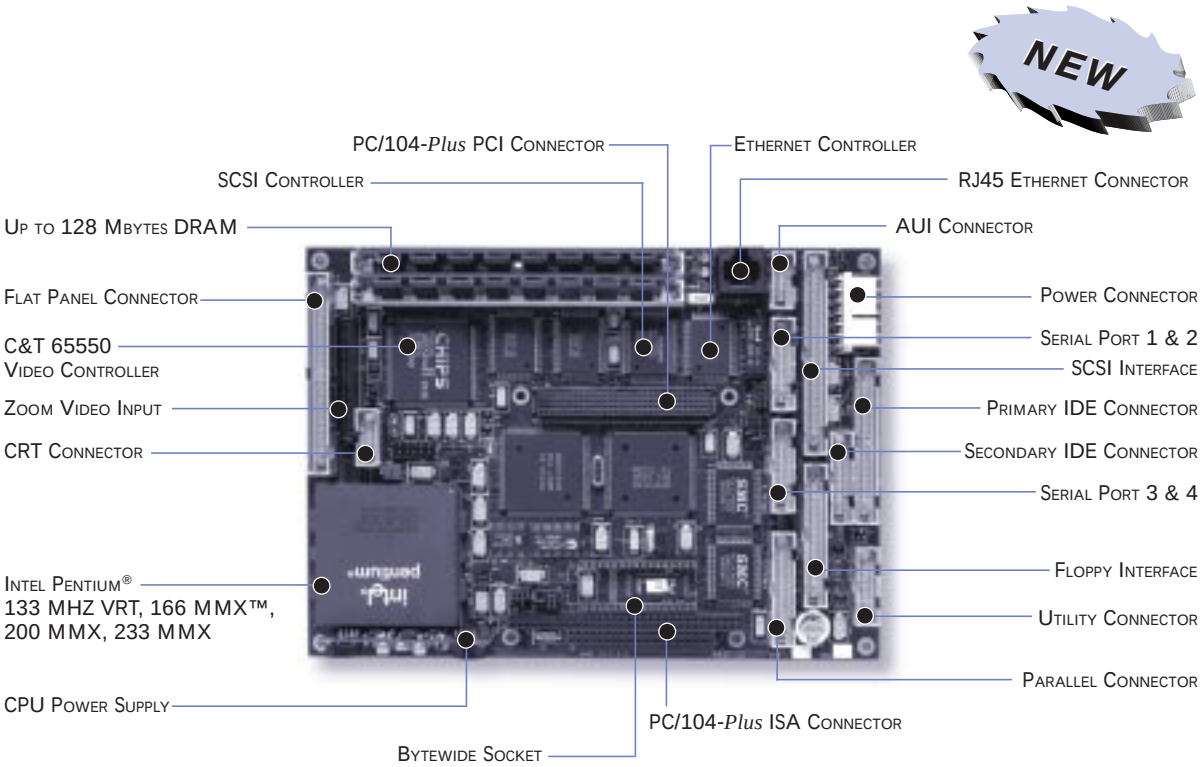
LB3-P5e

Little Board™/P5e • *Exceptional performance, high integration EBX compliant single board system*



The Little Board/P5*e* sets the standard for Pentium-based embedded-PC designs. The extreme power of an Intel Pentium processor is combined with the high bandwidth of a PCI expansion bus, in a rugged and reliable single-board solution for embedded applications that demand small size, low power consumption, and high functionality.

This new high-end member of the popular Ampro "third generation" Little Board family contains—on a single compact assembly— all the functions of a fully configured PC-compatible *system*. Included in this highly integrated design are disk, display, network, and SCSI controllers, plus four serial ports and an enhanced parallel port.

HIGH PERFORMANCE AND RELIABILITY

The Little Board/P5*e* meets the performance and reliability demands of a wide range of fixed, mobile, and portable embedded applications. Compact size, reduced power consumption, wide operating temperature, high quality, and rugged construction all make the Little Board/P5*e* the optimal choice for use in punishing embedded environments. Additional reliability enhancements include a watchdog timer, a power-fail NMI generator, and an onboard bootable "solid state disk."

ENHANCED VIDEO SUPPORT

Now the Little Board/P5*e* offers up to 2 Mbytes of video RAM which supports high resolution and true color modes for graphics intensive applications.

