



# WIMM-2401

- Single stream 802.11 b/g/n
- Security: WEP/WPA/WPA2
- Operation in STA Mode or AP Mode
- Rich interfaces: UART, SPI, PWM and GPIOs
- Support Printed or External Antenna Connector

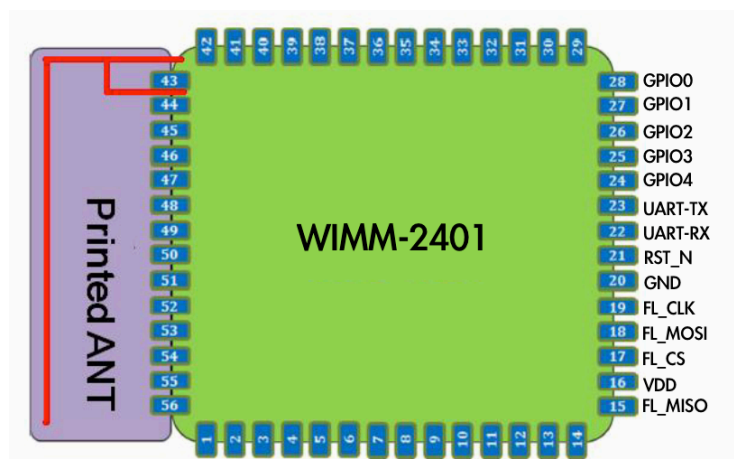
WIMM-2401 Wi-Fi module, equipped with small form factor 802.11n SoC, is suitable to develop various IoT applications, such as Home Automation, Smart Plug, Lighting, Remote Control, Metering, etc.

## Technical Specifications

|                                       |                                                               |
|---------------------------------------|---------------------------------------------------------------|
| Model Name                            | WIMM-2401                                                     |
| <b>Specification for Wi-Fi Module</b> |                                                               |
| Memory                                | Flash: 8Mbit; built-in eFuse: 8 Bytes; Built-in RAM: 100KB    |
| WiFi Standard                         | 802.11 b/g/n                                                  |
| Frequency Band                        | 2.4GHz                                                        |
| I/O Interface                         | 3.3V in, GPIO*5, Reset, UART                                  |
| Function                              | AP / STA Mode                                                 |
| Antenna Type                          | Printed Antenna; IPEX Connector; Main Board Antenna Connector |
| Transmit Power                        | 802.11b: Typ 16dBm<br>802.11g/n: Typ 15dBm                    |
| Receive Power                         | 802.11b: Typ -85dBm<br>802.11g/n: Typ -72dBm                  |
| Temperature                           | Operating: -10°C ~ +70°C    Storage: -40°C ~ +125°C           |
| Security                              | WEP 64/128, WPA, WPA2                                         |
| Dimension                             | 21.0(L)*16.0(W) mm                                            |



## Pin Definition



| PIN | Name    | Type | Description                      | PIN | Name | Type | Description |
|-----|---------|------|----------------------------------|-----|------|------|-------------|
| 1   | GND     |      |                                  | 31  | GND  |      |             |
| 2   | GND     |      |                                  | 32  | GND  |      |             |
| 3   | GND     |      |                                  | 33  | GND  |      |             |
| 4   | GND     |      |                                  | 34  | GND  |      |             |
| 5   | GND     |      |                                  | 35  | GND  |      |             |
| 6   | GND     |      |                                  | 36  | GND  |      |             |
| 7   | GND     |      |                                  | 37  | GND  |      |             |
| 8   | GND     |      |                                  | 38  | GND  |      |             |
| 9   | GND     |      |                                  | 39  | GND  |      |             |
| 10  | GND     |      |                                  | 40  | GND  |      |             |
| 11  | GND     |      |                                  | 41  | GND  |      |             |
| 12  | GND     |      |                                  | 42  | GND  |      |             |
| 13  | GND     |      |                                  | 43  | GND  |      |             |
| 14  | GND     |      |                                  | 44  | GND  |      |             |
| 15  | FL_MISO | I    | External Memory Data Input       | 45  | GND  |      |             |
| 16  | VDD     | I    | PMU 3.3V Power Supply            | 46  | ANT  | I/O  | RF I/O Port |
| 17  | FL_CS   | O    | External Chip Select             | 47  | GND  |      |             |
| 18  | FL_MOSI | O    | External Memory Data Output      | 48  | GND  |      |             |
| 19  | FL_CLK  | O    | External Clock                   | 49  | GND  |      |             |
| 20  | GND     |      |                                  | 50  | GND  |      |             |
| 21  | RST_N   | I    | External System Reset Active Low | 51  | GND  |      |             |
| 22  | UART_RX | I    | UART RX                          | 52  | GND  |      |             |
| 23  | UART_TX | O    | UART TX                          | 53  | GND  |      |             |
| 24  | GPIO4   | I/O  | Programmable Input / Output      | 54  | GND  |      |             |
| 25  | GPIO3   | I/O  | Programmable Input / Output      | 55  | GND  |      |             |
| 26  | GPIO2   | I/O  | Programmable Input / Output      | 56  | GND  |      |             |
| 27  | GPIO1   | I/O  | Programmable Input / Output      |     |      |      |             |
| 28  | GPIO0   | I/O  | Programmable                     |     |      |      |             |



|    |     |  |                |  |  |  |  |
|----|-----|--|----------------|--|--|--|--|
|    |     |  | Input / Output |  |  |  |  |
| 29 | GND |  |                |  |  |  |  |
| 30 | GND |  |                |  |  |  |  |

## Ordering Information

| Part Number  |            | Antenna Type    | Flash |
|--------------|------------|-----------------|-------|
| WIMM-2401-A  | Stamp Hole | Printed Antenna | No    |
| WIMM-2401-B  | Stamp Hole | IPEX Antenna    | No    |
| WIMM-2401-C  | Stamp Hole | Chip Antenna    | No    |
| WIMM-2402-A  | Pin Header | Printed Antenna | No    |
| WIMM-2402-B  | Pin Header | IPEX Antenna    | No    |
| WIMM-2402-C  | Pin Header | Chip Antenna    | No    |
| WIMM-2401-AF | Stamp Hole | Printed Antenna | Yes   |
| WIMM-2401-BF | Stamp Hole | IPEX Antenna    | Yes   |
| WIMM-2401-CF | Stamp Hole | Chip Antenna    | Yes   |
| WIMM-2402-AF | Pin Header | Printed Antenna | Yes   |
| WIMM-2402-BF | Pin Header | IPEX Antenna    | Yes   |
| WIMM-2402-CF | Pin Header | Chip Antenna    | Yes   |

