MPC-100 README

Driver Diskette Ver 4.2
for 10/100 Base FastEthernet PC Card
Sep 1999

TOPIC
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[1].   Diskette Contents
[2].   Installation for DOS ODI Driver
[3].   Installation for CLIENT32 Driver
[4].   Installation for DOS Packet Driver
[5].   Installation for Microsoft Windows 95/98/2000
[6].   Installation for Microsoft Windows NT 3.51
[7].   Installation for Microsoft Windows NT 4.0
[8].   Installation for Linux Series
[9].   Installation for NDIS2 Driver
[10]. Copyrights, Trademarks, and Disclaimers

[1] Diskette Contents

    Files   Contents

    \README.TXT   This File
    \ENABLER   DOS PCMCIA Enable Program
    \ODI   Novell Netware DOS ODI Driver
    \PKTDRV   FTP Compliant Packet Driver
    \WIN95   NDIS Driver for Windows 95
    \WIN98   NDIS Driver for Windows 98
    \WIN2000   NDIS Driver for Windows 2000
    \WNT351   NDIS Driver for Windows NT 3.51
    \WNT40   NDIS Driver for Windows NT 4.0
    \Manual\Manual.HTM   Manual Document

[2]. Installation for DOS ODI Driver

    1. For those who installed EMM386.EXE in your config.sys, please exclude
       memory address D400-D7FF from your system. PCMCIA Ethernet card enabler
       program will use this space to read Ethernet ID and CIS from on-board
       flash memory.
       [Example]
               DEVICE=EMM386.EXE NOEMS X=D400-D7FF
                             or
               DEVICE=EMM386.EXE NOEMS X=D000-DFFF

    2. User need to add "LASTDRIVE=[Device Name]" in the Config.sys file,
       then reboot Notebook. Example, if you want to login to Device "N",
       the string is "LASTDRIVE=M".

    3. Enable the FastEthernet PC Card
       The EN100.EXE is a PCMCIA controller enabling program. This enable
       program only need for DOS and Windows 3.1 system. You don't need
       installed the Socket and Card service in your Notebook before
       executing the enabler.
       In DOS command, go to "\ODI", then type "EN100 [/IRQ:x][/IOP:xxx]"
       * IRQ - system interrupt number required for the FastEthernet card.
       * IOP - card's I/O port address assignment in HEX format.
       The default syntax is "EN100 /IRQ:5 /IOP:300".

    4. Getting Started the Novell DOS ODI Driver:
       This directory "\ODI" contains FastEthernet DOS ODI driver.
       You need the following files to install DOS ODI DRIVER.
       a. LSL.COM supplied by Novell

b. PCM100.COM: DOS ODI driver, supplied by card manufacturer
c. IPXODI.COM: supplied by Novell
d. NETX.EXE: supplied by Novell
e. NET.CFG: optional configuration file

Type "STARTNET" at the DOS prompt will execute the files above, then you can login to the file server.

[3]. Installation for CLIENT32 Driver
1. If you have completed installed the Netware Client 32 for DOS, all you have to do is to modify STARTNET.BAT. Please see the sample STARTNET.BAT above. If not, Please follow the next step 2 - step 7.

2. Run INSTALL.EXE from Netware Client 32 for DOS diskette 1 (or from Netware 4.11 CD). When the product manual appears, mark the "Netware Client 32 for DOS" item, then press <Enter>.

3. Select "OTHER DRIVERS" item from "32-bit Network Board Drivers" menu, then press <Enter>.

4. Insert LNAX100 Driver Diskette, then specify the driver path A: or B:

5. Select "10/100 PCMCIA Ethernet adapter", then press <Enter>.

6. Following instructions to complete the Client32 for DOS software installation.

7. Reboot your machine.

Configuring LAN Adapter's Media Type:

The keyword "NWAY" is provided for LAN adapter to auto detect the speed and the duplex mode.
For example:
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN NWAY

The keyword "S100" is provided for user to force the media to 100BASE-TX HALF DUPLEX mode.
For example:
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN S100

The keyword "S10" is provided for user to force the media to 10BASE-T HALF DUPLEX mode.
For example:
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN S10

Installing Multiple LAN Adapters:

The keyword "SLOT" is provided for multiple LAN adapters in a single server by the driver LNAX100.LAN. So, add "SLOT" in LOAD commands. For example:

C:\NOVELL\CLIENT32\NIOS.EXE
LOAD LSLC32.NLM
LOAD CMSM.NLM
LOAD ETHERTSM.NLM
LOAD LNAX100 FRAME=Ethernet_802.2 SLOT=1
LOAD LNAX100 FRAME=Ethernet_802.2 SLOT=2

