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Wi-Fi 6E M.2 AE Key Module

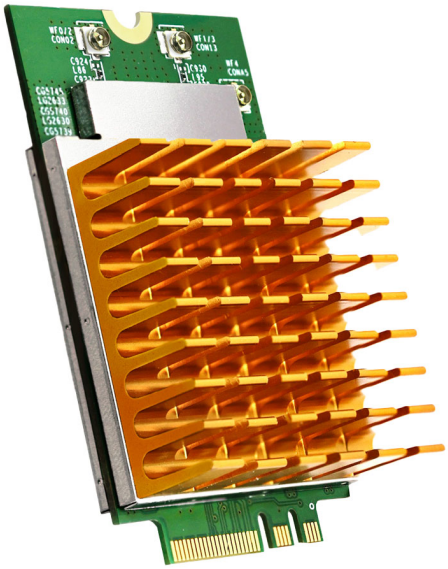
AW7916-AED

Description

The AW7916-AED is a cutting-edge M.2 AE Key Module that supports Wi-Fi 6E 3000, dual concurrent bands (DBDC) and is based on Mediatek MT7916AN. It provides up to 3Gbps performance and supports maximum bandwidths of 160MHz for 5 or 6GHz and 40MHz for 2.4GHz. An additional antenna boosts downlink performance via zero-wait DFS or MRC. The FEM radio integration into the Mediatek Filogic 630 platform offers size and cost benefits.

It accommodates up to 24 users (OFDMA), supports MU-MIMO clients, houses 512 MAC entries, and 16 MBSSID while also supporting all Wi-Fi 6 Release 2 features.

The chipset also boasts a hardware-based Wi-Fi offload engine, enhancing energy efficiency and performance by reducing Wi-Fi related processing for the router AP. The Filogic 630 can pair with the Filogic 830 SoC platform for comprehensive Tri-band Wi-Fi 6/6E solutions for routers and repeaters.



Features

- IEEE802.11a/b/g/n/ac/ax compliant
- Support 20/40MHz bandwidth in G-band, and 20/40/80/160MHz bandwidth in A-band
- G-band 2T2R + A-band 2T3R 2ss, dual-band dual concurrent (DBDC) with PHY rate up to 3000Mbps
- Support MU-MIMO TX/RX
- Support MU-OFDMA TX/RX
- Support STBC, LDPC, TX Beamformer and RX Beamformer
- Support greenfield, mixed mode, legacy modes
- Security support for WFA WPA/WPA2/WPA3 personal, WPS2.0
- QoS support of WFA WMM, WMM PS
- 32-bit RISC MCU for Wi-Fi protocols and Wi-Fi offload
- Embedded SRAM/ROM
- UART interface with hardware flow control
- Programmable and multiplexed GPIO pins
- PCIe device fully compliant to PCIe v2.1 specification
- Integrate 4Kbit efuse to store device specific information and calibration data

For more detailed information, please contact our sales team: sales@asiarf.com / +886 2 2940 7880