>> Solid State Data Recorder

>> STD Bus Compatible

>> Densities from 4Meg to 128Meg

>> High Speed PC Data Link

>> Read Cycles as fast as 200ns

128MEG STD BUS
SOLID STATE DATA RECORDER

The AEPSTD16M8 is an ultra high density, solid state data recorder designed around the STD bus structure. Incorporating the latest in Flash memory technology, the AEPSTD16M8 can achieve densities up to 128 megabytes in 4 megabyte increments. An on board microcontroller allows the use of single byte commands for complete control of read/write functions which eliminates the otherwise normal overhead associated with Flash memories. Write cycles can achieve speeds of up to 80us and read cycles as fast as 200nS.(Faster read and write times available from the factory.)

Options include:

The DL I/O Module provides direct data transfer rates faster than 200K baud between an IBM PC or compatible and the AEPSTD16M8 data recorder.
(Note: Data transfer rate is dependant on speed of PC used.)

A burst recording mode which allows write cycles of 4 Megabytes/burst at 70ns.

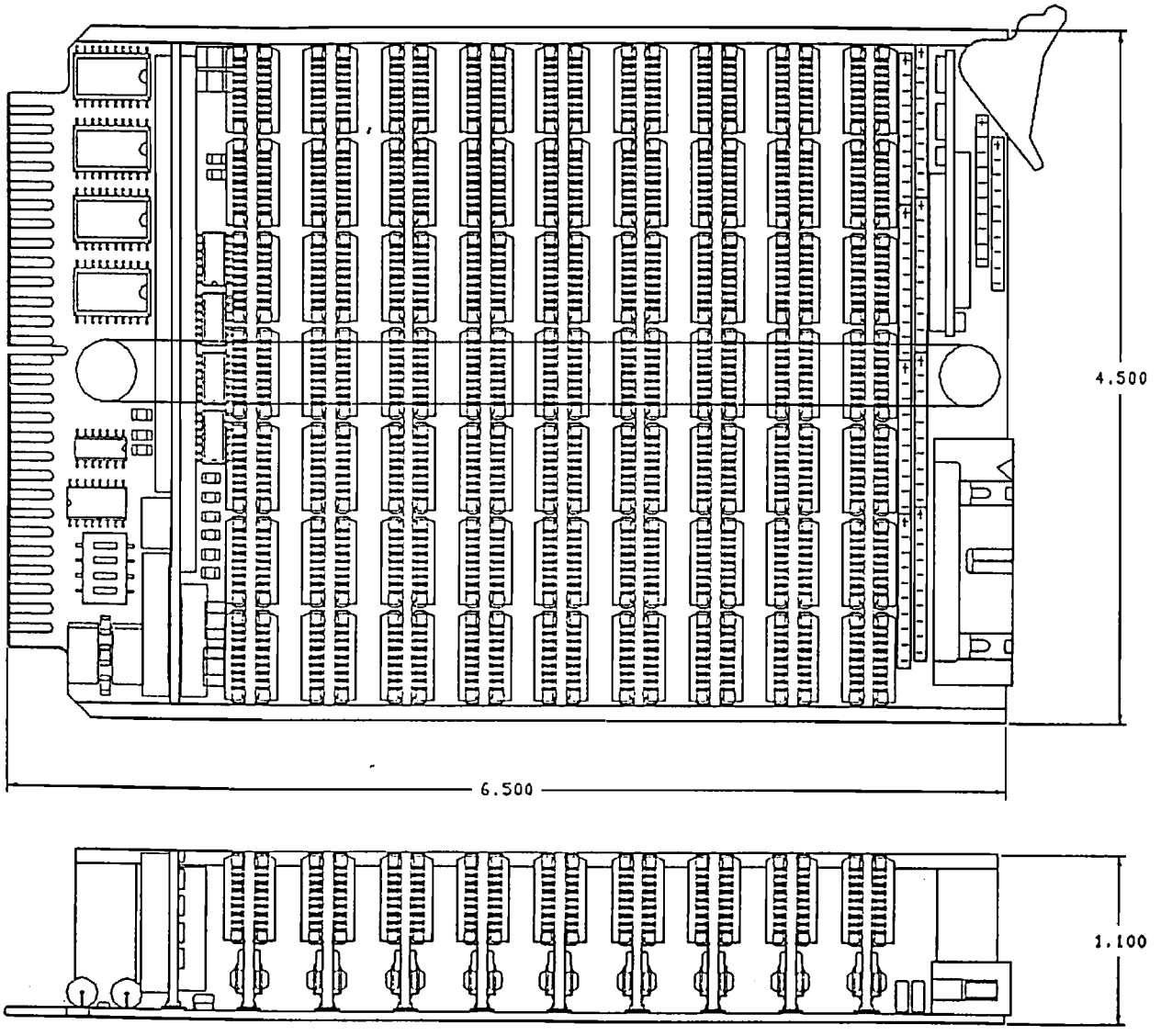
Data filtering and compression during record.

The AEPSTD16M8 can also be configured for use as a stand alone data recording device where data transfer is conducted through a bi-directional, high speed RS-485 connection.

Please contact the factory for more information on these options.

