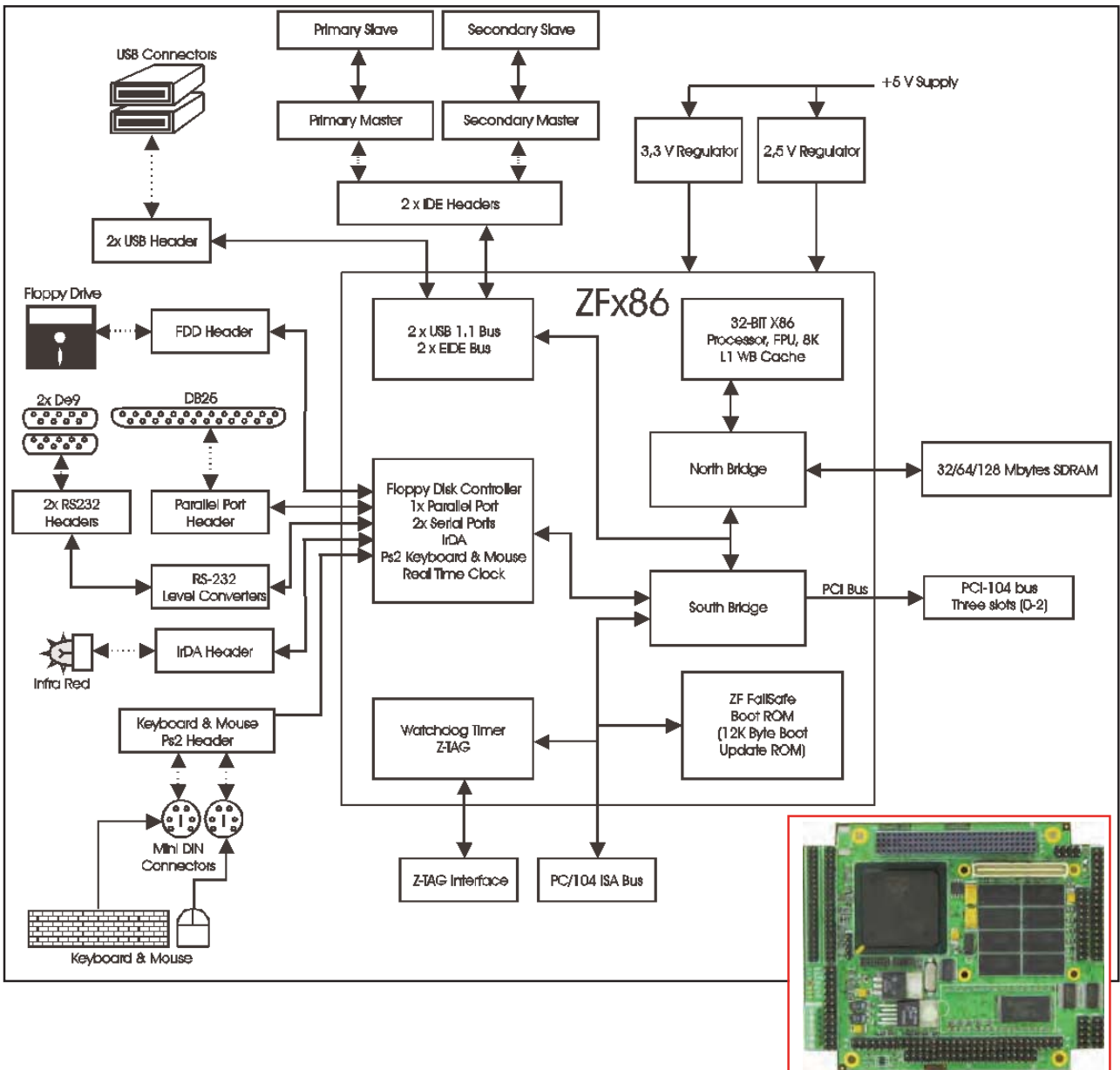


## ► PC/104 Plus Processor Board

The PC/104 Plus Single Board Computer Module is a rugged, fanless x86-based single board computer in the PC/104 Plus formfactor. It is a high reliability design built around the ZFx86 processor and uses a Polyimide PCB to provide temperature, shock and vibration resilience.

The ZFx86 processor provides support for industry standard architecture and peripherals, ensuring compatibility with a wide range of operating systems, such as VxWorks, Windows 9x/NT, Linux, QNX, MSDOS and DRDOS. The CPU speed can be 33 MHz, 66 MHz or 100 MHz over the full extended temperature range of -40 C to +85 C, or 128 MHz over the temperature range -20 C to +70 C.

The 100% PC-compatible Phoenix embedded PC BIOS is stored in 2 Mbyte reprogrammable Flash EPROM, leaving space for a complete Linux and VxWorks kernel image along with the boot loaders for both, enabling a dual-boot Linux / VxWorks system. A total of 128 Mbytes of SDRAM is soldered to the board for increased resistance to shock and vibration. For cost sensitive applications, 32 or 64 Mbyte options are available.



PC/104+ SBC

Board-Level



► **PC/104 Plus Processor Board**

<b>Specifications</b>	
<b>ISA Bus</b>	Full 8-bit ISA bus at 8,33 MHz
<b>PCI Bus</b>	PCI Rev 2.1, 32-bit, 33 MHz, up to 3 external masters
<b>Processor</b>	ZFx86 PC-on-a-chip (fanless)
<b>Speed</b>	33, 66, 100 or 128 MHz
<b>RAM</b>	32 to 128 Mbyte SDRAM soldered in place
<b>Real-Time Clock</b>	Compatible with DS1287, MC146818 and CP87911
<b>Drives</b>	1 x Floppy Disk Controller 2 x IDE with Primary and Secondary channels, 4 devices total. Ultra DMA (ATA-4) support
<b>Serial</b>	Two 16550-compatible RS232 serial ports with all the standard baud rates up to 115,2 kbps
<b>USB</b>	Two fully independent USB 1.1 interfaces
<b>Keyboard, Mouse</b>	PS/2
<b>LPT</b>	One bi-directional ECP/EPP printer port
<b>Video, Sound</b>	Not supported
<b>Watchdog Timer</b>	Both software and hardware control provided. Can be used to stabilise and recover the system after a critical software failure
<b>Power Requirement</b>	+5 V at 1 050 mA (with processor operating at 100 MHz)
<b>Mechanical Specifications</b>	95,89 mm x 90,17 mm x 23,80 mm in accordance with PC104 Plus V2.0
<b>Software Compatibility</b>	VxWorks Linux Windows 9x/NT MSDOS DRDOS
<b>Environmental Specifications</b>	
<b>Temperature</b> - Operating (33, 66 or 100 MHz) - Operating (128 MHz) - Storage	-40 C to + 85 C -20 C to + 70 C -55 C to +125 C
<b>Humidity</b>	0% - 95%
<b>Shock</b>	40 g peak for 11 ms
<b>Vibration</b> - Sine - Random	10 g (peak) 5 Hz to 2 kHz 0,1 g²/Hz at 15 Hz to 2 kHz

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