SYSTEM COMPONENTS

Hard Disks

External Drives

Software

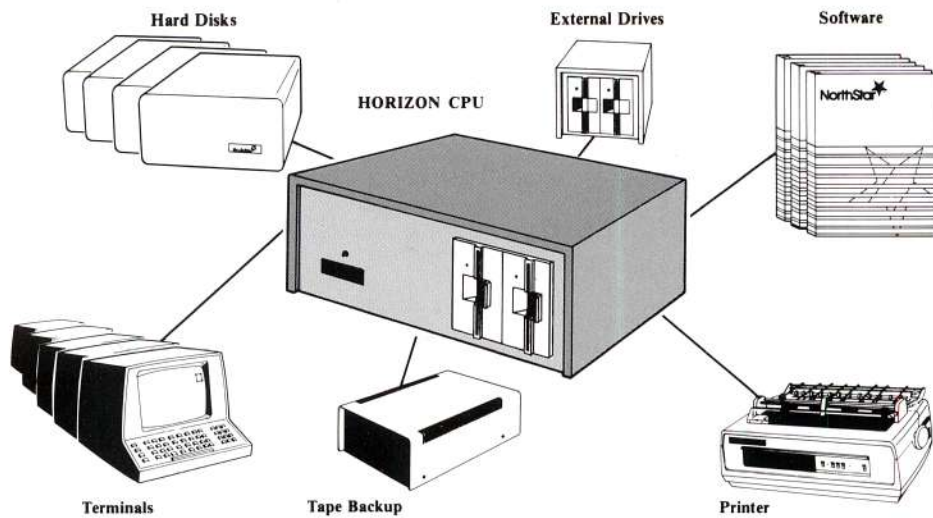HORIZON CPU

NorthStar

Terminals

Tape Backup

Printer

SPECIFICATIONS

CPU
Zilog Z80A operating at 4 MHz.

Word Size
8 bits.

Cycle Time
250 nsec cycle time.

Memory Capacity
Eraseable PROM: 1Kb (optional).
RAM: One 64Kb memory board, with parity
    and bank select (HRAM).

Serial I/O
Two RS-232C or Current Loop Serial I/O Ports
standard (Asynchronous or Synchronous).

Asynchronous: 8-bit characters with the
    following jumper selectable
    Baud rates: 75, 110, 150, 300,
    600, 1200, 2400, 4800, 9600.

Synchronous: jumper selectable identical
    Baud rates.

Parallel I/O
8-bit parallel. (one)

I/O Bus
Standard S-100 bus.

Real-Time Interrupt
12 Real-Time Interrupt intervals (one selected
by jumper connection) from 3.328 msec
through 27.263 seconds. Each interval is an
exact power of two times 3.328 msec.

Power Requirements
250W power supply—either 115V, 60 Hz or
230V, 50 Hz. Standard three prong plug into 20
amp single phase dedicated circuit.

Heat Dissipation
250W

Physical Specifications
Dimensions: 50.8 cm x 18.4 cm x 44.4 cm
    (20 in. x 7.25 in. x 17.5 in.).
Weight: approx. 22.7 kgs (50 lbs.) shipping
    weight including documentation.
Environmental Limits:
    Ambient temperature while operating:
    $10°$ C to $40°$ C ($50°$ F to $104°$ F).
    Ambient humidity while operating:
    non-condensing.

EXPANSION OPTIONS

HRAM-64	High Speed 64Kb Dynamic RAM memory board with parity (up to a total of six)
HSIO-4	Four Serial Port Expansion Board (RS-232C or Current Loop).
FPB	Floating Point Arithmetic Board.
ADC-2D	Two additional 5¼ inch Double capacity floppy disk drives incorporated within a cabinet (360Kb total capacity).
ADC-2Q	Two additional 5¼ inch Quad capacity floppy disk drives incorporated within a cabinet (720Kb total capacity).
HDS-5	5¼ inch Winchester Hard Disk —5Mb formatted capacity.
HDS-18	14 inch Winchester Hard Disk —18Mb formatted capacity.
Tape Backup	13.4Mb Tape Backup system for HDS-18 or HDS-5.
CRT	Hazeltine 1420/Soroc 120. (Other software drivers available.)
Printer	35 or 55 cps letter quality printer.

FOLLOW THE STAR

HORIZON

4 MHz Z80A® CPU, 64Kb High Speed Dynamic RAM, Optional PROM, S-100 Bus, Two Serial Ports, One Parallel Port, Integrated 5¼ inch Floppy Disk Drives.

HARDWARE

The HORIZON® computer incorporates a high speed 4 MHz Z80A microprocessor with 64Kb of Dynamic RAM including parity and two 5¼ inch floppy disk drives in an attractive desk top chassis. The chassis also provides a 12-slot S-100 mother board which contains a Real-Time Interrupt, two RS-232C serial ports, one 8-bit parallel port and power regulation circuitry for the integrated floppy disk drives. Either a 115 or 230 volt power supply with sufficient power for all 12 slots and the disk drives is also included. The use of high speed (200 nsec) Dynamic RAM and "fast stepping" floppy disk drives, along with the 4 MHz CPU, delivers the highest average performance of all comparable microcomputers as measured by independent benchmark studies!

SOFTWARE

The power and versatility of the HORIZON computer is further enhanced by a wide range of system and application software. For business use, the comprehensive North Star Application Software Packages offer Word Processing, Accounting and Financial Reporting in either single user or multi-user versions. For the scientific, engineering, or education oriented user, North Star's powerful DOS operating system with its efficient BASIC language or Pascal® II.O are available. The industry standard CP/M® operating system is also compatible with applications packages in MicroSoft BASIC, FORTRAN, and COBOL.

[1]Reference to *Benchmark Report, Association of Computer Users* Vol. 3.1, No. 3, March 1980

FOLLOW THE STAR

NorthStar™