



PCnet-32-KT

Am79C965 Based Evaluation Kits for VESA VL-Bus Systems

DISTINCTIVE CHARACTERISTICS

- Based on the PCnet-32 (Am79C965) 32-bit single-chip Ethernet controller
- Two evaluation kit options available:
 - PCnet-32-KT/2 with 10BASE-T and 10BASE2 ports
 - PCnet-32-KT with 10BASE-T port
- Implements a full functional Ethernet node using a VESA VL-Bus™ system as host
- Ethernet adapter card utilizing a high performance, low-cost, bus-master architecture (NE2100)
- Software compatible with all PCnet family members
- Software drivers support all popular Network Operating Systems
- Includes evaluation board, software driver diskettes and supporting documentation

GENERAL DESCRIPTION

The PCnet-32 evaluation kit is an evaluation vehicle for the Am79C965 PCnet™-32 single chip Ethernet controller. There are two versions of the kit available for evaluation. The PCnet-32-KT supports the 10BASE-T (Twisted Pair) connection, while the PCnet-32-KT/2 supports both the 10BASE2 (Cheapernet) connection and the 10BASE-T connection on the evaluation card.

The evaluation board, when installed in a VESA Local-Bus host system, provides a platform for demonstrating the high performance design of the PCnet-32 device, the low manufacturing cost of a PCnet-32 based solution and the overall ease of design. The platform further allows the user to evaluate network hardware and to develop software for an Ethernet node based on the PCnet-32.

In addition to the evaluation board, the kit comes with software diskettes, a hardware user's manual, the *PCnet Family Network Driver Installation Guide*, and device datasheet and the *PCnet Family Technical Manual*.

The software includes driver object codes for Novell NetWare™ ODIDOS and OS/2, NetWare Lite, Microsoft Windows NT, Windows for Workgroups, LAN Manager, Banyan VINES Client, IBM LAN Server, SCO UNIX, Artisoft LANtastic/Al, DEC Pathworks, and Packet Driver. Also included are two utility programs, one for configuration of the network adapter card and software driver installation, and one for EEPROM configuration.

In addition, AMD provides a low-level evaluation program to establish connections and send and receive

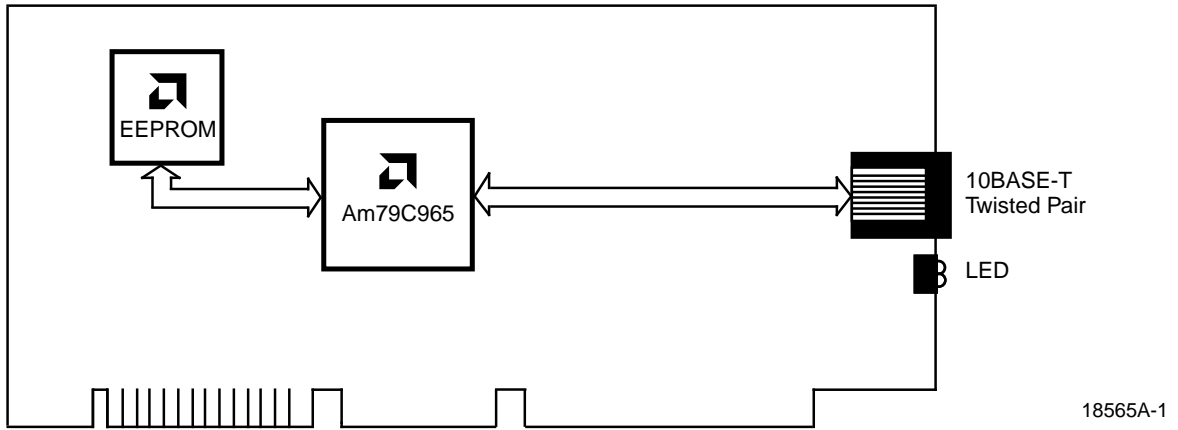
messages. The evaluation program allows the user to view and change the contents of the PCnet-32 registers, the memory resident Initialization Block, and the data buffer Descriptor Rings. The program also allows the designer to establish loops for hardware probing.

The PCnet Family Configuration and Installation utility program, AmlInstall, provides an easy user interface to view the configuration of the PCnet-32 evaluation board. The utility program will automatically scan the system bus(es), which may include ISA, VL, or PCI to find the installed PCnet device. This utility program will identify AMD's PCnet-ISA, PCnet-ISA+, PCnet-32, and PCnet-PCI devices. With the configuration portion of the program, the utility allows the user to select the I/O address, IRQ channel, DMA channel, and Boot ROM address for the PCnet-32 device. After configuration, the user may use the installation portion of the utility to install a selected driver by copying the appropriate driver from the AMD diskette and create or modify the CONFIG.SYS, AUTOEXEC.BAT, and PROTOCOL.INI or NET.CFG files on the user's system.

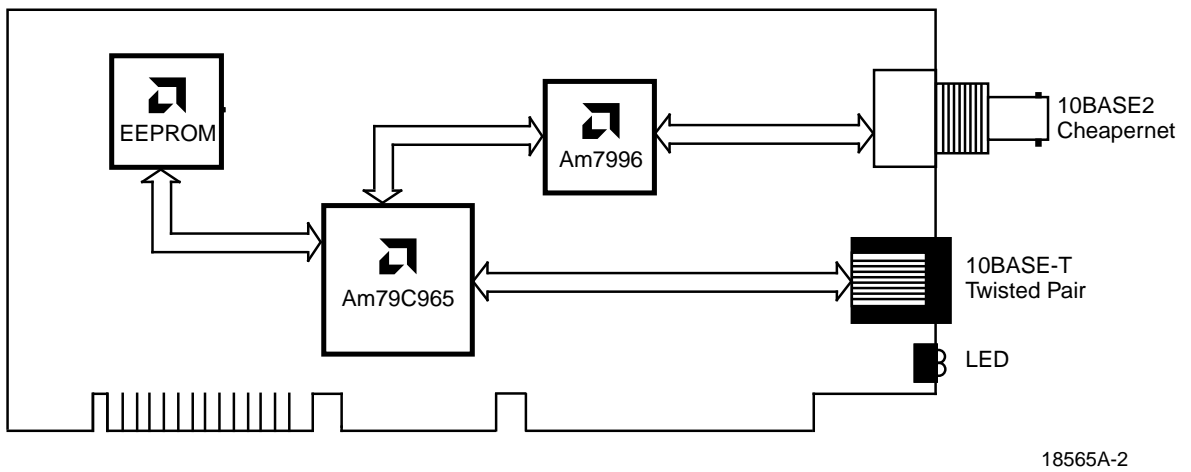
The PCnet-32 evaluation board stores the unique IEEE physical address in the serial EEPROM. Once powered up, the Am79C965 device reads the node's IEEE physical address from the EEPROM through the Microwire interface protocol. The EEPROM utility program allows the user to change the bus configuration options such as burst length, FIFO thresholds, I/O location, etc. For more details about the PCnet-32 single chip Ethernet controller, refer to the *Am79C965 PCnet-32 data sheet* (PID#18219) and *PCnet Family Technical Manual* (PID# 18216).

BLOCK DIAGRAM

PCnet-32-KT



PCnet-32-KT/2



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