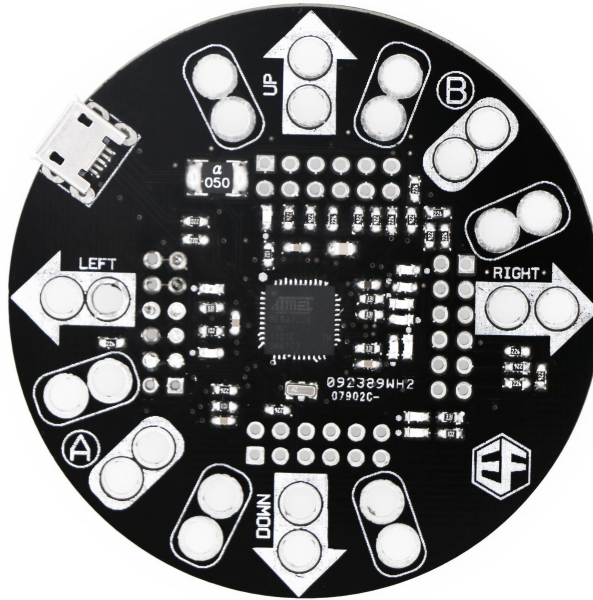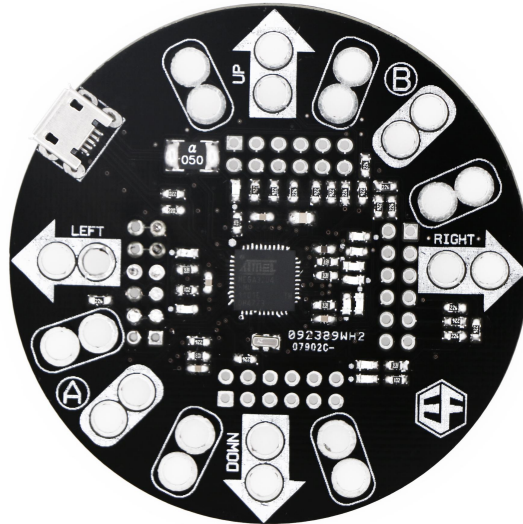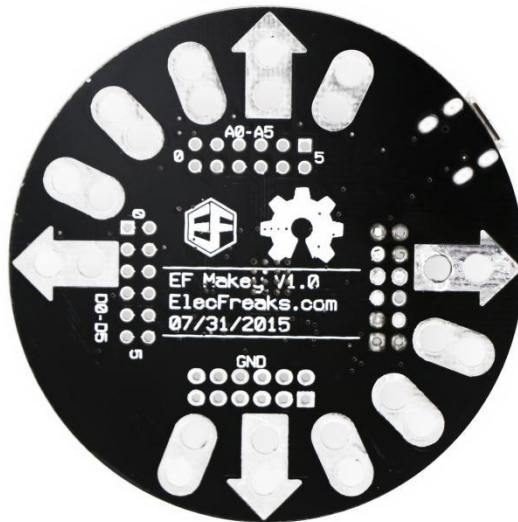## 1. Description

FreaksMakey is a completely open-source simulated USB keyboard, based on MEGA32U4 I/O. FreaksMakey can be used to simulate USB keyboard or electronic piano. Users can even turn it into a game console by programming and code modifying. Since FreaksMakey is open-source, it's far more powerful than above applications. Users can make interesting and creative keyboards with it.

2. FreaksMakey PCB Soldering

Pic 1 FreaksMakey soldering on the top

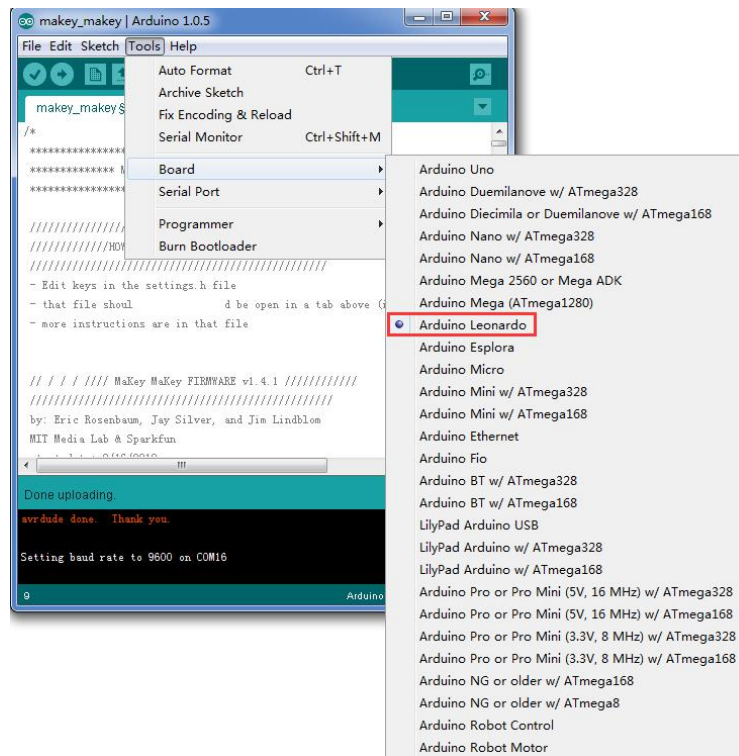Pic 2 FreaksMakey soldering on the bottom

