

 bitbank2

Updated pin numbers in examples and main lib

42ff850 · 4 years ago

🕒 History

🔒

92 lines (74 loc) · 2.06 KB

CodeBlame

Raw📄📥🔗📄

```
41 void setup() {
4   This sketch waits for the letter 'c' on the Serial Monitor,
5   it then reads a frame from the OmniVision OV7670 camera and
6   prints the data to the Serial Monitor as a hex string.
7
8   The website https://rawpixels.net - can be used the visualize the data:
9       width: 176
10      height: 144
11      RGB565
12      Little Endian
13
14  Circuit:
15      - Arduino Nano 33 BLE board
16      - OV7670 camera module:
17      - 3.3 connected to 3.3
18      - GND connected GND
19      - SIOC connected to A5
20      - SIOD connected to A4
21      - VSYNC connected to 8
22      - HREF connected to A1
23      - PCLK connected to A0
24      - XCLK connected to 9
25      - D7 connected to 4
26      - D6 connected to 6
27      - D5 connected to 5
28      - D4 connected to 3
29      - D3 connected to 2
30      - D2 connected to 0 / RX
31      - D1 connected to 1 / TX
32      - D0 connected to 10
33
34  This example code is in the public domain.
35  */
36
37  #include <Arduino_OV767X.h>
38
39  unsigned short pixels[176 * 144]; // QCIF: 176x144 X 2 bytes per pixel (RGB565)
40
41  void setup() {
42      Serial.begin(9600);
43      while (!Serial);
44
45      Serial.println("OV767X Camera Capture");
46      Serial.println();
47
48      if (!Camera.begin(QCIF, RGB565, 1)) {
49          Serial.println("Failed to initialize camera!");
50          while (1);
51      }
52
53      Serial.println("Camera settings:");
54      Serial.print("\twidth = ");
55      Serial.println(Camera.width());
56      Serial.print("\theight = ");
57      Serial.println(Camera.height());
58      Serial.print("\tbits per pixel = ");
59      Serial.println(Camera.bitsPerPixel());
60      Serial.println();
61
62      Serial.println("Send the 'c' character to read a frame ...");
63      Serial.println();
64  }
65
66  void loop() {
67      if (Serial.read() == 'c') {
68          Serial.println("Reading frame");
69          Serial.println();
70          Camera.readFrame(pixels);
71
72          int numPixels = Camera.width() * Camera.height();
73
74          for (int i = 0; i < numPixels; i++) {
75              unsigned short p = pixels[i];
76
77              if (p < 0x1000) {
78                  Serial.print('0');
79              }
80
81              if (p < 0x0100) {
82                  Serial.print('0');
83              }
84
85              if (p < 0x0010) {
86                  Serial.print('0');
87              }
88
89              Serial.print(p, HEX);
90          }
91      }
92  }
```