

Cumana SCSI II Interface

Cumana's new SCSI II card is the first such interface to be made available for Acorn computers. Although it has been designed with the Risc PC in mind, it is also compatible with all Archimedes machines which have slots for normal size expansion modules. The card allows Risc PC users to communicate at full speed with any SCSI device as well as SCSI II devices, which can achieve data transfer rates of 10Mb/sec.

Acorn SCSI II devices are thin on the ground, so I have not been able to confirm this claim, but I can confirm that the card is as fast as any SCSI board I have used on an Acorn machine, though of course transfer rates are invariably determined by the device in use. Suffice it to say that the card's on-board buffering should extract the best performance out of any device.

In the past, I have had to set up SCSI devices to run on many different computer systems. The experience is often fraught with problems caused by uncooperative hardware and unhelpful software. Even on the Macintosh, where SCSI is the standard interface for connecting all manner of hardware, the installation is usually nothing short of nightmarish.

I was pleasantly surprised then, to find that Cumana's SCSI Manager software is the most helpful and easy to use SCSI installation software I have ever come across. The main window allows you to see what devices you have, to map one to a logical drive or to partition it and map it to several drives, with a useful help display which enables you to set things up quite quickly.

Why partition a drive? One of the main reasons is security: you can write-protect partitions and hide them from view. For example, you could divide a drive into three partitions. One could contain applications in a write-protected area, which would protect them against accidental deletion. A write-enabled partition could be used to store users' files, and a hidden area could be used to store files and applications restricted to a privileged user - very useful in schools where computers are used both for teaching and for the teacher's private work.

This sort of protection is particularly useful to users of Acorn's Access, which is supported by the Cumana software. Under Access, drives may be protected by the network from external access but normally do not have any protection from access via the host computer. Although the Risc PC allows its internal disc to be protected, on older machines this can be a vulnerable area; the Cumana interface can address this problem.

The SCSI II interface provides five levels of protection. Depending on which level you choose, this can prevent other users from overriding the protection that you have given to discs, or it can protect the configuration from tampering, which can have inconvenient results, especially in situations where several computers may be involved.

One of the main strengths of the card for many users will be its handling of removable media, which can be troublesome with some interfaces. Acorn's SCSI interface, for example, requires that a

Nathan Micholey investigates a new type of SCSI card for Acorn Machines

removable drive is mounted and then dismounted when the computer is first switched on, otherwise the SCSI filer will consume vast amounts of idle time looking for the missing drive, causing a noticeable degradation in the latency of background

Product: SCSI II Card

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operations. The Cumana device has no such problem. If the drive has not been inserted, it will be ignored until it is explicitly mounted by the user.

The generally excellent software is let down slightly by the unusual filer drive icon and the incorrect positioning of the filer menu, but the card contains a Flash EPROM, which means that software upgrades can be made available on disc and then uploaded to the card by the user, a process which Cumana hopes will future-proof its cards.

Overall, the card is just the sort of well-designed and reliable hardware that

