

DATASHEET

Wi-Fi 7 Mini PCIe Module AW7990-NPD



Description

AW7990-NPD is an Wi-Fi 7 BE3600 module with MediaTek MT7990AN chipset supports Wi-Fi 7 technology and feature IEEE802.11a/b/g/n/ac/ax/be compliant, 2.4GHz 2x2, 5GHz 3x3 2ss BE3600 Wi-Fi subsystem. The MT7990AN offers feature-rich wireless connectivity at high standards and delivers reliable, cost-effective throughput from an extended distance.

The optimized Wi-Fi baseband algorithms provide superb performance. The intelligent MAC design deploys a highly efficient offload engine and hardware data processing accelerators, which fully offload Wi-Fi task of the host processor. The MT7976CN is designed to support standard-based features in the areas of security, quality of service, and international regulations, giving end users the greatest performance at any time and in any circumstances.

Pre-certified with CE / FCC / IC, this solution helps accelerate product deployment while lowering certification cost and complexity.



Features

WLAN

- Wi-Fi compliant
- IEEE 802.11a, b, g, n, ac, ax, be compliant
- 2.4GHz 20 and 40 MHz, 2x2
- 5GHz: 20, 40, 80 and 160 MHz, 3x3 2ss
- Dual-Band Dual Concurrent (DBDC) iFEM
- Supports up to 4096-QAM
- Data rate of up to 688Mbps for 40MHz channel in 2.4Ghz and 2882Mbps for 160MHz in 5GHz mode
- Integrated power detector to support per packet Tx power control
- Multi-user multiple input multiple output **(MU-MIMO)** for **Tx and Rx**
- Multi-user Orthogonal Frequency-Division Multiple Access **(MU-OFDMA)** for **Tx and Rx**
- Support STBC, LDPC, Tx beamformer and Rx beamformee
- Support greenfield mode, mixed mode, and legacy mode

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

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