ADVANCED ELECTRONIC PACKAGING
21562 SURVEYOR CIRCLE, HUNTINGTON BEACH, CA 92646
(714) 969-1150 FAX: (714) 536-0936

Physical Dimensions:



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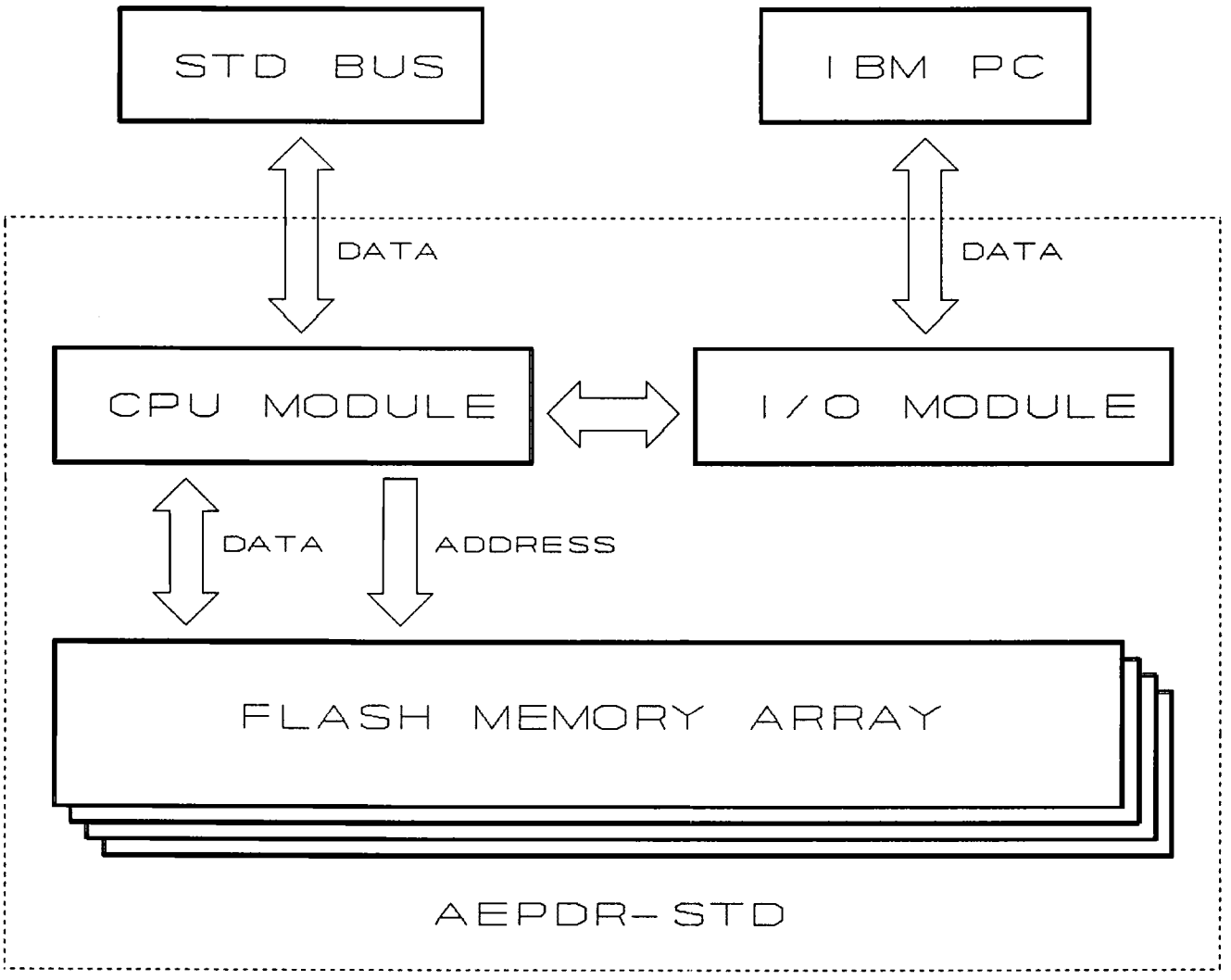

The AEP Flash Data Recorder consists of:

The STD Motherboard includes interface logic to the STD bus and provides a plane for the CPU, Memory, and I/O modules.

The CPU module plugs into the STD motherboard and handles the control of the flash memories by means of an Intel 80C51 microcontroller.

The Flash Memory modules utilize either 16 256Kx8 Flash memories for a total density per module of 4Mx8 or 16 512Kx8 Flash memories for a total density per module of 8Mx8. Each STD Motherboard can support up to 16 memory modules for a maximum total system memory of 128 Megabytes of storage.

The I/O module is used to upload information from the Data Recorder directly into an IBM PC at a rate of 200K bits/sec.

Ordering Information:

The AEPSTD16M8 can be ordered with or without the I/O module and with any amount of memory from 0-128 Megabytes in multiples of 4 Megabytes. When ordering use the part number: AEPSTDXXXM8-DL.

Where:

XXX = Amount of memory from 0-128 Megabytes in multiples of 4Meg.

Add a "DL" suffix to the part number for the addition of an I/O module

Add a "T" suffix to the part number to specify the use of thin TSOP Memory Modules which allow expansion up to 256 Megabytes

Example:

AEPSTD16M8-DL	16 Megabyte data recorder utilizing four 4Meg flash memory modules. Includes a direct PC downlink.
AEPSTD32M8	32 Megabyte data recorder utilizing eight 4Meg flash memory modules. Does not include direct PC downlink.

Operating Requirements:

Voltage/Current requirements:	5V +/- 5% @ 2A 12V +/- 5% @ .1A

(Note: A low power version is also available.)

Operating Temperature:	0-70 Deg. C

High-Speed I/O Module Requirements:

An IBM PC or Compatible computer with one open Parallel port. Upload from the data recorder to a PC through the I/O module is limited by the speed of both the PC's Processor and the track-to-track access time of the PC's hard drive. The maximum transfer rate that the I/O module can achieve is 26 megabits/sec

Typical download times for 16 Megabytes are:

Time	System
26 Min	16 Mhz-80386sx W/65ms Hard Drive
21 Min	12 Mhz-80286 W/30ms Hard Drive
10 Min	20 Mhz-80386 W/30ms Hard Drive