3. Test

3.1 Software
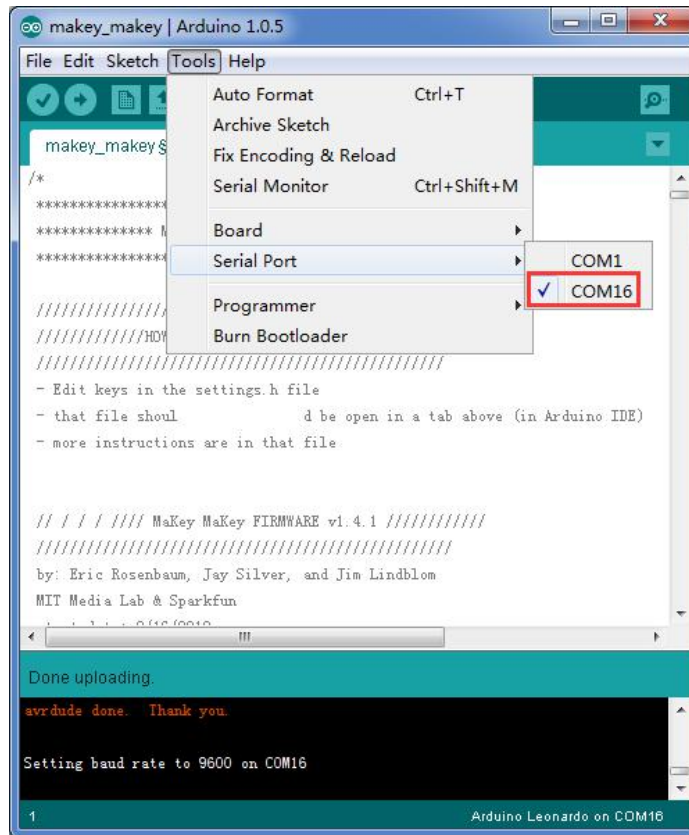
（1）FreaksMakey testing code

（2）Arduino IDE

3.2 Testing code burning

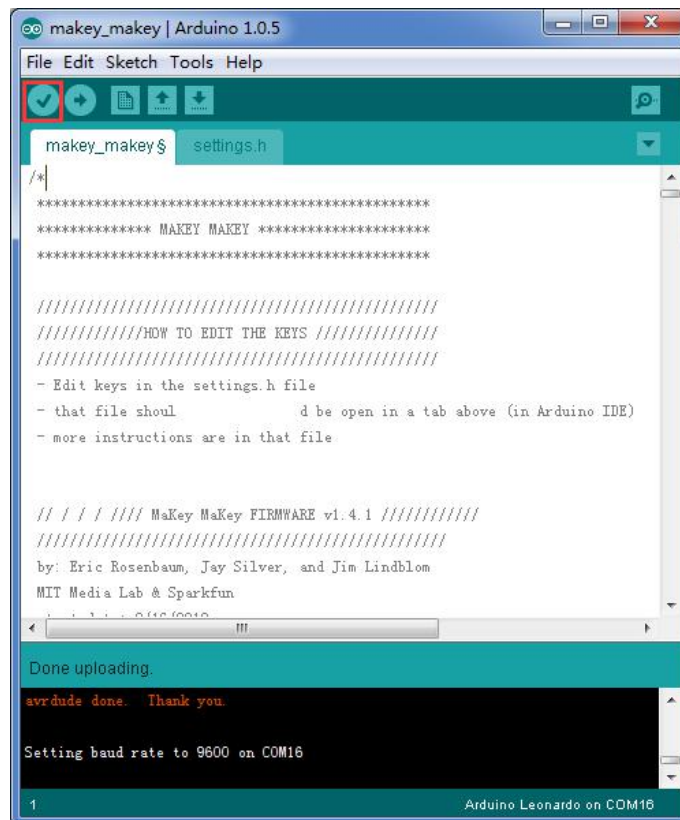Start downloading FreaksMakey_SourceCode.zip by clicking http://www.elecfreak s.com/estore/download/FreaksMakey_SourceCode.zip, unzip it and click "FreaksM akey_SourceCode"->"makey_makey"->"makey_makey.ino" to start compiling and burning process. Burning steps are shown below.

