WizFi360-EVB Datasheet

(Version 1.0)
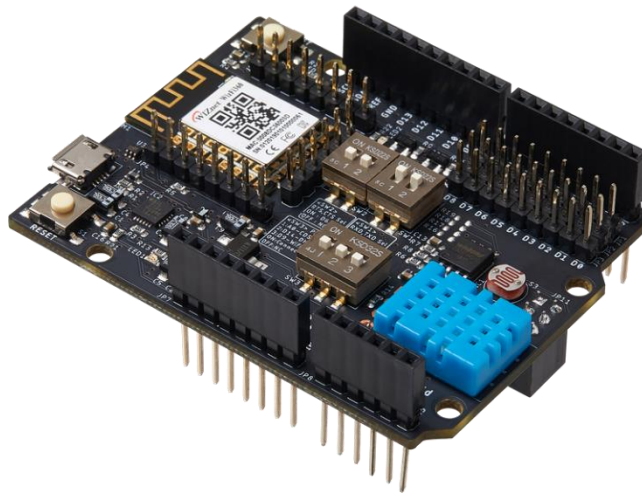
Document Revision History

Version	Date	Revision Description
1.0	2019/07/25	Official Release

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Contents

1. Overview

This document describes WizFi360-EVB. WizFi360-EVB is a development board for experiment, test and verification of WizFi360. WizFi360-EVB can also be used as an Arduino shield.

WizFi360 is a low cost and low-power consumption industrial-grade WiFi module. It is compatible with IEEE802.11 b/g/n standard and supports SoftAP, Station and SoftAP+Station modes. The serial port baud rate can be up to 2Mbps, which can meet the requirement of various applications.

2. Features

2.1 WizFi360

- WiFi 2.4G, 802.11 b/g/n
- Support Station / SoftAP / SoftAP+Station operation modes
- Support "Data pass-through" and "AT command data transfer" mode
- Support serial AT command configuration
- Support TCP Server / TCP Client / UDP operating mode
- Support configuration of operating channel 0 ~ 13
- Support auto 20MHz / 40MHz bandwidth
- Support WPA_PSK / WPA2_PSK encryption
- Serial port baud rate up from 600bps to 2Mbps with 16 common values
- Support up to 5 TCP / UDP links
- Obtaining IP address automatically from the DHCP server (Station mode)
- DHCP service for Wireless LAN clients (AP mode)
- Support DNS for communication with servers by domain name
- Support "Keep-Alive" to monitor TCP connection
- Support "Ping" for monitoring network status
- Built-in SNTP client for receiving the network time
- Support built-in unique MAC address and user configurable
- Support firmware upgrade by UART Download / OTA (via WLAN)
- Industrial grade (operating temperature range: -40 ° C ~ 85 ° C)
- CE, FCC certification

2.2 ETC

- Built-in UART to USB chip
  - CP2104-GM
  - Micro USB B Type Connector
- UART Selector

