```
00:             $AE
01:             $F4
02:             partition index (24 * part#
                - 16)
03:             partition index EOR $5A
                check code
04:             # blocks / 256 in entire
                card
05-07:          <<<reserved>>>
08-1F:          partition 1 data
20-37:          partition 2 data
    .
    .
    .
C8-DF           partition 9 data
E0-FF           <<<reserved>>>
```

The partition data is laid out like this within each group of 24 bytes:

```
Relative 00:    base address (hi)
01:             base address (mid)
02:             size (hi)
03:             size (mid)
04:             operating system code
05:             operating system check code
06-07:          <<<reserved>>>
08-17:          name of partition
```

Protocol Converter

Description of the Protocol Converter

The Protocol Converter is a set of assembly language routines which turn the //c disk port into a multi-drop peripheral bus capable of supporting up to 127 external I/O devices. The firmware in the Apple Memory Expansion Card and RamFactor provide all the features of the protocol converter for one I/O device, the memory card itself. The interface card for using the UniDisk 3.5 in an Apple //e or IIGS also supports a Protocol Converter.

CHAPTER ONE

RamFactor Installation

This section tells you everything you need to know about installing RamFactor in your computer.

Required

❑ **Computer**

You can install RamFactor in an Apple IIGS, //e (standard or enhanced),][Plus, Laser 128, or Franklin computer. It cannot be installed in the Apple //c or //c Plus.

❑ **80 Column Card**

RamFactor does not function as an 80 column text card. If you wish to run software written for 80 column display, you must have an 80 column card installed in your computer.

○ **The Apple //e** requires an 80 column text card or extended 80 column text card installed in its auxiliary slot. Of course, an Applied Engineering RamWorks® auxiliary memory expansion/80 column card is recommended!

○ **Apple II, Apple][Plus, and Franklin Ace 1000** series computers require an Applied Engineering ViewMaster 80 (-or a Videx-compatible 80 column card.)

○ **The Apple IIGS, Laser 128, and the Franklin Ace 2000** series computers have built-in extended 80 column display circuits.

Recommended

❑ **System Saver**

If you have more than 1.5 megabytes of RAM (including RamFactor and auxiliary slot memory expansion cards) installed in your system, Applied Engineering recommends that you protect your Apple system from excessive heat build-up with a cooling fan, such as the System Saver® from Kensington Microware. These specially designed fans are available from many computer dealers.