4   The Setup Program

The LFE-8139ATX NIC package includes a diskette containing a setup program. This program provides you to verify the configuration and suspect the isolation of faults. The 'setup new configuration' option allows you to change the configuration parameters for the NIC to fit the specific environment in which the NIC is installed.

The adapter's I/O port address and interrupt request level (IRQ) are set by the BIOS. Other default settings can be changed for these situations as below shown.

This program provides the following functions:

♦ Displays the current configuration of the adapter.
♦ Lets you set up the NIC in the computer while specifying parameters for a different computer.
♦ Performs network diagnostic tests to verify the operation of the adapter basic functions, and the adapter ability to communicate over the network with another adapter.
♦ Helps you to check the power management function.

Before running the setup program, ensure that the adapter driver is not loaded; otherwise, unpredictable results may arise.

Performing the RSET8139.EXE Program

The setup program is designed to make sure that the NIC is installed correctly and functioning properly in your computer.

After putting the LFE-8139ATX NIC into your computer, then boot DOS. Switch to the driver and directory where the RSET8139.EXE program resides. To execute the RSET8139.EXE in DOS, it will search for the NIC in your system. The utility will then present you with a screen showing the configurations it found. If the RSET8139 program does not recognize the NIC configuration that you have installed, please check your hardware installation. Start RSET8139.EXE program again.

The setup program can be to set up on board configuration and provides diagnostic tests. It is for testing the basic function verification, EEPROM data Access, loopback operation, and the ability to communicate over the network with another adapter.

To access this program, insert the Driver Diskette into the floppy disk drive and then type the following at the DOS prompt:

>A:\RSET8139.EXE [Enter]

If the NIC is installed, the setup program main menu appears on the screen shown in Figure.

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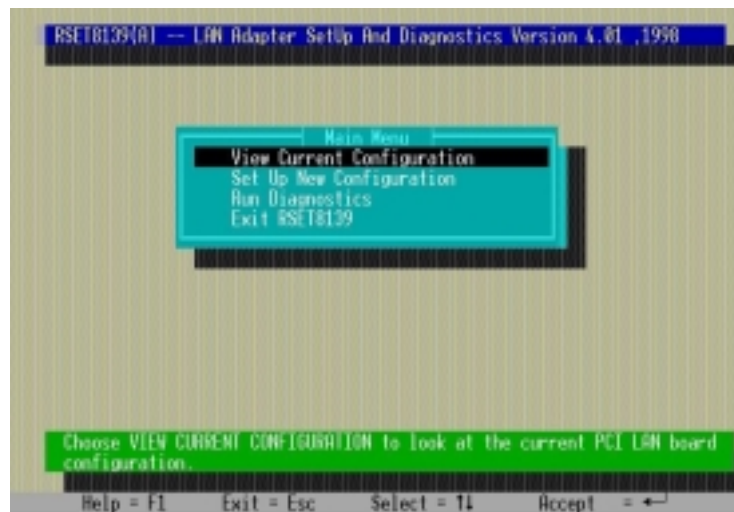
The following describes the available options on the main menu, and execute these functions test as follows:

1. View Current Configuration

On the main menu, select the **View Current Configuration** option and press [Enter], the screen would similar as following:

It offers you to find the LFE-8139ATX NIC current configuration in your system.
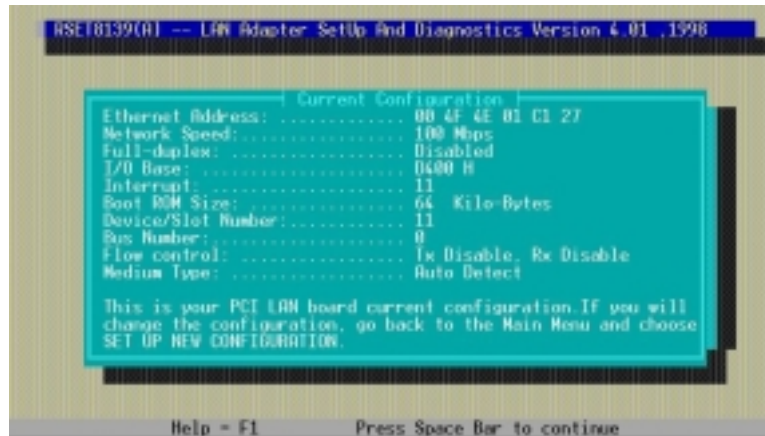
2. Set Up New Configuration

