

PXA270 EMBEDDED PC / Development Kit

The device has been designed to be used whether as a fully functional Embedded PC or as an Development kit allowing significant decrease of time-to-market for applications based on the PXA270 platform. Terminals, automatization, net applications and systems fields where there is a need for operating system are just few of the targeted areas of usage.

The device can be supplied in various configurations, what by a single module exchange represents a possibility of getting powerful system out of economic one, or even different product with different functions and applications, and comes with a pre-installed Linux / Windows CE OS.

Support for Windows CE and other operating systems is available from third parties. The developed application can be, together with the DIMM Module, easily placed into your own, more simple and what is the most important, more economic base board.

The Voipac PXA270 base board has on board 5V switching power supply with input voltage ranging from 7V to 37V. Maximum output current of the regulator is 3A thus limiting baseboard, module and all connected peripherals to 15W maximum power consumption. The Voipac Development kit also provides configurable switches, buttons, GPIO pins and LED for simple user interaction thus simplifying programming of one own applications.

The development kit is used to get acquainted with the platform and represents possibility of parallel SW and HW development. While designing, schematics of recommended connection provided by the chip manufacturer proved to be helpful. With such a support, it is possible to design and set up a new device in a very short time.

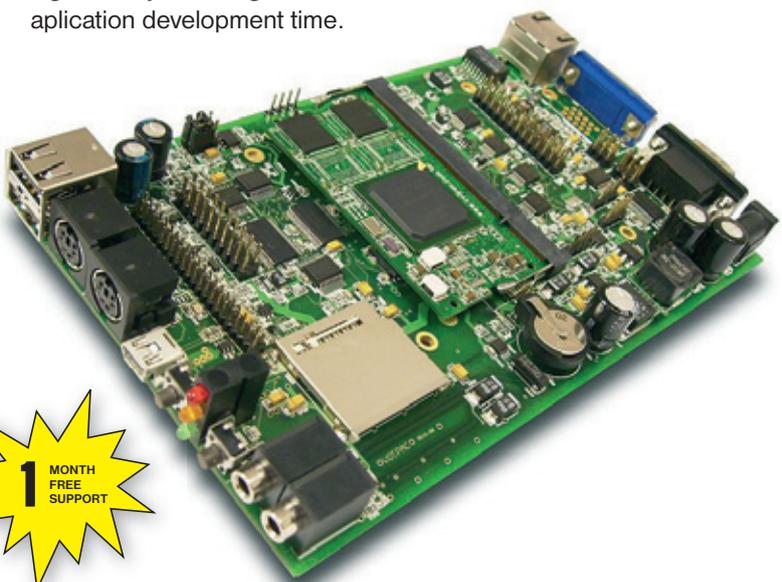
The state of the art design is taking full advantage of the platform features. Among the most significant attributes are low power drain with excellent MIPS/mW performance enabling usage in

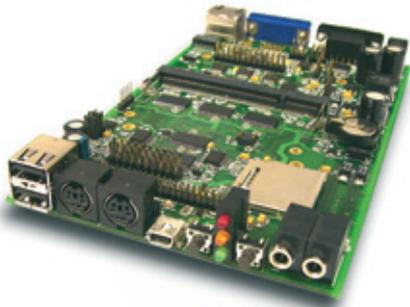
a battery-operated devices, high CPU performance, plenty of available interfaces and glueless connectivity of various passive and active LCDs with 4-wire resistive touch screens.

The adapter powered PXA270 EMBEDDED PC/ Development kit is supplied in a stylish aluminum case that is able to accommodate a standard 2.5" IDE HDD and via an analog VGA connector provides direct connectivity to a generic CRT or TFT screens, supporting maximum resolution of 1024x768 pixels / 65536 colors in a 16 bit mode. Outlet of a PCMCIA interface, MMC/SD card or Compact Flash significantly enlarges the possible usage of the processor. An AC'97 bus, used mainly by audio chip producers, can also catch one's attention.

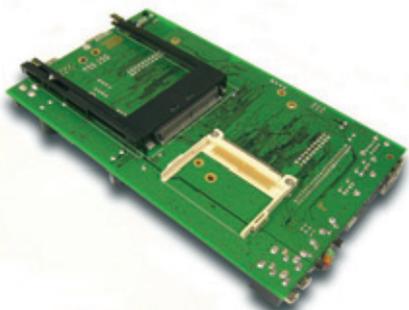
Besides all the standard PC peripheral interfaces you are used to, the system provides numerous communication channels as well as universal expansion slots and connectors. Support for a nonstandard or customer peripherals can be realized upon request.

The PXA270 Embedded system is also designed as a development platform for Voipac PXA270 DIMM Module, so-called computer on module (COM), which includes all technologically and development demanding parts, thus significantly reducing one's own application development time.





Base Board Top Layer



Base Board Bottom Layer



DIMM Module



JTAG Cable and CD ROM

PXA270 Base Board Hardware Specification

Connectors:

- 1x RJ45 (10/100Mbps Ethernet)
- 1x VGA DSUB15 (16bit)
- 1x RS232 DSUB9 male (terminal output)
- 2x USB-Host (stacked)
- 1x USB OTG 2.0 device mini (PC2PC networking supported)
- 2x Jack stereo 3.5mm (AC97 audio, stereo LINE IN/OUT, Microphone mono IN)
- 2x PS/2 DIN6 mini (mouse and keyboard controller)
- 1x PCMCIA socket
- 1x Compact Flash socket
- 1x MMC/SD card socket
- 1x DDR1 2.5V SODIMM 200pin socket
- 1x JTAG (board-to-board pitch compression connector)
- 1x RESET push button
- 1x USER push button (GPIO1)
- 1x Power jack 5.5/2.1mm
- 3x LED HOLDER stacked

Headers:

- 1x IDE 2x22pin, 2mm header (ATA2 interface for HDD or CDROM)
- 1x USB SWITCH 2x3pin, 2,45mm header
- 1x DISPLAY 2x13pin, 2,54mm header
- 1x BACKLIGHT 4pin, 2,54mm header
- 1x TOUCH 4pin, 2,54mm header
- 1x JTAG 2x10pin, 2,54mm header
- 1x I2C 4pin, 2,54mm header
- 1x BT UART 2x3pin, 2,54mm header
- 1x STD UART 4pin, 2,54mm header
- 1x SSP 2x3pin, 2,54mm header

Real Time Clock battery backup
POWER SUPPLY: 7-37V

PXA270 EMBEDDED PC / Development Kit includes:

- DIMM Module Basic / Pro (Optional)
- DIMM Base Board with schematics
- CD with source code
- JTAG Cable

	Length x Width x Height in mm		
PXA270 Base Board dimensions:	168	105	
PXA270 DIMM Module dimensions:	67.6	38	
PXA270 EMBEDDED PC (Aluminum case) dimensions:	175	112	30