UHF_RFID_SDK

Quick Start Guide V1.0

contents

Support Devices List

	FT230X

UHF_RFID_SDK Introduce

Function

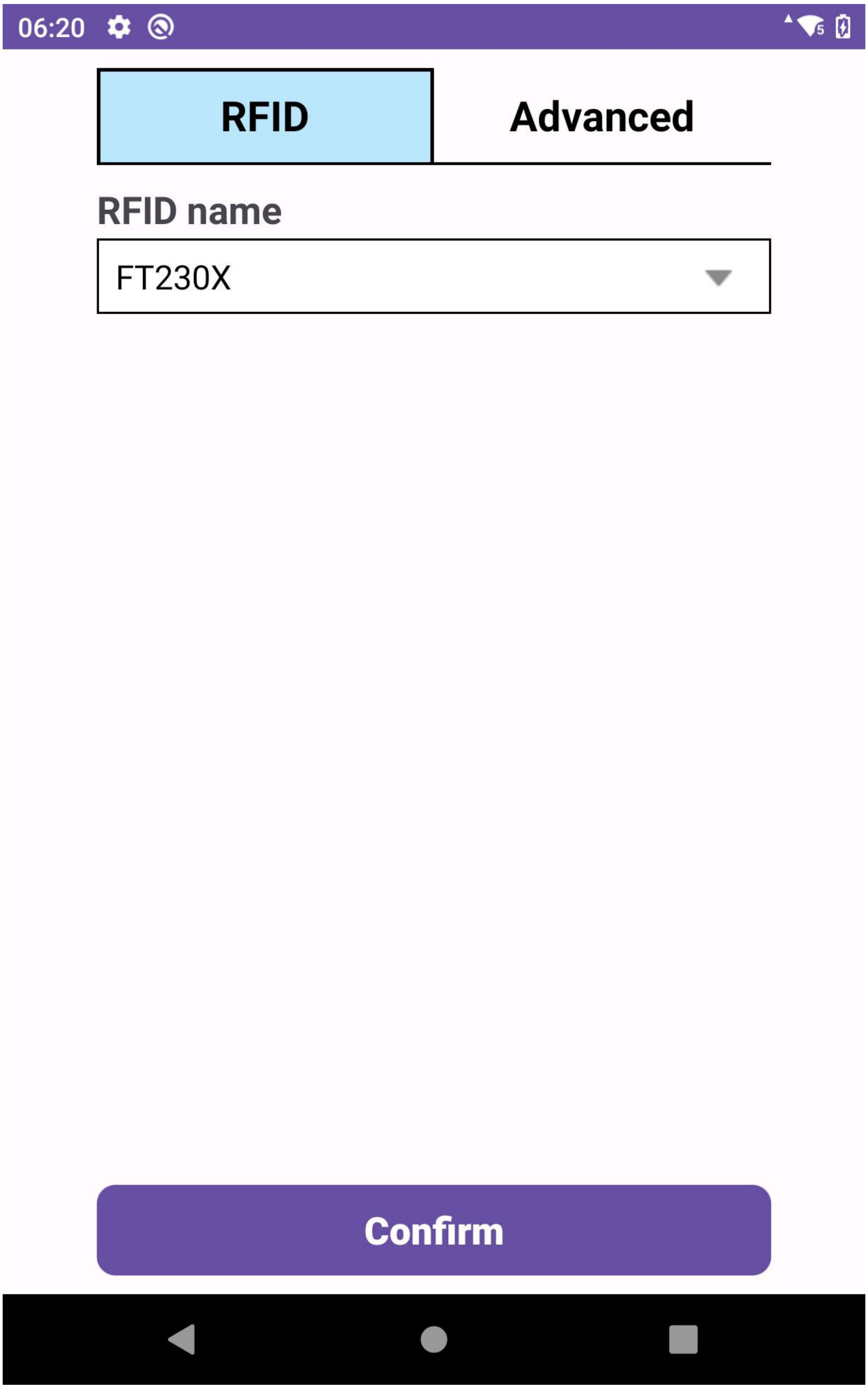
The UHF_RFID_SDK application is mainly used to simplify the development and use of RF SDKs by customers.

It integrates the functions of the FT230X module. It also provides broadcast triggering interface and floating button triggering mode for NFC recognition. The broadcast trigger interface cannot be closed and configured. It is mainly used for calling third-party applications. The floating button triggering mode can be configured and turned off.

