

Apple Serial NB Card: General Information (6/95)

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TOPIC -----

This article provides general information on the Apple Serial NB card.

DISCUSSION -----

The Apple Serial NB card is an intelligent NuBus card that uses Apple's Macintosh Coprocessor Platform (MCP) architecture. It provides additional communications and processing capabilities to a Macintosh computer.

The card includes a Motorola 68000 processor operating at 10 megahertz and 512 kilobytes of random access memory (RAM), which is expandable to 1MB. Software for the MCP consists of MCP/OS, Apple IPC, and support software. MCP/OS and Apple IPC supports a multitasking distributed operating environment for communications and other real-time services on the same card.

The card uses two Zilog SCC chips to support a total of four serial ports. A 62-pin connector on the back of the card breaks the electrical signalling into the respective ports. These ports can be configured to operate as four RS-232-C ports, or as two higher speed ports (such as V.35) and two RS-232-C ports. The RS-232-C ports can operate at speeds up to 19.2 kilobits per second (Kbps). The higher speed ports are DMA-backed and can operate at speeds up to 64 Kbps. Cabling for this card comes in two flavors: the Hydra cable, which provides four RS-232-C connectors (M0128LL/A), and the V.35 cable (M0127LL/A), which provides one V.35 port and one RS-232-C port.

The Apple Serial NB card can support more than one networking protocol because of its multitasking operating system and multiple independent ports. The card can be installed in a Macintosh II serving as a gateway to other networks, such as SNA with the SDLC protocol and X.25 with the HDLC protocol. This card is designed to be a platform for various serial communications applications (initially, MacAPPC and MacX25). The features and capabilities of the card correspond to the AST serial communications card, which has been available for some time and which also can run the MacAPPC and MacX25 software. The memory expansion option was implemented to allow MacAPPC to serve a large number of users and to provide enough memory for a customer to run multiple applications.

The two cabling options were designed with MacAPPC and MacX25 in mind. The cables are available for purchase separately. Future software developed for the

card may require new cables to be built.

The following documents contain details about the Apple Serial NB card or its technology:

Apple Serial NB Card Installation Guide (included with the card)
Apple Macintosh Coprocessor Platform Developer's Guide (available through APDA)

Article Change History: 06 Jun 1995 - Corrected V.35 cable part number. 17 Feb 1995 - Corrected typo. 13 Feb 1995 - Added cable part numbers.

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