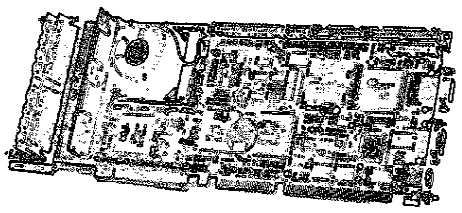
SingleBoard**Computers** (SBCs)



MSB133P0

Models and Description:

- MSB200P0 - Pentium SBC operating at 200 MHz.
- MSB166P0 - Pentium SBC operating at 166 MHz.
- MSB133P0 - Pentium SBC operating at 133 MHz.
- MT75E - 486DX5 SBC operating at 133 MHz (performance equates to 75 MHz Pentium®).

General Description:

Single-board computers for LAN-based hosts, gateways, and servers.

The Multi-Tech Single Board Computers, or SBCs, are full-featured Pentium® or equivalent processors with ISA-bus architecture. They are designed for high-density computer installations such as networks and communication systems that require multiple servers, operating systems, and applications running on individual computers.

Using a combination of one MultiArrayIII™ segmented computer rack, a MultiArraySwitch™ video/keyboard/mouse multiplexer, SBCs, and network interface cards (NICs), an administrator can install up to nine computers running independently in about twelve vertical inches of rack space (keyboard, mouse, and monitor not included). The SBCs are also the heart of Multi-Tech's MiniArray™ communication servers.

Models MSB133P0, MSB166P0, and MSB200P0 have Pentium® processors that operate at 133 MHz, 166 MHz, and 200 MHz, respectively and model MT75E has a 486 processor clocked at 133MHz.

Each SBC provides the features and operation of an IBM AT motherboard, with video, keyboard, and two COM port connectors plus peripheral device controllers, on a full-length expansion board. This board installs in any MultiArrayIII segment where it can access one to five expansion slots for a network interface card (NIC), SCSI controller card, or communication cards (e.g., ISI552, ISI608, or ISI2834/4).

With the on-board power of a Pentium/equivalent processor and capacity for 128 megabytes of RAM, the SBC may be configured for use as a file server, communication server, LAN gateway, sync/async bridge, router, or workstation for dial-in LAN access.

Features:

IBM® AT-motherboard compatible, Intel®-processors with capacity for 128 meg of RAM.

Processor

- Pentium or 486 family processor.
- Integrated coprocessor.

Random Access Memory

- All models ship without RAM.
- Bank(s) may be populated with 4 (MT75E only), 8, 16, 32, 64, or 128 meg (other expansion options are also supported) of RAM.
- Requires one bank, (Pentium-2 slots, 486-1 slot), to be completely filled with appropriate SIMM(s).

Video

- All models support VGA at 640x480x256, 800x600x256 (VESA), or 1024x768x16 color resolution.
- Pentium models also support 1024x768x256 color resolution.

Keyboard

- Supports 101-style keyboard via 6-pin mini-DIN connector.

Peripheral Controllers

- Standard IDE hard drive controller supports one or two hard drives with capacities over 1 Gb each.
- Floppy drive controller supports one or two 3.5" or 5.25" floppy drives.
- 16550 serial port controller provides one on-board serial port (9-pin, RS232C interface). Supports optional COM2 via user-supplied expansion cable or connector bracket.
- Parallel port controller supports optional LPT1 via user-supplied expansion cable or connector bracket.
- BIOS auto configures hard drive(s), provides password security, power saver, and watchdog timer.

Specifications:

Requires a powered backplane, as provided in the MiniArray or MultiArrayIII.

Dimensions:	4.75" x 1" x 13.25" 3 cm x 12.1 cm x 34.0 cm
Memory Banks:	Two (four slots) (Pentium) or Two (two slots) (486) 72-pin SIMM banks
SIMMs:	All SIMMs must operate at 70-nanoseconds or faster (SIMM(s) can be with or without parity).
Cache:	512Kb (Pentium) / 256Kb (486) external cache
Video:	100% VGA hardware-register and BIOS compatible
Video Port:	High density 15-pin female (DB15F) connector
VRAM:	1M (Pentium) / 512K (486) on-board VRAM supports 640x480x256, 800x600x256, 1024x768x16, (all models) or 1024x768x256 (Pentium only) color resolution.
Keyboard:	6-pin mini-DIN port for 101-style keyboard
UARTs:	Two 16550 UART controllers
Serial Port:	One 9-pin male (DB9M) connector with RS232C interface. Optional COM2 supported via expansion cable
Parallel port:	Parallel port controller supports optional LPT1 via expansion cable
Floppy drive:	Floppy disk controller supports one or two optional 3.5" or 5.25" floppy drives
Hard drive:	IDE hard drive controller supports two optional hard drives, CD-ROM or any IDE compliant device
Switch:	Momentary push-button reset switch
Clock:	Real Time Clock with battery backup
Timer:	Watchdog timer auto reboots upon system lockup
BIOS:	AWARD (Pentium); Phoenix ROM BIOS (486)
Temp:	32° to 120° F (0° to 50° C)
Power	4 A @ 5v DC (Pentium) 3 A @ 5v DC (486)
Usage:	20 mA @ ±12v DC
Warranty:	Two years

Manufactured in Mounds View, MN, U.S.A.

Individual spec sheets are available for the MultiArrayIII, MiniArray, ISI552, ISI608, and ISI2834/4.

MultiTech® Systems

The right answer every time.

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