

PropStick USB (#32210)

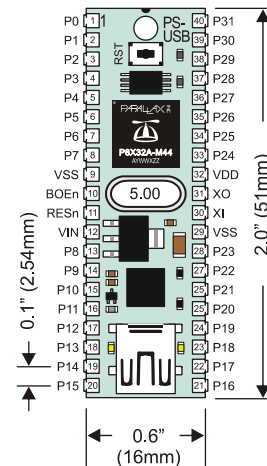
P8X32A Module with USB Programming Port

Introduction

The PropStick USB is a complete Propeller development tool with a convenient built-in USB programming interface. The PropStick USB module comes fully assembled, and is pin and code-compatible with the PropStick Kit (#32310), a build-it-yourself version with a serial programming interface. The PropStick USB includes the USB A to Mini-B Retractable Cable (#805-00010).

The PropStick USB has the following features:

- P8X32A-M44 microcontroller
- 32 KB EEPROM
- 3.3 V regulator with power and ground connections
- 5 MHz removable crystal
- Reset button
- FTDI 232R USB interface with red and blue LEDs for transmit/receive activity
- 600-mil wide 40-pin footprint, modeled after the P8X32A-D40
- USB A to Mini-B Retractable Cable included



The PropStick USB is suitable for all new Propeller-based designs, whether prototype or production. PropStick USB mounting possibilities include breadboard, perfboard with wire-wrap, or in a 600 mil 40-pin socket soldered to a PCB.

The PropStick USB was closely modeled after the P8X32A-D40, the DIP format Propeller chip. There are only three places where the PropStick USB varies from the P8X32A-D40 in pin assignments:

- Pin 10 (BOEn) is tied to VSS, permanently enabling the brown-out detector.
- Pin 12 (Vin) is the input to the onboard regulator and should be supplied with 5-9 VDC.
- Pin 32 (Vdd) is the output of the regulator and provides 400 mA of 3.3 VDC to power the Propeller circuit and your projects. Alternatively, the on-board regulator may be bypassed by connecting an externally regulated 3.3 VDC to Vdd.

NOTE: The PropStick USB is not for use in 40-pin BASIC Stamp boards made by Parallax (as in the Professional Development Board or BS2p40 Demo Board). Due to the PropStick USB's 3.3V power supply and separate built-in USB programming port, its voltages and pin assignments are not compatible with the BS2p40.

PC Drivers Installation

The PropStick USB requires FTDI USB drivers. If you install the Propeller IDE, these drivers for Windows 2000/XP install automatically. To install these drivers separately, visit www.parallax.com and follow the USB Driver installation steps as shown below; there is a link to troubleshooting instructions if needed.

Installing USB Drivers

step 1 Download
'Parallax USB Driver Installer'

Click
Here to
Download

step 2 Run the Installer
*Follow the steps provided by the Wizard
to install your hardware drivers.*



step 3 Connect Your Hardware



Sample Programs

Any program written for the Propeller will, of course, work with the PropStick USB. Sample programs for the PropStick USB can be downloaded from the product's webpage at www.parallax.com.

Schematic

