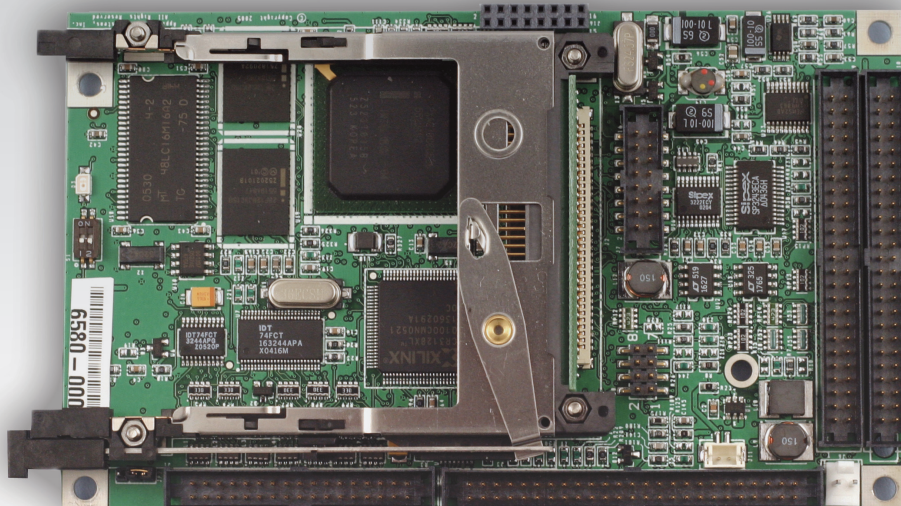


BitsyXb™

Next-generation, XScale-based embedded computer systems

HIGHLIGHTS

- Compact and battery operated
- Comprehensive I/O on a single board
- An expandable, scalable engine
- Graphics galore: LCD (to XGA) and touchscreen interface (4 or 5 wire)
- Operating System options: from Windows CE to Linux
- Power and power management



DESCRIPTION

Applied Data Systems introduces its 4th generation Bitsy family product, the BitsyXb featuring the Intel 520MHz XScale PXA270 processor. Over the years, the Bitsy family has been the most popular Applied Data product, delivering low power in a small form factor, at low cost, and powering proven successes in a wide range of vertical markets. Applied Data Systems, a leader in RISC-based, ubiquitous computing, makes the XScale platform complete by building its signature, application-ready system around a scalable 3" x 5" package. The BitsyXb™ has low-level drivers and stacks complete, designed as an application-ready platform that can reduce the product-to-market cycle from years to several months. To date, the Bitsy family of embedded computer systems has been quickly and readily "reconfigured" to satisfy dozens of application requirements. Most are battery-operable with 802.11b capability. Examples include:

- 2.1" x 3.0" handheld, consumer product scanner with mag-stripe reading capability
- 2.4" x 3.8" handheld, defense communications device
- 2.4" x 2.6" wearable, voice activated warehouse automation device
- 1.9" x 5.5" wearable, head up display system with graphics accelerator

Our quick-turn capabilities are based on a world class engineering house with an expertise in quickly and successfully reconfiguring systems based on a deep reserve of hardware and software device technologies.



Applied Data Systems, Inc.
A Member of Eurotech Group
10260 Old Columbia Road
Columbia, MD 21046 USA

Web www.applieddata.net
Email sales@applieddata.net
Phone +1 301.490.4007
Fax +1 301.490.4582
Toll Free +1 800.541.2003

SPECIFICATIONS*

PROCESSOR

- 32-bit, 520 MHz Intel® PXA270 RISC processor

GRAPHICS

- Video interface up to XGA (1024x768) color LCD interface (driven by the PXA270)
- Backlight connector with PWM + ON/OFF controlled by software
- 4 or 5 wire resistive touchscreen

MEMORY

- Program/Frame Buffer SDRAM to 128 Mbytes
- Flash Memory to 64 (Synchronous) Mbytes (32 asynchronous)
- One PCMCIA (Type II, also available for devices such as Ethernet, 802.11, etc.)

OPERATING ENVIRONMENTS

- Windows CE
- Linux
- others (contact factory for all options)

COMPREHENSIVE COMMUNICATIONS

- One USB host port, one USB function port (personality board required for connectors)
- Three (3) Serial Ports:
 - COM1: 8 wire RS-232
 - COM2: 2 wire, 3.3 V logic; with personality board: RS232 or IrDA transmitter
 - COM3: 4 wire RS-232
- 10 digital I/Os
- SPI port
- I2C bus with I2C master controller
- ADSmartIO, 9 configurable input/outputs, possible configurations include:
 - 5x4 keypad, or
 - 4 analog inputs + 5 digital I/Os, or
 - 9 digital I/Os
- Support for PS2 keyboard (with personality board) - optional
- AC '97, 16 bit stereo Codec:
 - 2x1W stereo audio amplifier
 - Stereo speaker output
 - Stereo microphone input
- Support for external interrupt inputs
- Expansion slot (header) with 16 address and 11 data lines (header for personality card option)

PERIPHERALS

- Real Time Clock
- Software controlled LED status indicator

DIMENSIONS, POWER REQUIREMENTS

- 3" x 5"
- 5V or 6 - 16V input
- <1W in operation
- Complete and partitioned on-board power supply

ADSMARTPOWER

The "ADSmartPower" technology utilized by Applied Data Systems in their 3" x 5" BitsyXb maximizes its use of power, from partitioning the system in its use to deploying components engineered for minimal power usage. Collectively, the BitsyXb has been engineered to maximize the life of, and minimize attention to, batteries in an embedded application.

- On-board power supply: 5V or 6-15V input voltage
- Option for external supercapacitor
- Battery trickle charger

ADS PERSONALITY BOARD WITH DEVELOPMENT SYSTEMS

Development systems include a "personality board" that includes one of the following:

- Compact Flash slot (Type II connector), or
- Ethernet 10/100bT, or
- Ethernet 10/100bT with four serial ports

Schematics for the personality board are available on ADS Forums.

*Subject to change without notice.

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.

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

CMM4467A 1August2007v1.0