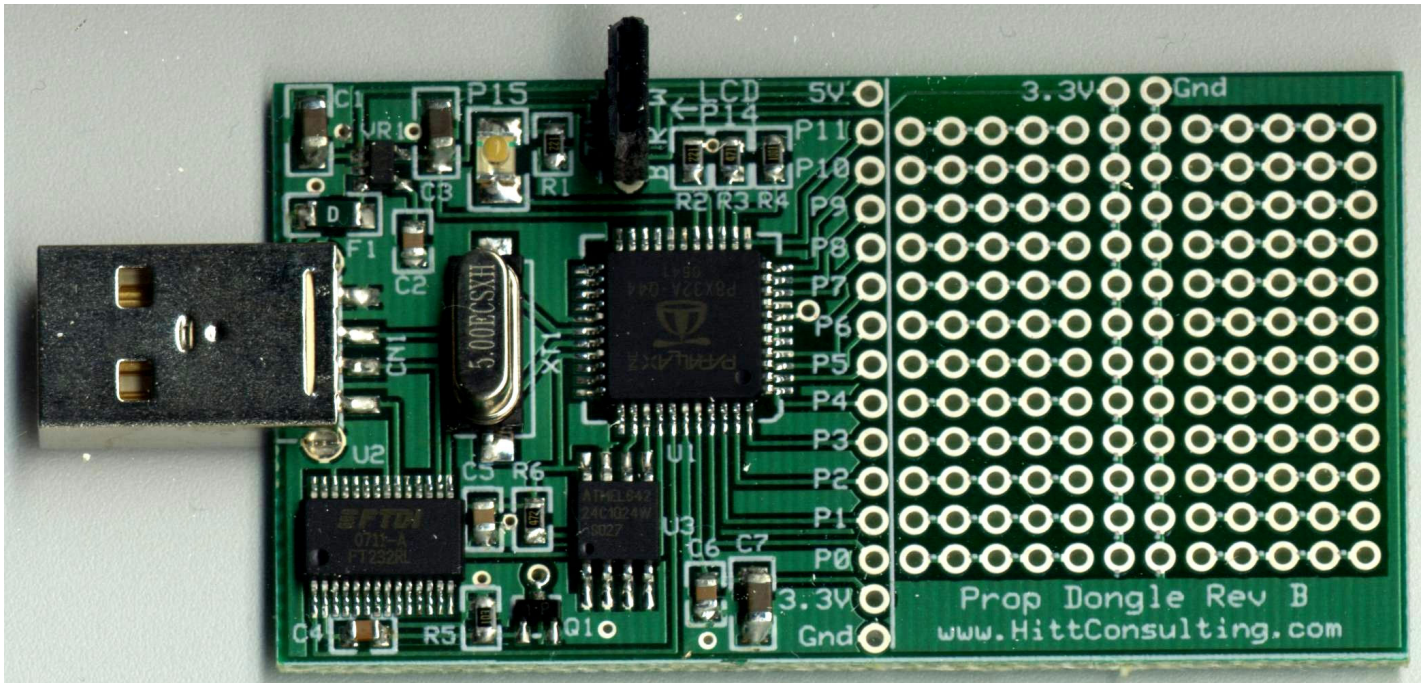


Prop Dongle Rev B



Prop Dongle Rev B Datasheet 06-22-07

- * Complete Parallax Propeller Development Board
- * No Programmer required, just plug it in
- * No power supply required, uses USB for power
- * On-board LED and TV / LCD video output
- * Provides easy connection to 12 I/O pins
- * USB connection can be used for PC communications
- * Small prototype area with power buss
- * 128K EEPROM (96K available for data storage)
- * PTC (Resettable) Fuse protection

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SPECS

Power:	From USB 200mA PTC Fused
Size:	2.75" x 1.5" (not including connectors)
Controller:	Parallax Propeller microcontroller operating at up to 80 MHz.
I/O Pins	12 I/O pins available on proto area
Indicators	1 LED on P15
Outputs	1 3-pin header. Can be used for TV (NTSC or PAL) output by using included adapter, or a 5V Serial LCD output.

CONNECTOR FUNCTIONS

CN1	USB Type A Connector
TV/LCD	3 pin header that provides video output from the propeller chip (with proper programming). Or may be used to connect to a 5 volt serial LCD module.

OVERVIEW

The Prop Dongle is a complete self-contained Parallax (r) Propeller (r) development board. No cables, programmers or power supplies are needed. Only a PC with a USB port.

The main component is the Parallax Propeller chip P8X32A. This microcontroller contains 8 32-bit processors (called cogs) each with 2K of RAM. And 32K of hub RAM (common to all cogs). A 5Mhz crystal is connected which will allow the propeller to be operated at 5, 10, 20, 40 or 80 MHz using the internal PLL contained within the propeller chip.

The Prop Dongle provides a standard FTDI USB serial port for programming the Propeller chip. This can also be used for communication with the PC by your program via the same USB port.

A 128KB EEPROM is also provided. The propeller program can use up to 32KB, leaving at least 96KB of space of non-volatile storage for your project. See the AT24C1024 datasheet for programming.

A single LED (on pin P15) and a TV / LCD output (on pins P12 - P14) allow your program to output information. If you are using the TV / LCD connector for a serial LCD use pin P12 for the serial output and make P13 and P14 inputs.