Select the **Set Up New Configuration** option from the main menu, and press [Enter], the screen appears as shown in below :
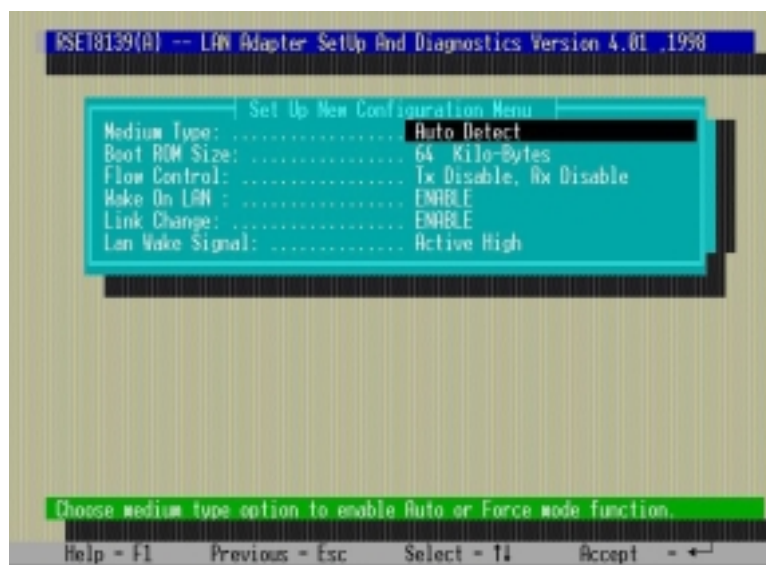
As shown in below table lists the option settings you can change.

Option Settings

| Option	Default Setting	Other Available Settings
Medium Type	Auto Detect	100 Full, 100 Half 10 Full, 10 Half
Boot PROM	64 kilo-Bytes	Boot ROM Enable Boot ROM Disable
Flow Control	Tx-Enable, Rx Enable	Tx Disable, Rx Disable Tx Enable, Rx Disable Tx Disable, Rx Enable
Wake On LAN	ENABLE	Disable
Link Change	DISABLE	Disable
Lan Wake Signal	Active High	Active Low

CAUTION: *Before setting the NIC for full duplex, make sure the switch port is also set to full duplex.*

Before you active the switching hub to server connection, make sure the switch port and adapter are configured for full duplex.

- *If the NIC connect repeater, you should select* **Auto Detect** *or* **half -duplex** *setting.*
- *If the Lan Wake Signal of the motherboard activate in high pulse, the NIC Lan Wake Signal should be set in high status, If the Lan Wake Signal of the motherboard activate in low pulse, the NIC Lan Wake Signal should be set in low status*
- *When the* **Wake On LAN** *is enabled, the NIC can Remote Wake-Up powers up a PC remotely from standby or suspend mode using a wake-up packet that is sent through the LAN*

3. Run Diagnostics

Select the **Run Diagnostics** option from the main menu, and press [Enter], the screen appears as shown in below. Under the **Run Diagnostics** menu pull-down menu, select the item that you want to test and press [Enter].

