

**VT6105M Software Package (VIA version) for LAN-On-Motherboard  
Usage Version: 1.3**

**Drivers**

<b>Name</b>	<b>Ver.</b>	<b>Supporting OSES</b>	<b>Note</b>
NDIS3 NDIS4 NDIS5	3.15	Win95, Win95OSR2, Win98, Win98SE, NT3.51, NT4.0, WinME, Win2000, WinXP	<ol style="list-style-type: none"> <li>1. Simplify FETNDIS.INF DelReg registry writing.</li> <li>2. Fix WinNT 3.51 Add Device bug in oemsetup.inf.</li> <li>3. Return NDIS_STATUS_RESOURCES in Windows 2000/XP and</li> <li>4. NDIS_STATUS_MEDIA_DISCONNECT in NT4/351 when NICSET is in diagnosys.</li> <li>5. Add Adaptive Interrupt driver option for ipxchk problem in Win98SE.</li> <li>6. Fix potential dual-P problem in dpc.c.</li> <li>7. Modify for under-sized packets padding issue.</li> <li>8. Add new copyright header.</li> </ol>
NDIS3F	3.09	Windows For Workgroup 3.11	<ol style="list-style-type: none"> <li>1. Driver modification for disabling "Validate Packet Length" in default.</li> <li>2. Reserve one more byte in SZ_DRIVER_NAME for patch utility.</li> <li>3. Porting from IO-map IO access method to MMIO access method.</li> <li>4. Add shared IRQ all 1's interrupt prevention.</li> <li>5. Change PCAvXXXX() function names to VNSvXXXX() function names.</li> <li>6. Modify for under-sized packets padding issue.</li> <li>9. Add new copyright header.</li> <li>10. Modify to use IO-map IO access</li> </ol>

			method but MMIO access method for ASUS P3BF MB MMIO issue.
NDIS2	4.17	LAN Server DOS Workstations, LANTASTIC, PCNFS, MS DOS 6.22 (MS client 3.0)	<ol style="list-style-type: none"> <li>1. Move CRC table and related variable to Data segment move the code that set D0 mode to before all MAC and MII register accessed.</li> <li>2. If the size of transmit packet is less than 60, we will copy to local and pad its with zero to 60 byte.</li> <li>3. Add copyright message in all source code.</li> <li>4. Fixed the bug in searching PCI device ( only for OS/2) we only search the PCI device on bus 0, so it would initialize fail when NIC on other BUS.</li> <li>5. Move CRC table to end of DATA segment. It fixed the problem of system halt on RPL remote boot environment.</li> </ol>
Packet	4.16	MS DOS 6.22 (NCSA Telnet client, PCTCP)	<ol style="list-style-type: none"> <li>1. Move the code that set D0 mode to before all MAC and MII register accessed.</li> <li>2. If the size of transmit packet is less than 60, we will copy to local and pad its with zero to 60 byte.</li> <li>3. Add VIA Networking Copyright message in all source code.</li> <li>4. Mark the code checking if packet length is less than 60 bytes in send_pkt().</li> <li>5. Check if packet length is more than 17 byte in SMPpseudoDriverSend(). If packet length is more than 17 bytes, the media_header length would be set zero.</li> </ol>
Server ODI (ASM)	4.16	Netware Server 3.11, 3.12, 4.11, 4.12	<ol style="list-style-type: none"> <li>1. Modification for reusing old buffer for under-sized packets padding.</li> </ol>

version)			<ol style="list-style-type: none"> <li>2. NW4.TXT &amp; Directory name modified.</li> <li>3. Add new directory "Nwserver.311" for binary.</li> <li>4. Fix VLAN Mode3 &amp; Mode1 problem.</li> </ol>
Server ODI (C version)	5.19	Client 32 for DOS, Netware Server 5.0, 5.1, 6.0	<ol style="list-style-type: none"> <li>1. Modification for reusing old buffer for under-sized packets padding.</li> <li>2. Fix PHYID check problem. (No Tx Padding, From v5.14).</li> <li>3. Fix TESTCON hang problem when we reusing old buffer for under-sized packets padding.</li> <li>4. Fix VLAN function problem when applied tx packet padding.</li> <li>5. Fix UDFI invoked continuesly &amp; make STRESS test faild for TESTCON (VT3206). Update BCR1 &amp; TCR both when UDFI is on.</li> <li>6. Not load driver if user specified wrong slot.</li> </ol>
DOS ODI	4.16	MS DOS 6.22 (Netware client for DOS)	<ol style="list-style-type: none"> <li>1. Mdfication for reusing old buffer for under-sized packets padding.</li> <li>2. Solve the problems of customer : add PUSH/POP register EBP in DrverSend().</li> </ol>
Linux	4.24	Linux Kernel 2.2.x ~ 2.4.19	<ol style="list-style-type: none"> <li>1. Fixed the kernel panic problem as RX buffer can not be allocated.</li> <li>2. Padding zeros to small frame.</li> </ol>
FreeBSD	3.10	FreeBSD 3.2, 4.0, 4.11, 4.2, 4.5,4.6,4.7	<ol style="list-style-type: none"> <li>1. Compatible with FreeBSD 4.6.</li> <li>2. Add license header on each source file.</li> <li>3. Fixed media setting procdure.</li> <li>4. Add fet_reset() in fet_init().</li> <li>5. Add splimp() in fet_start().</li> <li>6. Add tunable parameters TX_THRESH_DEF,</li> </ol>

