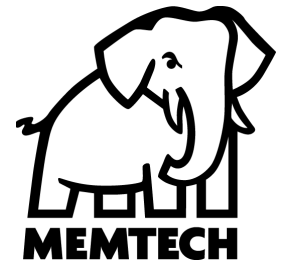


AT2520 Rocket 2.5" IDE Solid State Drive



- 64Mbyte to 3 Gbyte uncompressed capacity
- Full -40°C to +85°C industrial temperature range
- Compact 2.5" drive form factor with 44 pin, 2mm IDE interface
- 24-bit ECC for exceptional data reliability
- 5 volt, low power operation
- Kicker™ Hold Up Technology
- Completely solid state - no moving parts
- 1000G operating shock
- 15G operating vibration
- 4.0 Mbyte/sec media transfer rate
- 2.1 Mbyte/sec sustained Read throughput
- 1.1 Mbyte/sec sustained Write throughput
- 10 year data integrity
- Pending CE and CSA/UL Compliant



The AT2520 Rocket is the most cost effective 2.5" IDE drive available today. With a maximum capacity of 3 Gbyte in an extremely compact 2.5" drive form-factor, it delivers exceptional value for its features. It is completely solid state, with no moving parts. This contributes to the unit's exceptional ruggedness and wide operating temperature range; with no moving parts, there is no mechanism for mechanical wear-out. Being 100% IDE compatible, no special drivers or flash file managers are required. It is a virtual drop in replacement for standard rotating media.

The AT2520 employs sector erasable NAND E²PROMs (Flash) to deliver up to 3 Gbytes of uncompressed, non-volatile solid state storage in an extremely small, rugged form factor. Raw sustained data throughput is a 1.7 Mbytes per seconds for reads and 1.0 Mbytes/second for writes.

The drive is implemented using a custom IDE Flash controller with an integrated error detection and correction mechanism and proprietary remapping and wear-leveling technology to greatly improve data reliability. It's cost effectiveness and low-power operation make the AT2520 ideal for applications requiring high reliability at a low cost up to 3 Gbytes of data storage. Advanced PIO modes and multi sector transfer modes are supported, as well as LBA addressing.

The drive is available in a number of standard capacities from 64 Mbytes to 3 Gbyte. Please contact the factory for specific size availability.

Each drive is fully tested under environmental and voltage extremes to guarantee data integrity under even the harshest conditions.

The drive may be mounted in any orientation. Both bottom and side mounting holes are available and conform to the 2.5" IDE drive standard.

SPECIFICATIONS*

Interface

| | |
|----------------------|---------------------|
| IDE Compatibility | X3T10 2008D, Rev. 6 |
| IDE Mode Support | Up to PIO Mode 2 |
| IDE Drive Number | Drive 0 or 1 |
| Physical Capacity | 3 Gbytes |
| Physical Sector Size | 512 bytes |

Performance

| | |
|---------------------|----------------|
| Media Transfer Rate | 4.0 Mbytes/sec |
| Read Transfer Rate | 2.1 Mbytes/sec |
| Write Transfer Rate | 1.1 Mbytes/sec |

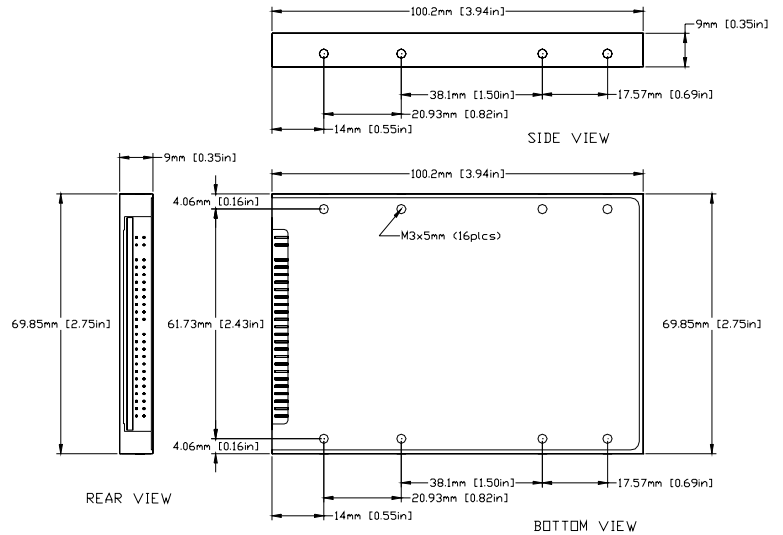
Environmental

| | |
|-----------------------------|-----------------------|
| Operating Temperature Range | |
| Commercial | 0° to +70°C |
| Extended | -20° to +75°C |
| Industrial | -40° to +85°C |
| Storage Temperature | -55° to +125°C |
| Shock - operating | 1000G, half sine |
| Vibration - operating | 15G Random |
| Airflow | None required |
| Humidity | 5% to 95% NC |
| Safety (pending) | CSA File LR114427 |
| EMC (pending) | EN55022 and EN50082-1 |

Reliability

| | |
|----------------|----------------------------------|
| Endurance | Application Specific |
| 8Kbytes/30 sec | 3.2 million hours |
| Error Rate | <1 in 10 ¹⁵ bits read |
| ECC | 24-bit |

*Specifications subject to change without notice.



Power Requirements

| | |
|---------|------------------|
| Voltage | 5V +/- 10% |
| Current | AT2520-3GB (rms) |
| Sleep | 5 mA |
| Read | 33 mA |
| Write | 40 mA |

Mechanical

| | |
|---------------------|-------------------------|
| Length | 3.94 inches (102.00 mm) |
| Width | 2.75 inches (69.85 mm) |
| Height | 0.35 inches (9.00 mm) |
| Cable Interface | 44-pin, 2mm |
| Max. Cable Length | 18 inches (457 mm) |
| Rec. Cable Length | 12 inches (305 mm) |
| Weight (128 Mbytes) | 3.0 oz (85 g) |
| (3 Gbytes) | 3.4 oz (96 g) |