A powerful and highly flexible PCI-based display controller interfaces with both flat panels and CRTs, and offers full compatibility with five popular video modes: VESA (SuperVGA), VGA, EGA, CGA, and MDA. Software programmable flat panel interface timing accommodates nearly all LCD and electroluminescent (EL) displays.

LB3-P5e

SPECIFICATIONS

Depopulated Versions Available!

PC FUNCTIONS

CPU
- Intel Pentium, 133 MHz VRT, 166 MHz MMX, 200 MHz MMX, 233 MHz MMX
- 256K level two cache

MEMORY
- Supports up to 128 Mbytes, Fast Page or EDO DRAM
- Supports two 72-pin SIMMs (1 bank) with or without parity
- Shadow RAM support provides fast system/video BIOS execution

DMA INTERNAL
- 15 interrupt channels (8259 equivalent)
- 7 DMA channels (8237 equivalent)
- 3 programmable counter/timers (8254 equivalent)

KEYBOARD
- Standard PC/AT keyboard port
- Speaker port with 0.1 watt output

REAL TIME CLOCK
- Battery backed real-time clock and CMOS setup

BIOS
- Award ROM-BIOS with Ampro enhancements (See Ampro Embedded-PC Enhancements section)

ADDITIONAL ONBOARD FUNCTIONS

SERIAL
- Four FIFO-buffered serial ports with full handshaking (16550 equivalent)
- Each channel supports either RS232C (direct connection) or RS485 (via the Ampro RS485 Adapter)

PARALLEL
- EPP/ECP compatible, bidirectional parallel printer port

FLOPPY
- Supports 1 or 2 drives

PCI ENHANCED IDE
- Supports up to four drives
- Supports "fast" IDE data transfer modes

PCI ULTRASCSI
- Adaptec AIC-7860
- Supports SCSI I/II, "UltraSCSI" (20MB/sec), synchronous or asynchronous transfers

BYTEWIDE SOCKET
- Usable with 32K-1M byte EPROMs, 32K-512K byte Flash EPROMs, 32K-512K byte SRAMs, or 32K-512K byte NOVRAMs
- Offboard battery converts SRAM into NOVRAM
- Usable with DiskOnChip2000™ read/write flash SSD device

CONFIG EEPROM
- Supports battery-free boot capability
- 512 bits available for OEM use

WATCHDOG TIMER
- Utilizes real time clock alarm function
- Timeout triggers NMI or hardware reset

POWERFAIL NMI
- Triggers when +5V power drops below +4.7V

PCI DISPLAY CONTROLLER

- Supports CRT, LCD, and EL displays

CONTROLLER
- C&T 65550

ONBOARD DISPLAY RAM
- 2 MBytes

FLAT PANEL SUPPORT
- Supports 24-bit "true color" (800 x 600)
- "GUI accelerator" for enhanced graphic function performance
- Software programmable flat panel interface signal timing
- Sequenced LCD power to protect display
- Supports DPMS-compatible displays
- Optional plug-in LCD bias supply: supplies ±15 to ±35 VDC @ 30 mA; voltage level adjusted via onboard or external potentiometer

FOR A COMPLETE LIST OF PANELS SUPPORTED, PLEASE VISIT OUR WEBSITE
www.ampro.com/support

ETHERNET LAN INTERFACE

- Complies with IEEE-802.3 (ANSI 8802-3)

CONTROLLER
- SMC 9000 series

MEDIA INTERFACE OPTIONS
- 10Base-T (twisted pair), via onboard RJ45 connector
- AUI, via onboard header connector; DB15F transition cable available
- 10Base2 (thin coax), via external MAU connected to AUI interface

DATA RATE
- 10M bits/sec

REMOTE BOOT ROM
- Can be installed in byte-wide SSD socket

For ordering information and pricing please refer to Ampro Ordering Guide.

MECHANICAL

SIZE
- 5.75 x 8.0 x 1.2 in. (146 x 203 x 30 mm)

POWER
- Power requirements: Contact factory

ENVIRONMENTAL
- Operating temperature (Please refer to the *Ampro Ordering Guide.*)
- 5% to 95% relative humidity, non-condensing
- Storage temperature: –55° C to +85° C
- Weight: 11.6 oz. (329 gm)

NOTE: Contact Ampro regarding custom configurations and special order options.

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