In addition, there are two processing methods for the data read by UHF_RFID_SDK. One is to simulate keyboard input method, which directly converts scanned data into keyboard input data. The other is to forward scanned data in the form of broadcast so that third-party applications can receive the data.

Customers only need to make some simple configuration for UHF_RFID_SDK, so they can easily use barcode scanner to collect data.

RFID Menu

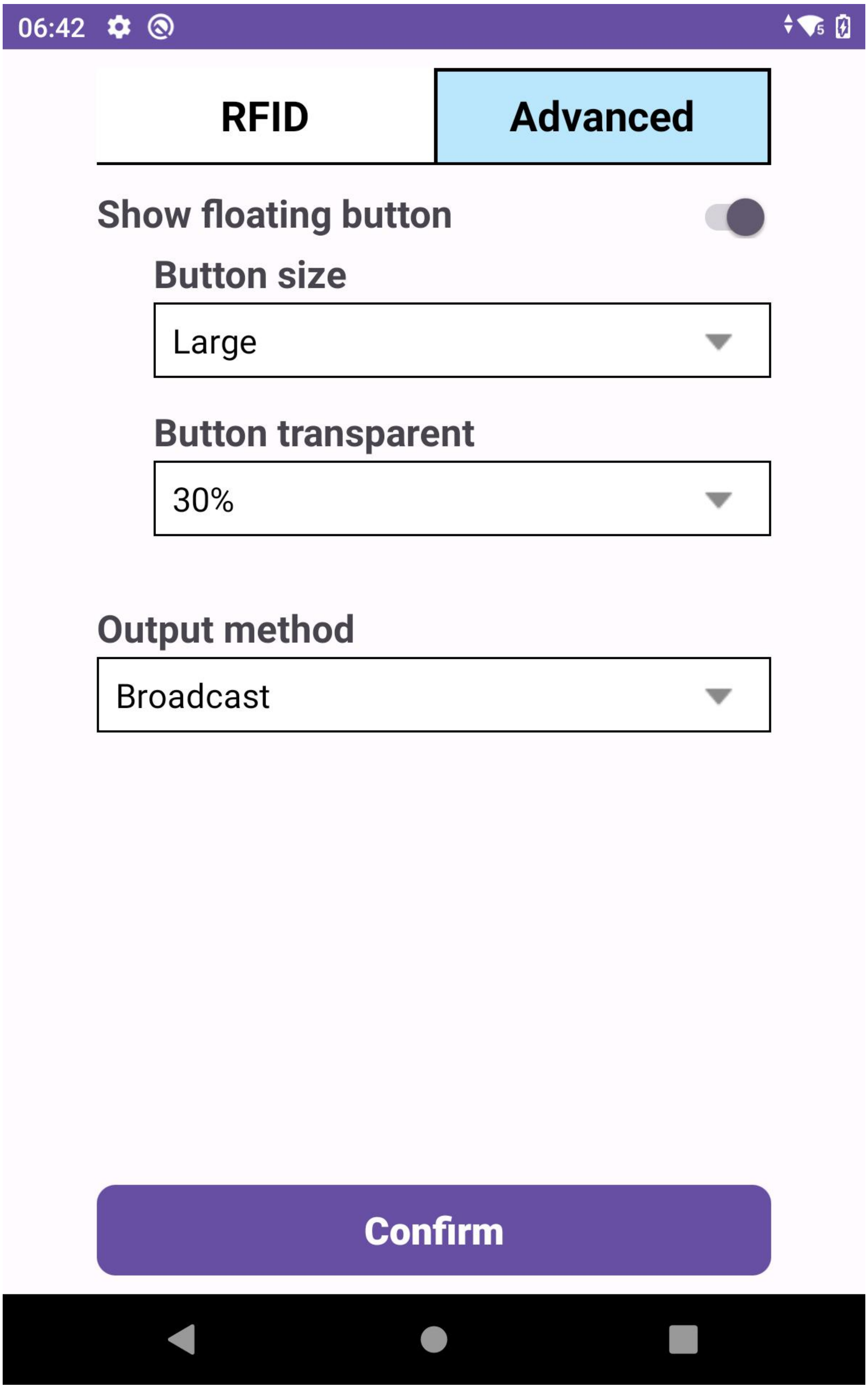


RFID name

FT230X

Name	Description
RFID name	The RFID model name. 1、FT230X

Advanced Menu



Show floating button

Button size: Large

Button transparent: 30%

Output method: Broadcast

Name	Description
Show floating button	Determines whether to display the floating button Size of floating button

