

ATNICm5x Device Driver for the AT-24xx and AT-27xx Series Ethernet Network Adapter Cards Software Release Notes

Please read this document before you begin to use the software.

Supported Platforms

The ATNICm5x device driver is supported on the AT-24xx and AT-27xx series Ethernet network adapter cards.

Product Documentation

For hardware installation instructions, refer to the following guides:

- Ethernet Network Adapters Installation Guide* (PN 613-50669-00)

This document is available on the Allied Telesyn web site at www.alliedtelesyn.com.

Driver Version 4.53

Bug Fix

- You can now disable the LLA function.

Driver Version 4.52

Bug Fixes

- Corrected receive statistics (Jabber, Collision, Miss Frames, Memory Error) issue where good receives were still being tracked by checking the receive descriptor status. Changed to use built-in MIB for the case of the Am79C976-based NICs.
- Corrected issue with Am79C976-based NICs which caused an inaccurate count of missed packets (OID_GEN_RCV_NO_BUFFER).
- Corrected bug with receive packet indication for number of free receive buffers.
- Corrected the issue where some switches put out invalid signals at power up, causing the Altima PHY to set the RX_ER line. Communication would resume after the condition was cleared.

Driver Version 4.50

Enhancements

- Added support for the Enhanced Backoff Algorithm affecting half-duplex operation.

Driver Version 4.49

Bug Fixes

- Corrected support for legacy NICs using the PCI-II chip.

Driver Version 4.48

Bug Fixes

- Corrected WHQL issue where receive statistics were not correctly updated.

Driver Version 4.47

Bug Fixes

- In some cases, intermittent network connectivity was reported when using driver version 4.45. This issue was caused when receive packets were indicated with NDIS_STATUS_SUCCESS. Receive packets are now indicated with NDIS_STATUS_RESOURCES.

Driver Version 4.45

Bug Fixes

- Corrected interrupt handling issues which caused higher than expected CPU utilization under heavy load.
- Transmit packet data was not being padded with zeros when the payload was less than the 60 bytes. Corrected for security reasons.
- Corrected the demand-transmit routine, which was disabling the NIC interrupt every time it was called after sending a batch of packets. Now, if the NIC's interrupt is enabled when this function is called, it is not disabled.
- Corrected issue with transmit statistics where transmit errors such as Loss of Carrier and Late Collisions were not being tracked properly.
- Corrected the driver statistics to correctly support 64-bit OIDs.
- Corrected spin lock issues relating to LBFO (load balancing and failover) functionality, which were causing random lock-ups on multi-processor systems.
- Changed receive packet indication from NDIS_STATUS_RESOURCES to NDIS_STATUS_SUCCESS.
- Corrected Receive Lookahead setting.
- Corrected failure to communicate after resuming from hibernation.
- Corrected speed indication issue with multi-PHY hardware versions.

Enhancements

- Implemented Scatter/Gather DMA support.
- Implemented the NDIS packet buffer ring for transmit packets.
- Interrupt sharing is now enabled.
- Implemented transmit interrupt masking to improve CPU utilization.
- Enabled burst-mode DMA support to increase performance.
- Changed the PHY setup for the Am79C976-based NICs to use the port manager to automatically configure the external PHY.
- Implemented the NDIS "Check for Hang" routine, which monitors the chip to ensure that it is running.
- Moved the link check function call to the check-for-hang routine to eliminate the need for a separate timer, and to avoid waiting for the driver-supplied spin lock, thus affecting performance.

Driver Version 4.44

Enhancement

- Updated to pass Microsoft's WHQL 10.1 certification.

Contacting Allied Telesyn

This section provides Allied Telesyn contact information for technical support as well as sales and corporate information.

Online Support

You can request technical support online by accessing the Allied Telesyn Knowledge Base: <http://kb.alliedtelesyn.com>. You can use the Knowledge Base to submit questions to our technical support staff and review answers to previously asked questions.

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- Allied Telesyn web site: www.alliedtelesyn.com
- Allied Telesyn FTP server: <ftp://ftp.alliedtelesyn.com>

If you prefer to download new software from the Allied Telesyn FTP server from your workstation's command prompt, you will need FTP client software and you must log in to the server. Enter "anonymous" for the user name and your email address for the password.

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