

ДОДАТОК (Код програми)

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#include <BLEDevice.h>
#include <BLEServer.h>
#include <BLEUtils.h>
#include <BLE2902.h>
#include <Tone32.h>

#define SPEAKER_PIN 4
const int buzzer_channel = 0;

BLECharacteristic *pCharacteristic;

void setup() {
  pinMode(SPEAKER_PIN, OUTPUT);
  Serial.begin(115200);

  BLEDevice::init("Sound Device");
  BLEServer *pServer = BLEDevice::createServer();
  BLEService *pService = pServer->createService(BLEUUID((uint16_t)0x180F));
  pCharacteristic = pService->createCharacteristic(
    BLEUUID((uint16_t)0x2A19),
    BLECharacteristic::PROPERTY_READ |
    BLECharacteristic::PROPERTY_WRITE |
    BLECharacteristic::PROPERTY_NOTIFY |
    BLECharacteristic::PROPERTY_INDICATE

```

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);  
pCharacteristic->addDescriptor(new BLE2902());  
  
pService->start();  
BLEAdvertising *pAdvertising = pServer->getAdvertising();  
pAdvertising->start();  
}  
  
void loop() {  
  if (pCharacteristic->getValue().length() > 0) {  
    int isActive = pCharacteristic->getValue()[0];  
    if (isActive > 0) {  
      Serial.println("Start working");  
      tone(SPEAKER_PIN, NOTE_A4, 300, buzzer_channel);  
    } else {  
      Serial.println("Stopping tone");  
      noTone(SPEAKER_PIN);  
    }  
  }  
  isConnected = BLEDevice::getAdvertising()->isConnected();  
  if (!BLEDevice::getScan()->isScanning() && !isConnected) {  
    Serial.println("Entering deep sleep...");  
    esp_sleep_enable_timer_wakeup(30000000);  
    esp_deep_sleep_start();  
  }  
}
```