BROADCOM®

Product Brief

BCM4916

Quad-Core ARM v8 CPU 10Gb Network Processor for Residential Wi-Fi Access Point Applications

Features

- Quad-core ARMv8-compatible CPUs
- Dual Issue Runner – Packet processor
- DDR4 memory interface
- Fully Integrated 10/5.0/2.5 Gb Ethernet PHY for WAN or LAN
- 3 USXGMII Ethernet ports
- Quad integrated 1Gb Ethernet PHYs
- Dual USB ports
- High-performance Security Processing Unit
- Secure Boot and Arm TrustZone, with advanced TEE (trusted execution environment) offering high levels of security
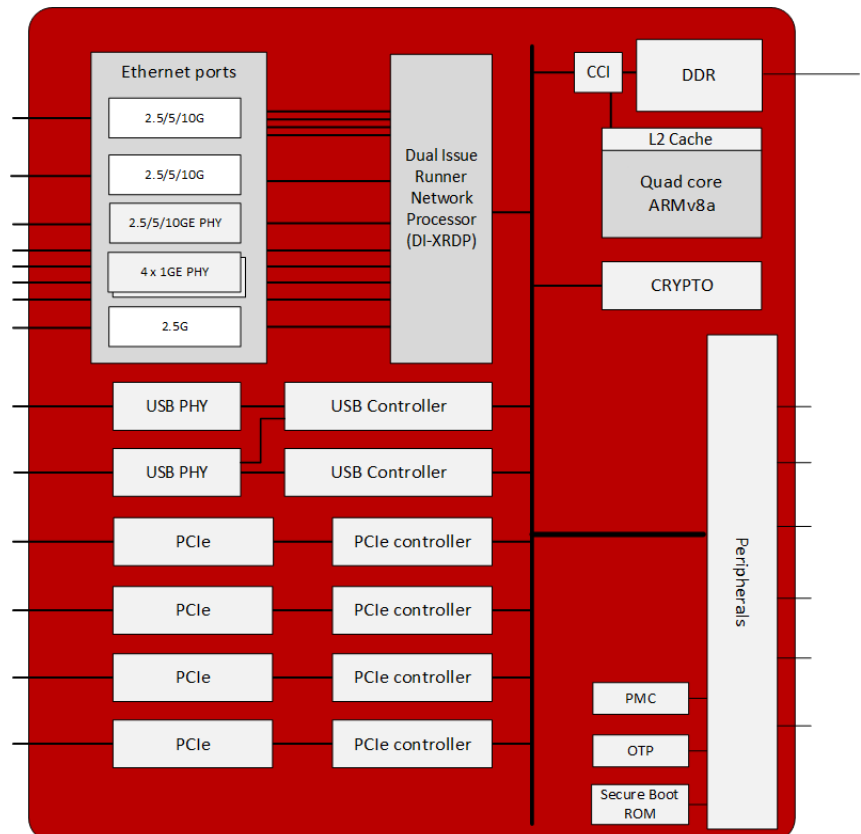
Overview

The BCM4916 high-performance network processor has been designed from the ground up for the next generation of high-performance wireless access points and is ideally suited to support the next generation of 802.11be WiFi7 routers.
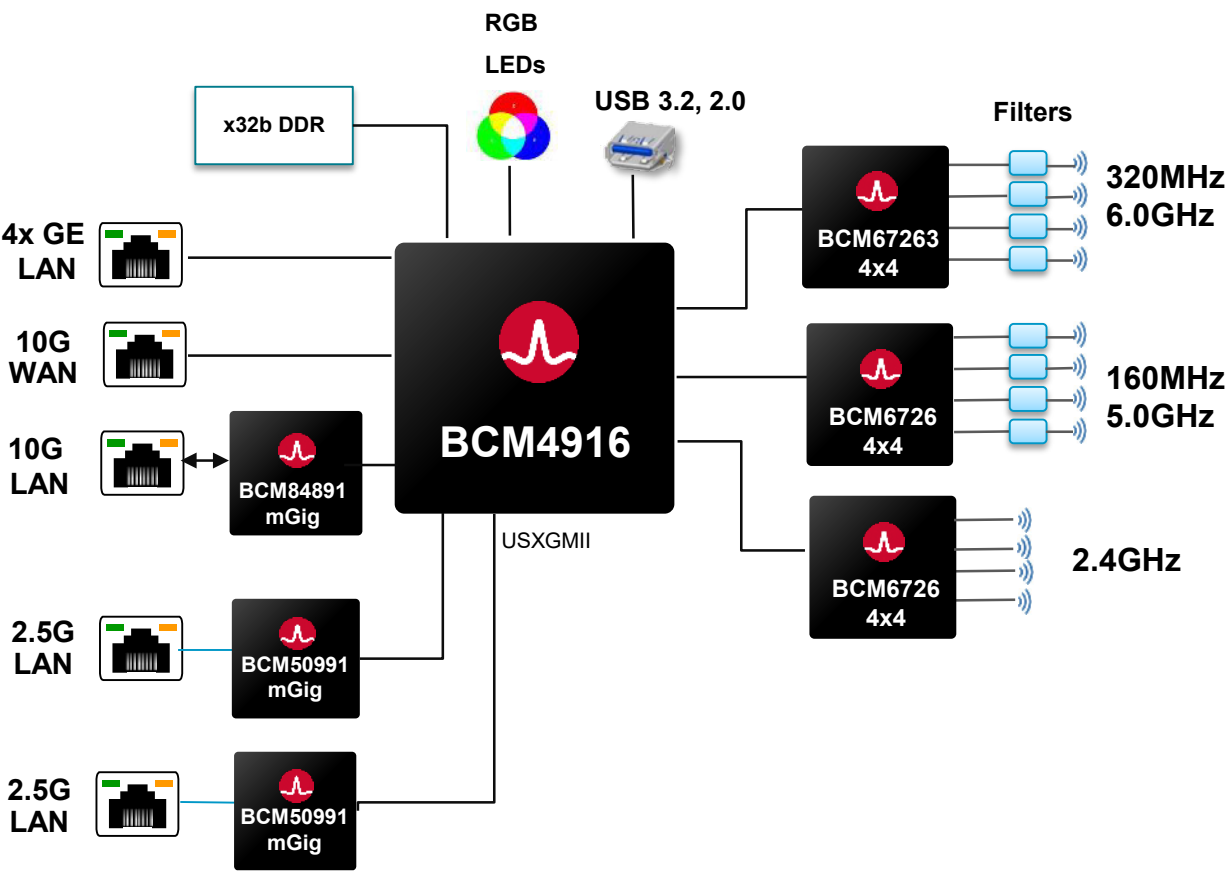
The quad-core v8-compatible CPUs have enough horsepower to support the throughput of Broadcom's next generation of Wi-Fi 7 access point chips and still provide plenty of headroom to run customers' value-added applications.

The BCM4916 features a dual-issue Runner network processor and a high-performance security processing unit. The integrated 10G/5G/2.5G multi-Gig Ethernet PHY makes this the ideal platform to support the next generation of multi-gigabit broadband networks.

BCM4916 Block Diagram

Typical Wi-Fi 7 Access Point Block Diagram

Ordering Information

Part Number	Package	Ambient Temperature Range
BCM4916A0KFEBG	21 mm x 21 mm FCBGA	0°C to 70°C