Button size	1.Small 2.Normal 3.Large
Button transparent	Transparent of floating button 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%
Output Method	Set the flow direction of the scanned data. 1. Keyboard 2. Broadcast

Keyboard Mode

Keyboard mode is to send the read data to the system in the form of analog keyboard input.
In this mode, the scanned data will be directly filled into the edit box where the focus is located

Broadcast Mode

Broadcast mode is to send the read data to the third-party app in the form of broadcast.If you want to get the data, you need to listen to the"com.advantech.uhf.rfid.TRANSFER_DATA" broadcast in the app, and get the data fromthe extra string "scan_data" after receiving the broadcast information. Please refer to UHF_RFID_SDKSample app source code for details.

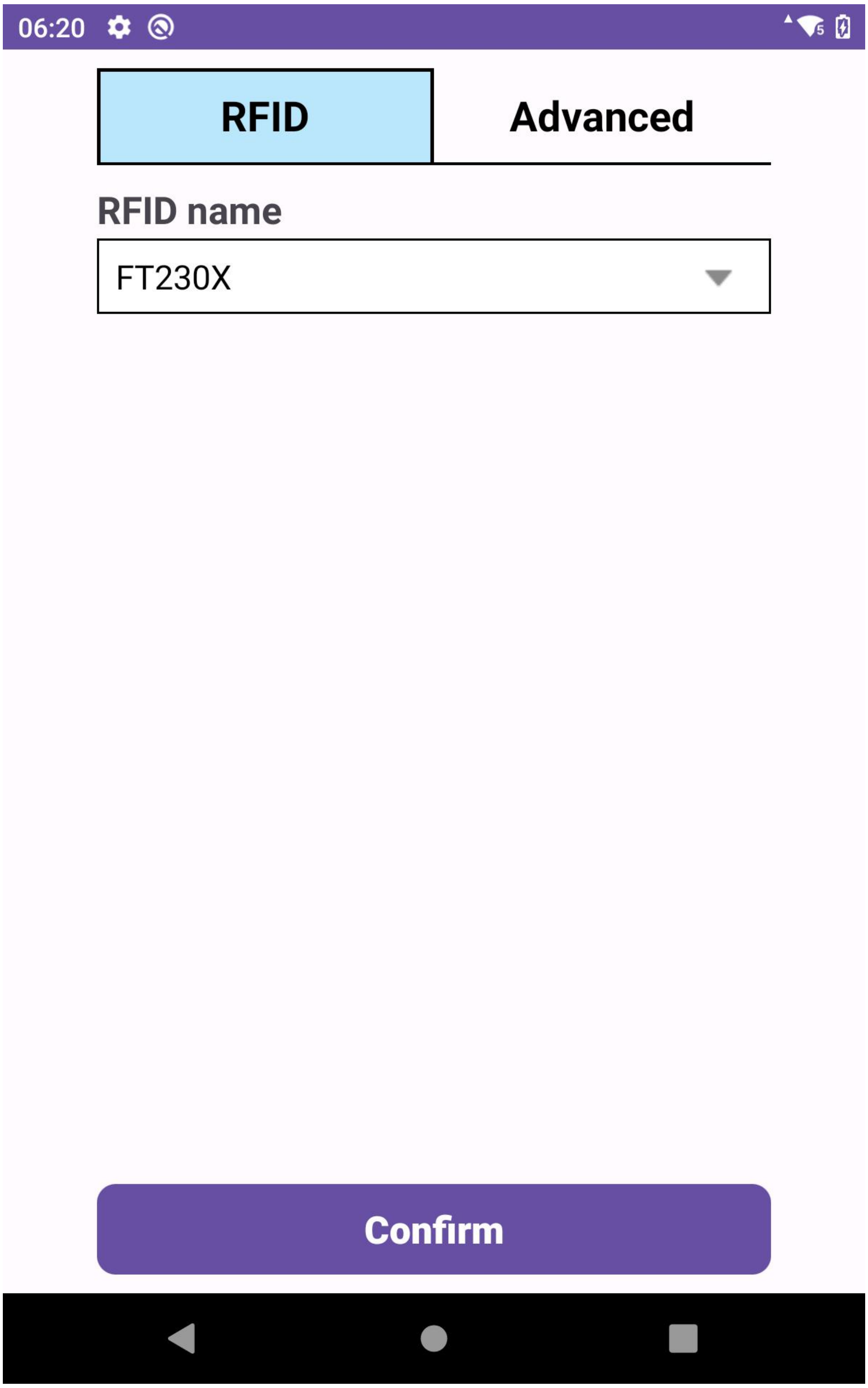
UHF_RFID_SDKSample Introduce

UHF_RFID_SDKSample is an open source sample app, which is mainly used to give users reference on how to trigger a scan through broadcast and how to receive the scanned data through broadcast.

UHF_RFID_SDK Usage

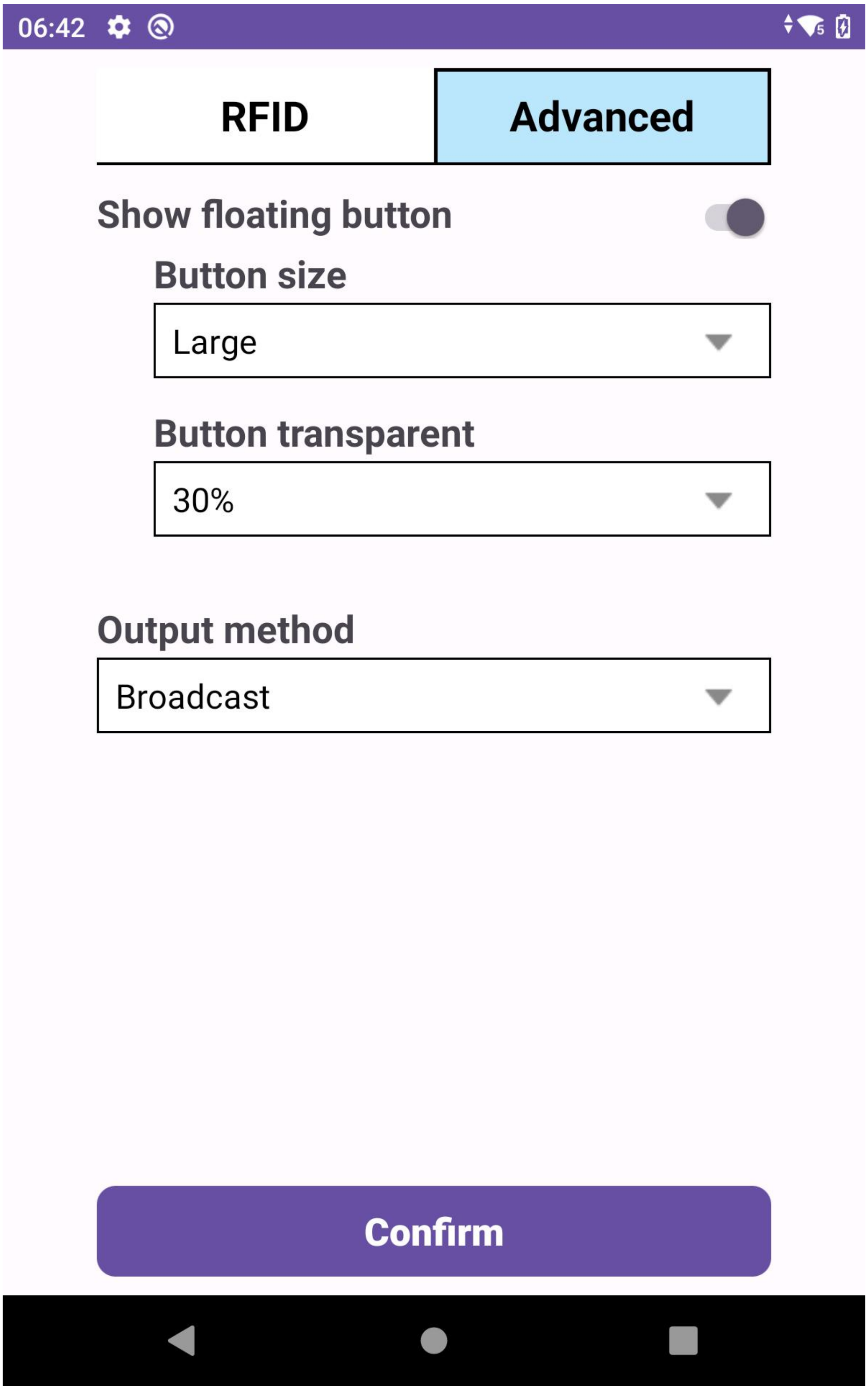
UHF_RFID_SDK Setting

Run UHF_RFID_SDK app and make some configuration
1. RFID name : Select the FT230X moudle



