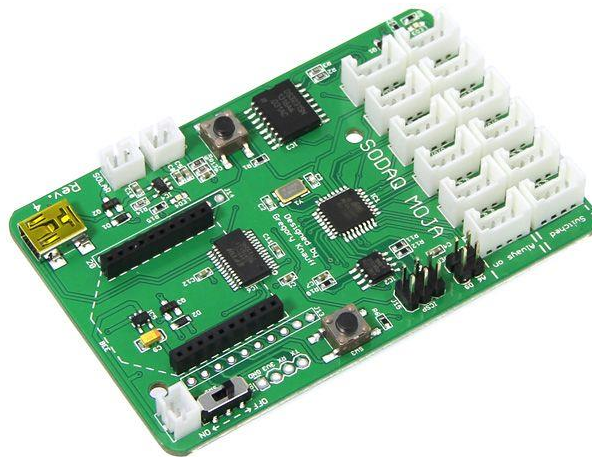


SEEED-103990027

SODAQ - Microcontroller for Solar Data Acquisition



PRODUCT DETAILS

The SODAQ (Solar Data Acquisition) is an Arduino compatible data acquisition board designed by Gregory Knauff.

The SODAQ is a multi-feature microcontroller board that lets you connect sensors and devices to the internet, quickly and with no fuss. It's designed for connecting things efficiently, running off-grid with built-in, ready-to-go solar power. You can connect a LiPo battery and a solar panel and keep it gathering sensor data without having to charge it.

The board has built in sockets for Grove modules; a realtime clock; extended flash memory; USB on-board; and the Bee socket can take any WiFi/RF/XBee or other compatible plugin for communications like our GPRS module (www.gprsbee.com).

The SODAQ is based on the Atmega328P microcontroller, which comes with the Arduino bootloader. The microcontroller runs on 3.3V at 8MHz and is

programmable through USB (Which is connected with the on-board FTDI-chip). For examples to get started, you can check out the website www.sodaq.net .

Specifications

- Atmega328P Microcontroller running at 3.3V and 8MHz
- Compatible with the Arduino platform
- Power supply by LiPo battery (3.7V) or USB cable (5V)
- Solar charge controller with JST connector for Solar Panel up to 2.5W
- Battery Monitor
- DS3231 Real Time Clock and Temperature sensor, RTC backup powered by LiPo battery
- 16 MBit data flash module (AT45DB)
- Mini USB connector
- 12 Grove connectors connecting Digital, Analog and I2C pins (Switched or always on)
- On/Off switch. With the switch in Off position the solar charge circuit is still active and the RTC clock is still powered.
- ICSP programming header
- Bee socket for Xbee, GPRSbee or other bee style modules
- Same size as Raspberry Pi

Technical details

Dimensions	0mm x0mm x0mm
Weight	G.W 47g
Battery	Exclude