

ESP32 and PN7150 in Arduino IDE

1. Download PN7150 library for Arduino

<https://github.com/ElectronicCats/ElectronicCats-PN7150/releases/tag/v3.0.0-beta>

P2P_Discovery OK FAIL

Notes

1. For `ISO14443-3A_write_block : if || (Resp[RespSize - 1] != 0` is omitted in the conditions to verify write status, the example works.
2. For `MifareClassic_write_block : if || (Resp[RespSize - 1] != 0` is omitted in the conditions to verify write status, the example works.

What's Changed

Full Changelog: [v2.1.0...v3.0.0-beta](#)

▼ Assets 2

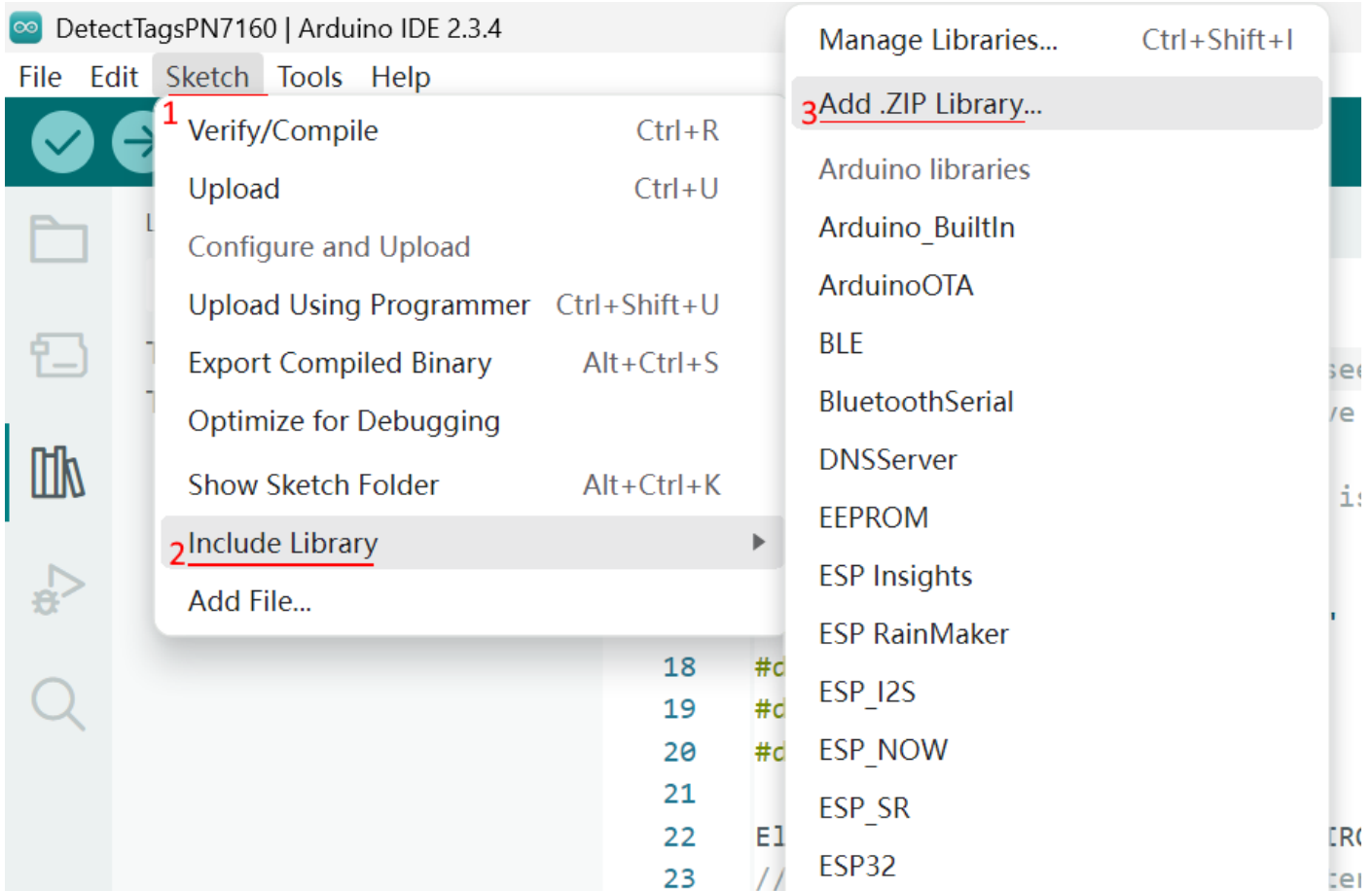
- Source code (zip) 3 days ago
- Source code (tar.gz) 3 days ago

