

## DATASHEET

Wi-Fi Router Board

# AP7621-001

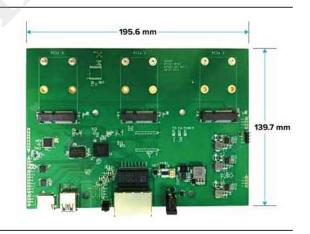
With 2 Giga Ethernet and 3 mini PCle



## **Description**

AP7621-001 is a 195.6 x 139.7 x 28 mm Router board with MT7621A integrates a dual-core MIPS1004Kc (880MHz), HNAT/HQoS/Samba/VPN accelerators, GbE switch, RGMII, USB3.0, USB2.0, 3xPCle, SD-XC. The powerful CPU with rich portfolio is suitable for 802.11ac, LTE cat4/5, edge, hotspot, VPN, AC (Access Control). It can also connect to touch-panel, ZigBee/Z-Wave for Internet Service Router and Home Security Gateway.

For the next generation router, MT7621A provides several dedicated hardware engines to accelerate the NAT, QoS, Samba and VPN traffic. These accelerators relief the CPU for other upper layer applications.



### **Features**

- · Mediatek MT7621A chipset
- · Flash SPI NOR16MB, DDR3 512MB 16bits BUS
- 32 KB I-Cache and 32 KB D-Cache per core
- 256 KB L2 Cache (shared by Dual-Core)
- SMP capable
- Single processor operation configurable Gigabit Switch
- IPv4 routing, NAT, NAPT
- IPv6 routing, DS-Lite, 6RD, 6to4, HW QoS
- HNAT/ HQoS/ Samba/ VPN accelerators
- · Support boot from Flash
- · Mini PCIe, Micro SD-XC, USB, GPIOs, I2C, UART and GPIOs
- 2 Giga Ethernet ports with Power over Ethernet (PoE) MDI transceivers

- 16 hardware queues to guarantee the min/max bandwidth of each flow
- · Seamlessly co-work with HW NAT engine
- · 2Gbps wired speed HW Crypto Engine
- Deliver 400~500 Mbps IPSec throughput Green
- Intelligent Clock Scaling (exclusive)
- Suitable with IEEE802.11ac MT7612E, MT7615, LTE, Firewall 3G mini PCle cards
- · Powerful Wi-Fi and IoT Gateway like LoRa, Sigfo
- MT7621A function diagram

#### **SOFTWARE FEATURE**

Support OPENWRT, MTK SDK

#### **NETWORK FEATURE:**

- · Video, Storage
- · DHCP Client/Relay/Server
- Dynamic DNS
- NTP Client
- DNS Cache/Proxy
- - MAC/IP/Port Filter
  - Virtual Server
  - DM7
  - Content Filter

