ARRAID®
Data Storage Solutions

AFFD
Arraid FLOPPYFlash Drive (AFFD)

FLOPPYFlash Drive Solutions

The ARRAID FLOPPYFlash Drive (AFFD) is a solid state replacement for SLIM-26, FLAT-34, 5.25" and 8" Shugart edge interface drives.

DESCRIPTION

The ARRAID FLOPPYFlash Drive (AFFD) is an industrial grade, programmable hardware emulator that uses standard industrial Compact Flash card technology to provide a solid state, drop-in replacement for obsolete electromechanical floppy disk drives. The AFFD will replace 3.5", 5.25" or 8" drives, both soft and hard sectored and may be set to operate at various data rates with the matching data encoding schemes, FM, MFM, or MMFM. Similarly, the emulated track configuration is programmable.

The AFFD product allows OEMS and service providers to have a quick, cost efficient solution to support their legacy system. The product's configurable firmware allows a perfect host match, eliminating the need for any host hardware or software changes.

Network back-up and restore capability enables vital data back-ups to be made as a complete image of its CompactFlash card and transferred via an Ethernet network to be stored remotely from the legacy equipment and restored as and if needed. Universal TCP is used for disk image transfers with remote execution of back-up and restore configuration operations controlled by SSDL API.

FEATURES

- Small footprint (3.5") allows replacement of any 3.5" floppy drive, or any larger drive with a suitable adaptor. The AFFD will fit in any standard floppy drive slot using the same fixings.
- Requires a single 5 Volt power supply.
- Firmware is field ungradable via integral USB port.
- Optional integration support, as required.
- Greatly increased reliability (MTBF) and media life.

BENEFITS

- Host hardware and software compatible.
- Fast efficient field replacement.
- Lower power consumption, noise and heat.
- Reduction in unplanned downtime.
- Fast recovery crash or CPU fail.
- Provides ability to extract image and store folders on a PC.
- Significantly faster browsing of directories such as old message logs, change logs and file recipes.
- Network enabled AFFD has its own IP address (configurable)*.
- Network enabled AFFD allows bit for bit image (.img) backup & restore direct to LAN*.
- Provides ability to import & move files between hosts systems / tools easily*.
- SCSIFlash™ proprietary API software drive offers the ability to edit backed (.img) files on a PC, add / remove files, repack, and transfer back to the host via the AFFD*.
  *Network drive

SPECIFICATIONS

Floppy Interfaces Supported:
- SoSLIM-26
- oFLAT-34
- 5.25" & 8 Shugart edge connector

Dimensions:
3.5", 5.25 in both full height and half height frame options
3.5" Floppy form factor – 102mm (4") wide x 147mm (5.75") long x 25mm (1") high

Compact Flash Connection:
Standard 3M header, with ejector, for Type 1 and 2 cards.

Power Requirement:
5 Volts only @ 0.8 Watts (Typical), with CF fitted. Connector matches floppy drive emulated.

Data Connection:
Data connection is normally made through to the 26, 34 or 8" edge connector at the rear of the AFFD circuit board.

Data Transfer Rate:
125kb/s to 500kb/s (Note: Data rate is linked to the coding method selected).

USB Port:
Used for microcode load and real time diagnostics. The drive is programmable so firmware can be updated real time with Arraid technical support team.

Standard Floppy Drive Emulations:
- Shugart Associates SA450™ 5.25"
- Shugart Associates SA850™ 8"
- 40MB Wangtec FAD5000™*
- Cipher 525 floppy Tape™*

Others;
ALPS ELECTRIC, CHINON, CITIZEN , EPSON, NEWTRONICS, MITSUMI, NEC, MATSUSHITA, PANASONIC, SAMSUNG, SFD, SONY, TANDON, TEAC, YE DATA

*Note that these 5.25" legacy products use a cartridge tape as the storage media and are themselves floppy drive emulators for the Shugart™ floppy drives.

Image shown is the FES-1 with two AFFDs installed.
The AFFD Commercial Grade (MLC) flash is available from 4GB- 256GB capacitiy.