

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®	 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	 Downlink OFDMA and MU-MIMO Uplink OFDMA and MU-MIMO 1024 QAM Spatial re-use Range extension DCM
Flex MAC	Adaptable architecture for 802.11ax standard evolutionManagement of high number of traffic queuesAdvanced scheduling
Dedicated In-Service Monitoring	Concurrent spectrum scanningZero-wait DFS
Precision Location	Distance: within 1 meterAngle: within 10 degrees
Host interfaces	 MCi (4-Lane) PCle[®] 3.0 (2-Lane)

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. Arm is a trademark or registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2019 NXP B.V.

Document Number: M88W9068FS REV 0 Published: September, 2019