



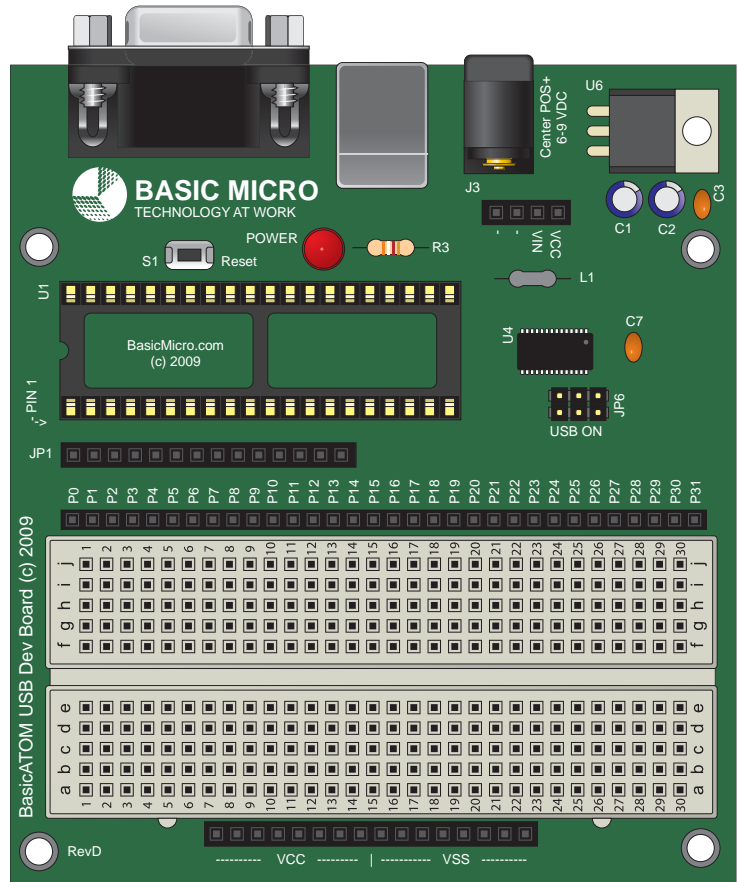
BASIC MICRO

TECHNOLOGY AT WORK

B0263 - BasicATOM USB Development Board
Data Sheet

Feature Overview:

- USB Connectivity
- RS232 Connectivity
- TX/RX/RTS Accessible
- On Board Power Regulation
- Power Status LED
- Access To All I/O From Header
- All ATOM Module Compatible
- Basic Stamp Compatible
- ATOM Pro ONE Socket
- Solderless Bread Board
- External Power Header

