## Race on to deliver MCA, EISA goods

BY PATRICIA KEEFE

WESTBORO, Mass. — Spring deliveries of 16M bit/sec. Token-Ring adapters optimized for the Extended Industry Standard Architecture (EISA) bus are expected to overlap with initial shipments of sister cards designed for machines with the IBM AT and Micro Channel Architecture (MCA) buses.

Compaq Computer Corp. is working closely with Token-Ring vendor Proteon, Inc. and other suppliers of network adapters to assist them in building EISA cards.

According to Proteon Vice-President of Marketing Nate Kalowski, which cards are delivered first is mostly a matter of which chip maker can ship in volume first Texas Instruments, Inc., with its 16M bit/sec. Token-Ring chip set, or Intel Corp., which is supplying the EISA chip.

Kalowski confirmed that Proteon is developing an EISA bus-mastering card from the ground up that will be able to operate at either 4M or 16M bit/sec. Bus mastering enhances performance by routing data off the network directly into system memory and eliminating read and write operations to the direct-memory access controller. It also offloads this activity from the system CPU.

Proteon demonstrated a 16M bit/sec. MCA card in the fall and plans to support both platforms. It is too early to set pricing for cards for either bus, Kalowski said.

## Also thinking adapter

The vendor is considering an EISA adapter for its nonstandard 10M bit/sec. Token-Ring as well, Kalowski said.

"The EISA platform is a good fit for Token-Ring technology because of the performance of its 32-bit bus and I/O, which makes for a good file server for data- and graphics-intensive applica-tions," he said. "We believe that EISA will be a major player."

Confirmation of Compaq's efforts with network adapter card suppliers follows reports from sources close to Compaq and Novell, Inc. that the two are considering a deal allowing Compag to reference-sell Novell's Netware 386 network operating system with Compaq's 33-MHz server based on Intel Corp.'s 80386 processor. Both products are expected to ship in the second or third quarter.

There is some speculation that Compaq may be positioning itself for a run at the work group server market. Users are increasingly employing 386 computers as file servers on local networks, and Compag is the No. 1 seller of 386 boxes. Novell has long-standing relationships with both Proteon and Compaq and said last week that it plans to deliver an EISA driver for its software once EISA machines are shipping in volume. Neither Novell nor Proteon sell server hardware.

## Micro Channel gains support; boost expected

BY WILLIAM BRANDEL

Good-news bouquets have continued to shower the Micro Channel Architecture (MCA) in the last two weeks, as a core of support builds for the IBM technology.

 Ing. C. Olivetti & Co., a co-founder of the MCA rival Extended Industry Standard Architecture (EISA), announced two MCA-compatible personal computers last week, with availability scheduled in June. This marks the second EISA member to bring MCA compatibles to market; Tandy Corp. is still filling back orders for its MCA machines.

 IBM has hinted at plans to introduce an improved version of MCA this spring. According to IBM senior engineer Chet Heath, Micro Channel bus speed could be improved significantly by simply removing the wait state. Heath said the wait state was applied to slow the bus down and balance data transfer speed between the bus and the processor.

An IBM spokesman said the enhanced Micro Channel will be compatible with the Micro Channel implementations used on the Personal System/2 Models 60, 70 and 80. The spokesman said IBM would not implement the bus until Intel Corp. announces its faster 33-MHz 386 microprocessor, expected out this spring.

 The Sierra Group, Inc., a Tempe, Ariz.based market research firm, has dramatically revised its research to support MCA-based PS/2s. Last September, when EISA was announced, the group forecast that users would reduce their plans to purchase MCA machines. However, a new study found that 77% of Fortune 500 users polled will buy PS/2s and that three-quarters of these units will have a Micro Channel bus.

 Businessland, Inc. denied a report that the retail giant had decided not to sell EISA-based systems. But, Chairman David Norman said, "We believe Micro Channel is an industry standard www.We'd material like to see the rest of the world behind it."



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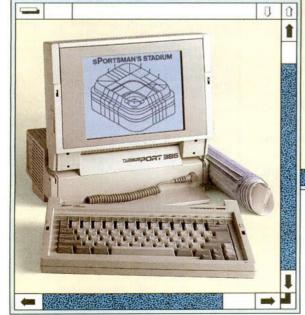
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