Sample Configuration Files:

STARTNET.BAT (Client 32 for DOS will contain):

```
C:\NOVELL\CLIENT32\NIOS.EXE
LOAD C:\NOVELL\CLIENT32\LSLC32.NLM
LOAD C:\NOVELL\CLIENT32\CMSM.NLM
LOAD C:\NOVELL\CLIENT32\ETHERTSM.NLM
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN FRAME=ETHERNET_802.2
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN FRAME=Ethernet_802.3
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN FRAME=Ethernet_II
LOAD C:\NOVELL\CLIENT32\LNAX100.LAN FRAME=Ethernet_SNAP
```

[4]. Installation for DOS Packet Driver

1. For those who installed EMM386.EXE in your config.sys, please exclude
   memory address D400-D7FF from your system. PCMCIA Ethernet card enabler
   program will use this space to read Ethernet ID and CIS from on-board
   flash memory.
   [Example]
   ```
           DEVICE=EMM386.EXE NOEMS X=D400-D7FF
                           or
           DEVICE=EMM386.EXE NOEMS X=D000-DFFF
   ```

2. Enable the FastEthernet PC Card
   The EN100.EXE is a PCMCIA controller enabling program. This enable
   program only need for DOS and Windows 3.1 system. You don't need
   installed the Socket and Card service in your Notebook before
   executing the enabler.
   In DOS command, go to "\ODI", then type "EN100 [/IRQ:x][/IOP:xxx]"
   * IRQ - system interrupt number required for the FastEthernet card.
   * IOP - card's I/O port address assignment in HEX format.
   The default syntax is "EN100 /IRQ:5 /IOP:300".

3. Getting Started the DOS Packet Driver:
   To load the packet driver , type "PCM100DPD 0x60".
   PCM100PD syntax: PCM100PD [options] <packet_int_no> <int_level> <io_addr>
   -i -- Force driver to report itself as IEEE 802.3 instead of Ethernet II.
   -d -- Delayed initialization. Used for diskless booting
   -n -- NetWare conversion. Converts 802.3 packets into 8137 packets
   -w -- Windows hack, obsoleted by winpkt
   -p -- Promiscuous mode disable
   -a -- Auto-Negotiation Mode
   -1 -- Line Speed 10M, Half Duplex Mode
   -2 -- Line Speed 10M, Full Duplex Mode
   -3 -- Line Speed 100M, Half Duplex Mode
   -4 -- Line Speed 100M, Full Duplex Mode
   -u -- Uninstall

   <PACKET_INT_NO>   This specifies the software interrupt (IRQ) where
                     you'll load the packet driver. It must be in the range
                     0x60 to 0x80.

   [IRQ]   This specifies the hardware interrupt (IRQ) where your
                     card will be indicated.

   [IO_BASE]   This specifies the I/O address .

   Example:
       The following command line loads the FastEthernet Packet Driver at
       software interrupt 60h, at I/O address 300, at hardware interrupt 5.
       "PCM100PD 0x60 0x5 0x300"

   Type "START" at the DOS will execute the en100.exe and pcm100pd.com,
   the IRQ and I/O address must be the same.

[5] Installation for Microsoft Windows 95/98/2000

    1. Introduction
       Windows 95/98/2000 provides a complete "Plug n' Play" System that will
       automatically recognize and configure most PC Cards.

       Before inserting your FastEthernet PC Card, the system's PCMCIA chipset
       must be enabled and functioning. The PCMCIA chipset is responsible
       for controlling the systems interface for PC Cards. Please consult
       the system's manual or manufacture for use with Windows 95/98/2000.

       Please have the installation media for the Windows 95/98/2000 ready for
       any request for files.

    2. Getting Started
       With the system off, remove all PC Cards

       Start/Boot Windows 95/98/2000

       Insert the FastEthernet PC Card into one of the system's PCMCIA Slots.

       A "Update Device Driver Wizard" dialog will display, press "Next" button.

       Select "Other Locations".

       Type in "A:\WIN95" or "A:\WIN98" in the location, where the device
       information file (.INF file) and the driver (.SYS) can be found.

       Press "OK", the driver then installs itself. If have "Insert Disk"
       dialog box for asking other file, type in your Windows path or
       Windows\system or your Winsows CD-ROM to find the file.

       Click "Finish" to complete the installation process.

       Reboot the machine to start the network.

