

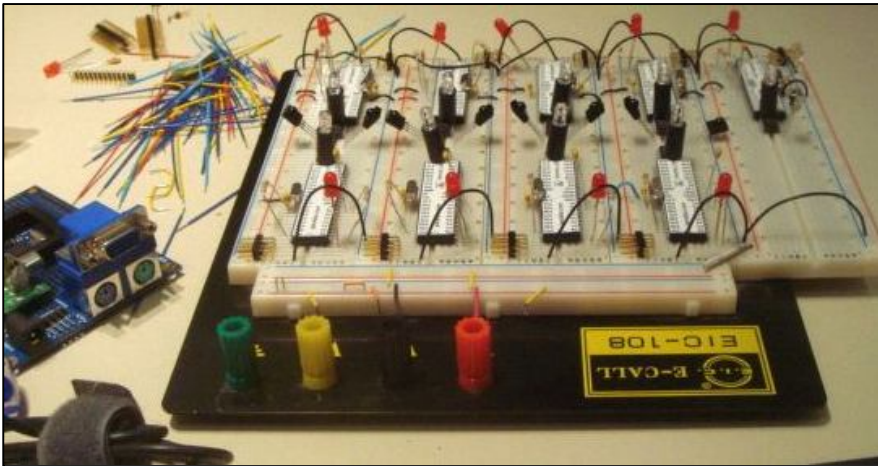
Propalot stuff

MARCH, 2010

parallax project concept by humanoido

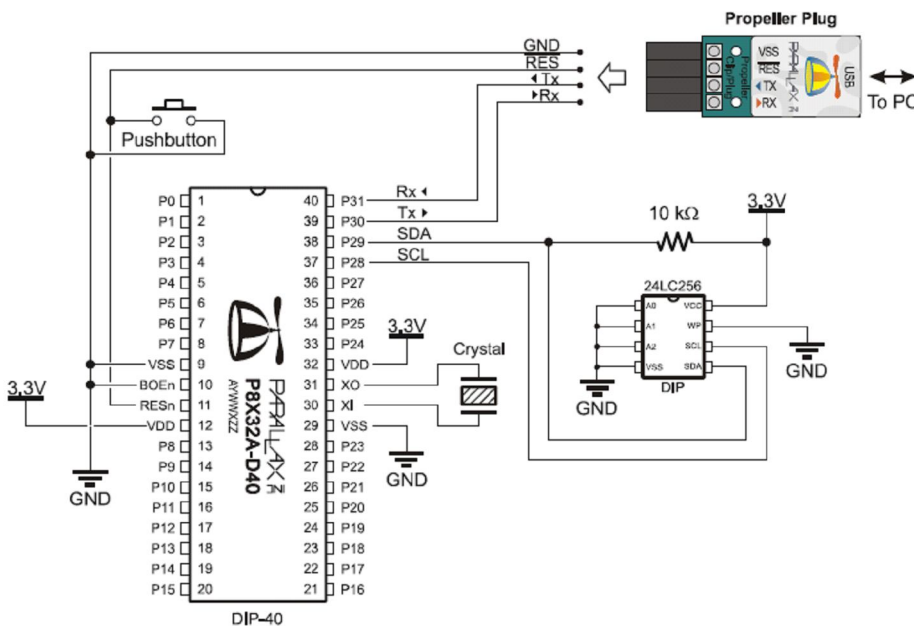
VOLUME I, NUMBER I

Ten Parallax Props Connected



The beginning project – connect ten props. Decide on the connection interface, communications format and finish the wiring design.

Propalot is a ten prop computer. Issues of Propalot Stuff (PS) will address many issues about connecting together multiple Parallax Propeller chips. This project is made available to everyone that wishes to participate in its development.



Parallax infrared transmitter-receiver pairs enable communications from prop to prop.

At left: this is the first test circuit for one Propeller chip, with crystal and eeprom. The pushbutton is not used, however, an LED will be connected for debugging and output information. For details of this circuit and others, consult the Parallax Propeller Education Labs manual, posted free at www.parallax.com.