The prototype area allows easy connection to pins P0 through P11. There is a +3.3V and ground buss on the prototype area for easy power connection to your circuit. If you wish the prototype area can be cut-off at the line just after the column of labeled holes.

REGULATORY WARNINGS

This device is NOT FCC approved. It is not in finished product form. It is strictly intended for experimental purposes only. If you wish to use these modules in an actual product (a non-experimental capacity), the modules must first be designed into the product, then the whole product must be approved by the FCC.

LIMITED LIABILITY

Hitt Consulting's liability shall be limited to the purchase price of the Prop Dongle module. The Prop Dongle module may NOT be used in any situation where harm to humans, animals or property could result.

HEALTH WARNINGS

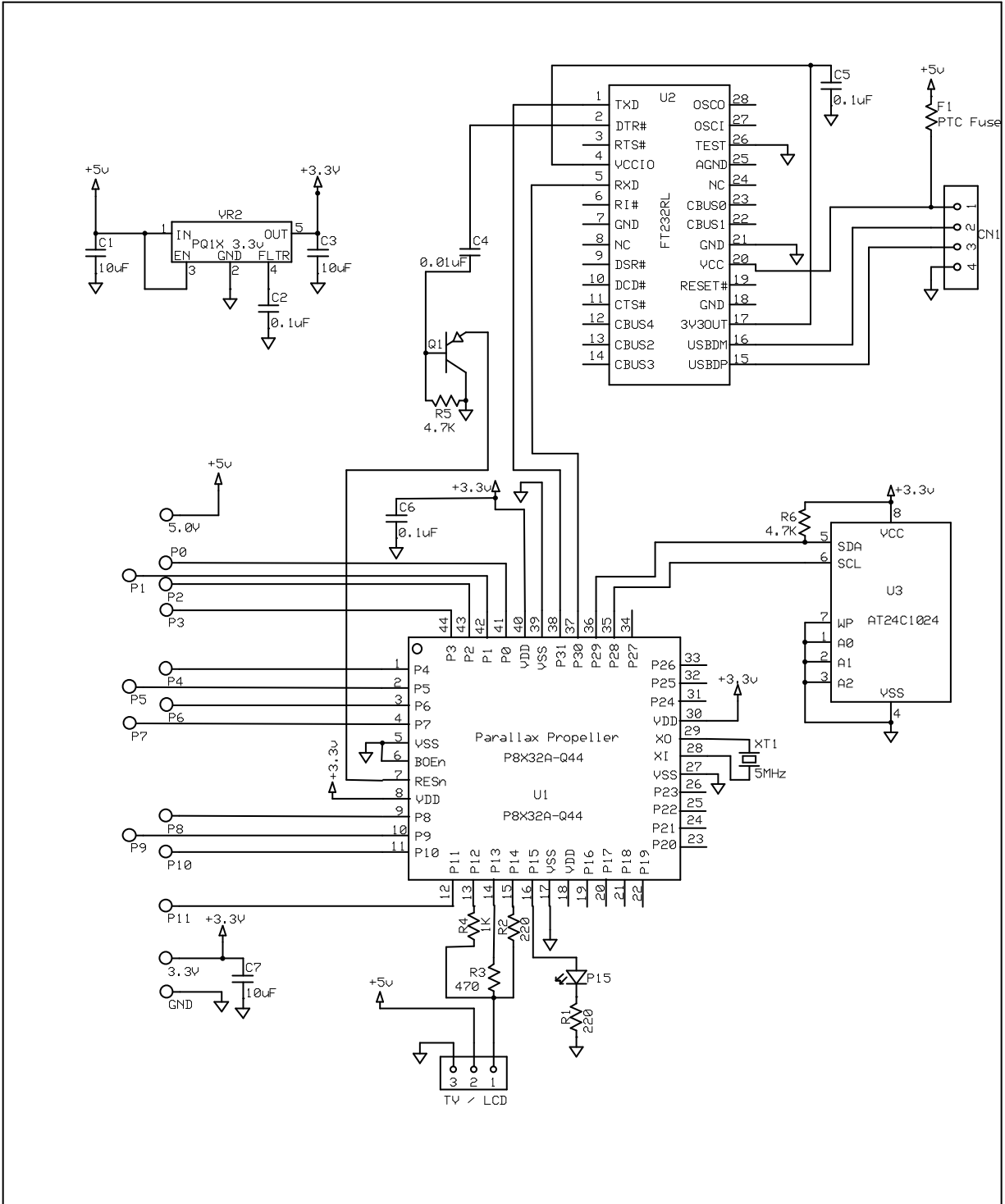
This product contains lead, a chemical known by the state of CA to cause cancer and birth defects and other reproductive harm.

CUSTOMIZATIONS

Customizations to the Prop Dongle are available from the developer Hitt Consulting. Please contact info@hittconsulting.com.

ERRATA

None



Propeller® Example Programs

```
' ' Blink LED on Prop Dongle  
  
PUB Toggle  
  dira[15]~~          ' Make P15 an output  
  repeat              ' Create an infinite loop  
    !outa[15]         ' Toggle P15 state (high to low, low to high)  
    waitcnt(3_000_000 + cnt) ' Wait awhile
```