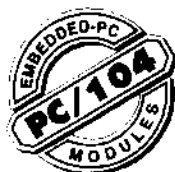


PCM-3840 DOC2000 Flash Disk Module

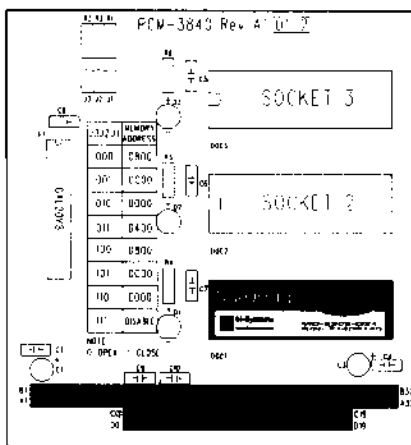


Introduction

The PCM-3840 DiskOnChip®2000 Flash PC/104 module is an SSD that is part of a new generation of high performance single-chip Flash disks. The DiskOnChip®2000 provides a Flash disk in a standard 32-pin DIP package. The PCM-3840 uses a DiskOnChip®2000 single-chip Flash disk that incorporates a new Flash component technology called MAND. These high density, low cost components enable faster read/write speeds, higher capacities and better prices than previous generations of Flash components.

DiskOnChip®2000 provides a Flash disk (BIOS expansion only) which does not require any bus, slot or connector. Simply insert the DiskOnChip®2000 into a 32-pin socket on the PCM-3840 or a CPU board and you have a bootable Flash disk. DiskOnChip®2000 is the optimal solution for single board computers. This Plug and Play Flash disk is small, fully functional, easy to integrate and features very low power consumption.

Locating Components



Socket 1 address: Base

Socket 2 address: Base + 2000

Socket 3 address: Base + 4000

Features

- Uses DiskOnChip®2000 single chip Flash memory
- 3 sockets, 2 - 24 MB capacity per socket, unable to link together
- 32-pin DIP JEDEC standard SRAM/EPROM/Flash compatible package
- High performance and superior read/write speeds
- ECC/EDC for high data reliability
- Full boot operability
- Built-in TrueFFS® which provides full hard disk read/write compatibility
- Operates with FLite™ (FAT-FTL) in O/S-less environments
- Extensive O/S support - DOS, Windows, Windows 95, pSOS+, QNX®, VxWorks and others
- Uses 8 KB memory window
- Best cost/performance solution

Specifications

- **Compatibility:** Full disk emulation
- **Host OS Support:** DOS 3.3 and up, Windows 3.1, Windows 95, Windows CE, pSOS+, QNX, VxWorks. Additional OS environments using FLite
- **Capacities:** 2, 4, 8, 12, 24 MB (per DiskOnChip®2000)
- **Current Consumption:** (per DiskOnChip®2000)
Standby 60 µA (typical), 100 µA (max.)
Read 25 mA (typical), 40 mA (max.)
Write 30 mA (typical), 40 mA (max.)
- **Supply Voltage:** 5 V (read and write)
- **Operating Temp.:** 0 - 70° C (regular)
-25 - 75° C (enhanced)
-45 - 85° C (extended)
- **Storage Temp.:** -45 - 100° C
- **Humidity:** 10% - 90% relative humidity, non-condensing
- **EDC/ECC (Enhanced Reed-Solomon ECC):**
 - Corrects up to two 10-bit symbols including two random bit errors
 - Corrects single bursts up to 11 bits
 - Detects single bursts up to 31 bits and double bursts up to 11 bits
 - Detects up to 4 random bit errors
- **Dimensions:** 95 mm x 90 mm (3.7" x 3.5")