

# MARVELL® 88W9068 8x8 802.11ax Wireless LAN SoC

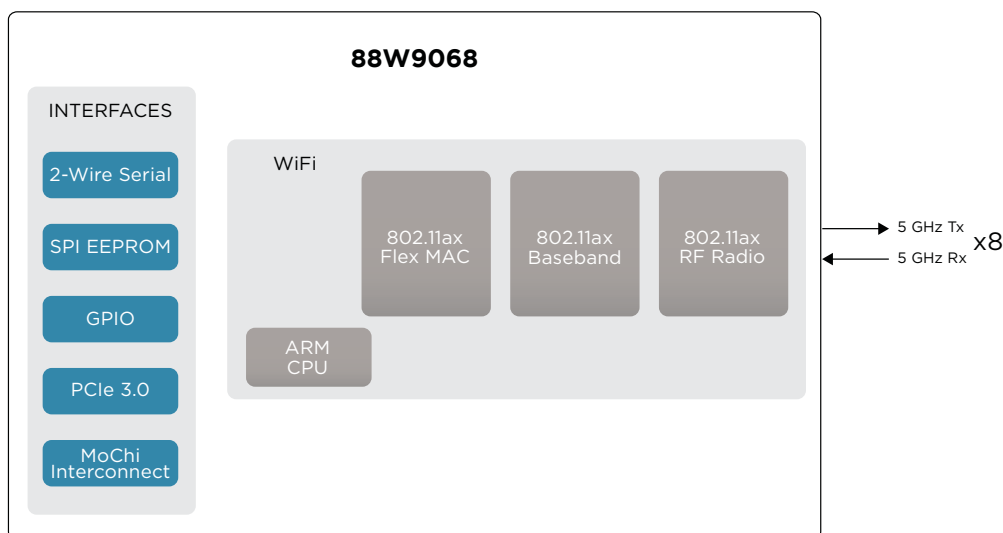
Providing capacity and coverage needed for High Efficiency Wireless Platforms

## PRODUCT OVERVIEW

The 88W9068 is the next evolution of our industry-leading Wi-Fi access solutions that have enabled generations of award-winning platforms. Drawing on the strength of our proven implicit and explicit beamforming technologies, our full MU-MIMO and OFDMA solutions help increase capacity in both directions. This allows for overall improved network utilization while meeting the growing demands of user applications.

With an 8x8 configuration, the 88W9068 supports a peak data rate of 4.8Gbps making it an integral part of next generation enterprise access points, broadband gateways and fixed wireless solutions. As an added advantage, the device's flexible architecture guarantees 802.11ax standard compliance.

## BLOCK DIAGRAM



## KEY FEATURES AND BENEFITS

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

## TARGET APPLICATIONS

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



**ABOUT MARVELL:** Marvell first revolutionized the digital storage industry by moving information at speeds never thought possible. Today, that same breakthrough innovation remains at the heart of the company's storage, networking and connectivity solutions. With leading intellectual property and deep system-level knowledge, Marvell semiconductor solutions continue to transform the enterprise, cloud, automotive, industrial, and consumer markets. For more information, visit [www.marvell.com](http://www.marvell.com).