SUNDANCE

ONYX
Onyx Systems, Inc.

SUNDANCE™ and SUNDANCE II   **Product Description**

Sundance Features

The integrated SUNDANCE™ computer system is an easy-to-use, low cost system with hardware and software capabilities normally found only in much larger systems. The entire system is contained in a single compact and attractive terminal unit housing the CPU, internal disk and tape back up. Since it is a complete system, it offers the user comprehensive application support for every business need.

The heart of the system is a Z80A microprocessor with 64K to 256K bytes of high speed memory which supports as many as three users. Memory error detect, power failure shut-down and built-in power up diagnostics ensure high reliability and availability. Designed for the office environment, the SUNDANCE has no special air conditioning or power requirements.

Depending on the model selected the built-in Winchester disk drive stores 7, 14 or 21 megabytes (unformatted), providing generous storage for system software, application software, and data files as well as eliminating the error prone and time consuming procedure of switching between on-line and off-line storage media. Completely sealed, the disk drive is impervious to environmental conditions and requires no scheduled maintenance.

A built-in magnetic tape cartridge drive provides fast easy backup capability for the Winchester disk. Up to ten megabytes of data can be stored on a single tape cartridge. A complete backup of all the data stored on the disk drive usually requires only a single command and takes less than 10 minutes. Since the tape is enclosed in a rugged dustproof case, this device is a highly durable and reliable means of backing up critical system software and data files. Every backup taken on the cartridge tape is subjected to a Cyclical Redundancy Check (CRC) to assure accurate and complete backup.

SUNDANCE has been designed for ease of use and operator comfort. The detachable keyboard has 67 sculptured keys arranged in standard typewriter format. An 18 key auxiliary numeric keypad includes four function keys which can be used to implement complex repetitive operations with a single key stroke. Seven keyboard lights show terminal status, four of which can be used to show the status of a programmed function. A five foot coiled cord with jack connects the keyboard to the system, allowing the user to place the keyboard in a convenient position. To minimize eye strain SUNDANCE has a 12-inch non-glare green screen. Smooth scrolling, line graphics, intensity control, reverse video, and blink capabilities are all standard.

SUNDANCE is available in two display models. The Model 80 offers 24 lines with 80 characters per line. The Model 132 allows the user to switch between 80 and 132 characters per line. In addition the Model 132 supports double-sized characters (height and/or width), allowing the application program to emphasize key items of information on the screen.

Three ports are standard: one port (RS-232C) for interfacing to a low speed (serial) printer or a second terminal, one for a high speed (parallel) printer, and one port (RS-232C with modem support) for interfacing to a third terminal or communication with another computer system.

The parallel port can also be used to interface to an 8-inch IBM compatible (single-sided, single-density) floppy disk drive for loading program and data files. A disk expansion port allows an additional Winchester disk drive to be configured with the system.

The system supports a variety of printers to meet every business requirement: such as letter quality units for correspondence and documentation; low cost dot matrix units for low volume internal use; and high speed printers which can also produce letter quality documents and graphs and charts. All offer upper and lower case capability (96 ASCII characters), six part forms and 132 column width. The letter quality printer supports either single sheet or continuous form paper. Printers are interfaced to the system via the serial port or the parallel port, depending on the number of user terminals attached to the system.

Sundance Options

Options available with the SUNDANCE include operating systems, programming languages, and business application packages. Each is fully supported by Onyx.

Operating Systems

Three operating systems are available for the integrated SUNDANCE system, CP/M, MP/M, and OASIS. All offer full software development facilities as well as run-time support for application software. CP/M, the most widely used single-user operating system available in the market, allows the user to take advantage of the hundreds of diverse business application packages available as standard products from many different software developers. MP/M, the multi-user version of CP/M, allows users to access the system as if each were the only one on the system. Each user can function independently of all others but share files without loss of data integrity.

The OASIS operating system is also available in both single and multi-user versions. Easy-to-use, it is a fault tolerant system and supports a "HELP" facility to aid the user in remembering system commands. OASIS

offers true system security, controlling both access to the system as well as protection for system and individual data files. Unauthorized users are prevented from accessing the system since a log-on facility requires valid user passwords. File security prevents the unauthorized access to confidential and critical files. OASIS supports the file structures most needed in business applications including sequential, random, and indexed (keyed) file organizations.

