the system to hang if the card is removed while online. Re-insertion won't help.

1.4 Performance

Performance

On a 40MHz 68030 system, the following FTP speeds have been achieved:

	Upload kbytes/s	Download kbytes/s
AmiTCP 3.0b:	407	497
Genesis:	373	551
Miami 3.2b:	191	279

There is no version of the device specially compiled for CPUs above the 68000, since there was no performance benefit.

1.5 Author and Legal Information

Author and Legal Information

3c589.device was written by Neil Cafferkey.

Please send bug reports, suggestions, and any other correspondence to one of the following addresses.

E-mail: caffer@cs.ucc.ie

Post: Neil Cafferkey,
      30, Upper Kensington,
      Rochestown,
      Cork,
      Ireland.

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information.

The full pccard.library archive, which includes the source code and
developer files, is available on Aminet as "util/libs/pccard.lha".

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1.6 History

History

V1.3 (February 2003)

  – Added 4 to reported length of incoming raw packets to make ShapeShifter
    and Fusion work (thanks to Marcin Ozdzinski).
  – Fixed a buffer overrun.

V1.2 (January 2003)

  – Bug fix: couldn't handle more than 64kb of attribute address space,
    causing some cards not to work (thanks to Tom Parker).

V1.1 (January 2003)

  – First release.

1.7 Cable Types

10baseT: Twisted Pair (TP) cabling with RJ45 connectors.

10base2: Thin coaxial cable with BNC connectors.