

## VT8231/VT8233/VT8235/VT8237 Integrated LAN Software Package (VIA version) Version: 3.3

### Major changes in this driver packages

1. Add supporting to VT8237 integrated LAN.
2. Support Windows Server 2003.
3. Support FreeBSD 5.0.
4. Support Netware 6.5 beta 3.
5. Merge driver package for Add-On-Card and LAN-On-Motherboard to a single one driver package.

### Notice

1. All the drivers included in this driver package are free for the vulnerability of Ethernet frame padding information leakage issue reported by @stake Inc. in Jan 2003.

### Detailed change note list

#### Drivers

| Name                    | Ver. | Supporting OSes  | Note   |
|-------------------------|------|--|--|
| NDIS3<br>NDIS4<br>NDIS5 | 3.18 | Win95, Win95OSR2, Win98, Win98SE,<br>NT3.51, NT4.0, WinME, Win2000,<br>WinXP     | <ol style="list-style-type: none"> <li>1. Porting miniport driver to support 64 bit OS and add AMD64 environment in driver compilation.</li> <li>2. Modify PCI access code to use NDIS provided ones instead of using raw access.</li> <li>3. Add new SVID/SSID.</li> <li>4. Two new OID added, OID_CUSTOM_VID_LIST_SIZE and OID_CUSTOM_LOOPBACK.</li> <li>5. Update new SVID/SSID.</li> </ol> |
| NDIS3F                  | 3.10 | Windows For Workgroup 3.11   | <ol style="list-style-type: none"> <li>1. Modify MII access method to fix ASUS P3BF change media mode bug in MMIO.</li> </ol>  |
| NDIS2                   | 4.20 | LAN Server DOS Workstations,<br>LANTASTIC, PCNFS, MS DOS 6.22<br>(MS client 3.0) | <ol style="list-style-type: none"> <li>1. Move CRC table to end of DATA segment. It fixed the problem of system halt on RPL remote boot environment.</li> <li>2. Add two keyword BUSNO and</li> </ol>  |

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|--------------------------|------|---|--|
|                          |      |   | <p>DEVICENO for specifying the NIC by user.</p> <ol style="list-style-type: none"> <li>3. Add select menu. If there are two or more NICs on the system and user doesn't specify, we show menu for user selection.</li> <li>4. Remove keyword SLOT.</li> <li>5. Fixed the bug of displaying duplex mode.</li> </ol>   |
| Packet                   | 4.17 | MS DOS 6.22 (NCSA Telnet client, PCTCP)                     | <ol style="list-style-type: none"> <li>1. Add two keywords BUSNO and DEVICENO for user specification</li> <li>2. Remove the keyword "-L".</li> </ol>   |
| Server ODI (ASM version) | 4.17 | Netware Server 3.11, 3.12, 4.11, 4.12                       | <ol style="list-style-type: none"> <li>1. Fix LDI file SLOT value range to 1-65535.</li> <li>2. Remove the header of LDI file.</li> <li>3. Use company short name (VIA) instead of "VIA Technologies~..." in LDI file SPROD tag.</li> <li>4. Binary file only change version number.</li> </ol>  |
| Server ODI (C version)   | 5.21 | Client 32 for DOS, Netware Server 5.0, 5.1, 6.0, 6.5 beta 3 | <ol style="list-style-type: none"> <li>1. 1.NW6.5 Beta3 will call DriverInit() for once, even all driver is loaded already. So, we must restore wCurrTxDescAddrAddress &amp; wCurrRxDescAddrAddress registers back if they are modified</li> <li>2. Fix SLOT keyword definition problem in LDI file (dual-LAN installation problem).</li> <li>3. Refine LDI file.</li> </ol> |
| DOS ODI                  | 4.18 | MS DOS 6.22 (Netware client for DOS)                        | <ol style="list-style-type: none"> <li>1. Add new keyword, DEVICENO and BUSNO, for specified the NIC card by user.</li> <li>2. Show select menu when there are two or more adapters on the system and user doesn't specify anyone.</li> <li>3. Reduce the size of RX buffer, form 2048 bytes to 1536 bytes.</li> </ol>   |