RFID name
FT230X

2. Show floating button: Select whether to turn it on according to your own needs. If enabled, you can continue to configure the following parameters
1. Button size: Normal
2. Button transparent: 50%
3. Output method: Keyboard
4. Complete configuration(This step is indispensable)
Click the confirm button to complete the configuration



06:42

RFID | Advanced

Show floating button: on

Button size: Large

Button transparent: 30%

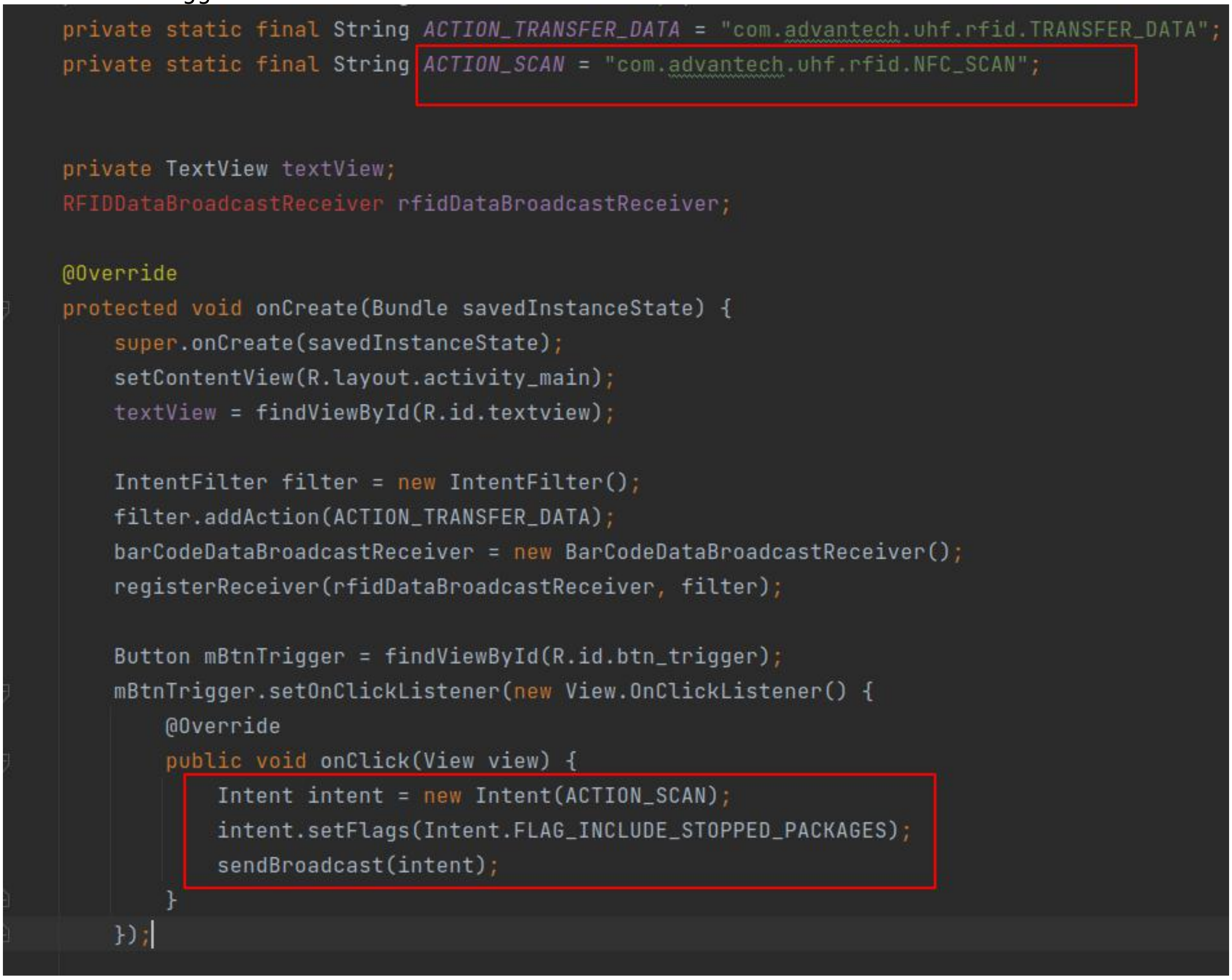
Output method: Broadcast

Confirm

Trigger Read NFC

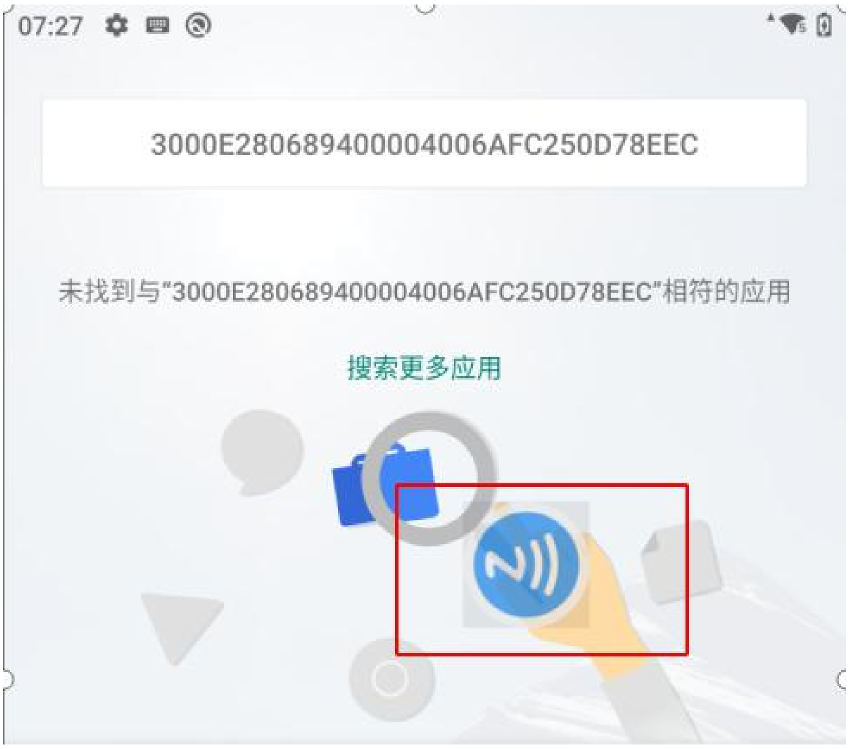
There are two ways to trigger a scan

a. Broadcast trigger



```
private static final String ACTION_TRANSFER_DATA = "com.advantech.uhf.rfid.TRANSFER_DATA";
private static final String ACTION_SCAN = "com.advantech.uhf.rfid.NFC_SCAN";


private TextView textView;
RFIDDataBroadcastReceiver rfidDataBroadcastReceiver;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    textView = findViewById(R.id.textview);

    IntentFilter filter = new IntentFilter();
    filter.addAction(ACTION_TRANSFER_DATA);
    barCodeDataBroadcastReceiver = new BarCodeDataBroadcastReceiver();
    registerReceiver(rfidDataBroadcastReceiver, filter);

    Button mBtnTrigger = findViewById(R.id.btn_trigger);
    mBtnTrigger.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent = new Intent(ACTION_SCAN);
            intent.setFlags(Intent.FLAG_INCLUDE_STOPPED_PACKAGES);
            sendBroadcast(intent);
        }
    });
```

b. Floating button trigger
If you turn on the floating button, you can see the floating button shown below in the UI.
Click it to trigger scanning