2. Hardware connection

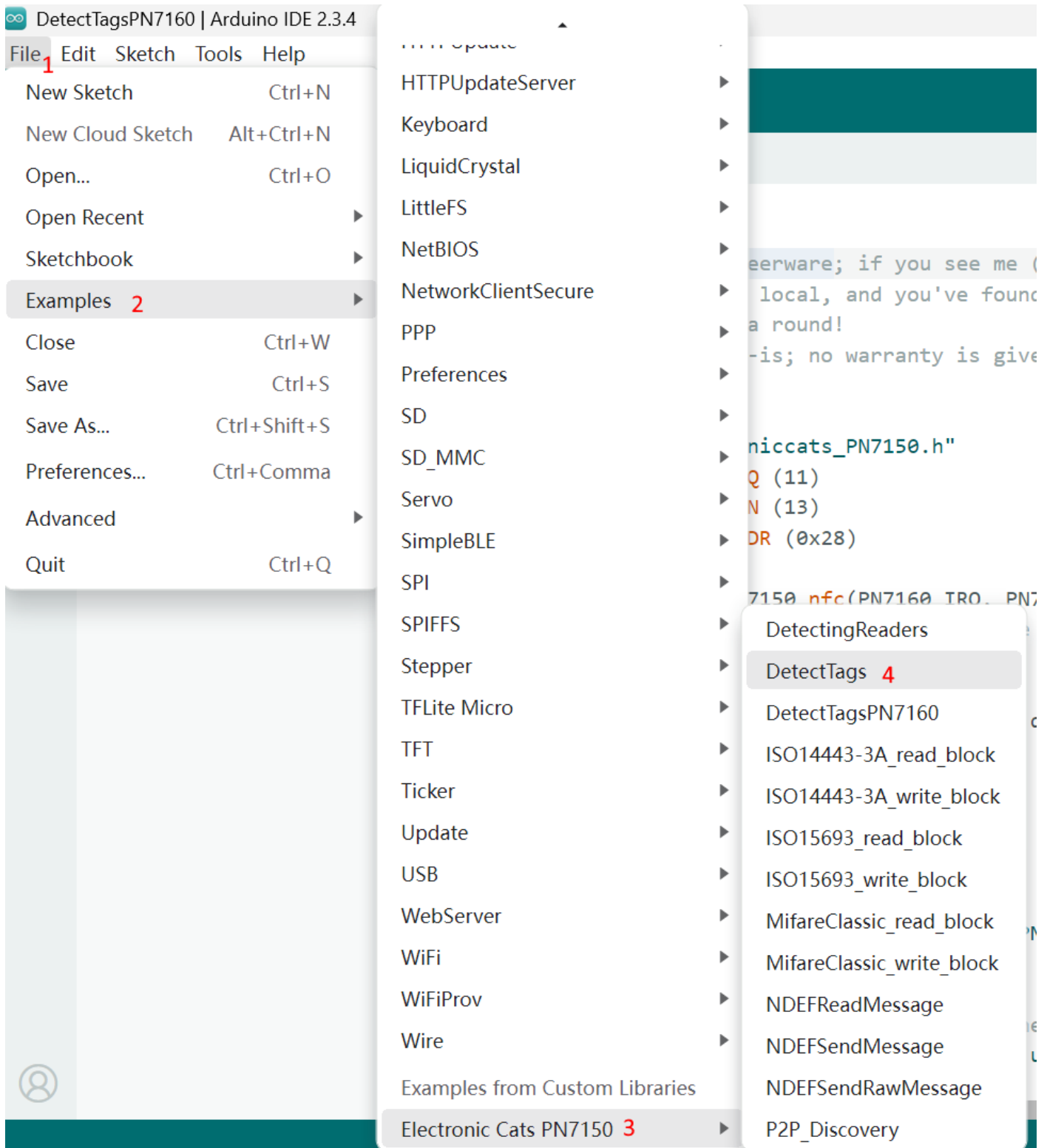
PN7150	ESP32_DEVKIT	ESP32-WROOM-32	Note
SDA	D21	GPIO21	
SCL	D22	GPIO22	
IRQ	D14	GPIO14	
VEN	D13	GPIO13	
VDD	3V3		
VANT	VIN/5V		Power supply from 5V
GND	GND		



