

VT6107 and VT8231/VT8233/VT8235/VT8237 Integrated LAN Software Package (VIA version) Version: 3.8

1. Major changes in this software packages

- 1.1. New support for Windows CE 5.0 driver.
- 1.2. New support for Windows CE 5.0 ether-debug tool.
- 1.3. New support for Linux 2.6 kernel.
- 1.4. New support for Linux AMD64 platform.

2. Notice

- 2.1. 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.
- 2.2. WHQL submission number of the Windows NDISM driver (v3.37) for x86 in this software package is 861029.

3. Detailed change note list

3.1. Drivers

Name	Ver.	Supporting OSes	Location	Note
NDIS3 NDIS4 NDIS5	3.37	Win95, Win95OSR2, Win98, Win98SE, NT3.51, NT4.0, WinME, Win2000, WinXP, Windows Server 2003	Root directory	<ul style="list-style-type: none"> 1. Add new SVID/SSID. 2. Modify for under-sized/over-sized packets drop coding. 3. Modify info.c to fix source code clean check issue reported by PREFix tool. 4. Modify MiniportHalt function to fix system hang from hibernation after card is removed. 5. Modify CE4/CE5 driver display name. 6. Modify oemsetup.inf to fix NT4 driver update bug.. 7. Modify FETNDIS.INF to use 16-bit/32-bit Un-installer in x86 driver for inf remove function. 8. Add PCI mode0~3 regs context save/restore functions in PM function. 9. Modify WINCE driver to add version info in driver file.
NDIS5 for AMD64	3.37	Windows XP, Windows Server 2003 for AMD64	\AMD64\	
NDIS5 for XP embedded	3.37	Windows XP embedded SP1	\XPe\	
NDIS5 for Windows CE 4.0/4.2	3.37	Windows CE 4.0/4.2	\CE4\	
NDIS5 for Windows CE 5.0	3.37	Windows CE 5.0	\CE5\	<ul style="list-style-type: none"> 1. First release for Windows CE 5.0.

NDIS3F	3.15	Windows For Workgroup 3.11	\WFW311\	1. Modify for under-sized/over-sized packets drop coding.
NDIS2	4.29	LAN Server DOS Workstations, LANTASTIC, PCNFS, MS DOS 6.22 (MS client 3.0)	\LANSVR40.DOS\, \LANTASTI\, \MSLANMAN.DOS\, \PCNFS\	1. No version change in this software package.
Packet	4.23	MS DOS 6.22 (NCSA Telnet client, PCTCP)	\PKTDRVR\	1. No version change in this software package.
Server ODI (ASM version)	5.00	Netware Server 3.11, 3.12, 4.11, 4.12	\NETWARE\SRV RODI.311\, \NETWARE\SRV RODI.312\, \NETWARE\SRV RODI.4\	1. Add Keywords TBUF and RBUF to set TX, RX buffer. 2. Modify Keywords BLEN. 3. UI FLOW_CONTROL option "Hardware Default" is changed into "Hardware Default (Auto)". 4. Modify the procedure for processing Rx. 5. Change buffer size form 2048 to 1536. 6. Disable NoBufResetRx control.
Server ODI (C version)	6.07	Client 32 for DOS, Netware Server 5.0, 5.1, 6.0, 6.5	\NETWARE\CLIE NT32\, \NETWARE\SRV RODI.56\	1. Increase media specific counter TxAbortCarrierSense when TX packet was serviced during link down. 2. Add Keywords TBUF, RBUF & BLEN to set Tx Buffer, Rx Buffer and FIFO DMA Length. 3. UI FLOW_CONTROL option "Hardware Default" is changed into "Hardware Default (Auto)". 4. Fix a bug that when driver would set loopback mode, it set wrong register(0x08-CR0). 5. Display product name according to device ID instead of revision ID. 6. Change buffer size form 2048 to 1536. 7. Show status of connection message when link was changed. 8. Modify the procedure for padding under-sized frame in TX and dropping over-sized frame in RX.
DOS ODI	4.24	MS DOS 6.22 (Netware client for DOS)	\NETWARE\DOS ODI\	1. No version change in this software package.
MAC OS	1.07	MAC OS X	\MACOSX\	1. No version change in this software package.
Linux	4.37	Linux x86 Kernel 2.2.x ~ 2.6.x Linux AMD64 Kernel 2.4.x ~ 2.6.x	\LINUX\	1. Use revision id instead of device id for comparison in all the codes. 2. Fix initial WOL reset code bugs. 3. Fix frame padding/dropping coding bugs. 4. Fix bug of the tagged small frame sending size padding codes. 5. Fix bug of redundant and incorrect cpu_to_le32 macro. 6. Fix legacy WOL register setting bugs. 7. Add contents for driver binding to kernel in linux.txt file. 8. Remove all VMNS related source codes. 9. Remove .depend and .depend.mak Makefile used dependency files. 10. Add rhine_save_pci_context and rhine_restore_pci_context functions. 11. Add calling netif_carrier_on and netif_carrier_off in link-change interrupt. 12. Remove unnecessary cpu_to_le32 macro in calling writel function.

