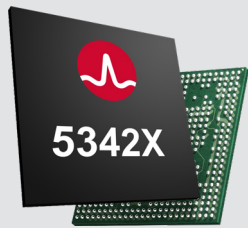


Product Brief



Key Features

- Integrated 1G/10G SerDes with diverse I/O for multiple configurations
- Wide range of natively supported interfaces including KX, KR, XFI, XAUI, RXAUI, SGMII, and QSGMII
- Integrated Arm Cortex-R5 CPU
- Line rate, non-blocking architecture for all packet sizes
- Flexible ContentAware™ Engine for ACL and QoS
- Fully integrated packet buffer
- Intelligent Memory Management Unit (MMU) optimized for handling bursty data traffic
- Support for Priority-based Flow Control (PFC)
- Timestamping support with IEEE 1588 transparent clock (TC) and Synchronized Ethernet (SyncE)
- IEEE 802.1ag OAM
- Support for industrial temperature
- Support for Energy Efficient Ethernet
- Low-power consumption

BCM5342X

60 Gb/s Multilayer Switch

Description

The Broadcom® BCM5342X System-on-a-Chip (SoC) family of switches offers industry-leading integration and performance in a small footprint. These devices offer up to 20x1G + 4x10G multilayer ports. Offering the industry's highest level of integration, the BCM5342X family of switches has embedded SerDes supporting KX, KR, SGMII, XFI, XAUI, and QSGMII modes and an Arm Cortex-R5 processor. The BCM5342X is ideal for cost-sensitive Edge connectivity applications, such as embedded designs for control-plane applications or embedded switches for Small and Medium Businesses (SMBs).

The BCM5342X family of switches offers multiple I/O configurations and speeds (1G/10G) that address key segments of Edge connectivity.

With an integrated packet buffer and the industry's lowest power consumption, the BCM5342X family of switches is designed to reduce overall system costs.

The BCM5342X family of switches offers many advanced features such as IEEE 802.1Q VLAN, VLAN translation, enhanced Denial-of-Service (DoS) protection, IPv4 and IPv6 support, advanced ContentAware Engine, and IEEE 802.1p Quality-of-Service (QoS).

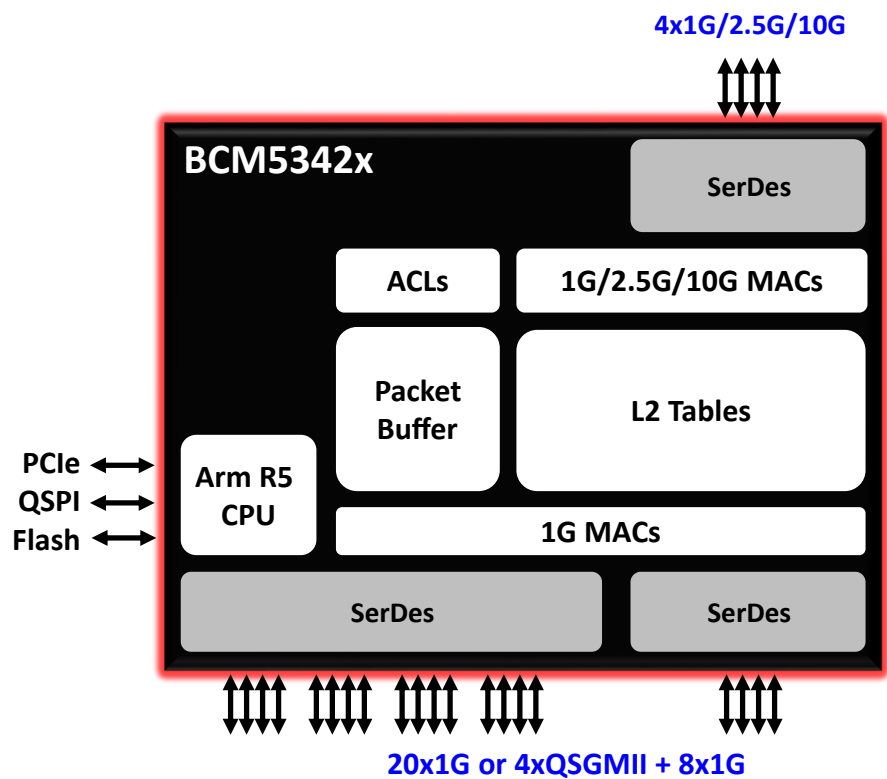
Benefits

- Based on industry-leading and field-proven StrataConnect® architecture
- Single-chip switch SoC optimized for embedded control plane, embedded switch, and embedded data plane connectivity applications for SMB networks
- Seamless connection to StrataXGS® fabric via HiGig2™ and HiGig+™ protocols
- Enhanced buffer management delivers optimum usage of packet buffer resources
- Eight flexible Class-of-Service (CoS) queues per port assure the lowest latency to high-priority traffic
- IPv6 support provides future-proofing
- Flexible I/O configuration support for future-proofing
- Leverages the Broadcom unified API for software reuse and quick time-to-market
- Optimized ball pattern for low-cost PCB design

Applications

- SMB/SME 1G switches
- Embedded Control Plane switches
- Embedded connectivity switch for base stations, Ethernet storage arrays, and other chassis backplanes

Figure. BCM5342X Block Diagram



Ordering Information		
Part Number	Integrated Arm Cortex-A9 CPU	Description
BCM53426A0KFSBG BCM53426A0IFSBG	No	20x1G + 4x10G
BCM53424A0KFSBG BCM53424A0IFSBG	No	4xQSGMII + 8x1G + 4x10G
BCM53422A0KFSBG BCM53422A0IFSBG	No	8x1G + 2x10G