



#### ■ Features

- Capacities up to 16GB
- 2 Million Write/Erase Cycles
- Sustained throughput up to 10 MB/s
- ATA and True IDE Interfaces
- Temperature Rated for Industrial Use
- Low Power Consumption
- PCMCIA Compliant
- Hot Swappable
- Supports 3.3V or 5V Operation
- 1000G Operating Shock Tolerance
- Optional Purge, End of Life, Password Protection and Write Protection Features Available
- 5-Year Warranty
- RoHS Compliant

## Mach1 ATA PC Card

### ■ Industrial Grade Solid State Storage

#### **SimpleTech is a global leader in Solid State Flash Storage and Memory (DRAM) Solutions.**

At SimpleTech, our world-class memory and storage products allow you to offer superior solutions to your markets. Whether you choose standard or custom solutions, SimpleTech will meet your requirements to exact specification. Your time-to-market requirements are achieved without delay or compromise. From our dock to yours, you can expect an uncompromising commitment to quality and service found nowhere else.

SimpleTech: "Meeting the Evolving Needs of OEM Customers Worldwide™"

SimpleTech Industrial Grade ATA PC Cards are perfect alternatives to hard disk drives due to their high reliability and low cost per usable megabyte. ATA PC Cards are designed specifically for equipment requiring standard form factors and moderate capacities (up to 16GB), such as data recorders, avionics systems and several telecommunication applications.

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.

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

## Product Key (M Controller)

**Part #:** SLATA(XXX)(M/G)M1U(I)

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

ex. SLATA512MM1U(I) = 512MB ATA PC Card  
SLATA8GM1U(I) = 8GB ATA PC Card

## Specifications

### FORM FACTOR

CF Type II

### CAPACITY

128MB to 16GB

### INTERFACE

ATA and True IDE

### PERFORMANCE

Data Transfer Rate

Sustained Read/Write Rate

Up to 10MB/sec

Burst Read/Write Rate

Up to 16.7MB/sec (burst)

### POWER REQUIREMENTS (at ambient temperature and nominal supply voltage)

DC Input Voltage

3.3V  $\pm$ 5% and 5V  $\pm$ 5%

Sleep Current

2 mA

Read Current

60 mA to 70 mA

Write Current

65 mA to 75 mA

### ENVIRONMENTAL

Operating Temperature

Commercial

32° to 158°F (0° to 70°C)

Industrial

-40° to 185°F (-40° to 85°C)

Storage Temperature

-85° to 302°F (-65° to 150°C)

Humidity

5% to 95%, non-condensing

Operating Vibration

15G; random; 10 - 2000 Hz @ 147 meter/sec<sup>2</sup>

Operating Shock

1000G; 4903.3 meter/sec<sup>2</sup>

### RELIABILITY

MTBF (Mean Time Between Failure)

greater than 4,000,000 hours

Endurance

2,000,000 write/erase cycles

Non-Recoverable Error Rate

less than 1 in 10<sup>14</sup> bits read

### PHYSICAL

Length

3.370  $\pm$  0.008 in (85.6  $\pm$  0.20 mm)

Width

2.126  $\pm$  0.004 in (54.0  $\pm$  0.10 mm)

Thickness:

0.196 in max. (5.00 mm max)

Weight:

1.34 oz (38g)

## Applications

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

## Embedded Operating System Support:

- Linux
- VxWorks
- WinCE and XP/Embedded
- QNX
- OS-9
- pSOS

### Worldwide Headquarters

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