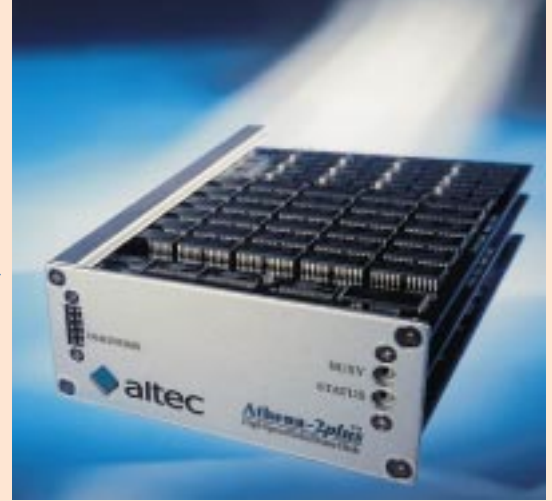


Athena-2plus™



High Speed Solid State Disk

Data Integrity

The Athena-2plus™ Solid State Disk is a complete replacement for mechanical Harddisks in systems which require a maximum of speed and best reliability. Developed by altec ComputerSysteme, the Athena-2plus™ offers a 100% compatibility to standard SCSI-2 (respectively SCSI-3) HDDs. A powerful Error Correction algorithm allows high level of data integrity. The formfactor of 3.5" guarantees an easy installation.

Data Security

The intelligent Power-Management with external battery buffering and backup HDD prevents accidental data loss due several situations, e.g.:

- ◆ the inactivity of the access to Athena-2plus™, the controlling time period is adjustable
- ◆ power interruption, time for backup start is adjustable
- ◆ additional backup starts:
 - on user's demand and
 - via diagnostic port

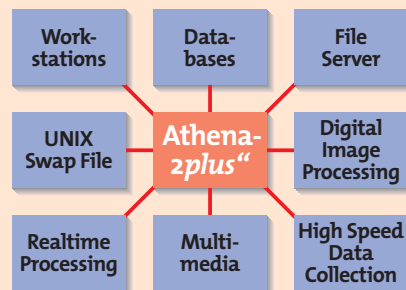
Advantages

- ◆ High-capacity, Highspeed, High-performance Mass storage device
- ◆ designed by altec Germany
- ◆ multistage EDC (Error Detection and Correction) for highest data integrity
- ◆ SCSI-2 (SCSI-3 connector) compatibility
- ◆ high shock- and vibration endurance
- ◆ low power consumption
- ◆ extended temperature range
- ◆ external battery buffering for date retention and backup

Effectivity

- ◆ extremely high access to programs and data
- ◆ maintenance free, data security
- ◆ abrasion-free long term operation

The Athena-2plus™ offers capacities from 200 MByte to 1 GByte (incl. 20% ECC) in a 3.5" form factor or to max. 4.6 GByte cascaded. Connected to a standard SCSI-Controller, the Athena-2plus™ replaces a standard harddisk. High Speed (read/write 20 MByte/sec. respectively up to 40 MByte/sec on wide ultra SCSI) and best reliability predestine the Athena-2plus™ for sophisticated applications. This could be especially applications working under conditions of harsh and rugged environment in industrial or military sector, high speed measurement systems or database applications.



TESTED QUALITY
18 Months Warranty



Technical Specifications

The Company

altec ComputerSysteme Ltd. designs, manufactures and markets PC Card Products and Solid-State-Disks to the commercial and industrial computer market. We deliver customer and system support with industrial quality hard- and software, technical support, application engineering and customer specific developments.

Capacity	200 MByte up to 1 GByte (incl. 20 % ECC)		
– first 3,5" unit:	DRAM-Technology		
– max.	up to 4.6 GByte		
Environment (without Battery Managing System):			
– Temperature:	Operating	0 °C to +70 °C	
	Non-Operating	–40 °C to +70 °C	
– Humidity:	Operating	10 % – 90 % non condensing	
	Non-Operating	10 % – 90 % non condensing	
– Altitude:	max. 33 000 feet		
– Noise:	0 dB		
– Vibration:	Operating	15 G, 0.01 inch displacement, 5 – 22 Hz	
	Non-Operating	15 G, 0.02 inch double amplitude, 5 – 62 Hz	
– Shock:	Operating	50 G	
	Non-Operating	50 G	
– Note:	Shock	1/2 Sinus Puls 11 ms	
	Vibration	Sinus 1 Oktave/min	
System Power Requirements:			
– DC Input Voltage	+5 V +/- 5 %, 100 mV max. ripple (p-p)		
– Max Current (typ.):	Controller-Board: 650 mA		
	Memory-Board: 160 mA		
– Typical Power Dissipation	Athena-2plus 200 MB: 4.3 W with Battery Managing System charging 15 W		
System Performance:			
Athena-2plus Ultra Fast Wide:			
– Data transfer from disk to host	Peak	40 MByte/sec	
	Sustained	24 MByte/sec	
– Command Delay	typ.	150 µs	
– Datatransfer from DRAM to SCSI controller		27 MByte/sec	
I/O transfer rate (typ)			
– block size (byte)		8-bit Transfer	wide Transfer
	512	5 000	5 700
	1 024	4 000	5 000
	2 048	2 800	4 000
	4 096	1 800	2 800
	8 192	1 050	1 800
System Reliability and Maintenance:			
– MTBF/MTTR	100 000 hours/ 20 min		
– Data reliability:	< 1 Error in 10 ¹⁴ bits (Read), 128 Byte EDC (Error Detection and Correction/ 512 byte Block)		
– Battery lifetime	1 000 charge/discharge cycles or 3 years		
– Power Cycling	10 E 6 cycles		
Dimensions:	146,0 mm length, 101,6 mm width, 43,5 mm height (up to 1 GByte)		

Technical data subject to change without prior notice. All brand and product names are trademarks of their respective owners.
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