       The Window 95/98/2000 PCMCIA installation will add Netware and Microsoft
       network support automatically if the 95/98/2000 have installed the Network
       Protocol. Any network support can be adjusted by the Network Support
       in the Control Panel.

[6] Installation for Microsoft Windows NT 3.51

    1. Introduction
       Windows NT 3.51 provides support for PC Card (PCMCIA) compatibile
       systems. Before inserting your FastEthernet PC Card, the system's
       PCMCIA chipset must be enabled and functioning. The PCMCIA chipset
       is responsible for controlling the systems interface for PC Cards.
       Please consult the system's manual or manufacture.

       Please have the installation media for Windows NT ready for
       any file request. The following installation does require a
       basic knowledge of the NT environment.

    2. Getting Started for Windows NT3.51

       Please confirm that your Notebook can support PCMCIA Card in NT3.51,
       if can't support it, contact your notebook manufactory

       Remove all PC Cards from the system

       Insert the FastEthernet card into a PC Card slot in the computer.

Start/Boot Windows NT3.51

Open the "Main" group icon and double click the "Control Panel",
then the "Network" icon.

Press the "Add Adapter..." and select "10/100 Base FastEthernet
PC Card" from the list. Press "Continue".

An adapter setup option dialog box is displayed next. Select your
free IRQ, I/O address and connection type, then press "OK".

"Windows NT Setup" dialog box will now ask you to input device driver
location. Type in "A:\WNT351" then press "Continue".

Upon finished the driver files copying, the process will go back to
Network Settings, select "Bindings..." button to bind all services
and press "OK" button to exit the binding display.

The installation will proceed to ask you for the required NWLink
IPX/SPX Protocol and TCP/IP setup information. You will need to
ask your System Administrator for an IP address.

Click "OK" after you have entered the proper protocols' setup
information and restart the computer.

Restart the NoteBook.

[7] Installation for Microsoft Windows NT 4.0

   1. Introduction
       Windows NT 4.0 provides support for PC Card (PCMCIA) compatibile
       systems. Before inserting your FastEthernet PC Card, the system's
       PCMCIA chipset must be enabled and functioning. The PCMCIA chipset
       is responsible for controlling the systems interface for PC Cards.
       Please consult the system's manual or manufacture.

       Please have the installation media for Windows NT ready for
       any file request. The following installation does require a
       basic knowledge of the NT environment.

   2. Getting Started for Windows NT 4.0

        Please confirm that your Notebook can support PCMCIA Card in NT 4.0
        if can't support it, contact your notebook manufactory

        Remove all PC Cards from the system

        Insert the FastEthernet card into a PC Card slot in the computer.

        Start/Boot Windows NT 4.0

        Double click the "Control Panel/Network", select the "Adapter",
        press "Add" button, then select the "Have Disk" option for required
        driver disk from the manufacturer.

        Type in "A:\WNT40".

        After press the "OK" button, the card's information will be displayed
        in the dialog box for your selection.

        Select the "10/100 Base FastEthernet PC Card" from the dialog box
        and press OK to continue.

Go to next dialog box, select free IRQ, I/O address and select your connection type, then press OK. The NT will proceed with the driver files copying.

Upon finished the driver files copying, the process will go back to Network, select "Bindings" and press "Close" button.

The installation will proceed to ask you for the required TCP/IP setup information. You will need to ask your System Administrator.

Click "OK" after you have entered the proper TCP/IP setup information and restart the computer.

[8] Installation for Linux Series

1. Getting Started for RedHat 5.2 with PCMCIA-3.0.5

Login as root.

Copy lnax100.o into /lib/modules/2.0.36 -"cp lnax100.o /lib/modules/2.0.36"

Copy config.lna100n into /etc/pcmcia - "cp config.lna100n /etc/pcmcia"

Use vi editor to append the following line into /etc/pcmcia/config - source ./config.lna100n

Restart the cardmgr - "/etc/rc.d/init.d/pcmcia restart"
Logoff root.

2. Getting Started for RedHat 6.0 with PCMCIA-3.0.9

Login as root.

Copy lnax100.o into /lib/modules/2.2.5 -"cp lnax100.o /lib/modules/2.2.5"

Copy config.lna100n into /etc/pcmcia - "cp config.lna100n /etc/pcmcia"

Use vi editor to append the following line into /etc/pcmcia/config - source ./config.lna100n

Restart the cardmgr - "/etc/rc.d/init.d/pcmcia restart"

Logoff root.

[9] Installation for NDIS2 DOS Driver

Please refrence to readme.txt in /NDIS2, /MSLANMAN.DOS, /MSLANMAN.OS2

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