XA270

The first PC/104 board using the XScale XA270





The XA270 has been designed using state of the art RISC technology using Intel®'s XScale® XA270® high performance, low-power, high-integration systems-on-a-chip (SOC) processor designed for low power portable computing applications. This concept enables the board to run industry standard operating systems and applications, thereby reducing the development time for the user.

XScale® Technology

The Intel® XA270® processor incorporates the Intel XScale® technology which complies with the ARM* version 5TE instruction set (excluding floating-point instructions) and follows the ARM programmer's model.

The XA270 processor also provides Intel® Wireless MMX™ media enhancement technology, which supports integer instructions to accelerate audio and video processing. In addition, it incorporates Wireless Intel Speedstep® Technology, which provides sophisticated power management capabilities enabling excellent MIPs/mW performance.

Advanced Multimedia Technology

Instead of using additional processors or accelerators that can reduce battery life, Intel Wireless MMX technology, provides an advanced set of multimedia instructions that will help bring desktop-like multimedia performance to Intel PXA27x processor-based clients while minimizing the power needed to run rich applications.

Intel Wireless MMX technology builds on the Intel® MMX[™] technology originally introduced in the Pentium®processor family, enabling the large number of software developers already familiar with these instructions to quickly make their applications such as 2-D and 3-D gaming, streaming MPEG4 video, wireless encryption/decryption, Digital TV reception and voice recognition available for Intel®-based cell phones and PDAs.

Highly Flexible

The Artemis XA270 running at 570MHz is an internet ready appliance which has a web server and browser built in when using DSP's LaunchPad for Windows CE.

The LaunchPad application development kit is a complete ready to use embedded computer system that includes display, keyboard & mouse and is ready for your application.



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Features

Processor	Intel®s XScale®PXA27x @520MHz
Memory	64MBytes of low-power on-board RAM Option up to 128MB
Storage	32Mbytes Intel Strata Flash, option upto 64MB CompactFlash socket allowing storage and peripheral expansion
Display	18bit TFT LCD Controller Interface to many displays via add on modules
USB	1x USB Client and 4x USB Host ports
Serial	5 channels RS232, one configurable as RS485
Ethernet	10/100 Base-T Ethernet
Audio	An AC97 codec provides microphone and stereo line inputs and line outputs
Touch Screen	4 wire resistive Touch Screen Controller
Expansion	I2S, I2C, PC/104, High Speed Bus 4 bit SD I/O 8 x DI 8 x DO
Real Time Clock	Battery backed Real Time Clock
Software	Windows CE5
Mechanical	85mm x 65mm form factor
Power	Single 5V supply – typical consumption of 2W
Environmental	0 to +70° C operating temperature range

+44(0)1246 545910

