Features

- Capacities up to 8GB
- Small form factor for embedded applications
- IDE interface
- 2 million write/erase cycles
- Sustained throughput up to 10MB/s
- Low power consumption
- Engineered for harsh environments
- Industrial operating temperature ranges
- Automatic bad block management
- Configurable vendor ID/Product ID (VID/PID)
- MTBF: Over 4 million hours
- 5-year warranty
- RoHS compliant

IDE FlashDisk Module

Industrial Grade Solid State Storage

SimpleTech Flash Disk Modules provide non-volatile, solid-state storage in a compact design perfectly suited for embedded applications. Built-in wear leveling algorithms, on-the-fly ECC, and over two million write/erase cycles give you superior data integrity and reliability. Available with industry standard IDE interface; Application software compatibility is ensured as no proprietary software drivers are required.

At the heart of all SimpleTech industrial grade solid state storage products is a proprietary controller that incorporates an advanced dynamic wear leveling algorithm in combination with 5 bit EDC / 4 bit ECC delivering exceptional endurance and reliability.

With no moving parts, SimpleTech flash disk modules are inherently more rugged and reliable than rotating hard drives. New applications for flash disk modules are rapidly emerging due to the low cost per megabyte. Most applications running embedded operating systems such as VxWorks, Windows, XP/embedded, and Linux do not have large data storage requirements, and a cost savings can be immediately realized.

SimpleTech also offers value-added services like customized form factors, testing, custom firmware, software imaging, controlled bill of materials, customer-specific labeling and serialization.

OEM Storage Solutions from STEC

Product Key

Part #:   SLFDM(xx)(zzz)-(xxx)(M/G)M1U(I)

xx =   Pin
xxx =   Capacity
M/G =   Megabyte/Gigabyte
I =   Industrial Temperature
U =   RoHS Compliant

zzz = IDE Connector Orientation:
V (Vertical), **H** (Horizontal),
LPV (Low profile vertical), **LPH** (Low profile horizontal)

ex. **SLFDM40H-512MM1U(I) =**
512MB 40Pin Flash Disk Module (Horizontal)
SLFDM44LPV-8GM1U(I) =
8GB 44Pin Flash Disk Module (Low profile vertical)

Specifications

INTERFACE

TRUE IDE (40/44 pin)

CAPACITY

128MB to 8GB

PERFORMANCE

Data Transfer Rate

Sustained Read/Write	Up to 10MB/sec
Burst Read/Write	Up to 16.7MB/sec

POWER CONSUMPTION

Typical Power Consumption

Sleep Current	2mA
Read Current	60mA - 70mA
Write Current	65mA - 75mA

ENVIRONMENTAL

Operating Temperature

Commercial	32ºF to 158ºF (0ºC to 70ºC)
Industrial	-40ºF to 185ºF (-40ºC to 85ºC)
Storage Temperature	-40ºF to 185ºF (-40ºC to 85ºC)
Operating Viberation	15 G, 10-2000 Hz @ 147 meter/sec
Operating Shock	1000 G, 4903.3 meter/sec

RELIABILITY

Data Write/Erase Endurance	2 million cycle min.
Data Reliability	1 in 10^{14} bits read
Data Retention	10 years

PHYSICAL

Length	2.00 to 2.19 in. (50.80 to 55.63 mm)
Width	0.88 to 1.58 in. (22.35 to 40.13 mm)
Thickness	0.44 to 0.64 in. (11.18 to 16.26 mm)

Applications

- Instrumentation
- Medical Equipment
- Machine Automation
- Telecommunications
- Data Recorders
- Avionics Systems
- Electronic Kiosks
- Networking Equipment