Programming Languages

COBOL and BASIC, two widely used business application languages, are supported. The COBOL is an interactive, U.S. Government certified version of the ANSI 1974 standard of this widely used business applications language. COBOL offers full file input/output capabili-

ties, including sequential, random and indexed (keyed) file organizations. Interactive support simplifies programming when implementing applications requiring formatted screen displays for data entry.

BASIC is a business oriented language with support for decimal digit computations and sophisticated text data manipulation. It is especially suitable for screen formatting and data entry applications. Powerful print capabilitites make it easy to format reports, safeguard check figures and make use of preprinted forms.

Applications

Software application packages available from Onyx include word processing, electronic spreadsheet modeling for business planning, sort and relational database management package.

System Expansion

A single add-on disk drive may be attached to the system. Like the built-in drive the unit is completely enclosed and needs no scheduled maintenance. Alternatively the internal disk drive may be swapped out for one with greater capacity.

The SUNDANCE may be upgraded to a SUNDANCE II and memory may be expanded in the SUNDANCE II to a maximum of 256K bytes.

The SUNDANCE II supports as many as three users by attaching terminals to the terminal and serial printer ports. Full function terminals available from Onyx include the DT/80 and the DT/132. The DT/80 is identical to the keyboard/display subsystem of the SUNDANCE II, Model 80. The DT/132 is identical to the keyboard/display of the Model 132. Either or both the DT/80 and DT132 may be attached to either model of the SUNDANCE II.

System Support

System support encompasses a broad range of services available to every user of Onyx products. Product documentation is complete and concise with 'Getting Started' training manuals to aid the new user in becoming familar with the system. Training facilitites with experienced instructors are available to introduce new customers to Onyx products. Seminars include both lecture and 'hands-on' sessions so that users gain experience with the system before using it on their own. Installation services include demonstrating the system as well as giving explanations of the

system operation and its maintenance requirements. Product specialists are available for consultation either by telephone or at the customer's place of business. They provide assistance if problems occur, and answer questions from new users of Oynx products.

Every Onyx product is rigorously tested before being shipped to the customer and carries a 90 day warranty. Should problems develop, however, an extensive system support organization is available for troubleshooting, maintenance and repair services.

Specifications

Processor	Z80A, 4MHz, 158 instructions, DMA;	Magnetic tape	¼ inch drive, 6250 bpi, 90 ips, 10M bytes capacity (300 foot tape)
Memory			
SUNDANCE I	64K bytes, byte parity	Keyboard	67 sculptured keys in standard typewriter format; two key rollover minimum; 18 key auxiliary numeric keypad with period, comma, minus, enter and 4 function keys; 7 LED indicators: 3 status, 4 programmable; 1.6 meter (5.2 feet) coiled cord attaching keyboard to display
SUNDANCE II	128K-256K bytes, byte parity		
Ports	1 RS-232C, 1 RS-232C with modem support, 1 8-bit parallel (Centronics compatible)		
Winchester disk	Single 5 ¼-inch drive, 7,14 or 21 MB (unformatted), 68 Msec average access time, 6.25 Msec average latency time, 1M bytes/second transfer rate		

Display	12-inch (diagonal) non-glare green phosphor screen; 96-character displayable ASCII subset (upper and lower case, numeric, line drawing, punctuation) normal, reverse video, blinking, underline, half intensity, smooth scrolling	Communication	EIA RS-232C, full/half duplex, even/odd/none parity, 300, 600, 1200, 2400, 4800, 9600, 19.2K baud; 7/8 bits/character, 1/2 stop bits
Model 132	selectable-24 lines x 80 columns or 24 lines x 132 columns; 7 x 9 dot matrix characters with descenders (9 x 9 in 132 column mode); double-sized characters (double height and/or double width)	Size Monitor Keyboard Weight	37.1 cm (14.6 in) x 46.4 cm (18.3 in) x 36.9 cm (14.5 in) 9.0 cm (3.5 in) x 46.4 cm (18.3 in) x 20.0 cm (7.9 in) 23.2 kg (51.0 lb) Monitor; 2.27 kg (5.0 lb) Keyboard
Model 80	24 lines x 80 columns 7 x 9 dot matrix characters with decenders	Operating Environment Temperature Humidity Electrical	10-40°C (50-104°F) 20%-80% Noncondensing 110V, 60Hz; 220V, 50Hz; 300 watts detachable power cord 1.9 meter (6 feet)

