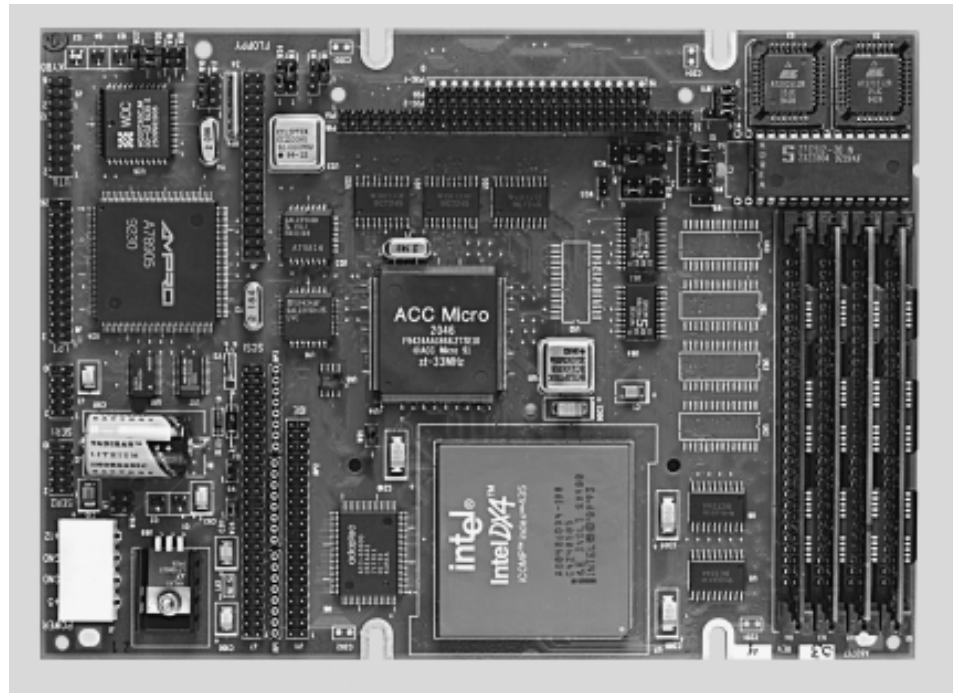# Little Board*/486-II

- Complete PC/AT-Compatible SBC:
  - Up to 32 Mbytes Onboard DRAM
  - Serial, Parallel, Disk, and SCSI-II Interfaces
  - Bootable "Solid State Disk"
  - Watchdog Timer and Real-Time Clock
- Enhanced PC/AT-Compatible Embedded-PC BIOS
- Compact 5.25" Disk Drive Form-Factor
- Expands with Self-Stacking PC/104 Modules
- Low Power, Rugged, and Reliable

The Little Board*/486-II provides embedded system designers with a full set of PC/AT-compatible system functions in the "foot print" of a 5.25-inch disk drive (5.75 x 8 in.; 146 x 203 mm). CPU options include the high performance 66 MHz IntelDX2™ processor and the ultra performance 100 MHz IntelDX4™ processor. High integration, rugged construction, wide operating temperature range (0-70°C standard; extended ranges available), and low power consumption (12W active; 8.5W standby) make the PC/104-expandable Little Board/486-II an ideal "platform" for reliable embedded systems.

The Little Board/486-II contains all the functions of a PC/AT motherboard plus three or four expansion cards. Included onboard are: CPU, RAM, BIOS, two serial ports, bidirectional parallel port, keyboard and speaker interfaces, standard system controllers (DMA, interrupts, timers), floppy and IDE drive interfaces, SCSI-II bus interface, and a battery backed real-time clock. Two valuable reliability enhancements for embedded systems are: a watchdog timer for fail-safe operation; and an onboard "solid state disk" function that can boot and operate the system from EPROMs, non-volatile RAMs, or flash EPROM devices. PCMCIA memory cards are also supported for program or data storage (via an adapter/drive). Serial ports support either RS-232 (directly cabled) or RS-485 (via

an adapter/cable). Operation requires +5V power only.

System expansion options can be installed directly onboard, using off-the-shelf stackable PC/104 modules. Examples include CRT and flat panel display controllers, LANs, modems, field buses, and data acquisition and control interfaces. In addition, custom application-specific logic boards can also be stacked directly on the Little Board/486-II using its PC/104 expansion bus interface as a rugged and reliable interconnect.

The Little Board/486-II also includes Ampro's unique embedded-PC BIOS which is based on a fully PC-compatible Award BIOS kernel combined with a comprehensive set of exclusive embedded-PC extensions for enhanced system reliability and flexibility. Enhancements include: fail-safe boot; battery-free boot; watchdog timer support; serial console option; serial loader; SSD and SCSI support; advanced power management; and OEM customization "hooks".

HOST SYSTEMS SUPPORTED:
AMX, DOS, Embedded DOS, LynxOS, OS/2, OS-9000, pSOS, QNX, ROM-DOS, RTX-DOS, Venix, VRTX/OS, VxWorks, Windows*, Windows95*, WindowsNT*

PROCESSORS SUPPORTED:
Intel486™ Processor 66 or 100 MHz

AVAILABILITY:
Now

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