X-board®<PXA>

Reduced to the maX



original size



- The most cost-efficient multimedia ready board in it's class
- More compact & cost efficient for embedded PC Systems
- All advantages of X-Scale architectures at business card size
- Low power design no cooling needed



The X-board®<PXA> module has what it takes. Reduced to the maX - Based on the Intel® PXA255 Application Processor it is the most compact embedded solution possible. Designed for low power consumption from the beginning the X-board®<PXA> module does not require a cooling device at all. Despite the compact size of a business card it offers all modern interfaces the applications of tomorrow need such as integrated Graphics (LCD), Ethernet, USB and audio. With up to 64 Mbyte of DRAM and up to 32 Mbyte Flash storage media on board, the X-board®<PXA> is ready for all applications with support for operating systems like WinCE, Linux, WxWorks or QNX. Ready for networking the X-board® is equipped with a 10/100Mbit Ethernet port for easy Internet/Intranet access. With 3 USB ports and 2 serial ports all communication devices can be connected to the X-board without trouble, many devices support USB as standard interfaces today. The integrated video controller supports LCD digital output. AC97, the digital audio interface is supported on all X-boards® to support an external Codec chip. Onboard Flash storage with build-in bootloader goes up to 64 Mbyte in space and is fully IDE compatible. Not only is Flash media very robust against shock and vibration, it is also EMI tolerant compared to a hard drive. For further expansion a single channel IDE port is available. For expansion to external hardware the PCI and LPC bus are supported. The LPC bus is the successor of the outdated ISA bus. LPC is a standard bus on todays motherboards and is widely supported by I/O-chip vendors. To adopt an ISA "glue-logic" to LPC does not take much effort. Despite the compact size with the rich variety of functionality, the X-board®<PXA> is the most cost-efficient multimedia-ready board in it's class.

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Technical Information

Processor			
	Intel® XScale™ PXA255 @ 200/400 MHz		
DRAM			
	32/64 Mbyte on board		
USB			
:	3x USB 1.1 ports OHCI (2 master and 1 client interface)		
Flash			
	16/32 Mbyte on board (with built in bootloader)		
Sound			
4	AC97 interface version 2.0 Compliant		
LCD			
	LCD output for various types like passive (DSTN) and active (TFT) displays		
LCD resolutions			
	800x600 Pixel 16 Bit/pixel		
Serial Interfaces			
	2 TTL (high speed COM's one with Bluetooth support)		

0the	r Features
	several GPIO's (GPIO pins shared with IrDA, SSP and 3rd COM),
	MultiMediaCard (MMC) interface, JTAG interface for easy debugging
Ethe	rnet
	10/100Base-T Realtek RTL8100BL controller
0the	r Features
	Multimedia Card Interface Additional GPIO ports
Hard	disk
	1x IDE interface
Dime	ensions
	68 x 49 x 8 mm (2,6 x 1,9 x 0,3")
Low	Power Consumption
	Typ. 1,5 W @ 3.3V (estimated)
Temp	perature (*)
	operating: 0° to 70 °C, non operating: -10° to +85 °C
Hum	idity
	operating: 10% to 90%, non operating: 5% to 95% (non condensing)

(*) Ask about wider temperature ranges

Ordering Information

Article	PartNo.	Description
X-board® <pxa></pxa>	28021-3216-40-0	Intel PXA255 400MHz, 32MB SDRAM, 16MB Flash
X-board® <pxa></pxa>	28021-6432-40-0	Intel PXA255 400MHz, 64MB SDRAM, 32MB Flash
X-board® Eval <pxa></pxa>	28010-0000-00-1	Evaluation Baseboard for X-board-PXA
X-board® <pxa> miniKit</pxa>	28010-0000-20-1	X-board® <pxa> miniKit including miniBaseboard, PXA Module, display & touch</pxa>
X-board® <pxa> SK</pxa>	28010-0000-00-3	Complete Starterkit including X-board® <pxa> (64MB SDRAM, 32MB Flash) and all hard-/ software</pxa>
X-board® Eval Board	28010-0000-10-2	Universal X-board® Evaluation Board for all X-boards® (x86 & RISC)

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