

DATASHEET

Wi-Fi 6E Development Platform

DP7986 AX6000 Router Board



Description

DP7986 is a highly integrated development platform designed with MediaTek's cutting-edge chipsets (MT7986AV, MT7975PN, MT7975N), delivering superior wireless performance for advanced applications such as home entertainment, smart home automation, and more.

Built with an advanced silicon process, DP7986 integrates a powerful quad-core ARM® Cortex-A53 MPCore™ processor running at up to 2.0 GHz, offering enhanced DRAM bandwidth for demanding applications. The SoC is equipped with a comprehensive range of peripherals, including one USB 3.0/ USB 2.0 (Host), one USB 2.0 (Host), and a PCle 2.0 2-lane (RC) port. Additionally, it supports two 2.5 Gbps HSGMII Ethernet interfaces, ensuring robust connectivity for diverse network applications.

With two RF chips, DP7986 provides a dual-band concurrent chipset solution for Wi-Fi 6E platforms. For even greater flexibility, users can configure a Tri-band solution by connecting a wireless NIC card through the PCIe port.

Beyond its connectivity capabilities, DP7986 features an embedded hardware NAT engine with QoS to prioritize audio and video streams over less time-sensitive traffic, ensuring a seamless home entertainment experience. Its SFQ technology further enhances streaming quality by isolating P2P sessions from audio and video streams.

Thanks to its advanced technology and feature-rich design, DP7986 is poised to become the centerpiece of next-generation smart Wi-Fi access points and home gateway systems, catering to the evolving needs of modern connected homes.

