AT3515 Bulldog 3.5" IDE Solid State Drive



- 128 Mbyte to 8 Gbyte uncompressed capacity
- Full -40°C to +85°C industrial temperature range
- Low profile 3.5" drive form-factor
- Standard 40-pin, unitized IDE interface
- 72-bit ECC for exceptional data reliability
- 5 volt, low power operation
- Completely solid state no moving parts
- 1000G operating shock
- 15G operating vibration
- 6 Mbytes/sec Read throughput
- 6 Mbytes/sec Write throughput
- 10 year data integrity

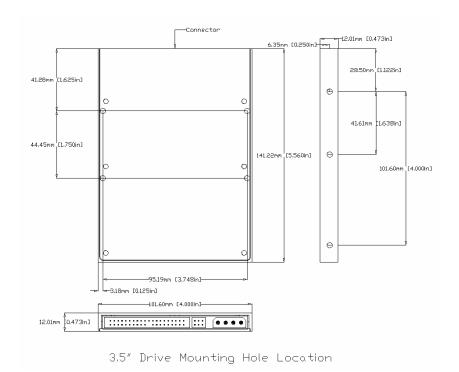


The AT3515 is an entry-level low cost solid-state flash drive, with a maximum capacity of 8 Gbyte in an extremely compact low profile 3.5" form-factor. It is completely solid state, with no moving parts. This contributes to the unit's exceptional ruggedness and wide operating temperature range; with 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 AT3515 employs sector erasable NAND E²PROMs (Flash) to deliver up to 8 Gbytes of uncompressed, non-volatile solid state storage in an extremely small, rugged form factor. Sequential sustained data throughput is up to 6 Mbytes/sec for reads and 6 Mbytes/sec for writes. The drive supports up to PIO Mode-4 and DMA Mode-2 bus access, multi-sector transfers, as well as LBA addressing. It is 100% IDE compatible and requires no special drivers to operate

The drive is implemented using a custom IDE Flash controller with multi-tasking technology. An integrated 72-bit Reed-Solomon error detection and correction mechanism and proprietary remapping and wear-leveling technology along with a power hold-up circuit greatly improve data reliability. Its' cost effectiveness and low-power operation make the AT3515 ideal for applications requiring high reliability at a low cost up to 8 Gbytes of data storage.

The drive is available in a number of standard capacities from 128 to 8 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. Bottom and side mounting holes are available that conform to the 3.5" IDE drive standard.

SPECIFICATIONS*

Interface

IDE Compatibility X3T10 2008D, Rev. 6 IDE Mode Support Up to PIO Mode 4

IDE Drive Number Drive 0 or 1 **Physical Capacity** 8 Gbyte Physical Sector Size 512 bytes

Performance

Sequential Read 6 Mbvtes/sec Sequential Write 6 Mbytes/sec **Burst Read** 16.6 Mbytes/sec **Burst Write** 16.6 Mbytes/sec

Environmental

EMC

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

EN55022 and EN50082-1

Reliability

Endurance **Application Specific** 8Kbytes/30 sec 3.2 million hours 72-bit Reed Solomon

Power Requirements

5V +/- 5% Voltage Current AT3515-1024 Sleep 45 mA Read 90 mA Write 112 mA

Mechanical

Length 5.56 inches (141.2 mm) Width 4.0 inches (101.6 mm) Height 0.50 inches (12.7 mm) Cable Interface Unitized 40-pin IDE and

4-pin power

18 inches (457 mm) Max. Cable Length Rec. Cable Length 12 inches (305 mm)

Weight (4 Gbytes) 6.4 oz 181 g)

^{*} Specifications subject to change without notice.



Mouser Electronics

Authorized Distributor

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STEC:

AT3515-4096C AT3515I-6144 AT3515-4096 AT3515-8192C AT3515I-4096 AT3515-2048C AT3515I-512

AT3515I-6144C AT3515-8192 AT3515-2048 AT3515-256C AT3515I-256C AT3515I-8192 AT3515-256 AT3515I-6144C AT3515I-256 AT3515I-8192C AT3515I-1024C AT3515I-2048C AT3515I-1024 AT3515I-6144 AT3515I-2048

AT3515I-512C AT3515I-1024C AT3515I-512C AT3515I-512C AT3515I-1024 AT3515I-4096C