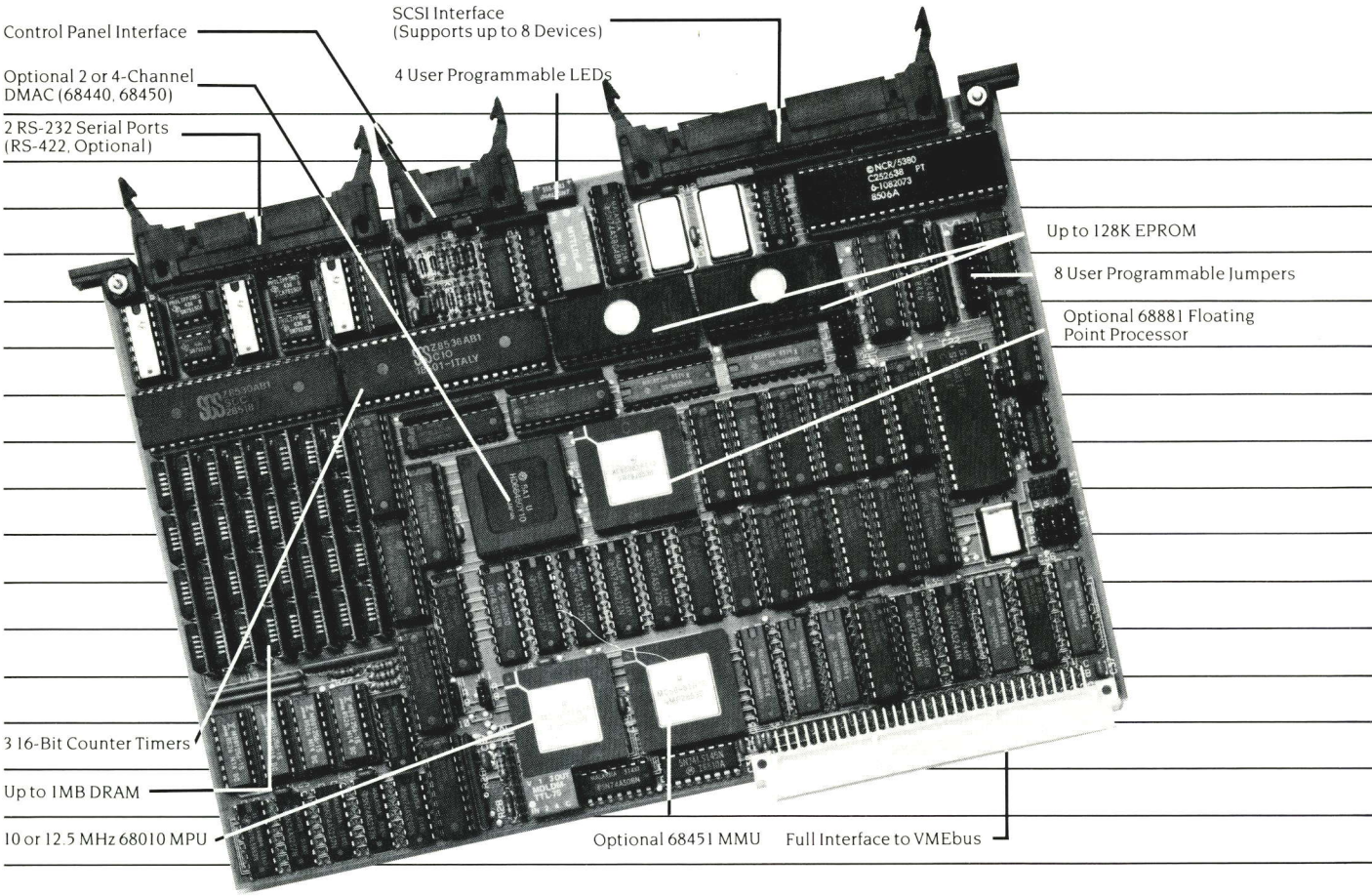
HEURIKON CORP



HK68/V™ VME *Family*

HK68/V10

Powerful Single Board Microcomputer for UNIX™ and Sophisticated Applications.

Heurikon is proud to introduce the HK68/V10 microcomputer, designed especially for those applications requiring high processor performance, as well as sophisticated memory management capability. The V10 is available as a basic processor with several options which allow you to choose the level of sophistication necessary to achieve your application goals.

