Ampro EBX SBC Family

Ampro helps you build a better product, faster

In the early 1980s, Ampro invented embedded PCs by repurposing desktop PC technology with its proven OS and tools support into small form factors with higher quality and reliability than desktop PCs, as required for embedded systems.

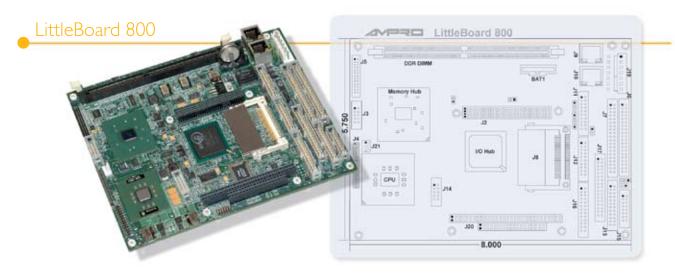
In 1984, Ampro introduced Little Board™ 186 and thus the embedded PC industry was born. Twenty-one years later, Ampro's rugged EBX family is unique in offering only low power processors from 400MHz Celeron® to 1.4GHz LV Pentium® M 738 for high-reliability applications. Optional −40° to +85°C testing, conformal coating and exceptional resistance to shock and vibration are available to satisfy the toughest requirements. Contact Ampro for your copy of the HALT reports.

LittleBoard Applications. Ampro's high-performance, highly integrated LittleBoard SBCs are based on the industry-standard EBX form factor (5.75×8.00 inches). LittleBoard SBCs may be used stand-alone or as the base of a stack of electronics for long lifecycle embedded applications which require ruggedness and high performance processing, networking and video.

Stand-alone. LittleBoard SBCs provide a complete, fully functional embedded PC. Each board contains a CPU, video controller, dual Ether-

net interfaces, IDE and floppy disk controllers, four RS232/422/485 ports, USB ports, a CompactFlash socket and an AC'97 audio interface. Many applications can be completely controlled by a single LittleBoard SBC with no additional I/O required. Additional application-specific logic or I/O can be driven through the PC/104-Plus expansion interface. With Ampro's rugged design and extended temperature specifications, the board can be mounted virtually anywhere in the system enclosure, frequently without additional cooling or thermal design considerations.

Embedded PC stacks with PC/104
Expansion. LittleBoard SBCs are often used as the baseboard of a compact stack of boards. Additional PC/104 or PC/104-Plus expansion modules plug in on top. The PC/104-Plus expansion modules can be either off-the-shelf modules, such as Ampro MiniModule™ products, or may be custom modules that you design and build specifically for your application. This type of module stack requires little space and can generally be secured in a convenient place directly inside the embedded system enclosure—allowing products that would otherwise require an external PC to include a rugged and reliable PC-compatible subsystem right inside.



Ampro's EBX Form Factor Solutions

	LittleBoard 800	LittleBoard 700
СРU	1.4GHz LV Pentium® M 738, 1.0GHz ULV Celeron® M 373, 600MHz ULV Celeron® M	650MHz LV Celeron® or 400MHz ULV Celeron®
Cache	2MB (Pentium® M) 512kB (Celeron® M) Level 2	512kB (PIII) 256kB (Celeron®) Level 2
DRAM	Up to IGB DDR	Up to IGB SDR
Bus Interface	PC/104-Plus	PC/104-Plus
EIDE	Ultra DMA 33/66/100 to 4 drives	Ultra DMA 33/66/100 to 4 drives
Solid State Disk	CompactFlash	CompactFlash
Serial Port	(4) RS232/422/485	(4) RS232/422/485
Parallel Port	EPP/ECP bidirectional	EPP/ECP bidirectional
Floppy	lor2	lor2
USB	(4) USB 2.0	(4) USB I.I
Keyboard/Mouse	PS/2	PS/2
Audio	AC97	AC97
Network	1000BaseT and 10/100BaseT Ethernets	Dual 10/100BaseT Ethernet
Video	AGP 128-bit, 2048×1536	AGP 4X, 1600×1200
Flat Panel Support	Dual channel LVDS	DSTN,TFT,LVDS