Design Considerations

Some of the issues are listed below:

- *One or many crystals*
- *Connect scheme*
- *Loading technique*
- *Communication Method*
- *Increasing Chip Power*

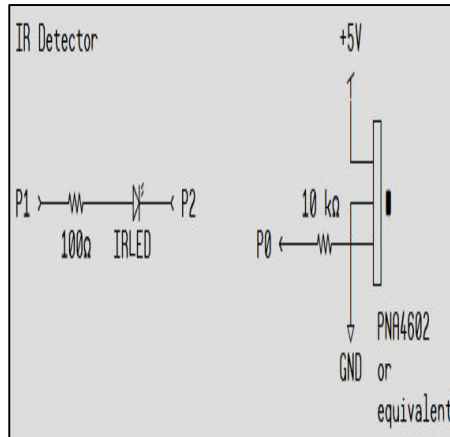
These will be discussed on the forum and the results published here. Comments are welcome and may be posted at the forum and/or emailed to

Penguindotrobot@yahoo.com

The First Steps

The first Prop circuit is built and tested. The next phase of placement of parts onto the breadboard is in progress. This phase will include crystals and eeproms for each chip, as well as a transmitter receiver infrared pair for communications from any one prop to any other prop in the collective. See url links on the first page for contact and more information or click here:

<http://forums.parallax.com/forums/default.aspx?f=25&m=431798>



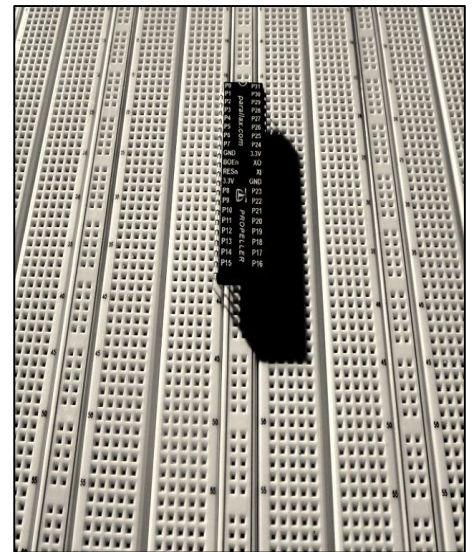
Infrared transmitter (left) and receiver (right). For each, there is only one supporting component, a resistor

Welcome to PS!

Welcome to Propalot Stuff **PS**, a published media designed to contribute and distribute information about creating easy-to-build Parallax Propeller computers with many chips connected together. The publication will *follow and conclude* some data you see posted on various Parallax Propeller threads. We wish to thank our first group of contributors: Leon, jazzed, Cluso99, Graham Stabler, OBC, Shmoopy, Dr_Acula, Radio Shack Jim, kwinn, localroger, Philldapill and Vittorio Rossi.

Breadboard Wiring

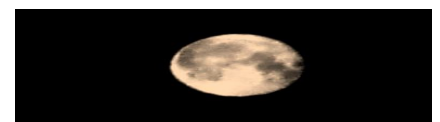
We've decided on initial wiring with a solder-less breadboard. This is ideal when rapid changes in wiring, component repositioning, and parts addition becomes necessary. The large breadboard is from a parts center in Taiwan and cost around \$7.95.



A solder-less breadboard is fast and efficient when testing and developing new Propeller circuits. This massive board holds ten Propeller chips and all of their components.

The Dark Knight?

Will the Propalot computer become the heroic dark night – one of the first standards that beginners can follow when putting together their first multiple Propeller chip projects – or the *beaten to the ground* failed folly of the century? Stay tuned and see how this interesting but tumultuous saga pans out.



Beginner's Propalot Dictionary

| | |
|--------------|---|
| P8X32A-D40 | Parallax 40-pin DIP multiprocessing chip |
| 24LC256 | EEPROM |
| EEPROM | Electrically erasable programmable read only memory |
| Adjunct | Joined or associated, auxiliary |
| Breadboard | A solderless way to create a circuit |
| Camelot | Legendary site of King Arthur's Palace |
| Collective | Complete collection group of chips |
| Guinevere | King Arthur's legendary queen consort |
| Infrared | Frequency of communication |
| Prop | Parallax Propeller processor chip |
| Propalot | Propeller computer with ten Prop chips |
| Sir Lancelot | First and greatest Knight |