X-board<861>



original size



- The most cost efficient multimedia-ready board in it's class
- More compact & cost efficient for embedded PC Systems
- > Full PC functionality at business card size
- Low power design no cooling needed



Product Overview

The X-board<861> module has what it takes. Reduced to the maX - Based on the National Semiconductor® Geode™ SC1200 Processor it is the most compact embedded PC possible. Designed for low power consumption from the beginning the X-board<861> 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, Ethernet, USB and audio. With up to 128 Mbyte of DRAM and up to 128 Flash storage media on board, the X-board<861> is ready for all applications with support for all major operating systems. Ready for networking the X-board is equipped with a 10/100Mbit Ethernet port for easy Internet/Intranet acess. With 3 USB ports and 2 serial ports all communication devices can be connect to the X-board without trouble, many devices support USB as standard interfaces today. The integrated video controller supports CRT analog output, LCD digital output and an TV-ouput with NTSC and PAL support.

CRT and LCD resolutions up to 1280x1024 with 8bpp or 1024x768 with 16bpp color depth can be displayed. AC97, the digital audio interface is supported on all X-boards to support an external codec chip. Bootable on-board Flash storage goes up to 128 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 harddrive. For further expansion a single channel IDE port with Ultra33 DMA capabilities 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 The LPC bus is the successor of the outdated ISA bus.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 "gluelogic" to LPC does not take much effort.

Despite the compact size with the rich variety of functionality, the X-board<861> is the most cost efficent multimedia-ready board in it's class.

X-board[™] - Reduced to the maX

Technical Information

Processor		
AMD® Geode™ SC1200 @ 266 MHz		
DRAM		
32/128 Mbyte SDRAM on board		
Cache		
16 kByte 1st Level		
Bootable Flash Harddrive		
32/128 Mbyte on board		
Sound		
AC97 interface (digital link), AMC97 version 2.0 Compliant		
Video Controller		
Up to 4MByte Video RAM (UMA), simultaneous operation of LCD and CRT Monitor		
Resolutions CRT and LCD		
XGA 1024x768 with 16 Bit (LCD) or SXGA 1240x1024 with 8 Bit (CRT)		
TV out		
NTSC and PAL resolutions, built in scaler, three line flicker filter		
LCD Support		
18 Bit digital interface		

	2x TTL (16550 compatible)
USB	
	3x USB 1.1 ports OHCI
Ethern	et
	10/100Base-T Twisted Pair Intel 82551 controller
Harddi	sk
	1x EIDE interface UDMA33 capable
Dimen	sions
	68 x 49 x 8 mm (2,6 x 1,9 x 0,3")
Low Po	ower Consumption
	typ. 3W @ 3.3V (estimated)
Tempe	rature (*)
	operation: 0° to 62°C, storage: -10° to 85°C
Humid	ity
	operation: 10% to 90%, storage: 5% to 95% (non condensing)

(*) Ask about wider temperature ranges

Ordering Information

Article	PartNo.	Description
X-board<861>	28011-3232-26-0	266 Mhz CPU, with 32 MByte DRAM, 32MByte Flash
X-board<861>	28011-2828-26-0	266 Mhz CPU, with 128 MByte DRAM, 128MByte Flash
X-board<861>	28011-2800-26-0	266 Mhz CPU, with 128 MByte DRAM, no IDE compatible Flashdisk
X-board-eval x86	28010-0000-00-0	Evaluation Baseboard for X-board<86x> series

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