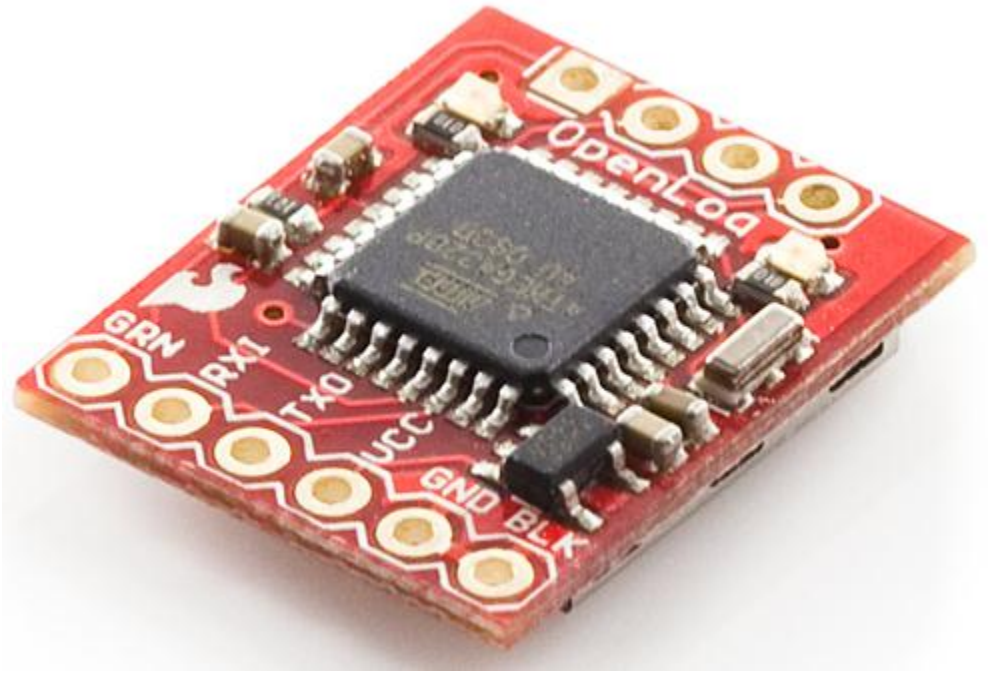
RB-Spa-656

OpenLog Data Logger

Description



OpenLog is an open source data logger. Simple to use, simple to change. We wanted to create a serial logger that just worked. Power up this device and it will start logging any received serial data at 9600bps. Sending Ctrl+z three times will drop out of logging and in to command mode. 'new' will create a new file. 'md' makes a directory. '?' brings up the list of commands. OpenLog doesn't do a lot, but it does log serial streams extremely well. Example:

>new testfile.txt

>append testfile.txt

<(send large amounts of text followed by three ctrl+z characters)

That's really it! OpenLog firmware is open source and is based on Bill Greiman's sdfatlib. OpenLog currently supports FAT16 and FAT32 microSD cards (we've tested up to 16GB!).

All the design files (schematic, PCB layout, firmware) are open source released under the CC-SA v3 license and are available through GitHub.

Note: Although this device will run at baud rates higher than 9600, operation at higher baud rates can become unreliable because of the limitations of the system when moving data to the SD card. You can find more information on this and tips to help you get logging at higher rates.

Features:

- Log to low-cost microSD FAT16/32 cards up to 16GB
- Simple command interface
- Edit config.txt file from a computer to change baud rate and other system settings
- Three modes:

- NewLog creates a new log every power up and immediately starts logging
- SeqLog appends a file called "SeqLog.txt" at every power up and immediately starts logging
- Command mode starts OpenLog at a command prompt at power up

- Configurable baud rates (2400 to 115200bps)
- Configure unit through config file or the menu system
- Power, ground, and RX-I are the minimum connections
- Reprogrammable ATmega328 using the Arduino IDE
- Two LEDs indicate writing status
- Input voltage from 3.3V to 12V
- 2mA idle, 6mA at maximum recording rate
- Dimensions: 0.16 x 0.6 x 0.75" (4 x 15 x 19mm)