

## Module 802.11b/g/n 2.472GHz 11000Kbps 28-Pin SMD Module Tray



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** MODULE

**Product Type:** RF Integrated Circuits

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

Microchip's ATWINC1500 is an IEEE 802.11 b/g/n IoT network controller. It is the ideal add-on to existing MCU solutions bringing Wi-Fi and Network capabilities through SPI-to-Wi-Fi interface. The ATWINC1500 connects to any SAM or PIC MCU with minimal resource requirements. The ATWINC1500's most advanced mode is a single stream 1x1 802.11n mode.

The ATWINC1500 features a fully integrated Power Amplifier, LNA, Switch and Power Management. The WINC1500 provides internal Flash memory as well as multiple peripheral interfaces including UART and SPI. The only external clock source needed for the ATWINC1500 is a high-speed crystal or oscillator (26 MHz). The ATWINC1500 is available in a QFN package or as a certified module.

The ATWINC1500 has 4 Mb of flash memory which can be used for system software. The ATWINC1510 has 8 Mb flash memory for even greater flexibility.

A MCU host driver can be found in the Advanced Software Framework (ASF).

Microchip's complimentary and confidential Wireless Check online design review service is available for customers who have selected our products for their application design-in\*. \*The online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Firmware Release Summary Latest major firmware release: v19.6.1, which is available in ASF 3.42 and later.

Module part numbers with v19.6.1 firmware: ATWINC1500-MR210PB1961 ATWINC1500-MR210UB1961 ATWINC1510-MR210PB1961 ATWINC1510-MR210UB1961

For product comparison, please consider: ATWINC3400, ATWILC1000, ATWILC3000

## Key Features

IEEE 802.11 b/g/n 20MHz (1x1) solution, single spatial stream in 2.4GHz ISM band

Integrated transmit/receive switch, fast boot options, on-chip network stack to offload MCU

Superior sensitivity and range via advanced PHY signal processing

FCC, IC, CE regulatory certification, advanced carrier and timing synchronization

Advanced equalization and channel estimation, no OTA/with shield, Wi-Fi direct and soft-AP support

Power save modes (4µA power down mode typical at 3.3V I/O), 3V to 4.2V VBATT voltage

Supports IEEE 802.11 WEP, WPA, WPA2 security and -40°C to +85°C operating temperature

On-chip memory management engine to reduce host load, built-in 26MHz crystal

2.7V to 3.6V I/O operating voltage, Wi-Fi alliance certifications for connectivity and optimizations

Integrated flash memory for system software

Supplier's original packaging: Tray

## Application

Embedded Design & Development

## Recommended For You

---

### **ATWINC1500-MR210PB**

Microchip Technology, Inc  
MODULE

### **ATZB-900-B0**

Microchip Technology, Inc  
MODULE

### **ATWINC1510-MR210PB1952**

Microchip Technology, Inc  
MODULE

### **ATSAMB11-MR510CA**

Microchip Technology, Inc  
39LMODULE

### **ATWINC1510-MR210PB1961**

Microchip Technology, Inc  
MODULE

### **ATWINC3400-MR210UA122**

Microchip Technology, Inc  
MODULE-36

### **ATWILC1000-MR110PB**

Microchip Technology, Inc  
MODULE

### **ATWINC1500-MR210UB1954**

Microchip Technology, Inc  
MODULE-28

### **ATWINC3400-MR210CA122**

Microchip Technology, Inc  
MODULE

### **ATWILC1000-MR110UB**

Microchip Technology, Inc  
MODULE

### **ATSAMW25H18-MR510PB**

Microchip Technology, Inc  
51LMODULE

### **ATWILC3000-MR110UA**

Microchip Technology, Inc  
MODULE

### **ATZB-A24-U0R**

Microchip Technology, Inc  
MODULE

### **ATZB-X0-256-3-0-C**

Microchip Technology, Inc  
MODULE

### **ATWINC1500-MR210UB**

Microchip Technology, Inc  
MODULE