

MediaTek Filōgic 880

Flagship Wi-Fi 7 AP/Router/Gateway Platform

Achieve unparalleled Wi-Fi 7 performance up to 36Gbps (BE36000) from a groundbreaking flagship platform for routers, gateways and access points, that's truly better by design. Benefit from an ultra-efficient chip that has a best-in-class quad-core CPU, dedicated Network Processing Unit (NPU), and the best Wi-Fi 7 Access Point features in a break-thru architecture.

Scalable 36Gbps Wi-Fi 7

The MediaTek Filōgic 880 offers truly flagship-grade Wi-Fi 7 performance up to 36Gbps (BE36000) with comprehensive support for the latest Wi-Fi networking features.

- Tri-band 2.4GHz + 5GHz + 6GHz or scalable to Penta-band support
- Support for 4096-QAM, MLO, MRU, OFDMA RU, and MU-MIMO
- Support for up to 320MHz channel bandwidth
- Automatic Frequency Coordination (AFC)

Single-chip MAC MLO Assures Lowest Latency

Wi-Fi 7's ground-breaking MLO (Multiple Link Operation) has been optimized with MediaTek's single-chip MAC MLO architecture.

- Up to 100x lower latency versus competing Wi-Fi 7 solutions
- Allows for the smoothest and most efficient band switching performance

Our In-Chip Network Processing Unit (NPU)

Sharing space in-chip, the MediaTek Network Processing Unit (NPU) offloads the main CPU of all networking tasks for full speed performance without hiccups, while also being exceptionally power-efficient.

- Ensures Wi-Fi to Ethernet performance operate at full speeds
- HW IPv4 NATP / IPv6 / DS-Lite / 6RD acceleration
- Hardware QoS acceleration
- Tunneling Offload Engine for VLAN / PPTP / L2TP / GRE
- Ultra-high Speed Networking Crypto Engine for IPSec, SSL/TLS, DTLS (CAPWAP), SRTP and MACsec

Powerful Quad-core AP

A best-in-class, quad-core CPU is ideal for device makers to apply software customization, in-built services and apps for extended functionality.

- 4X 64-bit, Arm Cortex-A73 CPU with large internal cache
- CPU speeds up to 1.8GHz
- Close to 30K DMIPS performance
- Support for 8GByte DDR3/4 3200 32-bit

Unique 4T5R Design

A unique 4T5R system to extend the range in the 6GHz band without incurring additional costs.

- 5th chain allows for improved Receive Diversity and support MRC (Multiple Receive Combining)
- Counteracts higher path loss that is inherent in higher 6GHz frequencies
- Extends maximum range
- Allows improvement in thruput at any given range

Rich Wired Connectivity & Interfaces

Premium Ethernet connectivity ensures full speed from wireless to wired – ideal for latest 10G+ Fiber connections, SMB and tech enthusiasts that require the fastest data networking speeds.

- 2x 10Gbps Ethernet
- 1x 2.5Gbps Ethernet
- 4x 1Gbps Ethernet
- Multiple PCI-Express Generation 3.0 Root-complex host controllers
- 2x USB 3.2
- UART, SD, SPI, PWM, GPIO and OTP