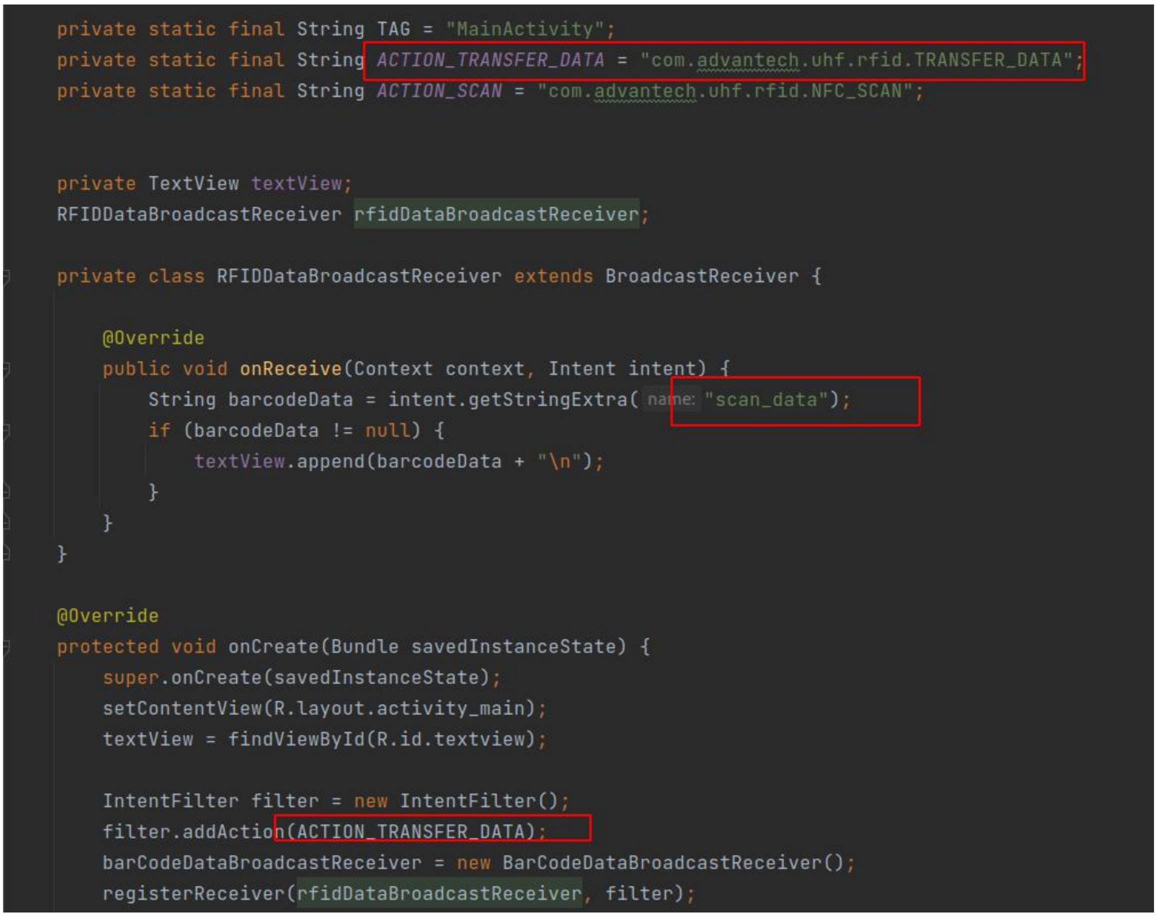


07:27

3000E280689400004006AFC250D78EEC

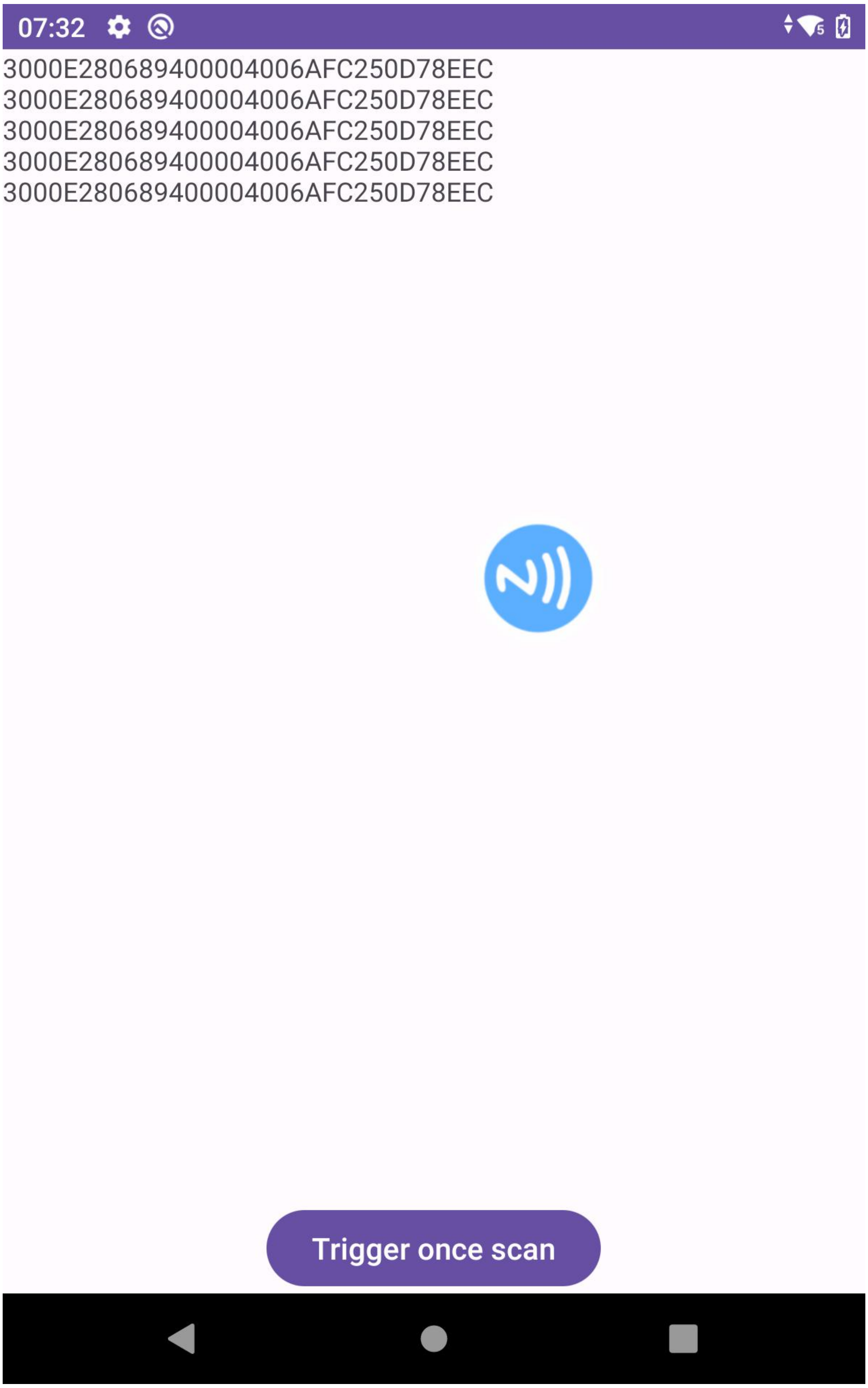
未找到与“3000E280689400004006AFC250D78EEC”相符的应用

If broadcast mode is selected in “Advance->Output method”. You can add the following code to your app to receive data.



```
private static final String TAG = "MainActivity";
private static final String ACTION_TRANSFER_DATA = "com.advantech.uhf.rfid.TRANSFER_DATA";
private static final String ACTION_SCAN = "com.advantech.uhf.rfid.NFC_SCAN";


private TextView textView;
RFIDDataBroadcastReceiver rfidDataBroadcastReceiver;

private class RFIDDataBroadcastReceiver extends BroadcastReceiver {

    @Override
    public void onReceive(Context context, Intent intent) {
        String barcodeData = intent.getStringExtra( name: "scan_data");
        if (barcodeData != null) {
            textView.append(barcodeData + "\n");
        }
    }
}

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    textView = findViewById(R.id.textview);

    IntentFilter filter = new IntentFilter();
    filter.addAction(ACTION_TRANSFER_DATA);
    barCodeDataBroadcastReceiver = new BarCodeDataBroadcastReceiver();
    registerReceiver(rfidDataBroadcastReceiver, filter);
```

For example, the data received with UHF_RFID_SDKSample app is as follows



```
3000E280689400004006AFC250D78EEC
3000E280689400004006AFC250D78EEC
3000E280689400004006AFC250D78EEC
3000E280689400004006AFC250D78EEC
3000E280689400004006AFC250D78EEC
```

Note

UHF_RFID_SDK app needs system signature, so please sign the app before installation.