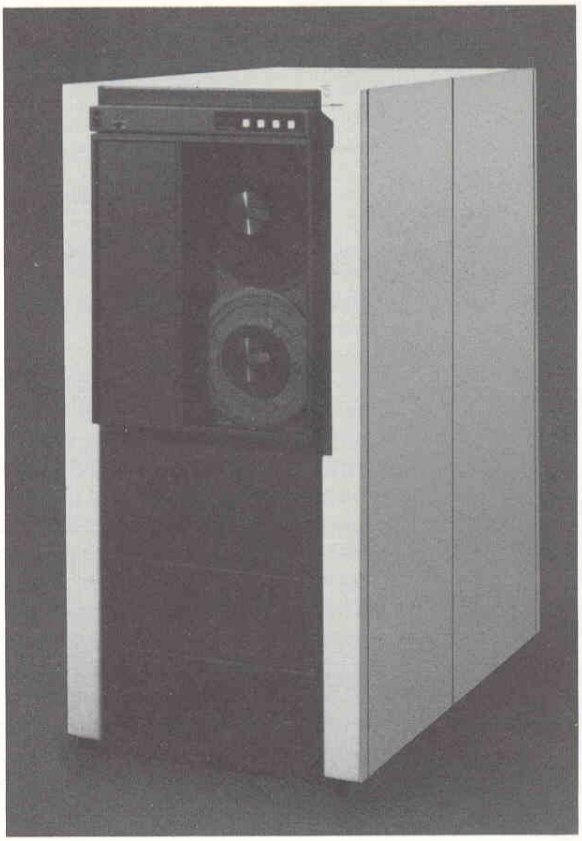
Product Bulletin

PRIME

# Mid-Range Tape Products

Features

- Industry compatible tape
- Dual density 800/1600 bpi available
- Software selection of density
- High reliability and data integrity
- Available on all Prime systems
- Up to four transports per controller supported by PRIMOS® operating systems
- Up to eight transports per system supported by PRIMOS operating systems



## Description

Prime Computer offers a complete line of magnetic tape transports to suit different performance requirements. The Mid-Range Tape family is comprised of conventional 10½" reel, ½" tape transports. Two tape speeds (45 IPS and 75 IPS) allow the user to choose the level of performance required. Two formats (NRZI and PE), and both nine-track and seven-track recording, provide industry compatibility for data interchange.

Table 1 summarizes Prime Computer's Mid-Range Tape products.

| Model No. | Speed | Density | Format |
|---|---|---|---|
| 4522 | 75 | 1600/800 | PE/NRZI |
| 4520 | 45 | 1600/800 | PE/NRZI |
| 4512 | 45 | 800 | NRZI |
| 4510 | 45 | 800/556 | NRZI |

Table 1. Mid-Range Tape Products.

Prime Computer's other magnetic tape product offerings include the 6250 GCR, Streaming Tape, and Cartridge Tape subsystems. Table 2 summarizes these tape transports. Further details and product bulletins are available at all Prime sales offices.

| Model No. | Speed | Density | Format |
|---|---|---|---|
| 4550 | 75 | 6250/1600 | GCR/PE |
| 4560 | 100 | 1600 | PE |
| | 50 | 3200 | Special |
| | 25 | 1600 | PE |
| 4651 | 30 | 6400 | MFM |

Table 2. Other Tape Products.

## Advantages of Tape Versus Other Storage Technologies

The most common configuration is at least one tape transport per system. This tape equipment is typically used for backup, data interchange, and journaling applications. Backup includes physical volume, file, and archival data storage. Data interchange applications include installation and software distribution as well as system-to-system data exchange. Journaling, recording all transactions as they occur, is frequently required to generate an audit trail, or to permit recovery at the transaction level in the event of a failure.

All of the above tasks can be accomplished using removable disk; however, factors of media cost, relative storage cost, and compatibility with other vendors' systems make tape a more cost-effective storage medium.

## Growth

Prime Computer ensures that data processing capabilities grow as business and, hence, computing needs grow. This growth ability is reflected in the tape portion of the product line, as well as Prime Computer CPU's and peripherals. All tape equipment can be configured on all CPUs. Therefore, CPUs can be upgraded without changing tape equipment. In addition, tape equipment can be added to existing system configurations. Up to four transports are controlled by one controller; eight transports are configurable on one system. Support by PRIMOS operating system, guarantees that software is easily generated and maintained.

## Reliability, Maintainability, and Data Integrity

Prime Computer's tape equipment includes many features to ensure reliability, maintainability, and availability (the integrity of the data). Reliability was achieved by using stable technology and components in the design of the unit.

As an example, vacuum column tape transport technology was chosen over tension arm because of the reliability of this technology. Maintainability was achieved by designing such features as diagnostics and easy parts access into the unit. Maximum availability is ensured by high reliability (few failures) and easy maintainability (short time to repair when failures do occur).

In addition, Prime Computer designed high data integrity features into its tape series. These features guarantee that data is maintained in a useable form. Characteristics of the recording modes ensure the detection (and in some cases the correction) of many temporary errors which can occur when recording or reading information on tape. All information is written immediately and then automatically read and checked. In the NRZI data recording mode, longitudinal redundancy checking and cyclic redundancy checking are performed to detect dropped bit errors. Additionally, tape skewing is electronically corrected during the PE recording mode.

## Operator Convenience

Each tape transport includes a simple control panel with legible status indicators and easy-to-use manual control switches. These switches include power, load, rewind, on-line, write enable, density, reset and address select.

