

AtomS3 IR NEC

M5AtomS3 IR driver case program. This case uses the [Arduino-IRremote - Lib](#) to implement NEC coding.

| Example

```
1  /**
2   * @file ir_nec.ino
3   * @author SeanKwok (shaoxiang@m5stack.com)
4   * @brief M5AtomS3 IR NEC test
5   * @version 0.1
6   * @date 2023-12-13
7   *
8   *
9   * @Hardware: M5AtomS3
10  * @Platform Version: Arduino M5Stack Board Manager v2.0.9
11  * @Dependent Library:
12  * M5GFX: https://github.com/m5stack/M5GFX
13  * M5Unified: https://github.com/m5stack/M5Unified
14  * M5AtomS3: https://github.com/m5stack/M5AtomS3
15  * IRremote: https://github.com/Arduino-IRremote/Arduino-IRremote
16  */
17
18  #define DISABLE_CODE_FOR_RECEIVER // Disables restarting receiver after each
19                                   // send. Saves 450 bytes program memory and
20                                   // 269 bytes RAM if receiving functions are
21                                   // not used.
22
23  #define SEND_PWM_BY_TIMER
24  #define IR_TX_PIN 4
25
26  #include "M5AtomS3.h"
27  #include <IRremote.hpp> // include the library
28
29  uint8_t sCommand = 0x34;
30  uint8_t sRepeats = 0;
31
32  void setup() {
33      auto cfg = M5.config();
34      AtomS3.begin(cfg);
35      AtomS3.Display.setTextColor(GREEN);
36      AtomS3.Display.setTextDatum(middle_center);
37      AtomS3.Display.setFont(&fonts::FreeMono9pt7b);
38      AtomS3.Display.setTextSize(1);
39
40      IrSender.begin(DISABLE_LED_FEEDBACK); // Start with IR_SEND_PIN as send pin
41      IrSender.setSendPin(IR_TX_PIN);
42  }
43
44  void loop() {
45      Serial.println();
46      Serial.print(F("Send now: address=0x1111, command=0x"));
47      Serial.print(sCommand, HEX);
48      Serial.print(F(", repeats="));
49      Serial.print(sRepeats);
50      Serial.println();
```

```
51 AtomS3.Display.clear();
52 AtomS3.Display.drawString("IR NEC SEND", AtomS3.Display.width() / 2,
53                             AtomS3.Display.height() / 2 - 40);
54
55 AtomS3.Display.drawString("ADDR:0x1111", AtomS3.Display.width() / 2,
56                             AtomS3.Display.height() / 2);
57
58 AtomS3.Display.drawString("CMD:0x" + String(sCommand, HEX),
59                             AtomS3.Display.width() / 2,
60                             AtomS3.Display.height() / 2 + 40);
61
62 Serial.println(F("Send standard NEC with 16 bit address"));
63
64 AtomS3.Display.fillCircle(10, 105, 8, GREEN);
65 IrSender.sendNEC(0x1111, sCommand, sRepeats);
66 // IrSender.sendOnkyo(0x1111, 0x2223, sRepeats);
67 /*
68  * Increment send values
69  */
70 sCommand += 1;
71 delay(500);
72 AtomS3.Display.fillCircle(10, 105, 8, YELLOW);
73 delay(500);
74 }
```