

```

/*
 * tinkerBOY's usb_gamepad v1.0
 *
 */

#include <Joystick.h>

#define PINS 14
#define ENABLE_ANALOG1 false
int X1 = A0;
int Y1 = A1;

Joystick_ Joystick(JOYSTICK_DEFAULT_REPORT_ID, JOYSTICK_TYPE_GAMEPAD, PINS, 0,
    true, true, false, false, false, false, false, false, false, false);

class CButton {
public:
    int pin = NULL;
    int lastState = 0;

    CButton(int p) {
        pin = p;
    }
};

CButton Buttons[PINS] ={0,1,2,3,4,5,6,7,8,9,10,16,14,15};

void setup() {
    for(int i=0 ; i<PINS ; i++) {
        pinMode(Buttons[i].pin, INPUT_PULLUP);
    }

    Joystick.begin();
    if (ENABLE_ANALOG1) {
        Joystick.setXAxisRange(-512, 512);
        Joystick.setYAxisRange(-512, 512);
    }
}

void JButtonStates() {
    if (ENABLE_ANALOG1) {
        Joystick.setXAxis(analogRead(X1) - 512);
        Joystick.setYAxis(analogRead(Y1) - 512);
    }

    for (int i = 0; i < PINS; i++) {
        int currentState = !digitalRead(Buttons[i].pin);

        if (currentState != Buttons[i].lastState) {
            Joystick.setButton(i, currentState);
            Buttons[i].lastState = currentState;
        }
    }
}

void loop() {
    JButtonStates();
    delay(50);
}

```