



Octagon Systems' highly integrated PC/104 package.

Description

The 2133 is one of several industrial grade CPU cards offered by Octagon Systems in a PC/104 package. It provides Pentium® performance for embedded applications that require a rugged design in a highly integrated package. This tiny powerhouse is compatible with DOS, Windows CE/NT®, QNX®, and other PC-compatible operating systems. In addition to the processing power, the card includes 4 MB of surface mount DRAM that is field expandable to 64 MB. The 2133 has one SSD socket that supports M-Systems DiskOnChip® 2000 flash drives. DiskOnChip devices are available from 2-288 MB and provide full hard disk read/write compatibility. This card is well suited for mobile, industrial, and control applications. It includes all the features you expect from embedded PC processors.

Features

PC MOTHERBOARD FUNCTIONS:

- CPU:AMD 5x86-133 MHz
 Chipset:OPTI
 Memory:4 MB DRAM on-card; expandable up to 64 MB via DIMM module
- Power management:Suspend/resume operation via SMI input and software; Wake up through various interrupts, including COM2 serial port
- DMA internal:7 DMA channels; 8237 compatible; AT interrupts 15 channels; 8259 compatible
- Counter timer3 programmable counter/timers; 8245 compatible
- Real time clock:.....AT style clock/calendar is fully Y2K compliant; external 3.6V battery required
- SETUP memory:System SETUP information stored in EEPROM; Up to 1536 Bytes of EEPROM available to user for special data storage
- BIOS:.....Phoenix AT compatible with industrial extensions in 512K flash

ON-CARD PERIPHERAL FUNCTIONS:

- Serial:Two RS-232 ports, 16C550 compatible , 300 to 115 Kbaud
 Supports all PC serial handshake lines
 Ports are ESD protected up to ± 6KV
- Parallel:IEEE-1284 enhanced bidirectional parallel port
 Supports ECP and EPP modes
 Floppy drive mode
 Backdrive and ESD protected
 Data lines provide 24 mA drive
- Keyboard interface:.....Compatible with AT style keyboards
- Speaker:Speaker interface will drive 8-50 ohm speakers
- SSD:M-Systems DiskOnChip® 2000 compatible; sizes 2-288 MB; 512K SRAM support; requires external 3.6V battery for data retention
- Watchdog timer:Software enabled & strobed
 Default time 1.6 seconds (typical)



All you'd expect from embedded PC processors:

Two standard serial ports, enhanced parallel port, AT keyboard support, battery-backed, real time clock, 5V only operation, watchdog timer, and EEPROM storage for SETUP configuration.

TECHNICAL SPECIFICATIONS

- Size:PC/104 standard: 3.775" x 3.55" x 1.0", Including stack-through connector
Bus:.....8/16-bit PC/104 ISA Bus
Power:.....5V ±0.25V, 500 to 950 mA typical, depending upon power management mode
Environment:.....-40° to 85° C operating
-55° to 85° C non-operating
RH 5% to 95%, non-condensing
6g vibration
40g shock
Weight: 3.5 oz. (No DOC or DIMM modules on card)
CE Compliant:Class A
MTBF:> 10 years

Ordering Information

Order #55152133 PC/104 CPU, includes 2133 User's Manual & utilities on CD ROM.

ACCESSORIES

- Order #2746VTC-9F, serial cable, 9-pin female, 6-ft.
Order #2472VTC-9M, serial cable, 9-pin male, 6-ft.
Order #4809FCA-12, floppy drive cable, 12-in.
Order #4808PCA-36, Centronics printer cable, 36-in.
Order #1237VTC-5/IBM, DB-25 printer cable, 6-ft.
Order #39092010 LCD display/keyboard interface