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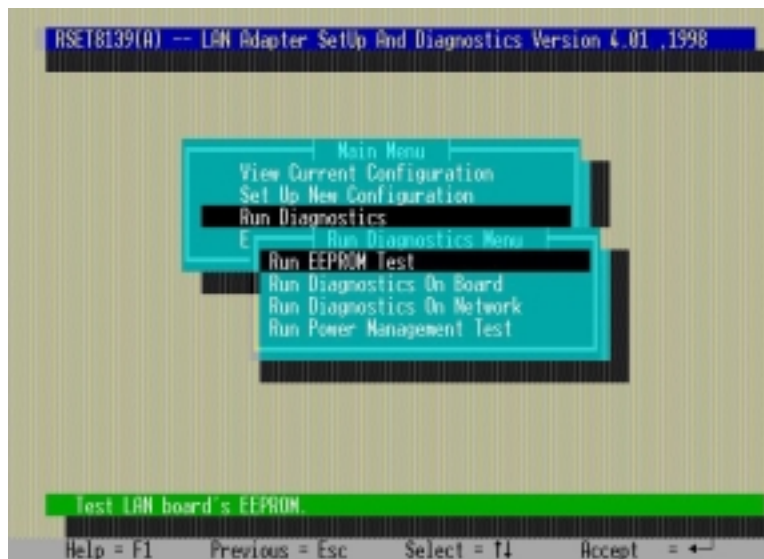
The ***Run Diagnostics* tests** do a basic function verification on board of LFE-8139TX NIC.
The basic Diagnostic tests include:

  EEPROM Test   : EEPROM data read/write test
  Diagnostics On Board : To do a basic function verification on board.

  Diagnostics On Network :
  To run this test on network, you need another computer set up as a Responder to receive
  packets from the adapter being tested and echo them back to the adapter.
  Starting the test as follows:

  1.From the ***Run Diagnostics*** *Menu* pull-down menu select the ***Run Diagnostics On
  Network,*** and press[Enter], the On-Network Diagnostics Menu appears.
  2.Set up another computer as a Responder using the **Set Up As Responder** option from
  On-Network Diagnostic *Menu.*
  3.Select the Set up As Initiator form the *On-Network Diagnostics Menu* and connecting to
  Responder station then press[Enter].

It checks the LFE-8139 NIC ability for communication over the network with another NIC to
receive and transmit network packets.

Perform a diagnostic test first on the NIC basic functions before running a test on its connectivity. This ensures that the NIC basic functions are working properly.

If the diagnostic fails, the NIC may be not be defective. Commonly, it may be caused by incorrect option settings, that conflict with the settings of other boards or improper installation.
Follow the steps below to test the adapter further.

1. Check the NIC installation to make sure the card is seated correctly in the slot.
2. Check the length and rating of the cable connection.
3. Make sure the PCI slot with the NIC in it is active. PCI computers allows PCI slots to be activated or deactivated. This is done through computer's CMOS utility. Please refer to your computer documentation for information about activating PCI slots.
4. Replace the failed NIC with a working adapter and run the diagnostic test program.
5. Install the NIC in another functioning PCI computer and run the tests again.
6. Replace all other PCI adapters from the computer and run the tests again. If the tests pass, the other PCI adapters may be causing connection.

If you have installed the NIC correctly but you still experienced problem, check the software. If you run the diagnostic tests successfully, you rule out a hardware failure on the computer. If

the NIC passes all the tests and there still appears a problem, look at cabling, software and other issues that affect functionality on the network.

Run Power Management Test Function

From the **Run Diagnostics** menu pull-down menu select the **Run Power Management Test**, and press [Enter], the **Run Power Management Test** appears.

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The LFE-8139ATX NIC can be awakened by a Magic Packet wake-up packet and Wake-Up frame sent by management software, or by connecting or disconnecting the TP cable, and the system can be notified via PME# signal. With this method, no one has to be at the PC to turn it on.

If the PC does not boot up when a Magic Packet wake-up packet is sent, please check these follow steps :

- Verify that the Wake On LAN setting is enabled.
- Verify that the Remote Wake-Up cable is plugged in to the NIC as well to the motherboard. Unplug and reinsert the cable if necessary.