3. Arduino IDE 2.3 add Library



4. Open the Example Code



5. Modify the code and upload

```
16
17 #include "Electroniccats_PN7150.h"
18 #define PN7150_IRQ (14)
19 #define PN7150_VEN (13)
20 #define PN7150_ADDR (0x28)
21
22 Electroniccats_PN7150 nfc(PN7150_IRQ, PN7150_VEN, PN7150_ADDR);
23 // creates a global NFC device interface object, attached to pins 11 (IRQ) and 13 (VEN) and us
24
25 // Function prototypes
26 String getHexRepresentation(const byte* data, const uint32_t numBytes);
27 void displayCardInfo();
28
29 void setup() {
30     Serial.begin(9600);
31     while (!Serial)
32     ;
```

```
16
17 #include "Electroniccats_PN7150.h"
18 #define PN7150_IRQ (14)
19 #define PN7150_VEN (13)
20 #define PN7150_ADDR (0x28)
21
22 Electroniccats_PN7150 nfc(PN7150_IRQ, PN7150_VEN, PN7150_ADDR);
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24
25 // Function prototypes
```

Output

Compiling sketch...

CANCEL

6. Open Serial Monitor and Read the tag

DetectTags | Arduino IDE 2.3.4

File Edit Sketch Tools Help

Node32s

```
DetectTags.ino
16
17 #include "Electroniccats_PN7150.h"
18 #define PN7150_IRQ (14)
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20 #define PN7150_ADDR (0x28)
21
22 Electroniccats_PN7150 nfc(PN7150_IRQ, PN7150_VEN, PN7150_ADDR);
23 // creates a global NFC device interface object, attached to pins 11 (IRQ) and 13 (VEN) and us
24
25 // Function prototypes
```

Output

Hash of data verified.

Leaving...

Hard resetting via RTS pin...

Done uploading.

Ln 18, Col 24 Node32s on COM5

DetectTags | Arduino IDE 2.3.4

File Edit Sketch Tools Help

Node32s

```
DetectTags.ino
13 * please buy us a round!
14 * Distributed as-is; no warranty is given.
15 */
16
17 #include "Electroniccats_PN7150.h"
18 #define PN7150_IRQ (14)
19 #define PN7150_VEN (13)
20 #define PN7150_ADDR (0x28)
21
22 Electroniccats_PN7150 nfc(PN7150_IRQ, PN7150_VEN, PN7150_ADDR);
23 // creates a global NFC device interface object, attached to pins 11 (IRQ) and 13 (VEN) and us
24
25 // Function prototypes
26 String getHexRepresentation(const byte* data, const uint32_t numBytes);
```

Output Serial Monitor

Message (Enter to send message to 'Node32s' on 'COM5')

New Line 9600 baud

```
Technology: NFC-A
SENS RES = 0x02 0x00
NFC ID = 0x85 0x37 0x9f 0x93
SEL RES = 0x18
```

Remove the Card

Ln 18, Col 23 Node32s on COM5