- ■ JP1, JP2, JP3
- ■ 2.54mm Pin Header
- ● Built-in Sensors
  - ■ Temprature/Humidity Sensor: DHT11
  - ■ CDS Sensor: GL5537
- ● Built-in Tact Switchs
  - ■ System Reset Switch: S1
  - ■ WiFi Reset Switch: S2
- ● Built-in LED Indicators
  - ■ D13 LED
- ● Built-in Level Shifters
  - ■ The voltage of the RXD/TXD signal changes according to the main board platform voltage.
- ● Built-in DIP Switchs
  - ■ UART RXD/TXD Selector: SW1
  - ■ UART RTS/CTS Selector: SW2
  - ■ Sensor/RESET Pins Selector: SW3
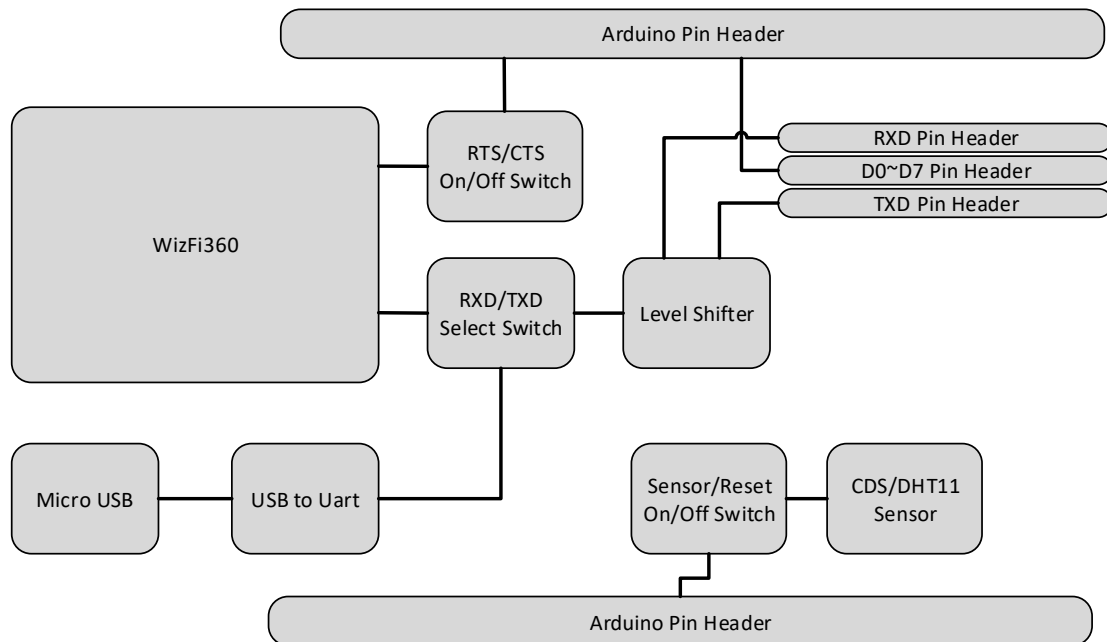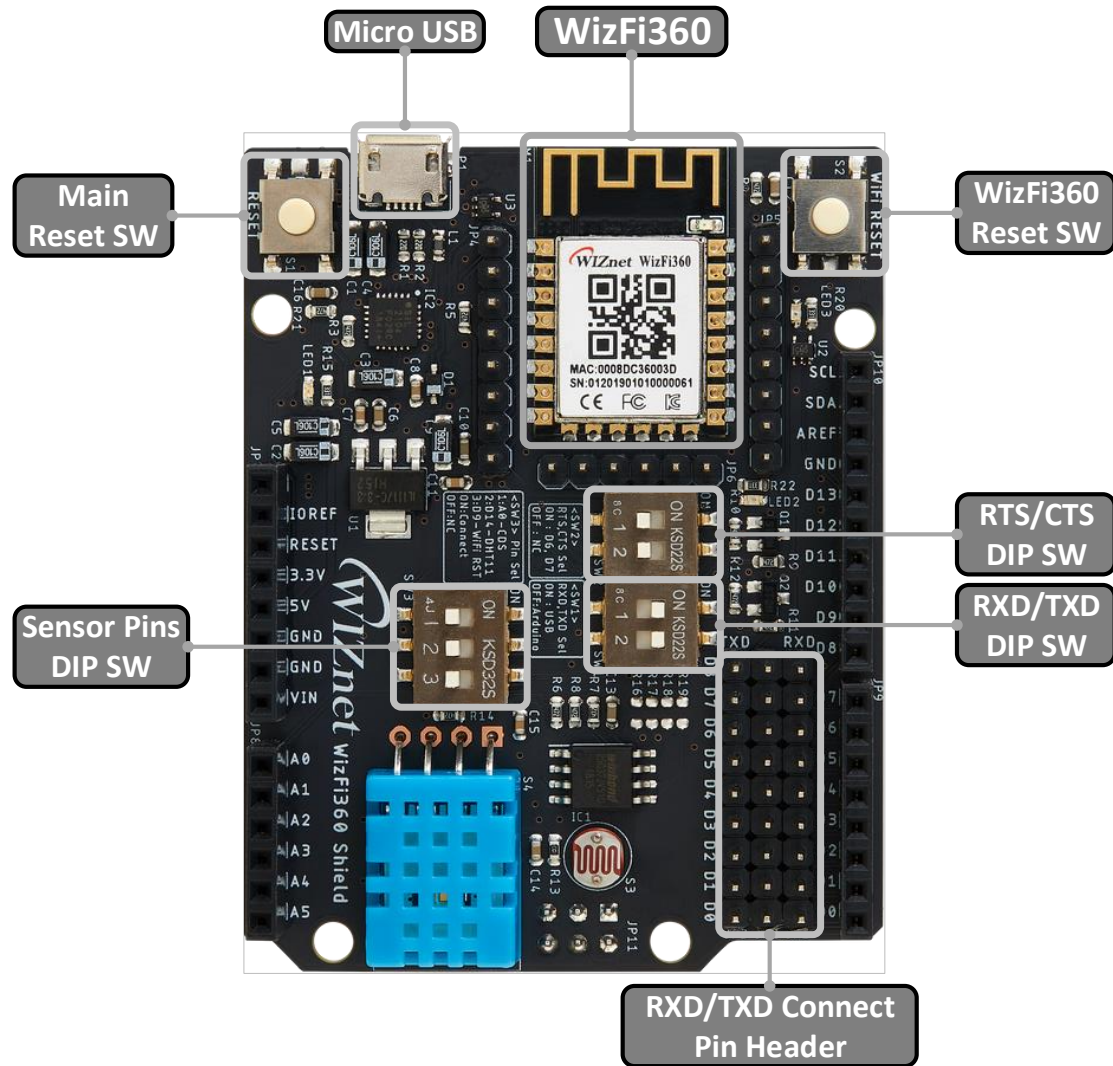
3. **Blockdiagram**

