

Providing capacity and coverage needed for highefficiency wireless platforms

NXP® 88W9064 4x4 Wi-Fi® 6 Dual Band with Bluetooth® 5 SoC

The NXP 88W9064 SoC family of Wi-Fi access solutions provides an advanced 802.11ax feature set and draws on the strength of our beamforming technologies. Integrated MU-MIMO and OFDMA solutions help increase capacity for downlink and uplink traffic to allow for overall improved network utilization while meeting the growing demands of user applications.standard compliance.

PRODUCT OVERVIEW

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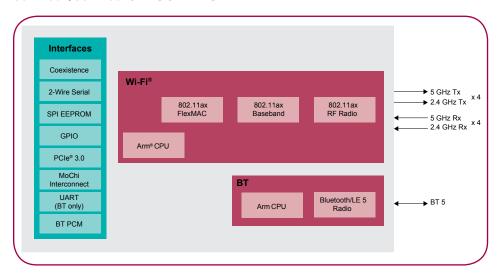
Other features of the 88W9064 family include integrated Bluetooth 5 and precision device location function that provides accurate positioning within 1 meter and 10 degrees. Bluetooth 5 supports classic Bluetooth and Bluetooth Low Energy with features such as long-range and direction finding using angle of arrival (AoA) and angle of departure (AoD). The added Bluetooth capability can be leveraged to provide a more cost-effective and complete solution for users' connectivity needs.

TARGET APPLICATIONS

- ▶ 88W9064 SoC
 - Enterprise & retail access points
 - Broadband gateway
 - Fixed wireless
- ▶ 88W9064S SoC
 - Service provider set-top box
 - Over-the-top set-top box



88W9064/88W9064S BLOCK DIAGRAM



KEY FEATURES AND BENEFITS

FEATURES	88W9064	88W9064S
Wi-Fi®	 IEEE® 802.11ax, 802.11ac Wave 2, 802.11a/b/g/n 20/40/80/160 (80+80) MHz channel bandwidths 2.4 Gbit/s peak data rate Implicit and explicit beamforming 	 IEEE 802.11ax, 802.11ac Wave 2, 802.11a/b/g/n 20/40/80/160 (80+80) MHz channel bandwidths 1.2 Gbit/s peak data rate Implicit and explicit beamforming
802.11ax	 Downlink OFDMA and MU-MIMO Uplink OFDMA and MU-MIMO 1024 QAM Spatial re-use Range extension DCM 	 Uplink and Downlink OFDMA and MU-MIMO 1024 QAM Spatial re-use Range extension DCM
Flex MAC	 Adaptable architecture for standards evolution Management of high number of traffic queues Advanced scheduling 	Adaptable architecture for standards evolution
Bluetooth [®]	Support for Bluetooth 5Direction findingLong rangeCo-existence arbitration	 Support for Bluetooth 5 Direction finding Long range Co-existence arbitration
Dedicated In-Service Monitoring	Concurrent spectrum scanning Zero wait DFS	
Precision Location	Distance: within 1 meter Angle: within 10 degrees	Distance: within 1 meter Angle: within 10 degrees
Host Interfaces	 MCi (2-Lane) PCle® 3.0 (2-Lane) High-Speed UART (for Bluetooth only) 	MCi (2-Lane)PCle 3.0 (2-Lane)High-Speed UART (for Bluetooth only)

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