ENDL

Date: September 30, 1988

To: Industry Representatives

Subject: Common Access Method Committee

At the SCSI Forum in February, Jim Rubino of Seagate spoke of "an effort to develop a standard BIOS and a set of drivers for the PC market to make it a total solution for the PC world. Other manufacturers who might be interested were invited to join the club."

In the March Happenings issue of the ENDL Letter I wrote: "Software has to change if the potential of intelligent interfaces is to be fulfilled. The first hint that this might be about to happen was Jim Rubino's words on a common BIOS to transcend individual differences. If Seagate convinces Microsoft to change the kernel in DOS, OS/2 and Xenix to talk to SCSI naturally we may see disk, tape and optical drives sharing the same HBA as a scanner."

Since then I have bugged Jim on a random basis to fill me in on any progress he has made. The Seagate effort has been a proprietary program developed in conjunction with Cipher Data. The objective was to provide a common software interface to both disk and tape, with Seagate disks and Cipher tapes running off the same Seagate HBA (Host Bus Adapter).

The Present

Only one company, Micropolis, approached Jim after his statement at the SCSI Forum, which left the impression that there was little industry interest. In mid-August, Seagate and Cipher agreed to discuss some characteristics of the program with a few more companies that have peripherals oriented to PCs.

In light of the positive response to this limited survey, Seagate and Cipher have decided to "take public" into an industry forum much of the development effort expended to date.

Two documents are involved. The first is the Common Access Method, a programmer's interface to SCSI. The latter will allow software drivers and/or an HBA's on-board BIOS to handle the specifics associated with generating SCSI command sequences and handling device status information. The other is the subset of SCSI-2 required by the SCSI-2/CAM, a SCSI-facto so to speak.

The concept of an industry group getting together to achieve a specific goal has been successful for the Quarter Inch Committee and the ESDI Steering Committee. I suggest we form a SCSI-2/CAM Committee along the same lines.

The Project

Anybody using a PC running under any operating system other than DOS cannot be sure that SCSI peripherals are supported. Even the DOS user is faced with a situation in which to connect a disk, a tape and a scanner he might wind up having to buy separate host bus adapters. The problem is with the software drivers that are unique to each.

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The objectives of the SCSI-2/CAM Committee are to specify an environment in which, with compliant hardware and software, a user can be assured of being able to mix 'n match SCSI-facto peripherals on a single CAM-compliant HBA.

o Define a set of calls and I/O requests (Common Access Method), to assist developers in writing code to support the PC environment.
o The SCSI-2/CAM will provide software with a wide range of SCSI functions that are generic to HBAs.
o The SCSI-2/CAM will not require that software be SCSI-specific, SCSI-expert, or be sensitive to SCSI nuances.
o Ensure the SCSI-2/CAM supports a broad range of peripherals.
o Provide a "pass-through" mode for special functions which may be device specific or manufacturer dependent.
o Permit the SCSI-2/CAM functions to be incorporated into the BIOS (Basic Input/Output System) chip of the HBA and save system memory.
o Pursue avenues to have SCSI-2/CAM become a formalized ANSI standard.
o Encourage broad-based software support for attaching SCSI devices to PCs.
o Document the implied specification (subset) of SCSI-2.

The Proposal

Form a SCSI-2/CAM Committee to spread the burden of documentation and other costs over many companies. The committee would have a recognized list of members, with their names listed in the letterhead of committee stationery.

Member companies will be asked to contribute $2,000 to fund the effort of defining the SCSI-2/CAM and SCSI-facto. All funds received will be placed in a separate account and billed by ENDL on a time and materials basis. Copies of billings against the account to be mailed to members on a regular basis.

There may be a need for continued funding when the original contributions are disbursed, but the more companies that join, the lower that likelihood (none were made for ESDI). A charge of $200 to defray the cost of document distribution and maintenance would be levied on non-members.

A number of companies (Adaptec, Cipher Data, DEST, LMS OSD, Micropolis, Seagate and Sytron) have already indicated their support of the goals listed above. The first meeting of the SCSI-2/CAM Committee will be hosted by Seagate at the Sunnyvale Hilton at 9:00 a.m. on October 19.

If you have any questions, please hold them until the meeting. I will be in Japan at the ISO SC13 meeting from September 30 through October 7 and at the ANSI plenary meetings in Boston from October 10 through 14.

Remember, everyone is welcome to join in the definition of the Common Access Method. I hope to see you in Sunnyvale on October 19.

Yours sincerely,

I. Dal Allan

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