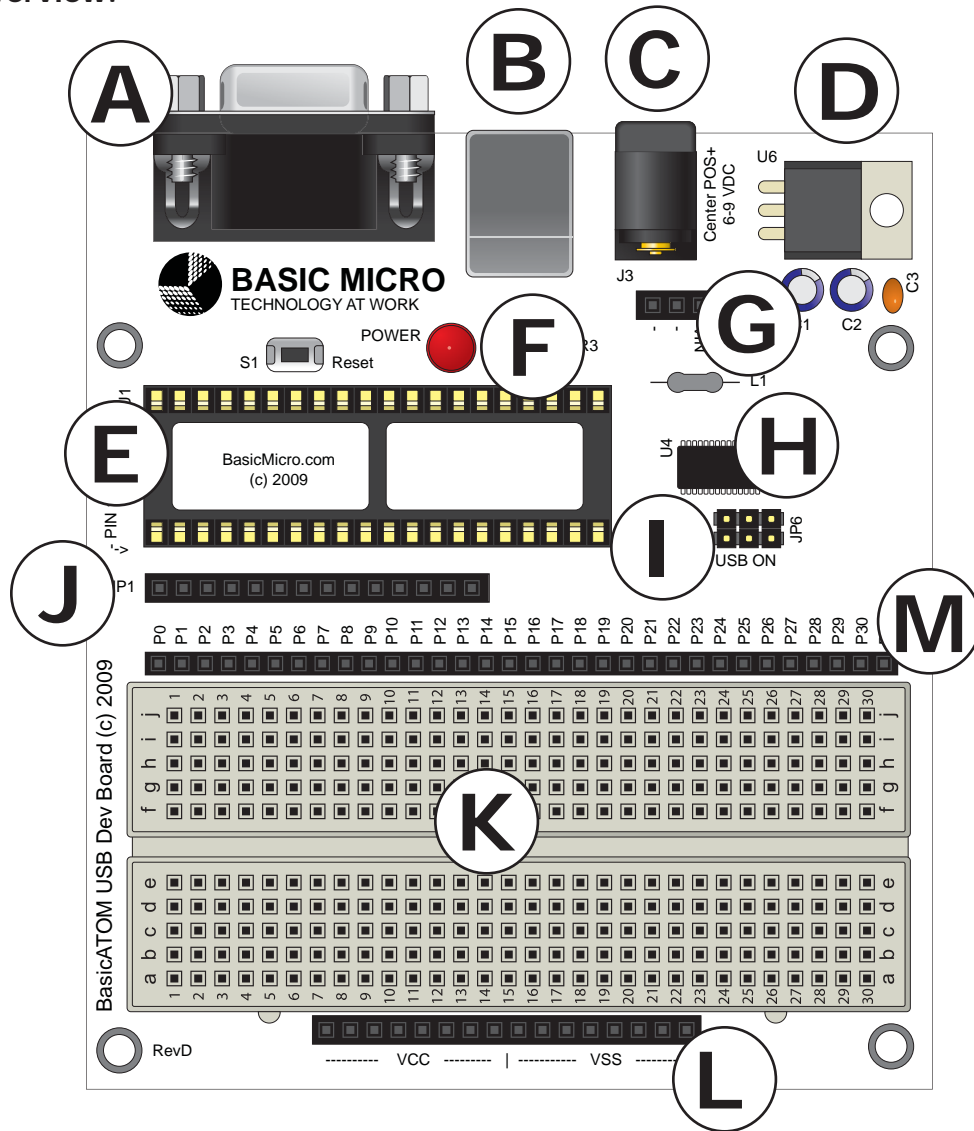
**Description**

The BasicATOM USB Development Board is compatible with most all Basic Stamp and BasicATOM Modules with the exception of the Nano series. This includes the BasicATOM Pro ONE. USB and RS232 connections are included. The USB Development Board was design to be a low cost easy to use testing platform when working with the ATOM modules.

USB or RS232

The ATOM modules SIN, SOUT and RES pins are accessible from JP6. The header JP6 also includes RX, TX and RTS from the FTDI serial to USB bridge micro. Breaking out the communication I/O on JP6 gives greater flexibility in how the module and development board is used. The FTDI can be used in your own circuit while programming the ATOM from the RS232 connector.