Figure 1. WizFi360-EVB Blockdiagram

4. Callout

5. Board Configurations

5.1 DIP Switch Configuratios

- **SW1** – RXD/TXC Selector DIP Switch
    - **ON**: RXD/TXD of WizFi360 connect to USB
        - It is only possible to communicate with WizFi360 using USB.
    - **OFF**: RXD/TXD of WizFi310 connect to JP1 and JP3
        - UART Pin Header, Arduino PIN
        - If the jumper cap is not attached to the UART pin header, it will not be connected to the arduino pin.
    - Pin 1: RXD
    - Pin 2: TXD
- **SW2** – RTS/CTS Selector DIP Switch
    - **ON**: RTS/CTS of WizFi360 connect to D6 and D7

◆ **If the state of SW5 is ON, D6 and D7 of UART jumper can not be used.**

- ■ **OFF**: RTS/CTS of WizFi310 not connect to anywhere
- ■ Pin 1: RTS – D6
- ■ Pin2: CTS – D7
- ● **SW3** – Sensor/RESET Pins Selector DIP Switch
  - ■ **ON**: Connect to Arduino Pin
  - ■ **OFF**: Not connect to anywhere
  - ■ Pin 1: A0 – CDS
  - ■ Pin 2: D14 – DHT11

5.2 UART Selector Pin Header
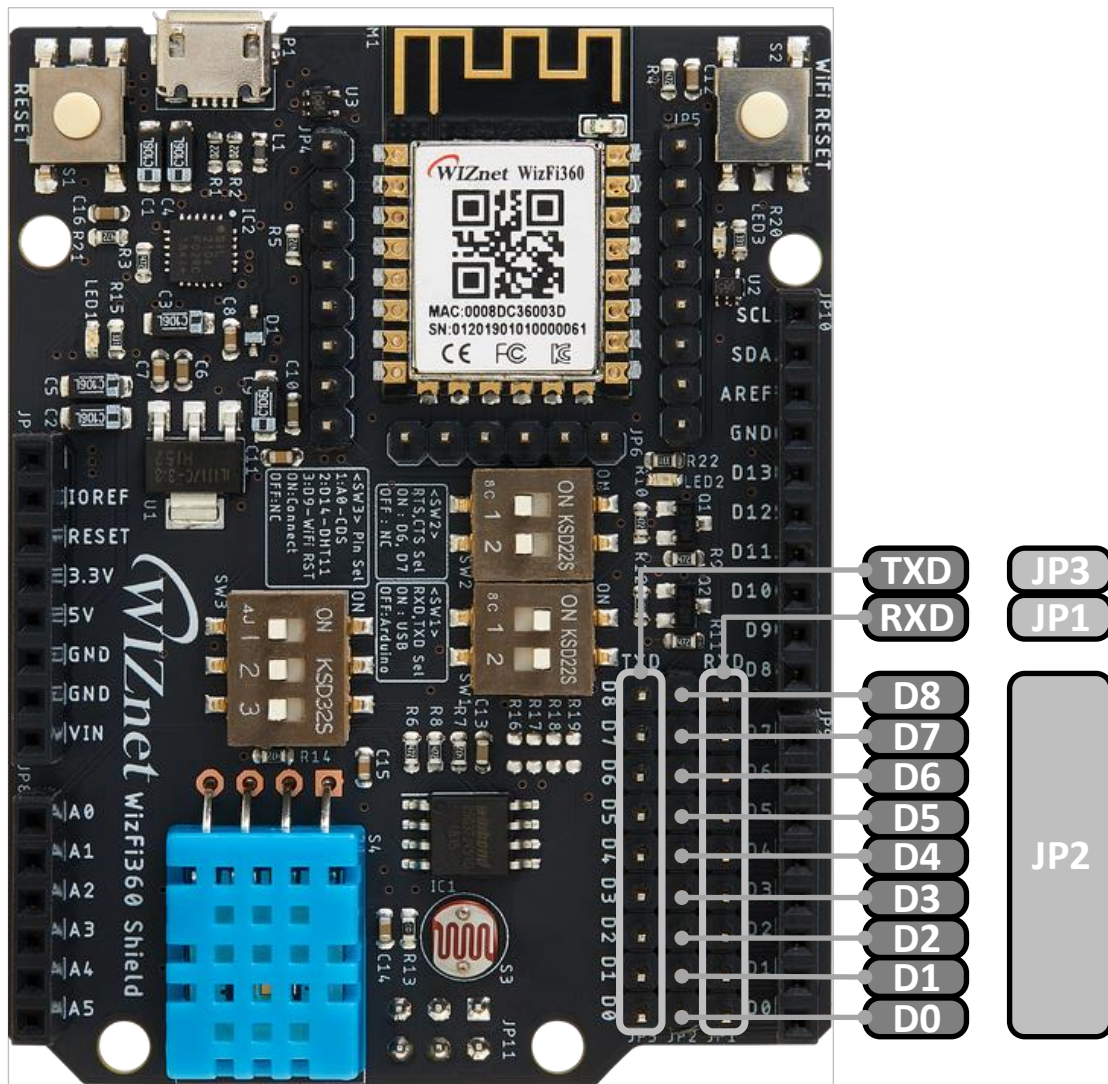
You can use the jumper cap to connect the pin header to select the RXD / TXD pin for the Arduino.

- ● JP1 – WizFi360 RXD
- ● JP2 – Arduino D0~D7 Pins
- ● JP3 – WizFi360 TXD

6. Schematic & Partlist

https://github.com/Wiznet/Hardware-Files-of-WIZnet/tree/master/07_WizFi_Module/WizFi360-EVB

7. Dimension

The dimension of WizFi360-EVB is the same as Arduino UNO.