

C-LANCE-AT-KT

Am79C90 Based Ethernet/Cheapernet/Twisted Pair Half Card Evaluation Kit for PC/AT

DISTINCTIVE CHARACTERISTICS

- C-LANCE-AT-KT/2 integrated with 10BASE2 transceiver and AUI port
- C-LANCE-AT-KT/2T integrated with 10BASE-T transceiver and AUI port
- Implements a working Ethernet node using an IBM PC/AT or compatible as host
- Complete solution utilizes CMOS Local Area Network Controller for Ethernet (C-LANCE) high performance, low-cost bus master architecture
- Supports the following types of network interface:
 - Standard AUI port for external 10BASE2, 10BASE5, or 10BASE-T MAU connection

GENERAL DESCRIPTION

The Ethernet/Cheapernet/IEEE 802.3 evaluation kit, called the C-LANCE-AT-KT (Am2100 architecture), is a design evaluation vehicle for AMD's Ethernet chipset. It is intended for use in IBM PC/AT or compatible machines, and represents a low component count, minimum board space, low cost network adapter implementation. There are two versions of the card available for evaluation, each optimized for a particular medium. The C-LANCE-AT-KT/2 card supports the 10BASE2 (Cheapernet) connection, while theC-LANCE-AT-KT/2T card supports the 10BASE-T (Twisted Pair) connection. Both versions have a standard AUI port (fully IEEE 802.3, Section 7, compliant) for connecting to 10BASE5 (Ethernet) medium through an external MAU. The choice of network media operation is jumper selectable.

Despite the card's low cost, it is still a high performance design that takes full advantage of the PC/AT multi-master I/O bus. When installed in a host machine, the system becomes a platform upon which to evaluate network hardware and to develop software for a complete node processor. The software designer can take advantage of the many tools available for the PC/ AT-compilers, assemblers, and debuggers.

The C-LANCE-AT-KT comes with a floppy diskette of software programs. The software includes a high-level demonstration program, a low-level driver/monitor,

- On board transceiver for Cheapernet connection (C-LANCE-AT-KT/2 only)
- On board transceiver for Twisted Pair connection (C-LANCE-AT-KT/2T only)
- Evaluation software allows the system designer access to register level functions, thereby facilitating quick development of custom software drivers
- 100% compatible with Novell NE2100 card
- Includes driver object code only for NetWare[™] ODI, NDIS 2.01, NDIS 3.0, Artisoft[®], LANtastic/AI[™], Streams (for SCO UNIX), and Packet Driver

Packet Driver (version 10.3), driver object code for Net-Ware ODI, NDIS 2.01, NDIS 3.0, Artisoft LANtastic/AI, and Streams (for SCO UNIX). The demonstration program contains an ISO data link layer with a menu driven interface which allows the user to assign physical and logical addresses, establish connections, and send and receive messages. The driver/monitor lets the user view and change the contents of theC-LANCE's registers, the memory resident Initialization Block, and the data buffer Descriptor Rings. The program also allows the designer to establish loops for hardware data probing. The Packet Driver (source code and object code) is included as a sample C-LANCE driver in 80x86 assembly language. The Novell NetWare object code, as well as the other drivers, transforms the C-LANCE-AT-KT into a cost effective, competitive, and manufacturing-ready commercial board level product. This allows the user to evaluate the performance of the AMD Ethernet chipset in a real PC LAN system.

In addition to the board and the software diskette, theC-LANCE-AT-KT kit comes with a user's manual including device specifications, device application notes, the Am2100/Am1500T Network Driver Installation Guide, C-LANCE device datasheet, and cable hook-up hardware.

BLOCK DIAGRAM

C-LANCE-AT-KT/2T



C-LANCE-AT-KT/2



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