Key features include:

- No wait-state, 10 or 12.5 MHz Motorola 68010 MPU
- Up to 1 MByte of on-board, dual access DRAM with parity
- Up to 128K EPROM
- Optional 2 or 4-channel DMAC
- Optional Memory Management Unit
- Optional on-board 68881 Floating Point Processor
- ANSI compatible full SCSI interface supporting up to 8 peripherals
- 2 RS-232 serial ports (RS-422 optional)
- Full master/slave interface to VMEbus with 16-bit data path and 24-bit addressing
- Militarized versions available

Like the HK68/VE, a related product serving real-time applications, the V10 incorporates the quality, performance and reliability resulting from over 13 years experience in microcomputer design and manufacturing. The HK68/V10 is but one member of the HK68/V Family of VME products and complementary software. For more information, please consult your Heurikon representative or call Heurikon directly.

Technical Specifications

Bus Interface

■ VMEbus architecture with 16-bit data path, 24-bit addressing and 7 bus interrupts assures compatibility with a wide range of peripheral boards serving a variety of applications ■ Operates in Master or Slave Mode (Compliance Level: D16 A24 I(7)).

Processor

■ No wait-state Motorola 68010 MPU operating at either 10 or 12.5 MHz (1 wait-state with optional MMU) ■ Watchdog Timer provided to terminate accesses otherwise causing system deadlock.

Memory

Random Access Memory

■ Up to 1 MByte of on-board dual access DRAM with parity in multiples of 128K.

Read-Only Memory

■ Up to 128K of EPROM (two 28-pin JEDEC ROM sockets).

Direct Memory Access

■ Optional 2-channel 68440 or 4-channel 68450 DMAC increases system performance for memory to memory and device to memory data transfer ■ DMAC single cycle mode operation supported for transfers directly from I/O to memory in a single bus cycle ■ Programmable 8 or 16-bit word size.

Memory Mangement

■ Optional 68451 MMU supports operating systems such as UNIX™ requiring address translation, segmentation/paging and memory segment protection.

Peripheral Device Interfaces

Small Computer System Interface (SCSI)

■ ANSI compatible Small Computer System Interface (SCSI) permits connection of up to 8 independent, SCSI compatible I/O controllers such as disk, tape and a variety of other devices ■ Transfer rates of up to 1.5 MBytes/second supported ■ Various device drivers are available for UNIX and VRTX® operating systems.

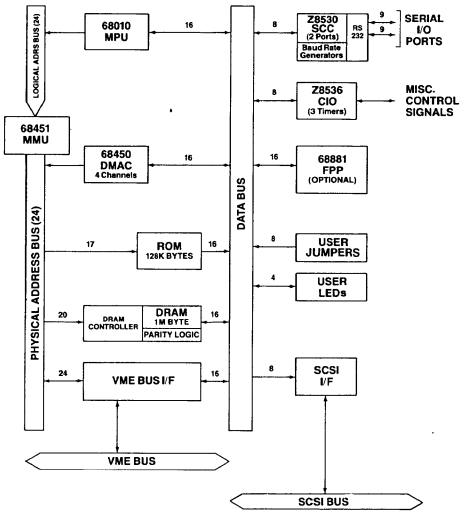
Serial I/O

■ Two RS-232 serial I/O ports provided via Z8530 Serial Communications Controller ■ Separate software controlled baud rate generator for each port ■ Both ports support asynchronous or synchronous communications including IBM BiSync, HDLC, SDLC and others ■ RS-232-C standard with EIA RS-422 available on both ports ■ Transfer rates of 38.4 K baud asynchronous and 1 Mbit synchronous obtainable.

Counter/Timers

■ Three programmable 16-bit Counter/Timer channels available.

HK68/V10 Block Diagram



Floating Point Processor Module

■ Motorola 68881 Floating Point Processor available on board ■ System performance enhanced via execution of floating point operations in hardware at speeds of up to 100 times that of the 68010 ■ C, Fortran and Pascal compilers generating 68881 in-line code to be available.

Light Emitting Diodes and Jumpers

■ Four user programmable LEDs and eight jumpers provided.

Operating Systems Supported

■ Unisoft Uniplus + ™ UNIX System V compatible operating system with Berkeley enhancements ■ Hunter and Ready VRTX Real-Time Executive. (For complete information on software availability, please contact your Heurikon representative or Heurikon directly.)

Board Configuration Options

■ MPU—10 or 12.5 MHz Motorola 68010 ■ DRAM—128K, 256K, 512K, 1 MB with Parity ■ DMAC—68440, 68450 ■ MMU—68451 ■ Floating Point Processor—68881 ■ RS-422 on both serial ports.

Physical and Environmental Characteristics

■ Multilayer with ground and VCC planes ■ Board size—23.35 cm x 16.0 cm (9.19 in x 6.3 in) ■ Power Requirements: + 5 VDC @ 4.75 A, + 12 VDC @ .6 A, − 12 VDC @ .2 A ■ Operating Range: 0 to 55° C, 100% relative humidity (non-condensing).

For detailed information on the operation of the HK68/V10, please refer to the User's Manual. Specifications subject to change without notice.

For more information, please call:

1•800•356•9602

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