Fubarino SD Reference Manual

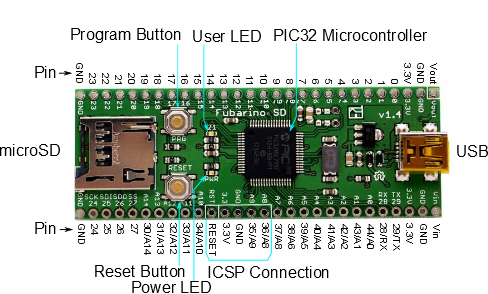
Last Revision: September 3rd, 2012 – Applies to version 1.4 of Fubarino SD hardware

Introduction:

The Fubarino SD is a small microcontroller board that uses a powerful PIC32 microcontroller. It is chipKITTM/MPIDE compatible and can run the same sketches that run on an ArduinoTM. It is designed to have all I/O pins on either side of the board in a traditional DIP pattern so that it can easily be plugged into a breadboard. It has a USB connector for power, programming, and a connection to a PC. It also has a microSD slot for increased storage.

Features:

* PIC32MX440F256H microcontroller, which includes 256KB Flash and 32K RAM
* Supported as development target from within MPIDE
* 45 I/O pins
* microSD slot connected to hardware SPI port
* Pads for 32 KHz crystal
* USB connector for power, programming, and connection to PC (serial, mass storage, etc.)
* Two buttons: RESET for resetting the board, and PRG for getting into bootloader mode and user application use
* USB bootloader pre-programmed at the factory – no other hardware needed to program board



Entering Bootloader Mode

Programming in MPIDE

Serial communications

Using the microSD

Electrical Connections

Power

I/O

Pin Reference