TurboXb Module
Slash NRE and time-to-market with the ADS TurboXb Module

HIGHLIGHTS

- Robust XScale PXA270 implementation
- Comprehensive I/O interface support
- Access provided for complete bus, I/O, display and audio
- Customized or off-the-shelf Solution Board options
- Low standby current and efficient active power profile
- Certified support for Windows/CE and Linux
- Fully RoHS compliant

DESCRIPTION

Bring your embedded system product to market fast, with minimum risk and NRE expense with the TurboXb Module from Applied Data Systems. Based on the Marvell XScale PXA270 RISC technology, the TurboXb Module leapfrogs your project beyond the challenges, expense and time common to new designs. The TurboXb Module delivers state-of-the-art processing, memory, and I/O support off-the-shelf and ready-to-go, letting you start your development where it matters most — with your application product. Adding value to your application has never been easier with certified support for Windows CE or Linux, standard. With the TurboXb Development System, you immediately start software development with your choice of operating system and development environment.

When you're ready, hardware development starts with a TurboXb Solution Board supporting the specific features you need, whether your application requires USB, a keyboard, SPI, or simple serial ports. You can choose one of our off-the-shelf TurboXb Solution Boards, or Applied Data Systems will rapidly design and deliver a Solution Board to your custom specifications for fast and sure-fire implementation. Either way, you will expedite development with your efforts focused where they belong, on your applications, and your customers.
SPECIFICATIONS*

**PROCESSOR**
- 32-bit Marvell XScale PXA270 32-bit RISC
- Voltage and frequency scaling

**POWER SUPPLY**
- TurboXb Module: 3.3 V, 10 mA standby, 150 mA idle, 500 mA run

**MEMORY**
- Up to 128 MB DRAM, 64 MB flash memory
- CompactFlash, CF Type I and II, 3.3 V

**COMMUNICATION INTERFACES**
- USB Client Type B
- USB Host Type A
- 3 Serial Ports
- 10/100 Base T Ethernet
- SPI

**USER INTERFACE AND DISPLAY**
- Four-wire analog-resistive touch panel interface
- LCD Video interface 24-bit color to SVGA (800x600)

**AUDIO INTERFACE**
- AC '97 Codec
- Microphone input
- Stereo line input
- Stereo headphone output

**OPERATING ENVIRONMENTS**
- Windows® CE
- Linux

**PHYSICAL**
- Dimensions 2.65 x 2.36 in (67.5 x 60 mm)
- Weight 0.7 oz (20 g)

* The Embedded System Architects

Applied Data Systems is a leading manufacturer of single board computers used in process control, medical instrumentation, environmental monitoring, fleet management, kiosks, voting systems and industrial automation equipment.

With 20 years of graphics hardware and software development experience, Applied Data uniquely delivers customized display connectivity, device support, and network communications. Applied Data Systems, a Eurotech Group company, is ISO 9000 certified, with headquarters in Columbia, Maryland, USA.

TurboXb is a trademark of Applied Data Systems. Other trademarks are property of their respective holders.

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**TurboXb BLOCK DIAGRAM**

The TurboXb Solution Board

**TurboXb Module**

**XScale PXA270**

**USB Client**

**USB Host**

**10/100 Base T Ethernet**

**Serial 1**

**SPI**

**CF control**

**USB Fcn**

**Serial 2 & 3**

**Pin Header**

**Touch address, control, data, IRQ**

**SPI**

**JTAG**

**Serial**

**LCD and Touch Panel**

**CompactFlash**

**Power supply**

**System logic**

**Buffer**

**802.3 Ethernet**

**AC'97 Codec**

**GPIO, I2C, etc.**

**IR**

**CPLD**

**JTAG**

**TurboXb Solution Board**

**Pin Header**

**Reset SW2**

**Wake SW1**

**Dimensions 2.65 x 2.36 in (67.5 x 60 mm)**

**Weight 0.7 oz (20 g)**

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*Subject to change without notice.