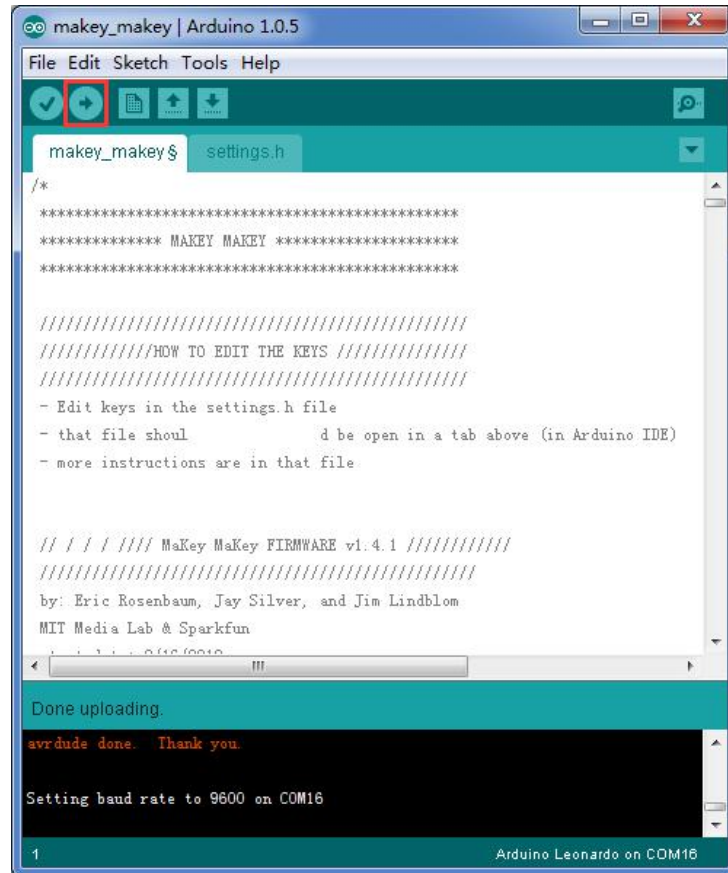Pic 3 Select Arduino Leonardo

Pic 4 Select Serial Port

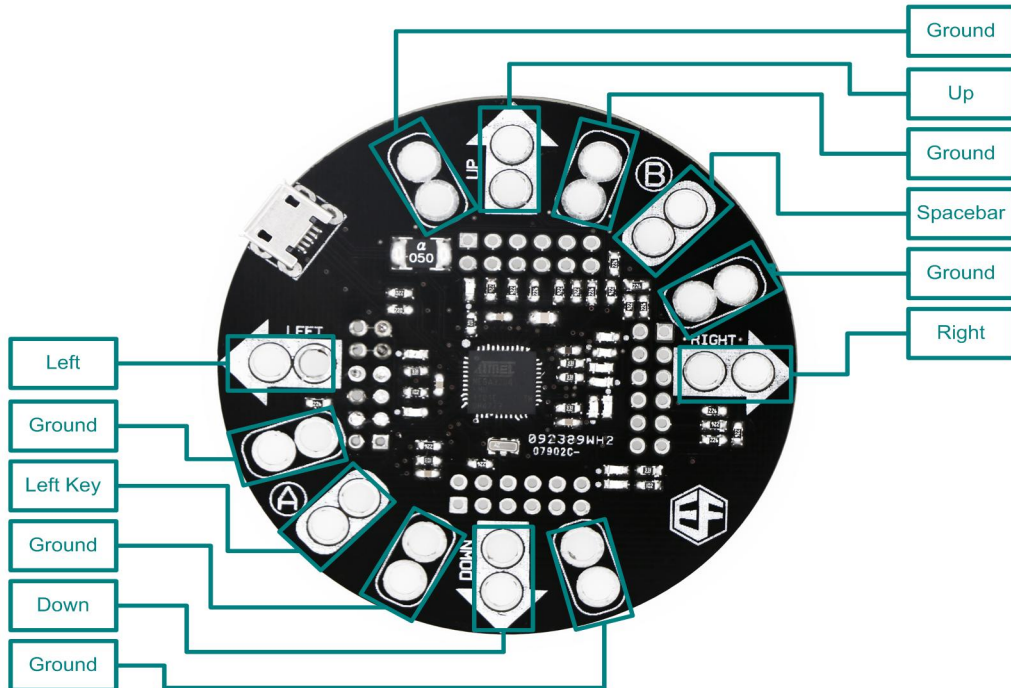Pic 5 Click Verify

Pic 6 Click Upload

3.3Test Procedure

Pic 7 FreaksMakey Test Interface

Connect a computer USB port and FreaksMakey to supply power as soon as code burning process is completed. Clamp any Ground button with an alligator clip and clamp Left, Left Key, Down, Up, Spacebar, Right buttons with six alligator clips. Run "FreaksMakey_SourceCode"->"makey_makey"->"keyboardtestutility.exe", hold the other end of the alligator clip connected to the Ground button and touch the other end of the alligator clip connected to Left, Down, Up, Spacebar and Right buttons with the other hand. You can see a corresponding reaction from the Left Key, Down Key, Up Key, Spacebar Key and Right Key. Move your mouse pointer over Reset key on keyboardtestutility interface, hold the other end of the alligator clip connected to Ground button and touch the other end of the alligator connected to Left Key. You will see Reset will be executed.

4. Version

Version	Note	Date
V1.0	Early version	2016.04.06

FreaksMakey

5. Contact

For more information, please visit: http://www.elecfreaks.com

Product datasheet   Technical support: Support@elecfreaks.com   7