Important

The materials contained herein are summary in nature, subject to change, and intended for general information only. Details and specifications concerning the use and operation of Oynx equipment and software are contained in the applicable technical manuals, available through local sales representatives.
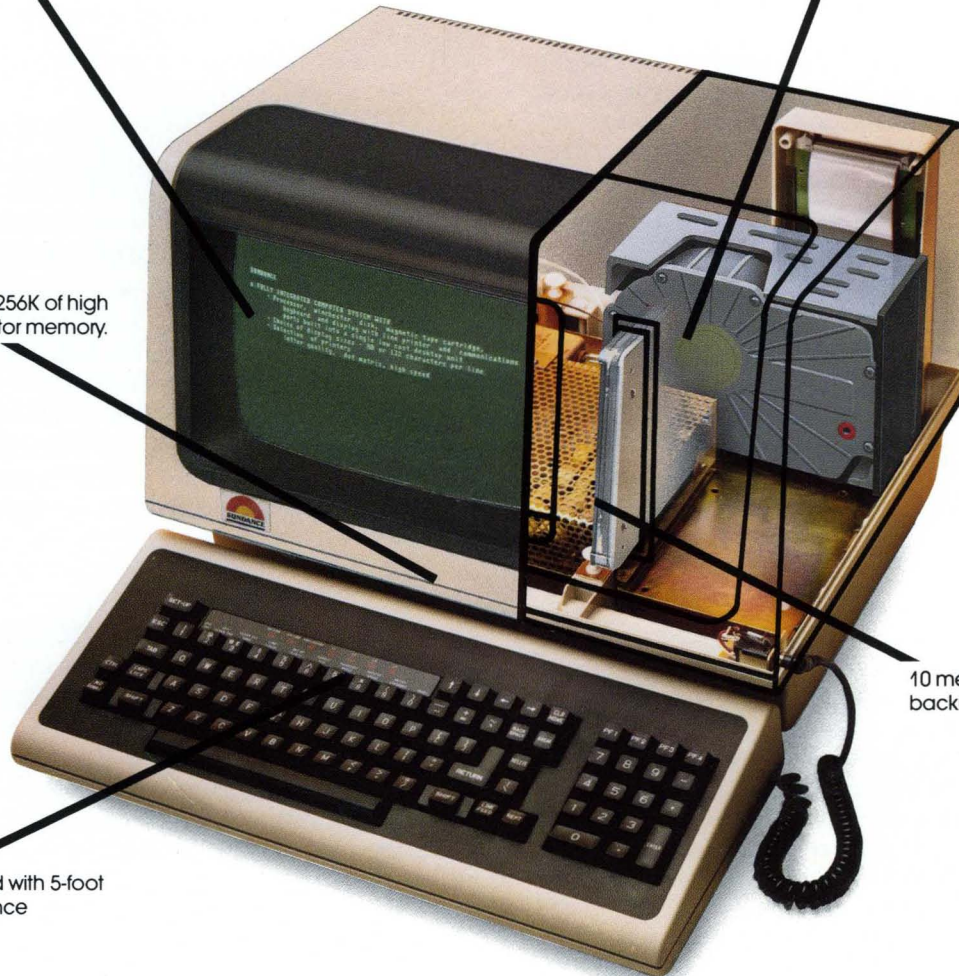
Sundance

Internal 7, 14 or 21 megabyte Winchester disk for maximum capacity and fast access time.

Eye-saving green screen for maximum efficiency in the office environment.

8-bit CPU with up to 256K of high speed semiconductor memory.

10 megabyte cartridge tape for backup and program load.

Moveable keyboard with 5-foot coiled for convenience and user comfort.

Fully Integrated Computer System

- Single integrated low cost unit includes: Processor, Winchester disk, magnetic tape cartridge backup, keyboard and CRT display with printer and communications ports.
- Choice of display sizes — 80 or selectable 80/132 character lines.
- Supports letter quality, dot matrix, high speed printers.

Designed to Grow With The Business

- Supports up to three users without the need to convert current applications software.
- Choice of disk sizes — 7, 14, 21 megabytes (unformatted) with add on capability.
- Choice of memory sizes — 64, 128, 192, or 256KB of RAM.

Fully Supported Business Application System

- Choice of business oriented operating systems— CP/M®, MP/M®, OASIS™.
- Selection of business languages — BASIC, COBOL
- Communications, graphics, database management, accounting, and word processing capabilities.

Fully Supported Nationwide

- Installation and maintenance available on-site nationwide (U.S.A.)
- Multi-level training program to meet user needs.
- Consultation and assistance by telephone or on-site.
- Software maintenance service.