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|          |      |   | 4. Remove the keyword PCISLOT and add the keyword FUNCNO.   |
| Linux    | 4.24 | Linux Kernel 2.2.x ~ 2.4.19                   | No version change.  |
| FreeBSD  | 3.14 | FreeBSD 3.2, 4.0, 4.11, 4.2, 4.5,4.6,4.7, 5.0 | <ol style="list-style-type: none"> <li>1. Modify 2 issues: <ol style="list-style-type: none"> <li>a. mbuf multiple free in fet_stop().</li> <li>b. modify fet_start() to check every available slot for every attached mbuf.</li> </ol> </li> <li>2. Modify small packets(len &lt; 60) sending method to use fet_encap()</li> <li>3. Porting to FreeBSD 5.0.</li> <li>4. Remove redundant power management code.</li> </ol>   |
| Unixware | 2.08 | SCO Unixware 7.1                              | No version change.  |
| SCO5     | 4.12 | SCO Open Server 5.0.4                         | <ol style="list-style-type: none"> <li>1. Modify chip name info to be suitable for patch.</li> <li>2. Modify for SCO5 5.0.5 NIC detection issue.</li> <li>3. Modify for flow control issue.</li> <li>4. Modify for MMIO bug of IBM GL300/PL300 series.</li> <li>5. Add new SVID/SSIDs in VIA version.</li> </ol>  |
| DIAG     | 3.20 | MS DOS 6.22                                   | <ol style="list-style-type: none"> <li>1. Port diag tool to 32-bit.</li> <li>2. Modify F6 Network Test function to fast ping-pong Rx/Tx.</li> <li>3. Add F10 PHY Test function to DIAG tool. Use -y to enable it.</li> <li>4. Modify 2-card test function for better TX performance.</li> <li>5. Add new copyright header.</li> <li>6. Sync new libraries.</li> <li>7. Hide "Bootrom" item in DIAG utility if the target device is VT8231/VT8233/VT8235/VT6105 L/VT6105LOM.</li> <li>8. Add a new link on-off WOL test function.</li> </ol> |

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| Winsetup | 2.18 | Win95, Win95OSR2, Win98, Win98SE, NT3.51, NT4.0, WinME, Win2000, WinXP | <ol style="list-style-type: none"> <li>1. Add SubClass ID 80h (Other network controller) to winsetup.exe to accept non-Ethernet controller (such as 802.11).</li> <li>2. Modify -s control complete dialog only.</li> <li>3. Modify -p control progress bar only.</li> <li>4. Update ntsim.sys(1.06).</li> <li>5. Enlarge company name to 40 Bytes.</li> <li>6. Update version number.</li> <li>7. Change version/usage dialog format.</li> </ol> |
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#### Application utilities for users

| Name   | Ver. | Supported OSes   | Note  |
|--------|------|--|---|
| NICSET | 1.23 | Win95, Win95OSR2, Win98, Win98SE, NT4.0, WinME, Win2000, WinXP | <ol style="list-style-type: none"> <li>1. Update winsetup and NDISM component version.</li> </ol> |

#### Drivers/Utilities for Boot ROM users

| Name    | Ver.          | Supported OSes | Note  |
|---------|---------------|----------------|---|
| RPL-DOS | 4.20          |                | <ol style="list-style-type: none"> <li>1. Update rpldos.txt and rplwin95.txt document.</li> </ol>   |
| RPL-W95 | 4.20/<br>3.18 |                |   |
| PXE     | 2.24          |                | <ol style="list-style-type: none"> <li>1. Fixed the bug of flow control configuration. <ol style="list-style-type: none"> <li>a. When we received a packet, we didn't update RBRDU if we dropped it.</li> <li>b. When we received a packet, we update RBRDU prior to setting OWN bit if we accepted it.</li> </ol> </li> <li>2. Fixed the bug of the Preboot API service, PXENV_START_BASE(0x75). it didn't call UNDI API service,</li> </ol> |

|        |      |  |  |
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|        |      |  | PXENV_UNDI_SET_MCAST_AD<br>DRESS(0x09), to set multicast<br>address. It made the packets with<br>multicast addresses were dropped<br>by HW.  |
| PXERPL | 2.18 |  | <ol style="list-style-type: none"> <li>1. Merge PXE 2.23 and RPL 4.19.</li> <li>2. Fixed the bug of flow control<br/>(PXE).</li> <li>3. Merge PXE 2.24 and RPL 4.19.</li> <li>4. Fixed the bug of the Preboot API<br/>service,<br/>PXENV_START_BASE(0x75).<br/>It didn't call UNDI API service,<br/>PXENV_UNDI_SET_MCAST_AD<br/>DRESS(0x09), to set multicast<br/>address. It made the packets with<br/>multicast address were dropped by<br/>HW (PXE).</li> <li>5. Merge PXE 2.24 and RPL 4.19</li> <li>6. Add new feature in boot menu;<br/>doesn't treat the key &lt;shift-tab&gt; as<br/>anykey. Press &lt;shift-tab&gt; is inactive<br/>in bootstrap menu.</li> </ol> |

#### Drivers/Utilities for manufacture, not to release to users

| Driver | Ver. | Supported OSes | Note   |
|--------|------|----------------|--|
| EEPROM | 3.13 | MS DOS 6.22    | <ol style="list-style-type: none"> <li>1. Add a new function to increase or<br/>decrease the MAC address<br/>in the config file, use "eeprom -mi<br/>VAL FILENAME" or<br/>"eeprom -md VAL FILENAME" to<br/>increase/decrease the MAC address<br/>number in the FILENAME file by<br/>VAL.</li> <li>2. Check if device ID matches<br/>eeprom.cfg before EEP writing.</li> <li>3. Modify 8235/8237 PHY check error<br/>string.</li> </ol> |

