

Little Board™ P5v

High-integration, Pentium®-based EBX single board system



FEATURES

- 266MHz Intel® Mobile Pentium (Tillamook) Processor
- Up to 256MB SDRAM, 512KB Level 2 Cache
- Enhanced Ultra 33/66/100 Synchronous DMA IDE to 2 drives
- Two RS232, RS422/485 serial ports, one with full handshaking
- ECP/EPP bidirectional parallel, floppy, 2 USB, IrDA, keyboard, PS2 mouse ports
- Type II CompactFlash socket
- 10/100BaseT Ethernet interface
- High-performance 2D/3D CRT and TFT Flat Panel interface with 2.5MB embedded SDRAM
- PC/104-Plus expandable
- -40° to +85°C extended temperature option

The highly integrated Little Board™ P5v EBX-compatible single board computer features a powerful, low-power 266MHz Mobile Pentium® processor, advanced networking and high performance graphics. It is ideal for high volume, ruggedized, cost-conscious embedded designs that need to optimize cost vs. performance vs. power/heat requirements.

The Little Board P5v contains all the component subsystems of a PCI motherboard plus the equivalent of up to five expansion boards. Supporting up to 256MB DRAM, it also provides 512KB synchronous-burst secondary cache to boost performance, plus thermal monitoring and advanced power management functions.

CRT Display/PCI Flat-Panel Controller

A powerful and flexible PCI video display controller (Trident Cyber9525DVD Multimedia Accelerator) supports both CRTs and flat panels (plasma, electroluminescent and LCD), and offers full software compatibility with all popular PC video standards (VGA, Super VGA, and VESA). All standard resolutions up to 1280x1024 pixels and up to 16.7 million colors are supported. 2.5MB of SDRAM video memory are standard.

100 Mbps Ethernet Interface

The Ethernet subsystem is based on the Intel 82559ER 10/100BaseT PCI Ethernet Controller. It fully supports IEEE 802.3 Ethernet standards—10BaseT and 100BaseT. For maximum performance, the Ethernet controller uses the PCI bus for system-side data transfers and includes on-board programmable DMA, full-duplex support and auto-negotiable support.



Processor

- 266MHz Mobile Pentium (Tillamook) Processor
- 512KB Synchronous Burst Level 2 Cache
- **System Controllers** – PC/AT compatible
- **Real Time Clock** – With CMOS setup; onboard replaceable battery provided
- **Watchdog Timer**
- **Configuration EEPROM** – Supports batteryless boot capability
 - 512 bits available for OEM use
- **Powerfail NMI** – Triggers when +5V power drops below +4.7V

Memory

- **DRAM**
 - 64-bit wide 3.3V SDRAM
 - 16-256MB SDRAM via 168-pin DIMM
- **CompactFlash Socket** – Type II, supports bootable flash

Bus Interface

- PC/104 (ISA) and PC/104-Plus (PCI)

I/O

- **EIDE** – Dual PCI-bus Enhanced Ultra 33/66/100 Synchronous DMA IDE interface to two drives each, ATAPI extensions including DVD
- **Serial** – Two 16-byte FIFO-buffered ports, both are RS232 or RS422/485 for half or full-duplex configuration
- **Parallel** – ECP/EPP bidirectional port
- **Floppy** – Supports 1 or 2 drives
- **Keyboard/Mouse** – PC/AT and PS/2 interfaces

Network Interface

- **Ethernet** – Intel 82559ER 10/100BaseT Ethernet

Video Interface

- **Controller** – Trident Cyber9525DVD Multimedia Accelerator with 2.5MB embedded SDRAM
- Supports CRT and Digital Flat Panel displays
- Supports interlaced/non-interlaced displays up to 1280x1024 resolution
- Supports 3.3V flat panels; support for 5V flat panels with external adapter

Software & Development Tools

- Board Support Packages for popular Operating Systems – see Web site for current listings
- **BIOS** – Award ROM-BIOS with Ampro enhancements

Mechanical

- **Size** – 146x203mm (5.75x8.00")
- **Power Requirements** – 2.09A@5V
- **Environmental** – Operating temperature 0° to 70°C standard; -55° to +85°C extended

Little Board P5v Functional Diagram

