

Product Brief



Key Features

- Low-power unmanaged/ websmart-lite switch for SMB networks.
- Small footprint, low-power, and flexible switch based on StrataXGS® IV architecture.
- EEE capability is ideal for SMB desktop environment where there are sustained periods of inactivity.
- Integrated CPU
- Two integrated QSGMII interfaces supporting 10/100/1000 Mb/s
- Optimized for unmanaged/ websmart-lite switch applications in SMB networks
- Nonblock, full wirespeed performance for 24x GbE
- Embedded GPHYs and High-Performance Arm A9 CPU
- Enhanced buffer management for robust burst absorption
- Flexible ContentAware Engine for ACL and QoS
- Full IPv4 and IPv6 support
- Low-power Energy Efficient Ethernet support

BCM53334

24 Gb/s Multilayer Switch

Overview

The Broadcom® BCM53334 System-on-a-Chip (SoC) switch family offers industry-leading integration and performance in a small footprint. The device offers up to 24 multilayer GbE ports. Offering the industry's highest level of integration, the BCM53334 has embedded GPHYs and an Arm Cortex A9 processor. The BCM53334 is ideal for costsensitive edge connectivity applications, such as unmanaged and websmart-lite switches for Small and Medium Businesses (SMB).

The BCM53334 device family offers I/O configurations that address key segments of edge connectivity. A single device supports the popular 24x GbE switch designs.

When used with the Broadcom QSGMII PHY, the BCM53334 device can be connected to the PHYs without any trace crossovers. The optimized I/O map reduces system design effort and enables low-cost PCB design. The BCM53334 device family offers many advanced features, such as IEEE 802.1Q VLAN, enhanced Denial of Service (DoS) protection, IPv4 and IPv6 support, advanced ContentAware™ Engine, IEEE 802.1p Quality of Service (QoS), and Energy Efficient Ethernet™ (EEE).

Features

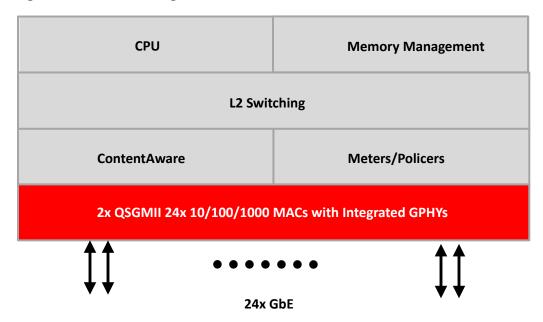
- Highly integrated 24-port 10/100/1000 Mb/s Ethernet switch SoC
- Integrated copper 10/100/1000 PHYs

- Integrated QSGMII interfaces supporting 10/100/1000 Mb/s
- Nonblocking architecture, line rate for all packet sizes
- Fully integrated packet buffer
- Intelligent Memory Management Unit (MMU) optimized for handling bursty data traffic
- IPv4/IPv6 support
- Flexible Access Control List (ACL)
- Enhanced DoS attack statistics gathering
- EEE support
- Support for Industrial Temperature
- Low power consumption

Benefits

- Based on industry-leading and market-proven StrataXGS IV architecture.
- Single-chip switch SoC optimized for unmanaged and websmart-lite connectivity applications for SMB networks.
- Enhanced memory technology delivers optimum usage of packet-buffer resources.
- Eight flexible Class of Service (CoS) queues per port assure the lowest latency to highpriority traffic.
- IPv6 support provides futureproofing.
- Optimized ball pattern for lowcost PCB design and singlesystem clock source.

Figure. BCM53334 Block Diagram



Ordering Information	
Part Number	Description
BCM53334	24 x GE with CPU