

EXB-8200

8mm Cartridge Tape Subsystem



The EXB-8200 8mm Cartridge Tape Subsystem combines removable, rewritable magnetic media with a compact, integrated drive/controller to meet the high storage capacity needs of today's computer systems.

The highest quality, least expensive tape available, and helical scan technology yield a recording density never before achieved. A single, standard 8mm tape cartridge can provide storage for over 2,000 megabytes — 2 gigabytes — of formatted data.

Packaged in a standard 5/4 inch form factor, the EXB-8200 enables unattended disk backup, dramatically reducing manual intervention, high speed file search to quickly access the desired data set; and resident error recovery procedures to increase host system throughput.

Additional features include: Integrated SCSI controller within drive package • Onboard Error Correction Code and Error Recovery Procedures • Integrated speed-matching buffer • High performance data transfer rate • Non-recoverable error rate of less than one in 10^{15} bits read • Five cartridge sizes.

EXABYTE's EXB-8200 is the competitively priced solution to your journaling, archiving, data interchange, data acquisition, backup and restore, and software distribution needs.

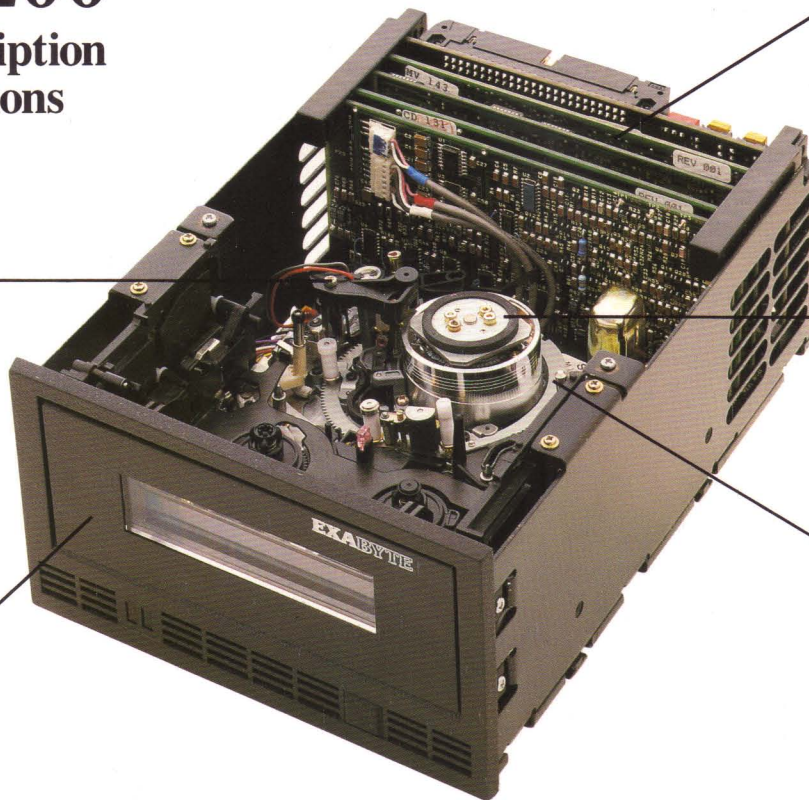
EXABYTE™
The New Slant on Tape

EXB-8200

Product Description and Specifications

Full-width erase head

Cartridge door/front load mechanism



SCSI interface, controller/formatter, and drive electronics are implemented in CMOS gate arrays, and Surface Mount Technology (SMT)

Rotary Drum Assembly contains read, write, and servo heads in read-after-write configuration

8mm tape transport provides gentle tape handling

Controller Features

Integrated SCSI Controller and Formatter
Standard SCSI Interface Connection
(single-ended or differential)
Onboard Error Correction Code (ECC)
and Error Recovery Procedures (ERP)
ECC: Reed-Solomon Product Code
256 KByte Speed-Matching Buffer

SCSI Command Set

Test Unit Ready
Rewind
Request Sense (Extended)
Read Block Limits
Read
Write
Write Filemarks
Inquiry
Space
Recover Buffered Data
Mode Select
Reserve Unit
Release Unit
Copy*
Erase
Mode Sense
Load/Unload
Receive Diagnostic Results
Send Diagnostics
Prevent/Allow Medium Removal
*per user's requirements

SCSI Characteristics

SCSI Specification — ANSI X3.131-1986
Conformance Level — 2
Sequential Access Device
SCSI Bus Parity — Configurable
Full Disconnect, Arbitration, Reconnect
Asynchronous Data Transfer Supported
Single Ended
Connector Type — ANSI Spec
Non-shielded
Termination — Removable
Termination PWR — Use/Not supplied

Formatted Capacity

User selectable data cartridges from
256 MBytes to over 2,000 MBytes

Cartridge Size	Length (ft.)	Maximum Formatted Capacity (MBytes)
256	45	291
512	90	583
1024	180	1166
1536	270	1750
2048	360	2332

Format

Recording format 8mm Helical-Scan Digital Computer Tape
Head configuration Read after write with separate full width erase head
Linear recording density 43,200 bits/in.
Track density 819 TPI
Areal recording density 35 million bits/sq. in.

Reliability

Non-recoverable error rate: Less than one in 10^{13} bits read
MTBF: >20,000 hours at typical usage
MTTR: <30 minutes
Preventive maintenance: None required

Performance

Transfer rate (peak): 1.5 MBytes/sec.
Transfer rate (sustained): 246 KBytes/sec.
Buffer size: 256 KBytes
Electronic buffer access time: 400 microseconds

Tape Motion

Tape speed: 0.429 ips/10.89 mm/sec.
Rotor speed: 1800 rpm
Effective head to tape speed: 150 ips
Max. rewind speed: 75 times nominal
File search speed: 10 times nominal

Physical Dimensions

Height: 3.25 in.
Width: 5.75 in.
Depth: 8.0 in.
(Standard 5.25 in. form factor)
Weight: 4.5 lbs.

Power

+5/+12 volts $\pm 4\%$
15 watts

Environmental

Operating temperature: +5°C to +40°C
(+41°F to +104°F)
Non-operating temperature: -20°C to +60°C
(-4°F to +140°F)
Relative humidity (non-condensing): 20% to 80%

Media

Standard 8mm tape cartridge
(3.7 × 2.5 × 0.6 in.)

Models

EXB-8200 S — Single-Ended SCSI
EXB-8200 D — Differential SCSI

All specifications are subject to change without notice.

EXABYTE™
The New Slant on Tape