



Providing capacity and coverage needed for high-efficiency wireless platforms

NXP® 88W9068 8x8 Wi-Fi® 6 SoC

With an 8 x 8 configuration, the NXP 88W9068 SoC supports a peak data rate of 4.8 Gbit/s, making it an integral part of next-generation enterprise access points, broadband gateways and fixed wireless solutions. The device's flexible architecture guarantees 802.11ax standard compliance for an added advantage.

PRODUCT OVERVIEW

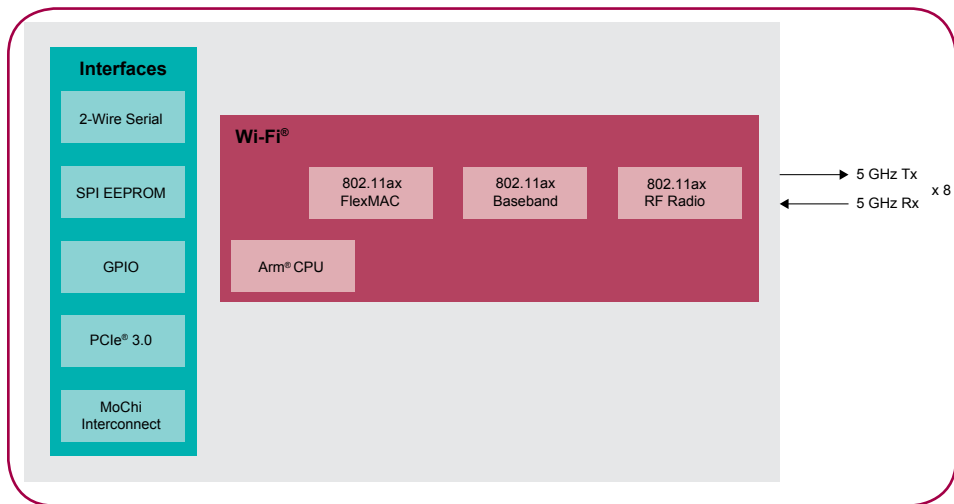
Drawing on the strength of our implicit and explicit beamforming technologies, we created the NXP 88W9068 SoC for the next evolution of Wi-Fi access solutions. Our full MU-MIMO and OFDMA solutions help increase capacity in both directions and allow for overall improved network utilization while meeting the growing demands of user applications.

TARGET APPLICATIONS

- ▶ Enterprise and retail access points
- ▶ Broadband gateway
- ▶ Fixed wireless services



88W9068 BLOCK DIAGRAM



KEY FEATURES AND BENEFITS

Features	Benefits
Wi-Fi®	<ul style="list-style-type: none"> • IEEE® 802.11ax, 802.11ac Wave 2, 802.11a/n • 20/40/80/160(80+80) MHz channel bandwidths • 4.8 Gbit/s peak data rate • Implicit and explicit beamforming
802.11ax	<ul style="list-style-type: none"> • Downlink OFDMA and MU-MIMO • Uplink OFDMA and MU-MIMO • 1024 QAM • Spatial re-use • Range extension • DCM
Flex MAC	<ul style="list-style-type: none"> • Adaptable architecture for 802.11ax standard evolution • Management of high number of traffic queues • Advanced scheduling
Dedicated In-Service Monitoring	<ul style="list-style-type: none"> • Concurrent spectrum scanning • Zero-wait DFS
Precision Location	<ul style="list-style-type: none"> • Distance: within 1 meter • Angle: within 10 degrees
Host interfaces	<ul style="list-style-type: none"> • MCi (4-Lane) • PCIe® 3.0 (2-Lane)