



promoting open source electronics

conceive
design
implement
fabricate

About Us

WyoLum is a partnership of Open Source enthusiasts collaborating on cool products. We want to take Do-it-Yourself to the next level of efficiency by creating a collaboration platform where guerrilla "engineering-and-design" teams can emerge for the duration of a project, solve a problem, disband and move on to the next project with the main goal of having fun in learning and developing as many cool and interesting projects as we can.

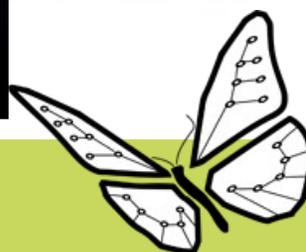
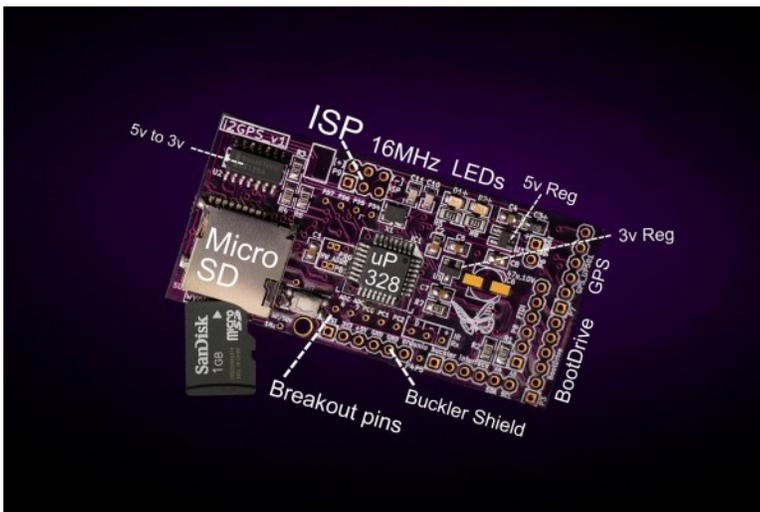
I2GPS

I2GPS is an Arduino compatible board with uSD card interface that sits on the I2C bus, also known as the Two Wire Interface or TWI. We also added an interface to the hacker friendly Fastrax UP501 GPS receiver. We think we have found a winning combination : for processing, an Arduino compatible ATMEGA328, a micro SD for massive amounts of storage, the ChronoDot (macetech.com) compatible DS3231 real time clock with ChronoDot compatible headers, and finally the UP501 GPS interface. This board also has on board voltage regulators for both 3 and 5 volts. Plus, headers for ICSP and FTDI. It can be powered via a Battery using the 2 pin Battery header. We also added a 3-pin header for adding an IR receiver. Finally, we added a "Buckler" interface - that's half of the standard Arduino headers. And after all this, you still have lots of digital and analog pins available on convenient breakout headers for hackability. The initial application is a GPS disciplined timing reference that acquires and maintains 1 microsecond timing accuracy. When the GPS signal is lost, the RTC maintains 1 millisecond / hour accuracy on its own.

Technical Data

- Use as a stand alone data logger.
- Compatible with Arduino, including Arduino shields (Buckler (half) interface)
- Micro-SD card for data storage and Arduino use.
- High precision RTC chip with coin battery (DS 3231 + CR1632).
- Convenient headers for FTDI, ICSP, GPS module (Fastrax UP501).
- Can be powered independently via an external Battery
- Chronodot compatible! This means you can add an SD card to any project that already has a ChronoDot slot.
- Two LEDs, no WyoLum project is complete without LEDs !!
- Size : 2.50" x 1.20 " (63.5 mm x 30.5 mm)

I2GPS



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