Wi-Fi Module

Wi-Fi combination Module
(Mediatek MT7628AN+MT7610EN)

Rayson

WFM-M628

WFM-M628 used PCIE connector, support 2.4G 2T2R and 5G 1T1R.   Main control chip the MT7628 router-on-a-chip includes an 802.11n MAC and baseband, a 2.4 GHz radio and FEM, a 575/580MHz MIPS® 24K™ CPU core, a 5-port 10/100 fast ethernet switch. The MT7628 includes everything needed to build an AP router from a single chip. The embedded high performance CPU can process advanced applications effortlessly, such as routing, security and VoIP. The MT7628 also includes a selection of interfaces to support a variety of applications, such as a USB port for accessing external storage.

The MT7610EN is a highly integrated Wi-Fi single chip which supports 433Mbps PHY rate. It is compliant with IEEE 802.11ac draft specification, offering feature-rich wireless connectivity and reliable throughput from an extended distance.

Optimized RF architecture and baseband algorithms provide superb performance and low power consumption. MT7610EN integrates PA/LNA such that the number of the external components is reduced to minimum. Intelligent MAC design deploys a high efficient DMA engine and hardware data processing accelerators which offloads the host processor.

The MT7610EN is designed to support standard based features in the areas of security, quality of service and international regulations, giving end users the greatest performance any time and in any circumstance.
The Wi-Fi subsystem contains the 802.11b/g/n radio, baseband, and MAC that are designed to meet both the low power and high throughput application. It also contains a 32-bit RISC CPU that could fully offload the application processor.

Features

- Support IEEE 802.11 b/g/n Standard
- Built in IPEX compatible antenna or PCB antenna
- Main chip: MediaTek MT7628AN + MT7610EN
- Frequency range: Wi-Fi : 2.412GHz-2.484GHz / 5.180GHz-5.825GHz
  BT: 2.402GHz-2.480GHz
- CPU Clock: 580MHz
- Memory capacity: ILM ROM 832KB
  ILM RAM 320KB
- Flash size: 64M
- DDR2 Speed Grade: 800M
- PCB stack: 4 layers
- Interface: UART、I2C、I2S、Ethernet、USB
- Operating Voltage: DC 3.3V +/- 10%
- RoHS Compliant
- Dimension: 56 mm x 37.7 mm x 1mm

Outline