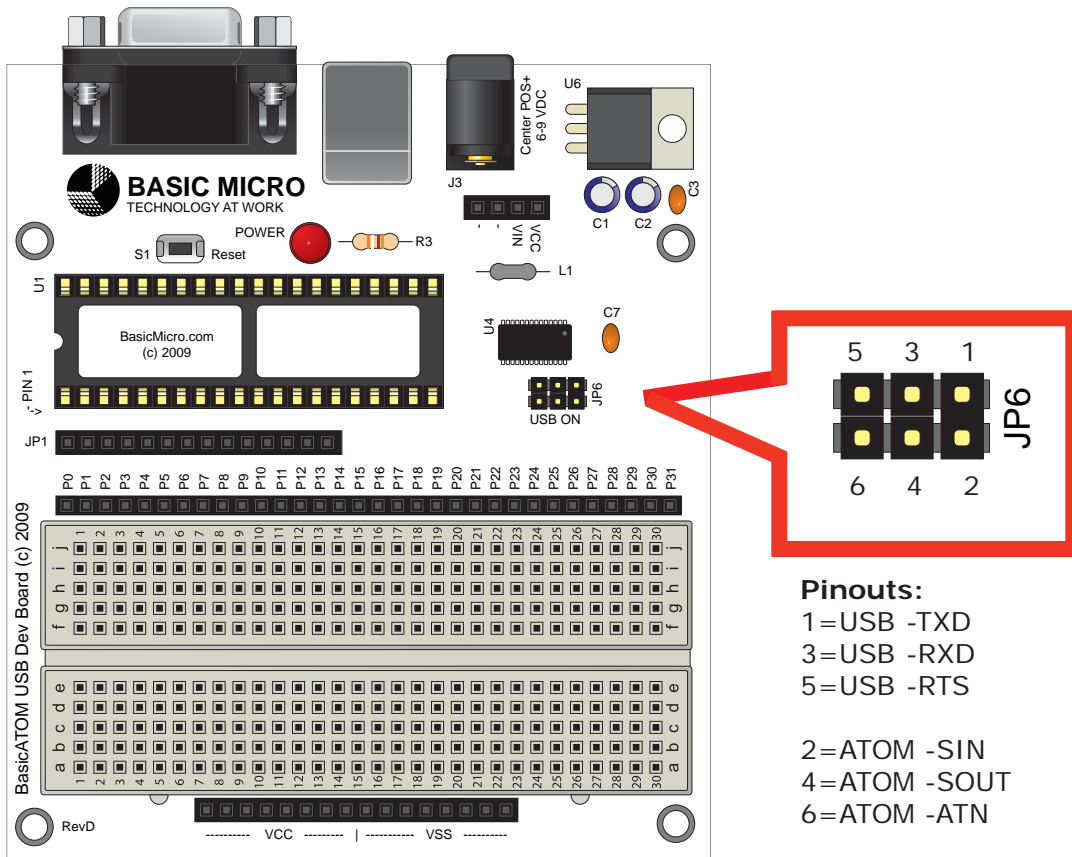
Hardware Overview:



- A:** DB9 RS232 Connector
- B:** USB Connector
- C:** 2.1mm Center Positive Power Connector
- D:** 5V Regulator
- E:** 40 Pin ATOM DIP Socket
- F:** Power Status LED
- G:** External Power Header
- H:** FTDI Serial To USB Bridge
- I:** USB Isolation Header
- J:** BasicATOM Pro ONE Socket
- K:** Solderless Bread Board
- L:** 5V and GND Power Header
- M:** I/O Header

JP6 Jumpers

The jumpers on JP6 should be installed if using USB to program the ATOM module in the on board socket. To program the ATOM modules using RS232 (DB9) the JP6 jumpers should be removed. You must remove any cables connected to the DB9 connector when using USB to program the ATOM module.



USB Access

The on board USB can be used in your circuit if using the RS232 (DB9) connector to program the ATOM module. TXD, RXD and RTS are available on JP6. Using male to female jumpers, which are included in most Basic Micro development kits JP6 USB side pins 1,3 and 5 can be jumpered to the solderless bread board area.

RS232

The on board RS232 (DB9) connector is hard wired to the ATOM modules SIN, SOUT and ATN pins. You must remove any cables connected to the DB9 connector when using the USB to program the ATOM module.