				13. Fix incorrect maximum VLAN ID determination bug. 14. Support 2.6.x kernel. 15. Get back IO map region request/release codes for 2.2/2.4 kernel. 16. Fix linux.txt typo. 17. Support AMD64 based linux system. 18. Fix the bug of incorrect MAC address display after MAC address override and driver reload. 19. Fix the bug of incorrect ethernet device number display while module parameters assigned. 20. Use index instead of descriptor pointer as the parameter in all the TX/RX process functions. 21. For TX frame size smaller than 60 bytes, padding to 60 bytes for both TX tagging and un-tagging condition. 22. Delay register_netdev function execution until all the option and parameter data ready.
FreeBSD	3.19	FreeBSD 3.2, 4.0, 4.11, 4.2, 4.5~4.9, 5.0, 5.1	\FREEBSD\	1. Modify for under-sized frame padding and under-sized/over-sized drop coding.
Unixware	2.15	SCO Unixware 7.1, OpenUnix 8	\UNIXWARE\	1. Modify for under-sized frame padding and under-sized/over-sized drop coding.
SCO5	4.18	SCO Open Server 5.0.4	\SCO5\	1. Modify for under-sized frame padding and under-sized/over-sized drop coding. 2. Add new SVID/SSIDs.
Solaris	1.08	Solaris 8, 9	\SOLARIS\	1. Modify for under-sized frame padding and under-sized/over-sized drop coding.
DIAG	3.34	MS DOS 6.22	Root directory	1. Add anti-dummy mechanism for EEP-less apps. 2. Update lib to SROM123 for EEP-less DMI structure buffer size modification for Phoenix BIOS. 3. Modify chip type field in diag UI for VT6106x.
Winsetup	2.28	Win95, Win95OSR2, Win98, Win98SE, NT3.51, NT4.0, WinME, Win2000, WinXP, Windows Server 2003	Root directory, \WINSETUP\	1. Fix bug parameter "-b -r" won't delete INF. 2. Remove local folder vnt_setup in advance.. 3. Correct some value in version information. 4. Change string table. 5. Do not delete temp file in enum mode in 2k/xp. 6. Set filter while copy source file into local disk.

3.2. Application utilities for users

Name	Ver.	Supported OSes	Location	Note
NICSET	2.06	Win95, Win95OSR2, Win98, Win98SE, NT4.0, WinME, Win2000, WinXP, Windows Server 2003	\NICSET\	1. Update miniport driver(3.37) and winsetup (2.28). 2. Add uni winsetup instead of 3 module of each platform(9X/NT/2K). 3. Update pack tool PFTW to 4.01.

3.3. Drivers/Utilities for Boot ROM users

Name	Ver.	Supported OSes	Location	Note
Flash	3.11	MS DOS 6.22	\FLASH\	<ol style="list-style-type: none"> 1. Add anti-dummy mechanism for EEP-less apps. 2. Update lib to SROM123 for EEP-less DMI structure buffer size modification for Phoenix BIOS.
RPL-DOS	4.33	Remote boot DOS	\RPL\	<ol style="list-style-type: none"> 1. Added anti-dummy mechanism. 2. Fixed the bug on EnableMiiAutoPolling(). 3. Simplified Re-Auto conditional coding.
RPL-W95	4.33/ 3.37	Remote boot Windows 95 Golden	\RPLW95\	<ol style="list-style-type: none"> 1. Use newer version RPL bootrom.
PXE	2.37		\PXE\	<ol style="list-style-type: none"> 1. TFTP download of bootfile from DHCP bootfile option(tag 67) would not work unless the option was NULL terminated or followed by a DHCP pad option(tag 0). This has been fixed. 2. The string of bootstrap menu support patch. We can use patch program to modify all message in bootstarp menu. 3. Adding anti-dummy mechanism. 4. Fixed the bug in vPacketTransmitted(). This bug is TXON isn't turned on after TX underflow. 5. Patched ICH6 bug. 6. Fixed the bug on shared IRQ.
PXERPL	2.36		\PXERPL\	<ol style="list-style-type: none"> 1. PXE 2.37 and RPL 4.33.

3.4. Drivers/Utilities for manufacture, not to release to users

Name	Ver.	Supported OSes	Location	Note
Ether-debug tool for Windows CE	1.02	Microsoft Windows CE 4.2/5.0	\ETHERTOOL\	<ol style="list-style-type: none"> 1. First release for Windows CE 5.0.
EEPROM	3.19	MS DOS 6.22	\EEPROM\	<ol style="list-style-type: none"> 1. Add anti-dummy mechanism for EEP-less apps. 2. Update lib to SROM123 for EEP-less DMI structure buffer size modification for Phoenix BIOS. 3. Add LED setting selection in both UI and command-line.

3.5. MISC

Name	Ver.	Support OSes	Location	Note
UNATTEND	1.00	Windows 9x, NT 4.0, 2000, XP	\UNATTEND\	<ol style="list-style-type: none"> 1. No version change in this software package.

3.6. Application documents

Document	Ver.	Location	Note
NICSET User Guide	1.2	\NICSET\	<ol style="list-style-type: none"> 1. First release in this software package.