			<p>DMA_LENGTH_DEF, QPACKET_DEF to allow user tuning the driver.</p> <ol style="list-style-type: none"> <li>7. Set the watchdog timer to 30 sec.</li> <li>8. Fixed fet_query_auto() function. The fet_query_auto() function report the duplex mode by only query BMCR.</li> <li>9. Fixed duplex mode (v3.08). Removed the code to use FreeBSD internal PHY driver.</li> <li>10. Padding zeros to frame smaller 60 bytes.</li> </ol>
Unixware	2.08	SCO Unixware 7.1	<ol style="list-style-type: none"> <li>1. Padding zeros to small frame.</li> </ol>
SCO5	4.09	SCO Open Server 5.0.4	<ol style="list-style-type: none"> <li>1. Padding zeros to small frame.</li> </ol>
DIAG	3.17	MS DOS 6.22	<ol style="list-style-type: none"> <li>1. Modify F1 Help content.</li> <li>2. 1.Port diag tool to 32-bit.</li> <li>3. Modify F6 Network Test function to fast pingpong Rx/Tx.</li> <li>4. Add F10 PHY Test function to diag tool. Use -y to enable it.</li> <li>5. Modify 2-card test function for better TX performance.</li> <li>6. Add new copyright header.</li> <li>7. Utility library sync.</li> </ol>
Winsetup	2.15	Win95, Win95OSR2, Win98, Win98SE, NT3.51, NT4.0, WinME, Win2000, WinXP	<ol style="list-style-type: none"> <li>1. Fix bug as to parameter driver directory (-d), inf reservation(-k) and help message (-?).</li> <li>2. Fix bug as to removable access while NT4 source needed in nt4.</li> <li>3. Fix bug as to DNI parameter update problem in registry (Depended on INF file).</li> <li>4. Remove enumerate function in</li> <li>5. 95/95osr2/98/98se/me after installation to prevent hang on 98se.</li> <li>6. Fix version number disorder in parameter "-v" in 95/98/me.</li> <li>7. Fix bug which "-r" option can't</li> </ol>

		<p>delete inf.</p> <p>8. Fix comment incorrect about "-p" option</p> <p>9. Fix bug when WorkGroup field in VNETSUP is blank in win95 golden.</p> <p>10. Change new architecture to support 3119.(INSTALL::install device depends on hardware id listed in inf file)(UNINSTALL::uninstall all devices with vendor id = 1106 &amp; device class = network adapter).</p> <p>11. Add reenumerate action to win ME to prevent the installed device missing inf file.</p> <p>12. Bug Fixed in 2000 while update 3.03 from/to 3.13 may casuse NIC out of function.</p> <p>13. Bug Fixed on parameter -b/-r combination.</p> <p>14. Bug fixed in 95 first edition where binary will not installed if there is a existed on in windows system folder.</p> <p>15. Bug Fixed in NT4 that inf search/check may cause illegal access fault.</p> <p>16. Bug Fixed in NT4 that adapter configuration info will fail to be displayed.</p> <p>Winsetup will now update InfName in registry KEY "Netrules" depend on "InfOption" and "AdapterCFID".</p>
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### Application utilities for users

Name	Ver.	Supported OSes	Note
NICSET	1.18	Win95, Win95OSR2, Win98, Win98SE, NT4.0, WinME, Win2000, WinXP	1. Update winsetup and NDISM component version.
DMI	1.09	Win95, Win95OSR2, Win98, Win98SE, NT4.0, WinME, Win2000, WinXP	1. Update winsetup and NDISM component version.
VSNMP	1.11	Win98, Win98SE, NT4.0, WinME, Win2000, WinXP	1. Support Win95/Win95osr2. 2. Update winsetup and NDISM component version.

### Drivers/Utilities for Boot ROM users

Name	Ver.	Supported OSes	Note
RPL-DOS	4.19		<ol style="list-style-type: none"> <li>1. Skipping the offset 8 when calculated new checksum of EEPROM context</li> <li>2. Set D0 mode before accessing all MAC and MII register, this bug will make RPL fail when system restart from Win98.</li> <li>3. Add patch code for AsusP4B</li> <li>4. If the size of transmit packet is less than 60, we will copy to local and pad it with zero to 60 bytes.</li> <li>5. Add VIA Networking copyright message in all source code.</li> <li>6. Fixed D-Link smartbit issue. This issue is system halt when driver keeps on receiving packets. The reason is that interrupt routine is reentered and the stack is full in the end.</li> <li>7. Decrease TXPAUSETIMER value from 0xffff to 0xff. The original value is too long, it may make RPL timeout when Flow-control is started.</li> <li>8. Fixed D-Link smartbit issue. This issue is system halt in loading</li> </ol>

			NIDS2 driver after keeping on receiving smartbit packets.
RPL-W95	4.19/ 3.15		
PXE	2.22		<ol style="list-style-type: none"> <li>1. Fixed the problem on AMI BIOS.</li> <li>2. Skipping the offset 8 when calculated new checksum of EEPROM context.</li> <li>3. Fixed the bug that PXE is fail when restart from Win98.</li> <li>4. Add VIA Networking Copyright message to all source code</li> <li>5. Fixed the bug that system halt when we choice "boot according Bios setting" on Dell530.</li> <li>6. For get correct checksum in non-VIA version, we patch before calculated checksum.</li> <li>7. Decrease PauseTimer from 0xffff to 0xff.</li> </ol>
PXERPL	2.15		

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

Driver	Ver.	Supported OSes	Note
EEPROM	3.10	MS DOS 6.22	<ol style="list-style-type: none"> <li>1. Do not show any message if LAN chip is VT823x.</li> <li>2. Remove F4: BootROM size option if LAN chip is VT823x.</li> <li>3. Modify for VT8235 EEPROM in BIOS MB to ignore eeprom content at 0x03 high byte, which is reserved for EtherID checksum field in VT8235 MB.</li> <li>4. Add new copyright header.</li> </ol>