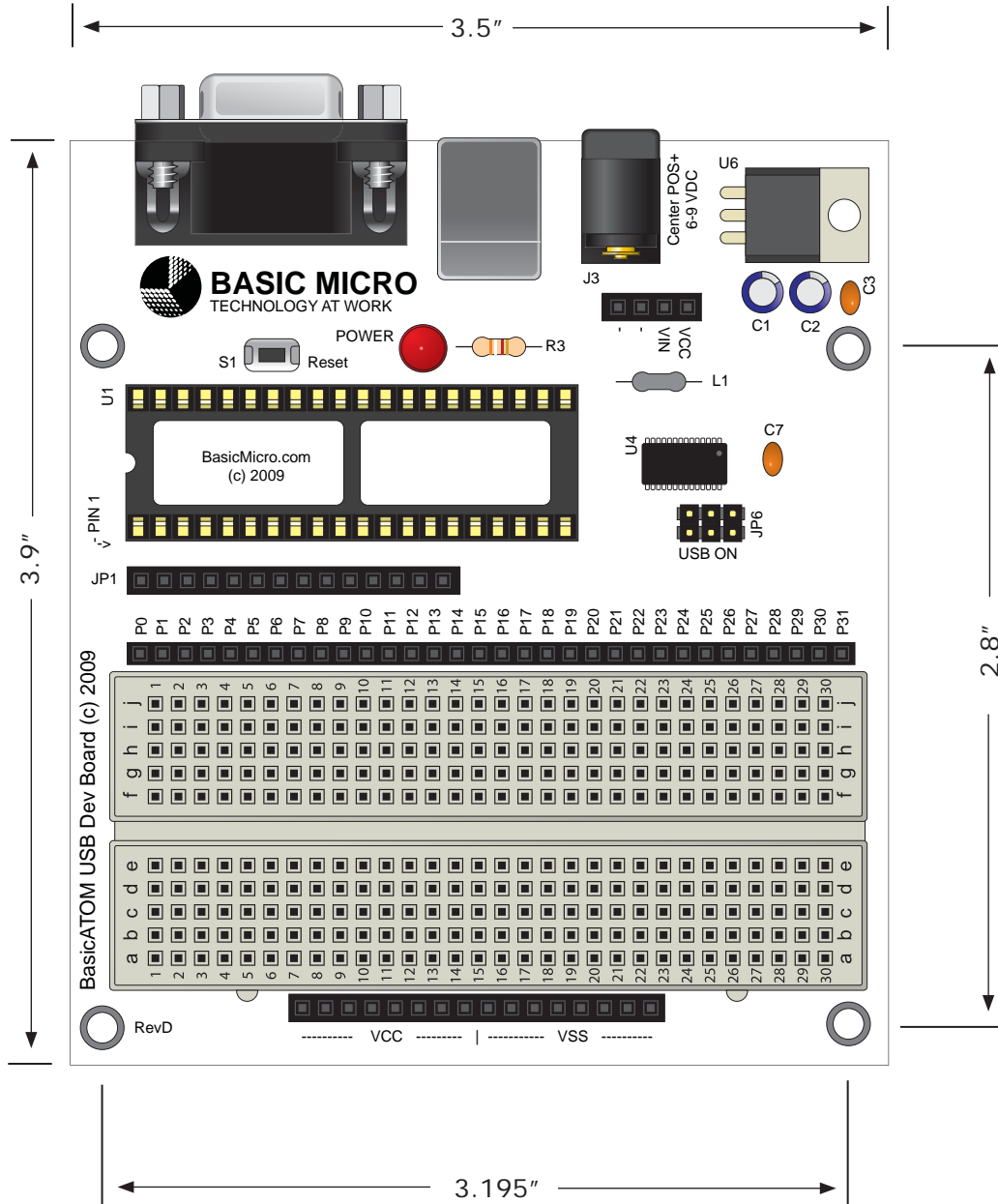
USB Driver Installation

The USB Development Board use a serial to USB chip. The drive must be installed in order for it to work properly. The drivers will setup a VCP (Virtual Comm Port). The drivers can be obtained from the downloads section of the Basic Micro website. If installing Basic Micro Studio the drivers are automatically included for WinXP and Win7 32 bit.

When you power up the development board and plug it in, Windows will ask to install the drivers. Let it search for the drivers. It will ask twice about driver signatures, just click "OK" both times. The driver is a two part install that happens automatically.

If installing from Win7 64Bit you must download the drivers from the download section of the Basic Micro website and unzip the files. Then run Dpinst64.exe. This will setup and install the drivers. Once this is complete, power up the development board and plug it in.

Dimensions:



Board Edge: 3.5"W X 3.9"L
Hole Pattern: 0.125D, 3.195"W x 2.8"H

Electrical Characteristics

Characteristic	Rating	Min	Max
VCC Input	VDC	6	12
Current Draw	mA	30	1000
I/O Voltages	VDC	0	5
Tempature Range	C	-40	+125

Warranty

Basic Micro warrants its products against defects in material and workmanship for a period of 90 days. If a defect is discovered, Basic Micro will, at our discretion, repair, replace, or refund the purchase price of the product in question. Contact us at support@basicmicro.com. No returns will be accepted without the proper authorization.

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Contacts

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Web: <http://www.basicmicro.com>

Discussion List

A web based discussion board is maintained at <http://www.basicmicro.com>.

Technical Support

Technical support is made available by sending an email to support@basicmicro.com. All email will be answered within 48 hours. All general syntax and programming questions, unless deemed to be a software issue, will be referred to the on-line discussion forums.