## Specifications

### *Model Operating Characteristics*

| Model No. | Recording Format | Recording Mode | Density (bpi) | Forward Drive Speed |
|---|---|---|---|---|
| 4522 | 9 track | PE/NRZI | 1600/800 | 75 |
| 4520 | 9 track | PE/NRZI | 1600/800 | 45 |
| 4512 | 9 track | NRZI | 800 | 45 |
| 4510 | 7 track | NRZI | 800/556 | 45 |

### *All Models*

Rewind drive speed (nominal) 200 ips (508cm/sec)
Vacuum column tape handling
Tape reel size to 10½ in. (26.6cm)
Available as first drive with controller
Available as second, third or fourth drive
Photoelectric load point and end of tape reflective strip detection (ANSI compatible)
Photoelectric broken tape detection

### *Environmental (Operating Environment)*

Ambient temperature +5 to +40°C
Relative humidity (noncondensing) 15% to 95%
Heat dissipation 1200 (BTUs/ Hr.)
Altitude 0-4000 ft. (0-1219 mtr.)

### *Electrical*

Power requirements 115 VAC, 60Hz. 220/240 VAC, 50Hz single phase
800 VA power demand

### *Physical*

Height 53 in. (135 cm)
Width 26.5 in. (67.5 cm)
Depth 35 in. (89 cm)
Weight 150 lbs. (68 kg)

## U.S. Offices

Alabama
*Birmingham*

Alaska
*Anchorage*

Arizona
*Phoenix*
*Tucson*

California
*Culver City*
*Irvine*
*Mountain View*
*Sacramento*
*San Diego*
*San Francisco*
*Walnut Creek*
*Woodland Hills*

Colorado
*Colorado Springs*
*Englewood*

Connecticut
*Windsor*
*Stamford*

Florida
*Hollywood*
*Jacksonville*
*Tampa*
*Winter Park*

Georgia
*Atlanta*

Iowa
*Iowa City*

Illinois
*Chicago*
*Oak Brook*
*Schaumburg*

Indiana
*Carmel*

Kansas
*Overland Park*

Kentucky
*Louisville*

Louisiana
*Metairie*

Maryland
*Rockville*

Massachusetts
*Framingham*

Michigan
*Flint*
*Grand Rapids*
*Troy*

Minnesota
*Bloomington*

Missouri
*Kansas City*
*St. Louis*

Nebraska
*Omaha*

New Jersey
*Parsippany*

New Mexico
*Albuquerque*

New York
*Albany*
*Amherst*
*Dewitt*
*Melville*
*New York*
*Rochester*

North Carolina
*Charlotte*
*Greensboro*

Ohio
*Cincinnati*
*Middleburg Heights*
*Worthington*

Oklahoma
*Tulsa*

Oregon
*Portland*

Pennsylvania
*Bridgeville*
*Camp Hill*
*Philadelphia*
*Wayne*

South Carolina
*Greenville*

Tennessee
*Knoxville*
*Nashville*

Texas
*Austin*
*Dallas*
*Houston*

Utah
*Salt Lake City*

Virginia
*Williamsburg*

Washington
*Bellevue*

## International Offices

Australia
*Adelaide*
*Brisbane*
*Canberra*
*Hobart*
*Melbourne*
*Neutral Bay*
**North Sydney*
*Perth*

Austria
*Vienna*

Belgium
*Zaventem*

Bolivia
*La Paz*
*Santa Cruz*

Canada
*Calgary*
*Edmonton*
*Halifax*
*London*
*Montreal*
*Ottawa*
*Saint John's*
**Toronto*
*Vancouver*
*Winnipeg*

Chile
*Santiago*

Colombia
**Bogota*
*Medellin*

Denmark
*Copenhagen*

Ecuador
*Quito*

Finland
*Helsinki*

France
*Aix*
*Angers*
*Grenoble*
*Lyon*
**Paris*
*Segres*

Greece
*Athens*

Hong Kong

India
*Ahmadabad*
*Bangalore*
**Bombay*
*Calcutta*
*Madras*
*New Delhi*

Ireland
*Dublin*

Israel
*Tel Aviv*

Italy
**Milan*
*Rome*
*Turin*

Japan
*Osaka*
**Tokyo*

Korea
*Pusan*
**Seoul*

Kuwait
*Hawalli*

Malaysia
*Kuala Lumpur*

Mexico
*Guadalajara*
*Mexico City*

Netherlands
*Zoetermeer*

New Zealand
**Auckland*
*Christchurch*
*Wellington*
*Parnelu*

Nigeria
*Lagos*

Norway
*Sandvika*

Peru
*Lima*

Puerto Rico
*San Juan*

Saudi Arabia
*Al Khobar*

Singapore

South Africa
*Capetown*
*Durban*
**Johannesburg*
*Pretoria*

Spain
*Madrid*

Sweden
*Stockholm*

Switzerland
*Bern*
*Geneva*
**Zurich*

Taiwan
*Taipei*

Thailand
*Bangkok*

Turkey
*Istanbul*

United Kingdom
*Bedford*
*Birmingham*
*Bristol*
*Central Park*
*City of London*
*Edinburgh*
*Feltham*
*Grange*
**Hounslow*
*Leeds*
*Milton Keynes*
*Southampton*
*Stevenage*
*Syvenham*
*Warrington*
*Wilmslow*

Venezuela
*Caracas*

West Germany
*Dortmund*
*Düsseldorf*
*Hamburg*
*Hannover*
*München*
*Stuttgart*
**Wiesbaden*

*Main Office
(1/84)



The materials contained herein are summary in nature, subject to change and intended for general information only. Details and specifications regarding specific Prime Computer software and equipment are available in the appropriate technical manuals, available through local sales representatives.

PRIME®
Prime Computer, Inc.
Prime Park
Natick, Massachusetts 01760